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THE
FRUITS AND FRUIT-TREES
OF
AMERICA;

OR,
THE CULTURE, PROPAGATION, AND MANAGEMENT, IN THE
GARDEN AND ORCHARD, OF FRUIT-TREES GENERALLY;

WITH
DESCRIPTIONS OF ALL THE FINEST VARIETIES OF FRUIT, NATIVE
AND FOREIGN, CULTIVATED IN THIS COUNTRY.

BY A. J. DOWNING.

CORRESPONDING MEMBER OF THE ROYAL BOTANIC SOCIETY OF LONDON; AND OF THE HORTICUL-
TURAL SOCIETIES OF BERLIN, THE LOW COUNTRIES, MASSACHUSETTS,
PENNSYLVANIA, INDIANA, CINCINNATI, ETC.

*Second Revision and Correction, with large Additions, including the Appendices of
1872 to 1881, and containing many New Varieties.*

BY CHARLES DOWNING.

WITH NEARLY 400 OUTLINE ILLUSTRATIONS OF FRUIT.

NEW YORK:
JOHN WILEY & SONS, 15 ASTOR PLACE.
1881.

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TO
MARSHALL P. WILDER, Esq.,
PRESIDENT OF THE
MASSACHUSETTS HORTICULTURAL SOCIETY,
THIS VOLUME IS DEDICATED,
BY HIS FRIEND,
THE AUTHOR.

A NOTE

ON THE

FRUITS OF CALIFORNIA

SINCE the publication of the recent edition of this book, the author has visited California, and his observations in that newly developed region have elicited the facts that fruit trees grow much faster there, and come into bearing much earlier than with us, and it may be fairly inferred, therefore, that they will not be as long-lived.

The same varieties of Apples, Pears, Peaches, Plums, Apricots, Cherries, &c., are grown as with us; but all kinds of fruit, especially some kinds of Apples, do not succeed equally well as in the Eastern States. The following sorts were considered most profitable: Williams' Favorite, Early Strawberry, Red Astrachan, Early Harvest, Winesap, Rawles' Janet, Newtown Pippin, White Winter Pearmain, Smith's Cider, Yellow Belflower. Newtown Pippin best and most profitable. The Northern Spy and Baldwin had failed.

The fruit is rather larger, fairer, and handsomer, and the quality equally good, except Strawberries and Blackberries, which were not quite as high flavored. Grapes are grown extensively in many localities, and succeed admirably. They are chiefly of the foreign varieties, and are grown in the open air, without protection, requiring but little labor, compared with our system of cultivation.

They are grown in the tree form on stems or stumps from two to three feet high, and those from ten to fifteen years old are from five to six inches in diameter. The vines are planted from seven to eight feet apart, each way. They are pruned, annually, back to the stems, and when the new shoots have grown five or six inches, all are thinned out, except ten or twelve of the strongest, and in most vineyards they have no further care till gathering time, except to keep the ground clean.

In some orchards that had been neglected, the trees were failing, and I was told that if the ground was not cultivated and the trees cared for, they soon died.

We found Figs abundant and of fine quality in nearly every locality we visited. English Walnuts, or Madeira Nuts, Almonds, and Olives are grown successfully in most places.

The climate and soil are favorable for fruit-growing. In the latter, clay predominates. The characteristics of fruit are about the same as with us.

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PREFACE.

A MAN born on the banks of one of the noblest and most fruitful rivers in America, and whose best days have been spent in gardens and orchards, may perhaps be pardoned for talking about fruit-trees.

Indeed the subject deserves not a few, but many words. "Fine fruit is the flower of commodities." It is the most perfect union of the useful and the beautiful that the earth knows. Trees full of soft foliage; blossoms fresh with spring beauty; and, finally,—fruit, rich, bloom-dusted, melting, and luscious,—such are the treasures of the orchard and the garden, temptingly offered to every landholder in this bright and sunny, though temperate climate.

"If a man," says an acute essayist, "should send for me to come a hundred miles to visit him, and should set before me a basket of fine summer fruit, I should think there was some proportion between the labor and the reward."

I must add a counterpart to this. He who owns a rood of proper land in this country, and, in the face of all the pomonal riches of the day, only raises crabs and choke-pears, deserves to lose the respect of all sensible men. The classical antiquarian must pardon me for doubting if, amid all the wonderful beauty of the golden age, there was anything to equal our delicious modern fruits—our honeyed Seckels, and Beurrés, our melting Rareripes. At any rate, the science of modern horticulture has restored almost everything that can be desired to give a paradisaical richness to our fruit-gardens. Yet there are many in utter ignorance of most of these fruits, who seem to live under some ban of expulsion from all the fair and goodly productions of the garden.

Happily, the number is every day lessening. America is a *young orchard*, but when the planting of fruit-trees in one of the newest States numbers nearly a quarter of a million in a single year; when there are more peaches exposed in the markets of New York, annually, than are raised in all France; when American apples, in large quantities, command double prices in European markets; there is little need for entering into any praises of this soil and climate generally, regarding the culture of fruit. In one part or another of the Union every man may, literally, sit under his own vine and fig-tree.

It is fortunate for an author, in this practical age, when his subject requires no explanation to show its downright and direct usefulness. When I say I heartily desire that every man should cultivate an orchard, or at least a tree, of good fruit, it is not necessary that I should point out how much both himself and the public will be, in every sense, the gainers. Otherwise I might be obliged to repeat the advice of Dr. Johnson to one of his friends. "If possible," said he, "have a good orchard. I know a clergyman of small income who brought up a family very respectably, which he chiefly fed on apple dumplings."(!)

The first object, then, of this work is to increase the taste for the planting and cultivation of fruit-trees. The second one is to furnish a manual for those who, already more or less informed upon the subject, desire some work of reference to guide them in the operations of culture, and in the selection of varieties.

If it were only necessary for me to present for the acceptance of my readers a choice garland of fruit, comprising the few sorts that I esteem of the most priceless value, the space and time to be occupied would be very brief.

But this would only imperfectly answer the demand that is at present made by our cultivators. The country abounds with collections of all the finest foreign varieties; our own soil has produced many native sorts of the highest merit; and from all these, kinds may be selected which are highly valuable for every part of the country. But opinions differ much as to the merits of some sorts. Those which succeed perfectly in one section, are sometimes ill-adapted to another. And, finally, one needs some accurate description to know, when a variety comes into bearing, if its fruit is genuine, or even to identify an indifferent kind, in order to avoid procuring it again. Hence the number of varieties of fruit that are admitted here. Little by little I have summoned them into my pleasant and quiet court, tested them as far as possible, and endeavored to pass the most impartial judgment upon them. The verdicts will be found in the following pages.

From this great accumulation of names, Pomology has become an embarrassing study, and those of our readers who are large collectors will best understand the difficulty—nay, the impossibility of making a work like this perfect.

Towards settling this chaos in nomenclature, the exertions of the Horticultural Society of London have been steadily directed for the last twenty years. That greatest of experimental gardens contains, or has contained, nearly all the varieties of fruit, from all parts of the world, possessing the least celebrity. The vast confusion of names, dozens sometimes meaning the same variety, has been by careful comparison reduced to something like real order. The relative merit of the kinds has been proved and published. In short, the horticultural world owes

this Society a heavy debt of gratitude for these labors, and to the science and accuracy of Mr. Robert Thompson, the head of its fruit department, horticulturists here will gladly join me in bearing the fullest testimony.

To give additional value to these results, I have adopted in nearly all cases, for fruits known abroad, the nomenclature of the London Horticultural Society. By this means I hope to render universal on this side of the Atlantic the same standard names, so that the difficulty and confusion which have always more or less surrounded this part of the subject may be hereafter avoided.

These foreign fruits have now been nearly all proved in this country, and remarks on their value in this climate, deduced from actual experience, are here given to the public. To our native and local fruits especial care has also been devoted. Not only have most of the noted sorts been proved in the gardens here, but I have had specimens before me for comparison, the growth of no less than fourteen of the different States. There are still many sorts, nominally fine, which remain to be collected, compared, and proved; some of which will undoubtedly deserve a place in future editions. To the kindness of pomologists in various sections of the country I must trust for the detection of errors in the present volume, and for information of really valuable new varieties.*

Of the *descriptions* of fruit, some explanation may be necessary. First, is given the *standard* name in capitals. Below this are placed, in smaller type, the various *synonymes*, or local names, by which the same fruit is known in various countries or parts of the country. Thus, on page 761, is the following:

FLEMISH BEAUTY.

Belle de Flandres.	Poire Davy.
Bosch Nouvelle.	Impératrice de France.
Bosch.	Fondant du Bois.
Bosc Sire.	Boschpeer.
Beurré Spence (<i>erroneously</i>).	

By this is signified, first, that FLEMISH BEAUTY is the *standard* name of the pear; secondly, that the others—*synonymes*—are various local names by which the Flemish Beauty is also known in various places; and, lastly, that by the latter name—Beurré Spence—it is *incorrectly* known in some collections, this name belonging to another distinct pear.

It is at once apparent that one of the chief points of value of a book like this, lies in the accuracy with which these synonymous names

* It is well to remark that many of the so-called new varieties, especially from the West, prove to be old and well-known kinds, slightly altered in appearance by new soil and different climate. A new variety must possess very superior qualities to entitle it to regard, now that we have so many fine fruits in our collections.

are given—since a person might, in looking over different catalogues issued here and abroad, suppose that all ten of the above are different varieties—when they are really all different names for a single pear. In this record of synonymes, I have therefore availed myself of the valuable experience of the London Horticultural Society, and added all the additional information in my own possession.

Many of the more important varieties of fruit are shown in *outline*. I have chosen this method as likely to give the most correct idea of the form of a fruit, and because I believe that the mere outline of a fruit, like a profile of the human face, will often be found more characteristic than a highly finished portrait in color. The outlines have been nearly all traced directly from fruits grown here. *They are from specimens mostly below the average size.* It has been the custom to choose the largest and finest fruits for illustration—a practice very likely to mislead. I believe the general character is better expressed by specimens of medium size, or rather below it.

It only remains for me to present my acknowledgments to the numerous gentlemen, in various parts of the country, who have kindly furnished information necessary to the completion of the work. The names of many are given in the body of the volume. But to the following I must especially tender my thanks, for notes of their experience, or for specimens of fruits to solve existing doubts.

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A. J. D.

HIGHLAND GARDENS,)
Newburgh, N. Y., May, 1845. }

PREFACE TO THE SECOND REVISION.

THE second revision of the FRUITS AND FRUIT-TREES OF AMERICA, originally written by my lamented brother, in 1845, has been undertaken with very great hesitancy; but the extended increased interest in fruit-culture, and demand for this work, have seemed to require of me such aid in its construction, commensurate with the progress of the age, as I could command.

I have therefore, by the assistance of numerous friends in all parts of the States and the Canadas, gathered together material, and embodied, enlarged, and revised the work, trusting that the desire to assist, aid, and continue the advancement of fruit-culture may be taken as the incentive which has guided my labors; and that imperfections will not be too freely commented upon, without careful thought of the time and observation, etc., requisite in deciding many points in Pomology. The correcting or deciding relative to the various names under which one fruit is known in different sections, was originally a feature of great difficulty, even when they were brought together and grown in one garden, as by the London Horticultural Society; but when this has to be done with the varieties spread over such a wide territory, and with so many varied climates and soils as ours, the task is one of no light character. At the first writing of this book the accumulation of names was such as to then cause the study of Pomology to be counted as an embarrassing one. What then shall we say of it now, when the list of names has been more than trebled? New varieties have sprung into existence with the magic rapidity belonging to everything of our country; but, unfortunately, regard has not always been had to the qualifications which should have been by them possessed ere their introduction to our lists; and at this day I may safely say that not perhaps one in thirty of the recent introductions, for the past twenty years, will bear the criticism of a first-class fruit.

In my revision I have endeavored to keep as near as possible the simple arrangement of the original, omitting the arrangement of classes and periods of ripening, and placing the whole alphabetically in order, trusting to the text description to give the information sought by the reader. The nomenclature of the London Horticultural Society in the original edition has been retained, and, so far as known, I have continued the original name by which each fruit was first described, as its true name, appending all others as synonyms.

In the first edition of this work the names of authors who had

before given descriptions of the fruits were appended to each description, but owing to the great number of names such a record would now make, and to its little practical benefit, I have omitted it.

In the labor of ascertaining synonyms and identifying disputed varieties, much credit is due to the American Pomological, Massachusetts, Western New York, Ohio, Illinois, Indiana, Missouri, and other kindred Societies, by their gathering and comparing great numbers of specimens from various sources, and in the accumulation of knowledge and opinions here reported as the result of long-continued examinations of private individuals. But the confusion of names yet exists to a large extent, and while much has been done toward correction, order and accuracy can only be arrived at when the different varieties are well grown in the same soil and locality, a result only to be realized in an experimental garden on a large scale.

The place of origin of each variety has been attached whenever it could be truly traced or known; but many are noted only as having been received from certain States or sections, their origin being possibly in another State. The period of maturity has been given as its period when fruited here; but it is well known locations South or North cause great changes in this respect, as well as in quality, and many good long-keeping winter apples of this section, when grown in our Southern States, become early autumn and inferior sorts. Again, nearly all varieties of our early summer fruits, although ripened at an earlier period, are equal, if not improved, in size and quality when grown at the South.

In the revision of a former edition, as well as in aid of revision of the present, I have received valuable notes, specimens of fruits, &c., from a large number of gentlemen, and in here making my grateful acknowledgments, I desire to record all names as a simple tribute, although some have passed from this land of chaotic terrestrial fruit to that where order and system ever reigns.

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CHARLES DOWNING.

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FRUITS AND FRUIT-TREES.

CHAPTER I.

THE PRODUCTION OF NEW VARIETIES OF FRUIT.

IN our survey of the culture of fruits let us begin at the beginning. Gradual amelioration, and the skilful practice of the cultivator, have so filled our orchards and gardens with good fruits, that it is necessary now to cast a look back at the types from which these delicious products have sprung.

In the tropical zone, amid the surprising luxuriance of vegetation of that great natural hot-house, nature offers to man, almost without care, the most refreshing, the most delicious, and the most nutritive fruits. The Plantain and Banana, excellent either raw or cooked, bearing all the year, and producing upon a rood of ground the sustenance of a family; the refreshing Guava and Sapodilla; the nutritious Bread-fruit; such are the natural fruit-trees of those glowing climates. Indolently seated under their shade, and finding a refreshing coolness both from their ever-verdant canopy of leaves, and their juicy fruits, it is not here that we must look for the patient and skilful cultivator.

But, in the temperate climates, nature wears a harsher and sterner aspect. Plains bounded by rocky hills, visited not only by genial warmth and sunshine, but by cold winds and seasons of ice and snow; these are accompanied by sturdy forests, whose outskirts are sprinkled with crabs and wild cherries, and festooned with the clambering branches of the wild grape. These native fruits, which at first offer so little to the eye or the palate, are nevertheless the types of our garden varieties. Destined in these climates to a perpetual struggle with nature, it is here that we find man ameliorating and transforming her.

Transplanted into a warmer aspect, stimulated by a richer soil, reared from selected seeds, carefully pruned, sheltered, and watched, by slow degrees the sour and bitter crab expands into a Golden Pippin, the wild pear loses its thorns and becomes a Bergamotte or a Beurré, the Almond is deprived of its bitterness, and the dry and flavorless Peach is at length a tempting and delicious fruit. It is thus only, in the face of obstacles, in a climate where nature is not prodigal of perfections, and in the midst of thorns and sloes, that MAN, THE GARDENER, arises and forces nature to yield to his art.

These improved sorts of fruit, which man everywhere causes to share his civilization, bear, almost equally with himself, the impress of an exist-

ence removed from the natural state. When reared from seeds they always show a tendency to return to a wilder form, and it seems only *chance* when a new seedling is equal to, or surpasses its parent. Removed from their natural form, these artificially created sorts are also much more liable to diseases and to decay. From these facts arises the fruit-garden, with its various processes of grafting, budding, and other means of continuing the sort; with also its sheltered aspects, warm borders, deeper soils, and all its various refinements of art and culture.

In the whole range of cares and pleasures belonging to the garden, there is nothing more truly interesting than the production of new varieties of fruit. It is not, indeed, by sowing the seeds that the lover of good fruit usually undertakes to stock his garden and orchard with fine fruit-trees. Raising new varieties is always a slow, and, as generally understood, a most uncertain mode of bringing about this result. The novice plants and carefully watches his hundred seedling pippins, to find at last, perhaps, ninety-nine worthless or indifferent apples. It appears to him a lottery, in which there are too many blanks to the prizes. He therefore wisely resorts to the more certain mode of grafting from well-known and esteemed sorts.

Notwithstanding this, every year, under the influences of garden culture, and often without our design, we find our fruit-trees reproducing themselves; and occasionally there springs up a new and delicious sort, whose merits tempt us to fresh trials after perfection.

To a man who is curious in fruit,—the pomologist,—who views with a more than common eye the crimson cheek of a peach, the delicate bloom of a plum, or understands the epithets, rich, melting, buttery, as applied to a pear, nothing in the circle of culture can give more lively and unmixed pleasure than thus to produce and to create—for it is a sort of creation—an entirely new sort, which he believes will prove handsomer and better than anything that has gone before. And still more: as varieties which originate in a certain soil and climate are found best adapted to that locality, the production of new sorts of fruit of high merit may be looked on as a most valuable as well as interesting result.

Besides this, all the fine new fruits which of late figure so conspicuously in the catalogues of the nurseries and fruit-gardens, have not been originated at random and by chance efforts. Some of the most distinguished pomologists have devoted years to the subject of the improvement of fruit-trees by seeds, and have attained, if not certain results, at least some general laws, which greatly assist us in this process of amelioration. Let us therefore examine the subject a little more in detail.

In the wild state, every genus of trees consists of one or more *species*, or strongly marked individual sorts; as, for example, the white birch and the black birch; or, to confine ourselves more strictly to the matter in hand, the different species of cherry,—the wild or bird cherry, the sour cherry, the mazard cherry, &c. These *species*, in their natural state, exactly reproduce themselves; to use a common phrase, they “come the same” from seed. This they have done for centuries, and doubtless will do forever, so long as they exist under natural circumstances only.

On the other hand, suppose we select one of these *species* of fruit-trees and adopt it into our gardens. So long as we cultivate that individual tree, or any part of it, in the shape of sucker, graft, or bud, its nature will not be materially altered. It may, indeed, through cultiva-

tion, be stimulated into a more luxuriant growth; it will probably produce larger leaves and fruit; but we shall neither alter its fruit in texture, color, or taste. It will always be identically the same.

The process of amelioration begins with a new generation, and by sowing the seeds. Some species of tree, indeed, seem to refuse to yield their wild nature, never producing any variation by seed; but all fruit-trees, and many others, are easily *domesticated*, and more readily take the impress of culture.

If we sow a quantity of seed in garden soil of the common black mazard cherry (*Cerasus avium*), we shall find that, in the leaves and habit of growth, many of the seedlings do not entirely resemble the original species. When they come into bearing, it is probable we shall also find as great a diversity in the size, color, and flavor of the fruit. Each of these individual plants differing from the original type (the mazard) constitutes a new *variety*; though only a few, perhaps only one, may be superior to the original species.

It is worthy of remark, that exactly in proportion as this reproduction is frequently repeated, is the change to a great variety of forms or new sorts increased. It is likely, indeed, that to gather the seeds from a wild mazard in the woods, the instances of departure from the form of the original species would be very few; while if gathered from a garden tree, itself some time cultivated, or several removes from a wild state, though still a mazard, the seedlings will show great variety of character.

Once in the possession of a *variety* which has *moved out* of the natural into a more domesticated form, we have in our hands the best material for the improving process. The fixed original habit of the species is broken in upon, and this variety which we have created has always afterwards some tendency to make further departures from the original form. It is true that all or most of its seedlings will still retain a likeness to the parent, but a few will differ in some respects, and it is by seizing upon those which show symptoms of variation that the improver of vegetable races founds his hopes.

We have said that it is a part of the character of a species to produce the same from seed. This characteristic is retained even where the *sport* (as gardeners term it) into numberless varieties is greatest. Thus, to return to cherries: the Kentish or common pie-cherry is one species, and the small black mazard another, and although a great number of varieties of each of these species have been produced, yet there is always the likeness of the species retained. From the first we may have the large and rich Mayduke, and from the last the sweet and luscious Black-Hearts; but a glance will show us that the duke cherries retain the distinct dark foliage, and, in the fruit, something of the same flavor, shape, and color of the original species; and the heart cherries the broad leaves and lofty growth of the mazard. So too the currant and gooseberry are different species of the same genus; but though the English gooseberry-growers have raised thousands of new varieties of this fruit, and shown them as large as hens' eggs, and of every variety of form and color, yet their efforts with the gooseberry have not produced anything resembling the common currant.

Why do not varieties produce the same from seed? Why, if we plant the stone of a Green Gage plum, will it not always produce a Green Gage? This is often a puzzling question to the practical gardener, while his every-day experience forces him to assent to the fact.

We are not sure that the vegetable physiologists will undertake to answer this query fully. But in the mean time we can throw some light on the subject.

It will be remembered that our garden varieties of fruits are not natural forms. They are the artificial productions of our culture. They have always a *tendency to improve*, but they have also another and a stronger *tendency to return to a natural or wild state*. "There can be no doubt," says Dr. Lindley, "that if the arts of cultivation were abandoned for only a few years, all the annual varieties of plants in our gardens would disappear and be replaced by a few original wild forms." Between these two tendencies, therefore, the one derived from nature, and the other impressed by culture, it is easily seen how little likely is the progeny of varieties always to reappear in the same form.

Again, our American farmers, who raise a number of kinds of Indian corn, very well know that, if they wish to keep the sorts distinct, they must grow them in different fields. Without this precaution they find, on planting the seeds produced on the yellow-corn plants, that they have the next season a progeny not of yellow corn alone, but composed of every color and size, yellow, white, and black, large and small, upon the farm. Now many of the varieties of fruit-trees have a similar power of intermixing with each other while in blossom by the dust or pollen of their flowers, carried through the air by the action of bees and other causes. It will readily occur to the reader, in considering this fact, what an influence our custom of planting the different varieties of plum or of cherry together in a garden or orchard must have upon the constancy of habit in the seedlings of such fruits.

But there is still another reason for this habit, so perplexing to the novice, who, having tasted a luscious fruit, plants, watches, and rears its seedling, to find it, perhaps, wholly different in most respects. This is the influence of *grafting*. Among the great number of seedling fruits produced in the United States, there is found occasionally a variety, perhaps a plum or a peach, which will nearly always reproduce itself from seed. From some fortunate circumstances in its origin, unknown to us, this sort, in becoming improved, still retains strongly this habit of the natural or wild form, and its seeds produce the same. We can call to mind several examples of this; fine fruit-trees whose seeds have established the reputation in the neighborhood of fidelity to the sort. But when a *graft* is taken from one of these trees, and placed upon another stock, this grafted tree is found to lose its singular power of producing the same by seed, and becomes like all other worked trees. The stock exercises some, as yet, unexplained power in dissolving the strong natural habit of the variety, and becomes, like its fellows, subject to the laws of its artificial life.*

When we desire to raise new varieties of fruit, the common practice

* The doctrine here advanced has perhaps no foundation in fact, nor has there been any test made that, to our knowledge, would controvert it. Observation of many years, however, leads to the belief that the mere engrafting a variety upon another stock in no way affects its habit or capacity for reproducing itself just the same as it would if retained upon its parent root. The great vitality possessed by some varieties, their strong character, &c., prevent them, as it were, from receiving impregnation while in flower from any less vigorous sort, and hence, as a strong variety is oftener than otherwise surrounded by those of less vitality, it mainly fertilizes itself from its own blossoms and thus reproduces its leading qualities.

is to collect the seeds of the finest table fruits—those sorts whose merits are everywhere acknowledged to be the highest. In proceeding thus, we are all pretty well aware that the chances are generally a hundred to one against our obtaining any new variety of great excellence. Before we offer any advice on rearing seedlings, let us examine briefly the practice and views of two distinguished horticulturists abroad, who have paid more attention to this subject than any other persons whatever; Dr. Van Mons, of Belgium, and Thos. Andrew Knight, Esq., the late President of the Horticultural Society of London.

The Van Mons Theory.

Dr. Van Mons, Professor at Louvain, devoted the greater part of his life to the amelioration of fruits. His nurseries contained, in 1823, no less than two thousand seedlings of merit. His perseverance was indefatigable, and, experimenting mainly on Pears, he succeeded in raising an immense number of new varieties of high excellence. The Beurré Diel, De Louvain, Frederic of Wurtemberg, &c., are a few of the many well-known sorts which are the result of his unwearied labors.

The Van Mons theory may be briefly stated as follows:

All fine fruits are artificial products; the aim of nature, in a wild state, being only a healthy, vigorous state of the tree, and *perfect seeds* for continuing the species. It is the object of culture, therefore, to subdue or enfeeble this excess of vegetation; to lessen the coarseness of the tree; to diminish the size of the seeds; and to refine the quality and increase the size of the flesh or pulp.

There is always a tendency in our varieties of fruit-trees to return by their seeds towards a wild state.

This tendency is most strongly shown in the seeds borne by *old* fruit-trees. And “the older the tree is of any cultivated variety of Pear,” says Dr. Van Mons, “the nearer will the seedlings raised from it approach a wild state, without however ever being able to return to that state.”

On the other hand, the seeds of a young fruit-tree of a good sort, being itself in the state of amelioration, have the least tendency to retrograde, and are the most likely to produce improved sorts.

Again, there is a certain limit to perfection in fruits. When this point is reached, as in the finest varieties, the next generation will more probably produce bad fruit, than if reared from seeds of an indifferent sort in the course of amelioration. While, in other words, the seeds of the oldest varieties of good fruit mostly yield inferior sorts, seeds taken from recent varieties of bad fruit, and *reproduced uninterruptedly for several generations*, will certainly produce good fruit.*

With these premises, Dr. Van Mons begins by gathering his seeds from a young seedling tree, without paying much regard to its quality, except that it must be in a *state of variation*; that is to say, a garden variety, and not a wild sort. These he sows in a seed-bed or nursery, where he leaves the seedlings until they attain sufficient size to enable him to judge of their character. He then selects those which appear the most promising, plants them a few feet distant in the nursery, and

* Experience of American growers does not bear out the supposition here taken. The Seckel, one of the finest and most perfect pears, has perhaps given more valuable seedlings than any other one kind.

awaits their fruit. Not discouraged at finding most of them mediocre in quality, though differing from the parent, he gathers the first seeds of the most promising and sows them again. The next generation comes more rapidly into bearing than the first, and shows a greater number of promising traits. Gathering immediately, and sowing the seeds of this generation, he produces a third, then a fourth, and even a fifth generation, uninterruptedly, from the original sort. Each generation he finds to come more quickly into bearing than the previous ones (the fifth sowing of pears fruiting at three years), and to produce a greater number of valuable varieties; until in the fifth generation the seedlings are nearly all of great excellence.

Dr. Van Mons found the pear to require the longest time to attain perfection, and he carried his process with this fruit through five generations. Apples he found needed but four races, and peaches, cherries, plums, and other stone fruits were brought to perfection in three successive reproductions from the seed.

It will be remembered that it is a leading feature in this theory that, in order to improve the fruit, we must *subdue or enfeeble* the original coarse luxuriance of the tree. Keeping this in mind, Dr. Van Mons always gathers his fruit before fully ripe, and allows them to rot before planting the seeds, in order to refine or render less wild and harsh the next generation. In transplanting the young seedlings into quarters to bear he cuts off the tap root, and he annually shortens the leading and side branches, besides planting them only a few feet apart. All this lessens the vigor of the trees, and produces an impression upon the nature of the seeds which will be produced by their first fruit; and, in order to continue in full force the progressive variation, he allows his seedlings to bear on their own roots.*

Such is Dr. Van Mons' theory and method for obtaining new varieties of fruit. It has never obtained much favor in England, and from the length of time necessary to bring about its results, it is scarcely likely to come into very general use here. At the same time it is not to be denied that in his hands it has proved a very successful mode of obtaining new varieties.

It is also undoubtedly true that it is a mode closely founded on natural laws, and that the great bulk of our fine varieties have originated by chance.

The first colonists here, who brought with them many seeds gathered from the best old varieties of fruits, were surprised to find their seedlings producing only very inferior fruits. These seedlings had returned, by their inherent tendency, almost to a wild state. By rearing from them, however, seedlings of many repeated generations, we have arrived at a great number of the finest apples, pears, peaches, and plums. According to Dr. Van Mons, had this process been continued *uninterruptedly*, from one generation to the next, a much shorter time would have been necessary for the production of first-rate varieties.

To show how the practice of chance sowing works in the other hemis-

* "I have found this art to consist in regenerating in a direct line of descent, and as rapidly as possible, an improving variety, taking care that there be no interval between the generations. To sow, to re-sow, to sow again, to sow perpetually, in short, to do nothing but sow, is the practice to be pursued, and which cannot be departed from; and in short this is the whole secret of the art I have employed."—Van Mons' *Arbres Fruitières*, l. p. 22, 223.

phère, it is stated by one of the most celebrated of the old writers on fruits, Duhamel of France, that he had been in the habit of planting seeds of the finest table pears for fifty years without ever having produced a good variety. These seeds were from trees of old varieties of fruit.

The American gardener will easily perceive, from what we have stated, a great advantage placed in his hands at the present time for the amelioration of fruits by this system. He will see that, as most of our American varieties of fruit are the result of repeated sowings, more or less constantly repeated, he has before him almost every day a part of the ameliorating process in progress; to which Dr. Van Mons, beginning *de novo*, was obliged to devote his whole life. Nearly all that it is necessary for him to do in attempting to raise a new variety of excellence by this simple mode, is to gather his seeds (before they are fully ripe) from a seedling sort of promising quality, though not yet arrived at perfection. The seedling must be quite young—must be on its own root (not grafted); and it must be a healthy tree, in order to secure a healthy generation of seedlings. Our own experience leads us to believe that he will scarcely have to go beyond one or two generations to obtain fine fruit. These remarks apply to most of our table fruits commonly cultivated.

In order to be most successful in raising new varieties by successive reproduction, let us bear in mind that we must avoid—1st, the seeds of old fruit-trees; 2d, those of grafted fruit-trees; and 3d, that we have the best grounds for good results when we gather our seeds from a young seedling tree, which is itself rather a *perfecting* than a *perfect* fruit.

It is not to be denied that, in the face of Dr. Van Mons' theory, in this country new varieties of rare excellence are sometimes obtained at once by planting the seeds of old grafted varieties; thus the Lawrence's Favorite and the Columbia plums were raised from seeds of the Green Gage, one of the oldest European varieties.

Such are the means of originating new fruits by the Belgian mode. Let us now examine another more direct, more interesting, and more scientific process—cross-breeding; a mode almost universally pursued now by skillful cultivators in producing new and finer varieties of plants; and which Mr. Knight, the most distinguished horticulturist of the age, so successfully practised on fruit-trees.

Cross-breeding.

In the blossoms of fruit-trees, and of most other plants, the seed is the offspring of the *stamens* and *pistil*, which may be considered the male and female parents, growing in the same flower. Cross-breeding is, then, nothing more than removing out of the blossom of a fruit-tree the stamens, or male parents, and bringing those of another and different variety of fruit, and dusting the pistil or female parent with them,—a process sufficiently simple, but which has the most marked effect on the seeds produced. It is only within about fifty years that cross-breeding has been practised; but Lord Bacon, whose great mind seems to have had glimpses into every dark corner of human knowledge, finely foreshadowed it. "The compounding or mixture of plants is not found out, which, if it were, is more at command than that of living creatures; wherefore, it were one of the most notable discoveries touching plants to find

it out, for so you may have great varieties of fruits and flowers yet unknown."

In Figure 1 is shown the blossom of the Cherry. The central portion, *a*, connected directly with the young fruit, is the *pistil*. The numerous surrounding threads, *b*, are the *stamens*. The summit of the stamen is called the *anther*, and secretes the powdery substance called *pollen*. The *pistil* has at its base the embryo fruit, and at its summit the *stigma*. The use of the stamens is to fertilize the young seed contained at the base of the pistil; and if we fertilize the pistil of one variety of fruit by the pollen of another we shall obtain a new

FIG. 1.

variety, partaking intermediately of the qualities of both parents. Thus, among fruits owing their origin directly to cross-breeding, Coe's Golden Drop Plum was raised from the Green Gage, impregnated by the Magnum Bonum or Egg Plum; and the Elton cherry from the Bigarreau, impregnated by the White Heart.* Mr. Knight was of opinion that the habits of the new variety would always be found to partake most strongly of the constitution and habits of the female parent. Subsequent experience does not fully confirm this, and it would appear that the parent whose character is most *permanent*, impresses its form most forcibly on the offspring.

The process of obtaining cross-bred seeds of fruit-trees is very easily performed. It is only necessary, when the tree blooms which we intend to be the mother of the improved race, to select a blossom or blossoms growing upon it not yet fully expanded. With a pair of scissors we cut out and remove all the anthers. The next day, or as soon as the blossom is quite expanded, we collect with a camel's-hair brush the pollen from a fully blown flower of the variety we intend for the male parent, applying the pollen and leaving it upon the stigma or point of the pistil. If your trees are much exposed to those busy little meddlers, the bees, it is well to cover the blossoms with a loose bag of thin gauze, or they will perhaps get beforehand with you in your experiments in cross-breeding. Watch the blossoms closely as they open, and bear in mind that the two essential points in the operation are: 1st, to extract the anthers carefully, before they have matured sufficiently to fertilize the pistil; and 2d, to apply the pollen when it is in perfection (dry and powdery), and while the stigma is moist. A very little practice will enable the amateur to judge of these points.

There are certain limits to the power of crossing plants. What is strictly called a *cross-bred* plant or fruit is a sub-variety raised between two varieties of the same species. There are, however, certain species, *nearly allied*, which are capable of fertilizing each other. The offspring in this case is called a *hybrid*, or mule, and does not always produce perfect seeds. "This power of hybridizing," says Dr. Lindley, "appears to be much more common in plants than in animals. It is, however, in general only between nearly allied species that this intercourse can take place; those which are widely different in structure and constitution not

* The seedlings sometimes most resemble one parent, sometimes the other; but more frequently share the qualities of both. Mr. Coxe describes an Apple, a cross between a Newtown Pippin and a Russet, the fruit of which resembled externally at one end the Russet and at the other the Pippin, and the flavor at either end corresponded exactly with the character of the exterior.

being capable of any artificial union. Thus the different species of Strawberry, of the gourd or melon family, intermix with the greatest facility, there being a great accordance between them in general structure and constitution. But no one has ever succeeded in compelling the pear to fertilize the apple, nor the gooseberry the current. And as species that are very dissimilar appear to have some natural impediment which prevents their reciprocal fertilization, so does this obstacle, of whatever nature it may be, present an insuperable bar to the intercourse of the different genera. All the stories that are current as to the intermixture of oranges and pomegranates, of roses and black currants, and the like, may therefore be set down to pure invention."

In practice this power of improving varieties by crossing is very largely resorted to by gardeners at the present day. Not only in fruit-trees, but in ornamental trees, shrubs, and plants, and especially in florists' flowers, it has been carried to a great extent. The great number of new and beautiful Roses, Azaleas, Camellias, Fuchsias, Dahlias, and other flowering plants so splendid in color and perfect in form, owe their origin to careful cross-breeding.

In the amelioration of fruits it is by far the most certain and satisfactory process yet discovered. Its results are more speedily obtained, and correspond much more closely to our aim, than those procured by successive reproduction.

In order to obtain a new variety of a certain character, it is only necessary to select two parents of well known habits, and which are both varieties of the same or nearly allied species, and cross them for a new and intermediate variety. Thus, if we have a very early but insipid and worthless sort of pear, and desire to raise from it a variety both early and of fine flavor, we should fertilize some of its pistils with the pollen of the best flavored variety of a little later maturity. Among the seedlings produced we should look for early pears of good quality, and at least for one or two varieties nearly or quite as early as the female parent, and as delicious as the male. If we have a very small but highly flavored pear, and wish for a larger pear with a somewhat similar flavor, we must fertilize the first with the pollen of a large and handsome sort. If we desire to impart the quality of lateness to a very choice plum, we must look out for a late variety as the mother, and cross it with our best flavored sort. If we desire to impart hardness to a tender fruit, we must undertake a cross between it and a much harder sort; if we seek greater beauty of color or vigor of growth, we must insure these qualities by selecting one parent having such quality strongly marked.

As the seeds produced by cross fertilization are not found to produce precisely the same varieties, though they will nearly all partake of the mixed character of the parents, it follows that we shall be most successful in obtaining precisely all we hope for in the new race in proportion to the number of our cross-bred seedlings; some of which may be inferior, as well as some superior to the parents. It is always well, therefore, to cross several flowers at once on the same plant, when a single blossom does not produce a number of seeds.

We should observe here, that those who devote their time to raising new varieties must bear in mind that it is not always by the first fruits of a seedling that it should be judged. Some of the finest varieties require a considerable age before their best qualities develop themselves, as it is only when the tree has arrived at some degree of maturity that its secre-

tions, either for flower or fruit, are perfectly elaborated. The first fruit of the Black Eagle cherry, a fine cross-bred raised by Mr. Knight, was pronounced worthless when first exhibited to the London Horticultural Society; its quality now proves that the tree was not then of sufficient age to produce its fruit in perfection.

CHAPTER II.

REMARKS ON THE DURATION OF VARIETIES OF FRUIT-TREES.

It was for a long time the popular notion, that when a good variety of fruit was once originated from seed, it might be continued by grafting and budding forever,—or, at least, as some old parchment deeds pithily gave tenure of land—“as long as grass grows and water runs.”

About 1830, however, Thomas Andrew Knight, the distinguished President of the Horticultural Society of London, published an Essay in its Transactions tending entirely to overthrow this opinion, and to establish the doctrine that all varieties are of very limited duration.

The theory advanced by Mr. Knight is as follows: All the constitutional vigor or properties possessed by any variety of fruit are shared at the same time by all the plants that can be made from the buds of that variety, whether by grafting, budding, or other modes of propagating. In similar terms, all the plants or trees of any particular kind of pear or apple being only parts of one original tree, itself of limited duration, it follows, as the parent tree dies, all the others must soon after die also. “No trees, of any variety,” to use his own words, “can be made to produce blossom or fruit till the original tree of that variety has attained the age of puberty;* and, under ordinary modes of propagation, by grafts and buds, all become subject, at no very distant period, to the debilities and diseases of old age.”

It is remarkable that such a theory as this should have been offered by Mr. Knight, to whose careful investigations the science of modern horticulture is so deeply indebted—as, however common it is to see the apparent local decline of certain sorts of fruit, yet it is a familiar fact that many sorts have also been continued a far greater length of time than the life of any one parent tree. Still, the doctrine has found supporters abroad, and at least one hearty advocate in this country.

Mr. Kenrick, in his new American Orchardist, adopts this doctrine, and in speaking of Pears says: “I shall, in the following pages, designate some of these in the class of old varieties, once the finest of all old pears, whose duration we had hoped, but in vain, to perpetuate. For, except in certain sections of the city, and some very few and highly

* This part of the doctrine has of late been most distinctly refuted, and any one may repeat the experiment. Seedling fruit-trees, it is well known, are usually several years before they produce fruit. But if a graft is inserted on a bearing tree, and, after it makes one season's fair growth, the grafted shoot is bent directly down and tied there, with its point to the stock below, it will the next season—the sap being checked—produce flower-buds and begin to bear, long before the parent tree.

avored situations in the country around, they (the old sorts) have become, either so uncertain in their bearing—so barren—so unproductive—or so miserably blighted—so mortally diseased—that they are no longer to be trusted; they are no longer what they once were with us, and what many of them are still described to be by most foreign writers.”

Mr. Kenrick accordingly arranges in separate classes the *Old* and *New* Pears; and while he praises the latter, he can hardly find epithets sufficiently severe to bestow on the former poor unfortunates. Of the Doyenné he says: “This most eminent of all Pears has now become an outcast, intolerable even to sight;” of the Brown Beurré, “once the best of all Pears—now become an outcast.” The St. Germain “has long since become an abandoned variety,” &c., &c.

Many persons have, therefore, supposing that these delicious varieties had really and quietly given up the ghost, made no more inquiries after them, and only ordered from the nurseries the new varieties. And this not always, as they have confessed to us, without some lingering feeling of regret at thus abandoning old and tried friends for new-comers—which, it must be added, not unfrequently failed to equal the good qualities of their predecessors.

But, while this doctrine of Knight's has found ready supporters, we are bound to add that it has also met with sturdy opposition. At the head of the opposite party we may rank the most distinguished vegetable physiologist of the age, Professor De Candolle, of Geneva. Varieties, says De Candolle, will endure and remain permanent so long as man chooses to take care of them, as is evident from the continued existence to this day of sorts, the most ancient of those which have been described in books. By negligence, or through successive bad seasons, they may become diseased, but careful culture will restore them, and retain them, to all appearance, forever.

Our own opinion coincides, in the main, with that of De Candolle. While we admit that, in the common mode of propagation, varieties are constantly liable to decay or become comparatively worthless, we believe that this is owing not to natural limits set upon the duration of a variety; that it does not depend on the longevity of the parent tree; but upon the care with which the sort is propagated, and the nature of the climate or soil where the tree is grown.

It is a well-established fact, that a seedling tree, if allowed to grow on its own root, is always much longer lived, and often more vigorous than the same variety when grafted upon another stock; and experience has also proved that in proportion to the likeness or close relation between the stock and the graft is the long life of the grafted tree. Thus a variety of pear grafted on a healthy pear seedling lasts almost as long as upon its own roots. Upon a thorn stock it does not endure so long. Upon a mountain ash or quince stock still less; until the average life of the pear-tree when grafted on the quince is reduced to one-third of its ordinary duration on the pear stock. This is well known to every practical gardener, and it arises from the want of affinity between the quince stock and the pear graft. The latter is rendered dwarf in its habits, bears very early, and perishes equally soon.

Next to this, the apparent decay of a variety is often caused by grafting upon unhealthy stocks. For although grafts of very vigorous habit have frequently the power of renovating in some measure, or for a time,

the health of the stock, yet the tree, when it arrives at a bearing state, will, sooner or later, suffer from the diseased or feeble nature of the stock.

Carelessness in selecting scions for engrafting is another fertile source of degeneracy in varieties. Every good cultivator is aware that if grafts are cut from the ends of old bearing branches, exhausted by over-bearing, the same feebleness of habit will, in a great degree, be shared by the young graft. And on the contrary, if the thrifty straight shoots that are thrown out by the upright extremities, or the strong limb-sprouts, are selected for grafting, they ensure vigorous growth, and healthy habit in the graft.

Finally, unfavorable soil and climate are powerful agents in deteriorating varieties of fruit-tree. Certain sorts that have originated in a cold climate are often short-lived and unproductive when taken to warmer ones, and the reverse. This arises from a want of constitutional fitness for a climate different from its natural one.

Most varieties of apples originating in the climate of the Middle States, if their period of maturity be mid-winter, when taken to the extreme northern limits lose their value, because of the season not being long enough for their juices to become fully matured. Again, if they are taken to the Southern States their period of maturity is hastened by a greater amount of continued heat, and the quality impaired.

Varieties, however, that originate at the North, and have their maturity naturally in the warm summer months, are improved by their removal South. But this only proves that it is impossible to pass certain natural limits of fitness for climate, and not that the existence of the variety itself is in any way affected by these local failures.

Any or all of these causes are sufficient to explain the apparent decay of some varieties of fruit, and especially of pears, over which some cultivators, of late, have uttered so many lamentations, scarcely less pathetic than those of Jeremiah.

Having stated the theories on this subject, and given an outline of our explanation, let us glance for a moment at the actual state of the so-called decayed varieties, and see whether they are really either extinct, or on the verge of annihilation.

Mr. Knight's own observation in England led him to consider the English Golden Pippin and the Nonpareil, their two most celebrated varieties of apple, as the strongest examples of varieties just gone to decay, or, in fact, the natural life of which had virtually expired twenty years before. A few years longer he thought it might linger on in the warmer parts of England, as he supposed varieties to fall most speedily into decay in the north, or in a cold climate.

Lindley, however, his contemporary, and second to no one in practical knowledge of the subject, writing of the Golden Pippin,* very frankly states his dissent, as follows: "This apple is considered by some of our modern writers on Pomology to be in a state of decay, its fruit of inferior quality, and its existence near its termination. I cannot for a moment agree with such an opinion, because we have facts annually before our eyes completely at variance with such an assertion. In Covent Garden, and indeed in any other large market in the southern or mid-land counties of England, will be found specimens of fruit as perfect

* *Guide to the Orchard*, by George Lindley.

and as fine as have been figured or described by any writer, either in this or any other country whatever. Instead of the trees being in a state of 'rapid decay,' they may be found of unusually large size, perfectly healthy, and their crops abundant; the fruit perfect in form, beautiful in color, and excellent in quality." And the like remarks are made of the Nonpareil.

Certain French writers, about this time, gladly seized Knight's theory as an explanation of the miserable state into which several fine old sorts of pears had fallen about Paris, owing to bad culture and propagation. They sealed the death-warrant, in like manner, of the Brown Beurré, Doyenné, Chaumontel, and many others, and consigned them to oblivion in terms which Mr. Kenrick has already abundantly quoted.

Notwithstanding this, and that ten or fifteen years have since elapsed, it is worthy of notice that the repudiated apples and pears still hold their place among all the best cultivators in both England and France. And the "extinct varieties" seem yet to bid defiance to theorists and bad cultivators.

But half the ground is not yet covered. How does the theory work in America? is the most natural inquiry. In this country we have soil varying from the poorest sand to the richest alluvial, climate varying from frigid to almost torrid—a range wide enough to include all fruit-trees between the apple and the orange.

We answer that the facts here, judged in the whole, are decidedly against the theory of the extinction of varieties. While here, as abroad, unfavorable soil, climate, or culture have produced their natural results of a feeble and diseased state of certain sorts of fruit, these are only the exceptions to the general vigor and health of the finest old sorts in the country at large.

Recent experiments have proved that it is not sufficient to bring healthy trees of the old varieties from the interior of the seaboard to insure, in the latter localities, fair and excellent crops. But, on the other hand, the complete renovation of blighted trees by the plentiful use of wood-ashes, bone-dust, lime, and blacksmith cinders, along with common manure, shows us distinctly that it is not the *age* of these varieties of fruit which causes their apparent decline, but a want of that food absolutely necessary to the production of healthy fruit.*

But there is another interesting point in this investigation. Do the newly originated sorts really maintain in the unfavorable districts the appearance of perfect health? Are the new pears uniformly healthy where the old ones are always feeble?

Undoubtedly this question must be answered in the negative. Some

* Since the writing of this, in 1845, there have occurred seasons when nearly every variety of fruit perfected, and there have also been seasons when the old as well as new varieties have failed, and that too in almost all soils and in many varied sections of the country. To our knowledge, no continued experiments in the practice of applying special manures as remedial agents have been tried, but, from the fact that old as well as new sorts have frequently failed in our rich western soils and inland climates, we have come to regard the cause of cracking and other diseases of the pear more to proceed from climatic or atmospheric influence than from any special-condition or quality of the soil. It is now generally conceded that our seasons are more changeable and the extremes greater than they were half a century back, and to this influence do we attribute in a great measure the deterioration noted in occasional seasons and localities.

of the latest Flemish pears already exhibit symptoms of decay or bad health in these districts. Even Mr. Kenrick, with all his enthusiasm for the new sorts, is obliged to make the following admission respecting the Beurré Diel pear, the most vigorous and hardy here of all: "I regret to add, that near Boston this noble fruit is liable to crack badly." We predict that many of the Flemish pears originated by Van Mons will become feeble, and the fruit liable to crack, in the neighborhood of Boston, in a much less time than did the old varieties.

And this leads us to remark here, that the hardiness of any variety depends greatly upon the circumstances of its origin. When a new variety springs up accidentally from a healthy seed in a semi-natural manner, like the Seckel, the Dix, and other native sorts, it will usually prove the hardiest. It is, as it were, an effort of nature to produce a new individual out of the materials in a progressive state which garden culture has afforded. Cross-bred seedlings—one parent being of a hardy nature, and both healthy; such as Knight's own seedlings, the Monarch and Dunmore pears—are next in hardiness. Lastly, we rank varieties reared by Van Mons' method—that of continually repeated reproductions. This, as Van Mons distinctly states, is an *enfeebling* process—without any compensating element of vigor. Hence it follows, as a matter of course, that seedlings of the fifth or sixth generation, as are some of his varieties, must in their origin be of feeble habit. Van Mons himself was fully aware of this, and therefore resorted to "grafting by copulation,"—in fact, root-grafting,—well knowing that on common stocks these new varieties would, in light soils, soon become feeble and decayed. It is needless for us to add that hence we consider the Belgian mode of producing new varieties greatly inferior to the English one, since it gives us varieties often impaired in health in their very origin.

If any further proof of this is desired, we think it is easily found by comparing the robust vigor and longevity of many native pear-trees to be found in the United States—some of them 80 or 100 years old, and still producing large crops of fruit—with the delicate trees of several new varieties now in our gardens from Europe. These varieties are delicate not only with respect to their constitutional vigor, but they are also more susceptible to injury from the severity of our winter's cold and summer's sun.

There are great advantages, undoubtedly, for soils naturally unfavorable, and for small gardens, in grafting the pear upon quince stocks; yet, as it diminishes the vigor of the tree, it is not impossible that continued propagation from dwarf trees may somewhat lessen the vital powers and the longevity of a given variety.

The decay of varieties of the Apricot, or Peach, much shorter lived trees by nature, we seldom or never hear of. Varieties of both are now in cultivation, and in the most perfect vigor, of 200 years' duration. This, probably, is owing to the more natural treatment these trees receive generally. Varieties of the vine are said never to degenerate, and this is perhaps owing to their having very rarely been propagated by grafting.*

* We do not deny that in any given soil there is a period at which a variety of tree or plant exhibits most vigor, and after having grown there awhile it ceases to have its former luxuriance. The same is true of wheat or potatoes, and accordingly farmers are in the habit of "changing their seed." The nutriment for a given variety is after a time exhausted from the soil, and unless it is again

We are not without remedy for varieties that have partially decayed in a certain district. If the trees have once been productive of excellent fruit, and are still in a sound condition, though enfeebled, a thorough renewal of their powers will again restore them to health. To effect this, the soil about the roots should be replaced by new, enriched by manure or peat-compost, and mixed with the mineral substances named in the preceding page. The bark of the trunk and large branches should be well scraped, and, as well as all the limbs, thoroughly washed with soft soap; the head should be moderately pruned; and finally, the tree should be suffered to bear no fruit for the two following seasons. After this it will generally bear excellent fruit for several years again.

In making plantations of fine old varieties, in districts where the stock has become feeble, something may be gained by procuring grafts or trees from more favorable localities, where the fruit is still as fair as ever, and care should be exercised in selecting only the healthiest grafts or trees. Nurserymen in unfavorable districts should endeavor to propagate only from trees of healthy character; and if those in their own vicinity are diseased, they should spare no pains to bring into their nurseries and propagate only such as they feel confident are healthy and sound. On them, next to the soil, depends very considerably the vigor or debility of the stock of any given variety in the country around them.

In Mr. Knight's original essay on the Decay of Varieties, he clearly stated a circumstance that most strongly proves what we have here endeavored to show, viz.: that the local decline of a variety is mainly owing to neglect, and to grafting on bad stock. We allude to the fact repeatedly verified, that healthy young shoots, taken from the *roots* of an old variety in apparent decline, produce trees which are vigorous and healthy. "The decay," says he, "of the powers of life in the roots of seedling trees is exceedingly slow comparatively with that in the branches. Scions (or shoots) obtained from the roots of pear-trees two hundred years old afford grafts which grow with great vigor, and which are often covered with thorns like young seedling stocks; whilst other grafts, taken at the same time from the extremities of the branches of such trees, present a totally different character, and a very slow and unhealthy growth. I do not conceive that such shoots possess all the powers of a young seedling, but they certainly possess no inconsiderable portion of such powers."

This is nothing more, in fact, than going back to the roots—the portion of the tree least exhausted—for the renewal of the health of a variety when the branches of the tree have been exhausted by overbearing, &c. It is a simple and easy mode of increasing the vigor of a sort of delicate habit, to take scions from young root-suckers for grafting anew. This can of course only be done with trees that grow on their own roots, or have not been grafted.

supplied the tree must decline. In light soils this speedily happens. In strong clayey or rocky soils, the natural decomposition of which affords a continual store of lime, potash, &c., the necessary supply of inorganic food is maintained, and the variety continues healthy and productive.

CHAPTER III.

PROPAGATION OF VARIETIES — GRAFTING — BUDDING—CUTTINGS, LAYERS,
AND SUCKERS.

AFTER having obtained a new and choice kind of fruit, which in our hands is perhaps only a single tree, and which, as we have already shown, seldom produces the same from seed, the next inquiry is how to continue this variety in existence, and how to increase and extend it, so that other gardens and countries may possess it as well as ourselves. This leads us to the subject of the propagation of fruit-trees, or the continuation of varieties by grafting and budding.

Grafting and budding are the means in most common use for propagating fruit-trees. They are, in fact, nothing more than inserting upon one tree the shoot or bud of another, in such a manner that the two may unite and form a new compound. No person having any interest in a garden should be unable to perform these operations, as they are capable of effecting transformations and improvements in all trees and shrubs, no less valuable than they are beautiful and interesting.

Grafting is a very ancient invention, having been well known and practised by the Greeks and Romans. The latter, indeed, describe a great variety of modes, quite as ingenious as any of the fanciful variations now used by gardeners. The French, who are most expert in grafting, practise occasionally more than fifty modes, and within a few years have succeeded perfectly in grafting annual plants, such as the tomato, the dahlia, and the like.

The uses of grafting and budding, as applied to fruit-trees, may be briefly stated as follows:

1. The rapid increase of propagation of valuable sorts of fruit not easily raised by seeds or cuttings, as is the case with nearly all varieties.
2. To renew or alter the heads of trees partially or fully grown, producing in two or three years, by heading-in and grafting, a new head, bearing the finest fruit, on a formerly worthless tree.
3. To render certain foreign and delicate sorts of fruit more hardy by grafting them on robust stocks of the same species native to the country, as the foreign grape on the native; and to produce fine fruit in climates or situations not naturally favorable, by grafting on another species more hardy, as in a cool climate and damp strong soil by working the Peach on the Plum.
4. To render *dwarf* certain kinds of fruit, by grafting them on suitable stocks of slower growth, as in the case of the Pear on the Quince, the Apple on the Paradise stock, &c.
5. By grafting several kinds on the same tree, to be able to have a succession of fruit, from early to late, in a small garden.
6. To hasten the bearing of seedling varieties of fruit, or of such as are a long time in producing fruit, by grafting them on the branches of full-grown or mature bearing trees. Thus a seedling pear, which would not produce fruit on its own root in a dozen years, will generally begin to bear the third or fourth year if grafted on the extremity of the bearing branches of a mature tree.

The proper time for grafting fruit-trees is in the spring, as soon as the sap is in motion, which commences earliest with the Cherry and

Plum, and ends with the Pear and Apple. The precise time of course varies with the season and the climate, but is generally comprised from February to the middle of April. The grape-vine, however, which suffers by bleeding, is not usually grafted until it is in leaf. The most favorable weather for grafting is a mild atmosphere with occasional showers.

The scions are generally selected previously, as it is found, in nearly all kinds of grafting by scions, that success is more complete when the stock upon which they are placed is a little more advanced—the sap in a more active state than in the scion. To secure this, we usually cut the scions very early in the spring, during the winter, or even in the autumn, burying their lower ends in the ground in a shaded place, or keeping them in fine soil in the cellar till wanted for use. In cutting scions we choose straight thrifty shoots of the last year's growth, which may remain entire until we commence grafting, when they may be cut into scions of three or four buds each. In selecting scions from old trees it is always advisable to choose the most vigorous of the last year's shoots growing near the centre or top of the tree. Scions from sickly and unhealthy branches should be rejected, as they are apt to carry with them this feeble and sickly state. Scions taken from the lower bearing branches will produce fruit soonest, but they will not afford trees of so handsome a shape or so vigorous a growth as those taken from the thrifty upright shoots near the centre or top of the tree. Nurserymen generally take their scions from young grafted trees in the nursery-rows, these being usually in better condition than those taken from old trees, not always in a healthy state.

The stock for grafting upon is generally a tree which has been standing, at least for a year previously, on the spot where it is grafted, as success is much less certain on newly moved trees.

In the case, however, of very small trees or stocks, which are grafted below the surface of the ground, as is frequently the practice with the Apple in American nurseries, the stocks are grafted in the house in winter, or early spring, put away carefully in a damp cellar, and planted out in the spring; but this method is only successful when the root is small, and when the top of the stock is taken off, and the whole root is devoted to supplying the graft with nourishment.

The theory of grafting is based on the power of union between the young tissues or organizable matter of growing wood. When the parts are placed nicely in contact, the ascending sap of the stock passes into and sustains life in the scion; the buds of the latter, excited by this supply of sap and the warmth of the season, begin to elaborate and send down woody matter, which, passing through the newly granulated substance of the parts in contact, unites the graft firmly with the stock. "If," says De Candolle, "the descending sap has only an incomplete analogy with the wants of the stock, the latter does not thrive, though the organic union may have taken place; and if the analogy between the albumen of stock and scion is wanting, the organic union does not operate, the scion cannot absorb the sap of the stock, and the graft fails."

Grafting therefore is confined within certain limits. A scion from one tree will not, from the want of affinity, succeed on every other tree, but only upon those to which it is allied. We are, in short, only successful in budding or grafting where there is a close relationship and similarity of structure between the stock and the scion. This is the case with *varieties* of the same species which take most freely, as the different

sorts of Apple; next with the different *species* of a genus, as the Apple and the Pear, which grow, but in which the union is less complete and permanent; and lastly with the *genera* of the same natural family, as the Cherry on the Plum, which die after a season or two. The ancients boasted of Vines and Apples grafted on Poplars and Elms; but repeated experiments, by the most skilful cultivators of modern times, have clearly proved that although we may, once in a thousand trials, succeed in effecting these ill-assorted unions, yet the graft invariably dies after a few months' growth.*

The range in grafting or budding, for fruit-trees in ordinary culture, is as the following: Apples, on apple or crab seedlings for orchards (standards), or on Paradise apple stocks, for dwarfs; Pears, on pear seedlings for common culture, or Quince stocks for dwarfs, and sometimes on the thorn for clayey soils; Peaches, on their own seedlings for standards or for orchards; on Almonds, for hot and dry climates; on Plums in cold or moist soils, or to secure them against the worm; Apricots, on Plum stocks, to render them hardy and productive, or on their own seedlings to render them long-lived. Nectarines are usually worked on the Peach or Plum; and Cherries on mazard seedlings, or on the perfumed Cherry, and on the morello for forming half dwarfs.

The manual operation of grafting is performed in a very easy and complete manner when the size of the stock, or branch to be grafted, corresponds precisely with that of the scion. In this case, which is called *splice-grafting*, it is only necessary with a smooth sloping cut, upwards on the stock *a*, and downwards on the scion *b*, Fig 2. to make the two fit precisely, so that the inner bark of one corresponds exactly with that of the other, to bind them firmly together with a strand of matting, and to cover the wound entirely with grafting clay or wax, and the whole is finished. In this, which is one of the neatest modes, the whole forms a complete union nearly at once, leaving scarcely any wounded part to heal over. But, as it is only rarely that the stock is of so small a size as to fit thus perfectly to the scion, the operation must be varied somewhat, and requires more skill. The method in most common use to cover all difficulties is called *tongue grafting*.

We may remark here that grafting the shoots of Peaches, Nectarines, and Apricots, owing to their large pith, is more difficult than that of other fruit-trees. A variation of splice-grafting, Fig. 3, has been invented to obviate this. This consists in selecting the scion *a*, so as to leave at its lower end about a fourth of an inch of two years old wood, which is much firmer. The bottom of

* The classical horticulturist will not fail to recall to mind Pliny's account of the tree in the garden of Lucullus, grafted in such a manner as to bear Olives, Almonds, Apples, Pears, Plums, Figs, and Grapes. There is little doubt, however, that this was some ingenious deception, as to this day the Italian gardeners pretend to sell Jasmines, Honeysuckles, &c., growing together and grafted on Oranges and Pomegranates. This is ingeniously managed, for a short-lived effect, by introducing the stems of these smaller plants through a hole bored up the centre of the stock of the trees—their roots being in the same soil, and their stems, which after a little growth fill up these holes, appearing as if really grafted.

the slope on the stock is cut with a dovetail notch, *b*, into which the scion is fitted.

Tongue-grafting (or whip-grafting), Fig. 4, resembles very nearly

Splice-Grafting the Peach.

Tongue-Grafting, progressive stages.

splice-grafting, except, instead of the simple splice, a tongue is made to hold the two together more firmly. In order to understand this method, let us explain it a little in detail.

Having chosen your stock of the proper size, cut it off at the point where, *a*, it appears best to fix the graft. If the stock is quite small, it may be within three or four inches of the ground. Then, with a *very sharp knife*, make a smooth cut upwards, *b*, about two inches in length. Next make a slit from the top of this cut about one-fourth of the way downwards, *c*, taking out a thin tongue of wood. Cut the scion four or five inches long, or so as to have three buds; then shape the lower end with a single smooth sloping cut, *e*, about the same length as that on the stock, and make the tongue upward, *f*, to fit in the downward slit of the stock. Now apply the scion accurately to the stock, making the *inner bark of the scion fit exactly the inner bark of the stock, at least on one side, g*. Without changing their position, tie them together carefully with a piece of bass matting or tape, *h*. And finally cover the wound with well-prepared grafting clay or wax, *i*. This ball of clay should more than cover the union, by an inch above and below, and should be about an inch thick. If grafting-wax is used, the covering need not be above half an inch thick.

American Whip Tongue-Grafting—the mode generally practised by American nurserymen—is similar to the foregoing method, but much more rapid in its execution. The scion and stock are first cut, as represented in Fig. 2, for splice-grafting, and then the knife is passed upward in the scion, *a*, Fig. 5, and downward in the stock, *b*, forming a sliced tongue in appearance, and when joined together, *c*, serves to hold the scion in place. The tying for out-door grafting is then done by a narrow strip of cloth, say half an inch to an inch wide, one side of which is saturated or coated with grafting-wax, and as each turn round the

American Whip Tongue-Grafting in its different stages.

(a). Scion cut for insertion. (b). Stock prepared to receive the scion. (c). Stock and scion united. (d). The same tied up.

Whip-Grafting large stock.

(a). Stock prepared to receive the scion. (b). Scion cut for insertion. (c). Stock and scion united.

graft and stock is made, the adhesive power of the wax holds the strip firmly and renders the work complete (d).

Whip-grafting large stocks is frequently practised, and is a very successful manner of operating upon quite large trees in the nursery row. The sloping cut upon the stock, and the forming of the graft, is the same as in the ordinary American whip tongue-grafting, except that one side of the stock, opposite that on which the graft is placed, should be cut away upon the same slope as the grafted side, as indicated by the dotted lines in Fig. 6. As soon as the graft has taken, and commenced expanding its leaves and sending out shoots, it will be necessary to rub or cut off all shoots between the ball and the ground, if it is a small stock, or all those which would rob it of a principal share of nourishment, if upon a large tree. If the scion or stock is very weak, it is usual to leave one or two other buds for a time, to assist in drawing up the sap. When the graft has made a growth of two or three inches the ball of clay may be removed, and if the graft is securely united, the bandage may be loosened and re-tied, or it may be cut partially away at the back of the graft, for the purpose of permitting the expansion of growth, that otherwise would soon be checked, and cause the graft to break off. In the use of the wax-cloth strips, passing the knife at the back and cutting the tie is all that is requisite. Early in August the angle left at the top of the stock should be cut off smoothly, in order to allow the bark of the stock and the scion to heal neatly over the whole wound.

Though it is little attended to in common practice, the amateur will be glad to know that the success of a graft is always greatly insured by choosing the parts so that a bud is left near the top of the stock, *k*, Fig. 4, and another near the bottom of the scion, *l*. These buds attract the rising sap to the portions where they are placed, form woody matter, and greatly facilitate the union of the parts near them; the upper part of

the stock and the lower part of the scion being the portions soonest liable to perish from a want of nourishment.*

Cleft-grafting is a very easy though rather clumsy mode, and is in more common use than any other in the United States. It is chiefly practised on large stocks, or trees the branches of which have been headed back, and are too large for tongue-grafting. The head of the stock is first cut over horizontally with the saw and smoothed with a knife. A cleft about two inches deep is then made in the stock with a hammer and splitting-knife. The scion is now prepared by sloping its lower end in the form of a wedge about an inch and a half long, leaving it a little thicker on the outer edge. Opening the cleft with the splitting-knife, or a small chisel for that purpose, push the scion carefully down to its place, fitting its inner bark on one side to that of one side of the stock. When the stock is large, it is usual to insert two scions, Fig. 7. On withdrawing the chisel, the cleft closes firmly on the scions, when the graft is tied and clayed in the usual manner.

Apple-stocks, in many American nurseries, are grafted in great quantities in this mode—the stocks being previously taken out of the ground, headed down very near the root, cleft-grafted with a single scion, sloping off with an oblique cut the side of the stock opposite that where the graft is placed, and then planted at once in the rows, so as to allow only a single bud of the scion to appear above ground. It is not usual with many either to tie or clay the grafts in this case, as the wound is placed below the surface; but when this plan is adopted, the grafts must be set and the trees planted at once, drawing the well-pulverized soil with great care around the graft. Another way of grafting apple-stocks, common in western nurseries, consists in tongue-grafting on seedling stocks of very small size, cut back almost to the root.

Large quantities of trees are also propagated by using pieces of roots each three to five inches long, thus forming from the root of one stock sufficient root for two or more grafts. This practice, although quite common, is of very doubtful value, and by some prominent horticulturists considered as tending to debilitate and reduce vitality—the seat of vital life in fact resting in the natural crown of the seedling, and that once destroyed cannot be renewed. It is therefore apparent that but one healthy permanent tree can ever be grown from a seedling stock. This is performed in winter, by the fireside, the grafts carefully tied, and the

Cleft-Grafting.

(a). Scion ready for insertion. (b). Stock with two scions inserted.

* In grafting large quantities of young trees when stocks are scarce, it is not an unusual practice in some nurseries to tongue or whip-graft upon small *pieces of roots* of the proper sort of tree, planting the same in the earth as soon as grafted. Indeed Dr Van Mons considers this the most complete of all modes, with regard to the proper condition of the grafted sort: 1st. because the smallest quantity of the stock is used; and 2d, because the lower part of the scion being thus placed in the ground, after a time it throws out fibres from that portion, and so at last is actually growing on its own roots.

roots placed in the cellar, in sand, till spring, when they are planted, the top of the graft just above ground.

Grafting the Vine is attended with success in the cleft or whip manner, if treated as follows:—Cut your scions during the winter or early spring, keeping them partially buried in a cool damp cellar till wanted. As soon as the first leaves of the old vine or stock have grown to about two inches in diameter, and all danger of bleeding is past, cut it off smoothly below the surface of the ground, and split the stock and insert one or two scions in the usual manner, binding the cleft well together if it does not close firmly. Draw the soil carefully over the whole, leaving one bud of the scion at the surface. If the root of the stock is a strong native grape, the graft will frequently grow ten or fifteen feet during the first season, and yield a fair crop the second year.

Saddle-Grafting.

Saddle-Grafting Large Stocks.

Saddle-grafting, Fig. 8, consists in cutting the top of the stock in the form of a wedge, splitting the scion and thinning away each half to a tongue shape, placing it astride the stock, and fitting the two, at least on one side, as in tongue-grafting. This mode offers the largest surface for the junction of the scion and stock, and the union is very perfect. Mr. Knight, who practised it chiefly upon Cherry-trees, states that he has rarely ever seen a graft fail, even when the wood has been so succulent and immature as to preclude every hope of success by any other mode.

A variety of this mode, for stocks larger than the scions, is practised with much success in England after the usual season is past, and when the bark of the stock separates readily. "The scion, which must be smaller than the stock, is split up between two or three

inches from its lower end, so as to have one side stronger than the other. This strong side is then properly prepared and introduced between the bark and the wood, while the thinner division is fitted to the opposite side of the stock." The graft, thus placed, receives a large supply of the sustaining fluid from the stock, and the union is rapid; while the wound on the stock is speedily covered by a new layer of bark from that part of the scion which stands astride it.

Side-grafting is a mode described by Elliott, and considered very successful for grafting the Magnolia, and other trees difficult of propagation; and also for the greater safety of grafts received or delayed late in spring. It is performed by cutting a notch or slit of about one inch long in the side of the stock, paring the outer portion, splitting the lower end of the graft and paring the inner portion, then inserting it, so as to form a union of the bark and wood, leaving meanwhile the top of the stock to carry on the circulation of the sap until the graft becomes united, when the stock is to be cut away.

Grafting-clay is prepared by mixing one-third cow-dung, free from straw, and two-thirds clay, or clayey loam, with a little hair, like that used in plaster, to prevent its cracking. Beat and temper it for two or three days, until it is thoroughly incorporated. When used, it should be of such a consistency as to be easily put on and shaped with the hands.

Grafting-wax. The common grafting-wax of the French gardeners is of two kinds. The first is melted and laid on with a brush in a fluid state, and is made of half a pound of pitch, half a pound of beeswax, and a pound of cow-dung, boiled together. The second, which is spread while warm on strips of coarse cotton or strong paper, and wrapped directly about the graft, answering at once to tie and to protect it, is composed of equal parts of beeswax, turpentine, and resin. The grafting-wax most commonly used here is made of tallow, beeswax, and resin, in equal parts, or, as many prefer, with a little more tallow to render it pliable. It may be applied directly around the graft, or it may be spread with a brush, when warm, upon cloth or paper, and afterward the cloth or paper cut into suitable strips for wrapping, as indicated in the directions for grafting.

Grafting-wax is a much neater and more perfect protection than grafting-clay.

Budding.

Budding (inoculating, of the old authors) differs from common grafting not the least in its nature or effects. Every bud is a distinct individual, capable of becoming a tree under favorable circumstances. In grafting we use a branch composed of several buds, with a considerable quantity of bark and wood; while in budding we employ but a single bud, with a very small quantity of the adjoining bark and wood.

The advantages of budding fruit-trees, compared with grafting, are so considerable that in this country it is ten times as much practised. These are, first, the great rapidity with which it is performed; a skilful budder, with a clever boy following him to tie the buds, being able to work from a thousand to twelve hundred young nursery stocks in a day. 2d. The more convenient season at which it is performed in all countries where a short spring crowds garden labors within a small space. 3d. Being able to perform the operation without injuring the stock in

case of failure, which is always more or less the case in stocks headed down for grafting. 4th. The opportunity which it affords, when performed in good season, of repeating the trial on the same stock. To these we may add that budding is universally preferred here for all stone-fruits, such as Peaches, Apricots, and the like, as these require extra skill in grafting, but are budded with great ease.

Budding-Knives.

A Stick of Buds.

The proper season for budding fruit-trees in this country is from the first of July to the middle of September; the different trees coming into season as follows:—Plums, Cherries, Apricots on Plums, Apricots, Pears, Apples, Quinces, Nectarines, and Peaches. Trees of considerable size will require budding earlier than young seedling stocks. But the operation is always, and only, performed when the bark of the stock parts or separates freely from the wood, and when the buds of the current year's growth are somewhat plump, and the young wood is growing firm. Young stocks in the nursery, if thrifty, are usually planted out in the rows in the spring, and budded the same summer or autumn.

Before commencing you should provide yourself with a budding-knife, Fig. 10 (about four and a half inches long), having a round blade at one end, and an ivory handle, terminating in a thin rounded edge called the *haft*, at the other.

Fig. 11 represents another style or form of budding-knife, by many considered preferable. The cutting portion extends about one-third around the end of the blade, and about two-thirds of its length, leaving the lower part dull. The rounded end of the blade to this knife obviates the necessity of reversing it for opening the bark when setting a bud, and thus facilitates work.

In choosing your buds, select thrifty shoots that have nearly done growing, and prepare what is called a *stick of buds*, Fig. 12, by cutting off a few of the imperfect buds at the lower, and such as may be yet too soft at the upper ends, leaving only smooth, well-developed single buds; double buds being fruit-buds.

Great care is essential in selecting buds, as often even on sticks cut from young trees, and especially from bearing trees, many of the single buds will be found developed into fruit-buds, and are therefore unfitted for use. The form of a wood-bud is always long rather than round, and, in the case of peaches, there are sometimes triple buds, the centre one of which is always a wood-bud.

Cut off the leaves, allowing about half an inch of the

foot-stalks to remain for conveniently inserting the buds. Some strands of bass matting, about twelve or fourteen inches long, and from a quarter to half an inch in width, moistened in water to render them soft and pliable (or in the absence of these some soft woollen yarn), must also be at hand for tying the buds.

Shield or T-budding is the most approved mode in all countries. A new variety of this method, now generally practised in this country, we shall describe first, as being the simplest and the best mode for fruit-trees.

American shield-budding. Having your stick of buds ready, choose a smooth portion of the stock. When the latter is small, let it be near the ground, and, if equally convenient, select also the north side of the stock, as less exposed to the sun. Make an upright incision in the bark from an inch to an inch and a half long, and at the top of this make a cross cut, so that the whole shall form a T. From the stick of buds, your knife being very sharp, cut a thin, smooth slice of wood and bark containing a bud, Fig. 13, *a*. With the rounded end of your budding-knife, now raise the bark on each side of the incision just wide enough to admit easily the prepared bud. Taking hold of the footstalk of the leaf, insert the bud under the bark, pushing it gently down to the bottom of the incision. If the upper portion of the bud projects above the horizontal part of the T, cut it smoothly off, so that it may completely fit *b*. A bandage of the soft matting is now tied over the whole wound, Fig. 14, commencing at the bottom, and tying most firmly above, leaving the bud and the footstalk of the leaf only exposed to the light air.

American shield-budding.

Common shield-budding, Fig. 15, practised in all gardens in Europe, differs from the foregoing only in one respect—the removal of the slice of wood contained in the bud. This is taken out with the point of the knife, holding the bud or shield by the leaf-stalk with one hand, inserting the knife under the wood at the lower extremity, and then raising and drawing out the wood by bending it upwards and downwards, with a slight jerk, until it is loosened from the bark;

always taking care that a small portion of the wood remains behind to fill up the hollow at the base or heart of the bud. The bud thus prepared is inserted precisely as before described.

The American variety of shield-budding is found greatly preferable to the European mode, at least for this climate.

Many sorts of fruit-trees, especially Plums and Cherries, nearly mature their growth, and require to be budded in the hottest part of our summer. In the old method, the bud having only a shield of bark with but a particle of wood in the heart of the bud, is much more liable to

be destroyed by heat, or dryness, than when the slice of wood is left behind in the American way. Taking out this wood is always an operation requiring some dexterity and practice, as few buds grow when their eye or heart-wood is damaged. The American method therefore requires less skill, can be done earlier in the season with younger wood, is performed in much less time, and is uniformly more successful. It has been very fairly tested upon hundreds of thousands of fruit-trees in our gardens for the last twenty years, and although practised English budders coming here at first are greatly prejudiced against it, as being in direct opposition to one of the most essential features in the old mode, yet a fair trial has never failed to convince them of the superiority of the new.

After-treatment. In two weeks after the operation you will be able to see whether the bud has taken, by its plumpness and freshness. If it has failed, you may, if the bark still parts readily, make another trial; a clever budder will not lose more than 6 or 8 per cent. If it has succeeded, after a fortnight more has elapsed the bandage must be loosened, or, if the stock has swelled much, it should be removed altogether, by cutting on the back side opposite the bud. When budding has been performed very late, we have occasionally found it an advantage to leave the bandage on during the winter.

As soon as the buds commence swelling in the ensuing spring, head down the stock, with a sloping back cut, within two or three inches of the bud. The bud will then start vigorously, and all "robbers," as the shoots of the stock near to and below the bud are termed, must be taken off from time to time. To secure the upright growth of the bud, and to prevent its being broken by the winds, it is tied, when a few inches long, to that portion of the stock left for the purpose, Fig. 16, *a*. During the month of August, if the shoot is strong, this support may be removed, and the superfluous portion of the stock smoothly cut away in the dotted line *b*, when it will be rapidly covered with young bark.

Treatment of the growing bud.

We have found a great advantage, when budding trees which do not take readily, in adopting Mr. Knight's excellent mode of tying with two distinct bandages, one covering that part below the bud, and the other the portion above it. In this case the lower bandage is removed as soon as the bud has taken, and the upper left for two or three weeks longer. This, by arresting the upward sap, completes the union of the upper portion of bud (which in plums frequently dies while the lower part is united) and secures success.

Reversed shield-budding, which is nothing more than making the cross cut at the bottom instead of the top of the upright incision in the bark, and inserting the bud from below, is a good deal practised in the south of Europe, but we have not found that it possesses any superior merit for fruit-trees.

An ingenious application of budding, worthy the attention of amateur cultivators, consists in using a blossom-bud instead of a wood-bud; when, if the operation is carefully done, blossoms and fruit will be produced at once. This is most successful with the Pear, though we have often succeeded also with the Peach. Blossom-buds are readily distin-

guished, as soon as well formed, by their roundness, and in some trees by their growing in pairs; while wood-buds grow singly, and are more or less pointed. We have seen a curious fruit-grower borrow in this way, in September, from a neighbor ten miles distant, a single blossom-bud of a rare new pear, and produce from it a fair and beautiful fruit the next summer. The bud, in such cases, should be inserted on a favorable limb of a bearing tree.

Annular budding, Fig. 17, we have found a valuable mode for trees with hard wood and thick bark, or those which, like the walnut, have buds so large as to render it difficult to bud them in the common way. A ring of bark, when the sap is flowing freely, is taken from the stock, *a*, and a ring of corresponding size containing a bud, *b*, from the scion. If the latter should be too large a piece must be taken from it to make it fit; or should all the scions be too small, the ring upon the stock may extend only three-fourths the way round, to suit the ring of the bud.

Annular Budding.

An application of this mode, of great value, occasionally occurs in this country. In snowy winters, fruit-trees in orchards are sometimes girdled at the ground by field-mice, and a growth of twenty years is thus destroyed in a single day, should the girdle extend quite round the tree. To save such a tree it is only necessary, as soon as the sap rises vigorously in the spring, to apply a new ring of bark, in the annular mode, taken from a branch of proper size; tying it firmly, and drawing up the earth so as to cover the wound completely. When the tree is too large to apply an entire ring, separate pieces, carefully fitted, will answer; it is well to reduce the top somewhat by pruning, that it may not make too large a demand on the root for a supply of food.

Another practice, and perhaps one more easily applicable, is the taking several large grafts or strong twigs of last year's growth, and after splitting them in halves, pare each end down to a thin edge, and insert them underneath the bark of the tree just above and below the wound. Tie around firmly with strong bass matting, and then draw up the earth to cover the whole and keep out the air.

Budding may be done in the spring as well as at the latter end of summer, and is frequently so performed upon roses and other ornamental shrubs by French gardeners, but is only in occasional use upon fruit-trees.

Influence of the stock and graft.

The well-known fact that we may have a hundred different varieties of pear on the same tree, each of which produces its fruit of the proper form, color, and quality; and that we may have, at least for a time, several distinct though nearly related species upon one stock, as the Peach, Apricot, Nectarine, and Plum, prove very conclusively the power of every grafted or budded branch, however small, in preserving its identity. To explain this, it is only necessary to recall to mind that the ascending sap, which is furnished by the root or stock, is nearly a simple fluid; that the leaves digest and modify this sap, forming a proper juice, which re-descends in the inner bark; and that thus every bud and leaf upon a

branch maintains its individuality by preparing its own proper nourishment, or organizing matter, out of that general aliment the sap. In deed, according to De Candolle,* each separate cellule of the inner bark has this power of preparing its food according to its nature; in proof of which a striking experiment has been tried by grafting rings of bark, of different allied species, one above another, on the same tree, without allowing any buds to grow upon them. On cutting down and examining this tree, it was found that under each ring of bark was deposited the proper wood of its species, thus clearly proving the power of the bark in preserving its identity, even without leaves.

On the other hand, though the stock increases in size by the woody matter received in the descending sap from the graft, yet as this descends through the inner bark of the stock, it is elaborated by, and receives its character from the latter; so that, after a tree has been grafted fifty years, a shoot which springs out from its trunk below the place of union will always be found to bear the original wild fruit, and not to have been in the least affected by the graft.

But whilst grafting never effects any alteration in the identity of the variety or species of fruit, still it is not to be denied that the stock does exert certain influences over the habits of the graft. The most important of these are dwarfing, inducing fruitfulness, and adapting the graft to the soil or climate.

Thus every one knows that the slower habit of growth in the Quince stock is shared by the Pear grafted upon it, which becomes a dwarf; as does also the Apple when worked on the Paradise stock, and, in some degree, the Peach on the Plum. The want of entire similarity of structure between the stock and graft confines the growth of the latter, and changes it, in the case of the Pear, from a lofty tree to a shrub of eight or ten feet in height. The effect of this difference of structure is very apparent, when the Peach is grafted on the Plum, in the greater size of the trunk above, as compared with that below the graft; a fact which seems to arise from the obstruction which the descending sap of the graft finds in its course through the bark of the stock.

To account for the earlier and greater fruitfulness caused by grafting on a stock of slower growth, Mr. Knight, in one of his able papers, offers the following excellent remarks:—

“The disposition in young trees to produce and nourish blossom buds and fruit is increased by this apparent obstruction of the descending sap; and the fruit, I think, ripens somewhat earlier than upon other young trees of the same age which grow upon stocks of their own species. But the growth and vigor of the tree, and its power to nourish a succession of heavy crops, are diminished, apparently, by the stagnation in the branches and stock of a portion of that sap which, in a tree growing on its own stem or upon a stock of its own species, would descend to nourish and promote the extension of its own roots. The practice, therefore, of grafting the Pear on the Quince, and the Peach on the Plum, when extensive growth and durability are wanted, is wrong; but it is eligible wherever it is wished to diminish the vigor and growth of the tree, and its durability is not so important.”

In adapting the graft to the soil the stock has a marked influence. Thus in dry chalky soils, where the Peach on its own roots will scarcely

* *Physiologie Végétale.*

grow, it is found to thrive admirably budded on the Almond. We have already mentioned that in clay soils too heavy and moist for the Peach, it succeeds very well if worked on the Plum. M. Floss, a Prussian gardener, succeeded in growing fine pears in very sandy soils, where it was nearly impossible to raise them before, by grafting them on the Mountain Ash, a nearly related tree, which thrives on the driest and lightest soil.

A variety of fruit which is found rather tender for a certain climate, or a particular neighborhood, is frequently acclimatized by grafting it on a native stock of very hardy habits. Thus near the sea-coast, where the finer plums thrive badly, we have seen them greatly improved by being worked on the beech-plum, a native stock adapted to the spot; and the foreign grape is more luxuriant when grafted on our native stocks.

A slight effect is sometimes produced by the stock on the quality of the fruit. A few sorts of pear are superior in flavor, but many are also inferior, when grafted on the Quince, while they are more gritty on the thorn. The Green Gage, a Plum of great delicacy of flavor, varies considerably upon different stocks; and Apples raised on the crab, and pears on the Mountain Ash, are said to keep longer than when grown on their own roots.

In addition to the foregoing, a diseased stock should always be avoided, as it will communicate disease slowly to the graft, unless the latter is a variety of sufficient vigor to renew the health of the stock, which is but seldom the case.

The cultivator will gather from these remarks that, in a favorable climate and soil, if we desire the greatest growth, duration, and development in any fruit (and this applies to orchards generally), we should choose a stock of a closely similar nature to the graft—an apple seedling for an apple; a pear seedling for a pear. If we desire dwarf trees that come into bearing very young, and take little space in a garden, we employ for a stock an allied species of slower growth. If our soil or climate is unfavorable, we use a stock which is adapted to the soil, or which will, by its hardier roots, endure the cold.

The influence of the graft on the stock seems scarcely to extend beyond the power of communicating disease. A graft taken from a tree enfeebled by disease will recover with difficulty, even if grafted on healthy stocks for a dozen times in repeated succession. And when the disease is an inherent or hereditary one, it will certainly communicate it to the stock. We have seen the *yellow*s, from a diseased peach-tree, propagated through hundreds of individuals by budding, and the stock and graft both perish together from its effects. Hence the importance, to nurserymen especially, of securing healthy grafts, and working only upon healthy stocks.

Propagation by Cuttings.

Propagating by cuttings, as applied to fruit-trees, consists in causing a shoot of the previous season's wood to grow, by detaching it from the parent tree at a suitable season, and planting it in the ground under favorable circumstances.

In this case, instead of uniting itself by woody matter to another tree, as does the scion in grafting, the descending woody matter becomes roots at the lower end, and the cutting of which is then a new and entire

plant. Every bud being a distinct individual, capable of forming a new plant, has indeed theoretically the power, if separated from the parent stem, of throwing out roots and maintaining a separate existence; and some plants, as the grape-vine, are frequently propagated by single buds planted in the soil. But in practice it is found necessary, with almost all trees and plants, to retain a considerable portion of the *stem* with the bud, to supply it with food until it has formed roots to draw nourishment from the soil.

All fruit-trees may be propagated by cuttings, with proper care and attention, but only a few grow with sufficient facility in this way to render their propagation by cuttings a common mode. These are the Gooseberry, the Currant, the Vine, the Quince, the Fig, and the Mulberry.

Cuttings of the Currant, Gooseberry, and the hardy sorts of Vine will root readily, in a soil not too dry, in the open garden. Currants and Gooseberries are generally taken off in the fall or winter, prepared for planting, and two-thirds of their lower ends buried in the ground till the commencement of spring, when they are planted out, either where they are to remain or in nursery rows. They will succeed nearly as well if taken off in the spring, but, owing to the period at which they commence growing, this must be attended to *very early*, if deferred till that season.

A successful practice is to prepare the cuttings of Gooseberries and Currants early in the autumn, and to plant them at once in the position where they are to grow the succeeding summer. In planting, set the cuttings into the ground so deeply that but one bud will be left at or near the surface, and then, as soon as the frosts of winter come, cover the whole ground with a light mulch of coarse straw manure, or other litter three or four inches deep.

In order to raise plants of the Gooseberry and Currant, with straight clean stems, which shall not throw up suckers, it is only necessary, before planting the cutting, to cut out every eye or bud to be placed below the surface of the ground, Fig. 18. The cutting should be about a foot long, eight inches of which may be inserted in the ground. To insure greater success in raising the finer sorts of Gooseberry, or other shrubs, it is customary to plant the cuttings on the shaded side of a wall or fence, in deep rich loam, rather damp than dry. Cuttings of the vine are generally prepared when trimming the old plants in autumn or winter; they may then be buried with their lower ends in the ground, or kept in earth in the cellar till spring.

Grape cuttings are also made as soon as it will answer to prune the vines in the autumn; and, being planted at once in the ground, covered as above noted for Gooseberries and Currants, are found to grow successfully.

Scarce sorts of grapes, which it is desirable to multiply extensively, are frequently propagated by joints: that is, by buds having about two inches of wood attached to each—every bud in this way forming a plant. When this mode is adopted, it is usual to plant the joints about half an inch deep, in light soil, in a common hot-bed prepared for the purpose, or each joint is planted in a pot by itself. In the first way a great number of plants may be grown in a small space.

Gooseberry
cutting pre-
pared and
planted.

Formerly more certain success in propagating the vine by joints was considered gained by halving the joint before planting, as shown in Fig 19; but, recently, operators have practised the simple manner of preparing the cuttings with about two inches of wood below, and half an inch above the bud, and then planting in frames or propagating-houses, by simply placing the eye or cutting in a perpendicular position, the bud just level with, or nearly covered in a bed of clean, sharp, building or lake sand. A gentle bottom heat is to be maintained steadily, at the same time keeping the air in the house or frame quite cool until the lower end of the cutting or bud has commenced to form roots, when the air of the surface or volume of the house may be increased in warmth to stimulate growth of vine.

A vine joint prepared and planted.

In the method of growing from single eyes, or two-eye cuttings, in out-door practice, it is considered best to prepare the cuttings during winter, and pack them in clean damp—not wet—sand, in a cool dark cellar, where they will callus; and then, just as soon in the spring as the ground can be worked, plant the cuttings out, selecting as far as possible a sharp sandy loam for the location, covering the bed half an inch deep with the soil, and then two to three inches deep with mulch of sawdust, tan bark, &c.

In preparing cuttings of what are termed hard-wood varieties, such as Delaware, Norton's Virginia, &c., it is customary with some propagators to scrape off the outer bark from the lower end of the cutting, and to soften it by soaking in water from ten to twenty hours before placing them in the bed or frame.

The large English black mulberry is propagated by cuttings, as follows: About the last of October take cuttings from the thrifty shoots of a bearing tree, cut out all the buds except two or three at the top, and pare off the bottom of the cutting just below a bud. Lay in the cuttings in a sheltered border, burying them so that only the two buds at the top are exposed, and covering them with some loose straw or litter. In the spring make a small hot-bed with very sandy soil, in which to plant the cuttings on taking them out of the ground, or place each one in a small pot in any hot-bed ready at hand, and in a few weeks they will be found to have made roots freely.

As a general rule, cuttings succeed best when they are taken off just between the young and the previous year's wood; or, in the case of young side shoots, when they are cut off close to the branch preserving the *collar* of the shoot. The lower end should be cut smoothly across just below a bud, the soil should in all cases be pressed firmly about the lower end of the cutting, and it should always be planted before the buds commence swelling, that the wound may in some measure heal before growth and the absorption of fluid commences.

Propagation by Layers and Suckers.

A layer may be considered as a cutting not entirely separated from the plant.

Layering is a mode of propagation resorted to in increasing some fruit-tree stocks, as the Paradise stock, the Muscle Plum, and some

kinds which do not grow so well from the seed. Certain varieties of native grape, as the Norton's Virginia, which do not root readily by cuttings, are also raised in this way, and it may be applied to any sort of fruit-tree which it is desirable to continue on its own root without grafting.

Fruit-trees are generally layered in the spring, and the layers may be taken off well-rooted plants in the autumn. But they may also be layered with success early in July.

In making layers the ground around the mother plant should be made light and mellow by digging. Being provided with some hooked

Layering.

pegs to fasten down the layers, bend down a branch, so that the end may recline upon the ground. Open a little trench three or four inches deep to receive the young wood to be layered; make a cut or tongue, Fig. 20, *a*, half way through the under or upper side of the shoot, pegging down the branch with the hooked peg, *b*, to keep it in its place; press the earth slightly round the tongue, and, in

filling in the soil, raise nearly upright the end of the layer, which remains above the surface of the ground.

The descending sap, filled with organizable matter, is arrested by this tongue, accumulates there, and the emission of roots speedily takes place. Ringing, wounding, or twisting the limb answers the same purpose less perfectly, and indeed many trees root readily from the mere position of the branches as layers, and the moisture of the soil.

A tree or plant which is kept for raising layers is called a *stool*, and is headed down both to facilitate the rooting of the layers and to afford an abundance of shoots near the earth. Shoots of some of the fruit-tree stocks in the English nurseries are pegged down to the surface before growth commences in the spring, covered about an inch deep with soil, and at the end of autumn afford hundreds of plants; almost every bud making a separate root.

Suckers are shoots sent up from the root, or from portions of the stem below the surface of the soil, which are easily separated from the parent plant.

Suckers of fruit-trees are frequently used as stocks for budding or grafting upon; but they are greatly inferior to seedlings for this purpose, as they are always more liable to produce suckers, and they have not the thrifty, vigorous habit, or the same power of forming as good roots as seedlings. Besides this, should the tree from which they are taken be diseased, they will be likely to carry the malady with them.

Propagating by suckers is an easy and desirable way when we wish to continue a seedling fruit of value on its own root, and some of our common fruits appear to be more healthy and permanent when growing in that way. It is also a mode for increasing the Raspberry; as is also that of runners, which is a kind of sucker above ground, for the Strawberry.

Propagation by Pieces of Roots.

Many varieties of trees, and nearly all varieties of Blackberries, Raspberries, Gooseberries, Currants, &c., can be readily propagated by small pieces of roots. Cut the root into pieces of about two inches in length, any time in autumn or winter, and pack them in moist sand, storing where they will be free from frost. In spring prepare a frame with a gentle bottom heat and plant them, covering about an inch deep, in a sandy loam; as soon as they have well started they may be transplanted out into the open field. Some propagators keep them in the winter packages until the spring is well advanced and the ground becomes somewhat warmed, when they plant at once in the open ground, setting the upper end of the piece of root just level with the ground, and then covering the whole surface with about three inches deep of some light mulching material.

CHAPTER IV.

PRUNING.

1. *Pruning to promote Growth or modify the Form of Fruit-trees.*

IN this country almost all fruit-trees are grown as *standards*. In this way they develop their natural forms, attain the largest size, and produce the greatest quantity of fruit with the least possible care. Our bright and powerful sun, reaching every part of the tree, renders the minute systems of pruning and training, which occupy so large a portion of the English works on the subject, of little or no moment to the cultivator here. Pruning is therefore commonly resorted to only for the purpose of increasing the vigor of feeble trees, or to regulate and improve the form of healthy and luxuriant trees.

Pruning has the power of increasing the vigor of a tree in two ways. If we assume that a certain amount of nourishment is supplied by the roots to all the branches and buds of a tree, by cutting off one-half of the branches at the proper season we direct the whole supply of nourishment to the remaining portion, which will consequently grow with nearly double their former luxuriance. Again, when a tree becomes stunted or enfeebled in its growth, the thinness of its inner bark, with its consequent small sap-vessels (which it must be remembered are the principal channel for the passage of the ascending supply of food), renders the upward and downward circulation tardy, and the growth is small. By heading back or pruning judiciously, all the force of the nourishing fluid is thrown into a smaller number of buds, which make new and luxuriant shoots, larger sap-vessels, and which afford a ready passage to the fluids, and the tree with these renewed energies will continue in vigor for a long time.

This treatment is especially valuable in the case of small trees of feeble or stunted growth, which are frequently cut back to a single bud, and a new shoot or shoots, full of vigor, gives a healthy habit to the

trec. In the nurseries this practice of heading down unthrifty trees is frequently pursued, and small orchard trees which have become enfeebled may be treated in the same manner, cutting back the head as far as the place where it is wished that new shoots should spring out. Older trees should be headed back more sparingly, unless they are greatly enfeebled, and their roots should at the same time be assisted by manure.

A judicious pruning, to modify the form of our standard trees, is nearly all that is required in ordinary practice. *Every fruit-tree, grown in the open orchard or garden as a common standard, should be allowed to take its natural form, the whole efforts of the pruner going no further than to take out all weak and crowded branches;* those which are filling uselessly the interior of the tree, where their leaves cannot be duly exposed to the light and sun, or those which interfere with the growth of others. All pruning of large branches in healthy trees should be avoided, by examining them every season and taking out superfluous shoots while small. Mr. Cox, the best American author on fruit-trees, remarks very truly: "When orchard trees are pruned, they are apt to throw out numerous (superfluous) suckers from the boughs in the following summer; these should be rubbed off when they first appear, or they may easily be broken off while young and brittle — cutting is apt to increase their number."

Where pruning is not required to renovate the vigor of an enfeebled tree, or to regulate its shape,—in other words, in the case of a healthy tree which we wish to retain in a state of the greatest luxuriance, health, and vigor,—it may be considered worse than useless. Bearing in mind that growth is always corresponding to the action of the leaves and branches, if these are in due proportion and in perfect health, the knife will always be found rather detrimental to luxuriance and constitutional vigor than beneficial.*

The best season for pruning to promote growth, theoretically, is in autumn, soon after the fall of the leaf. Next to this, winter pruning, performed in mild weather, is best, and in orchards this is the season usually most convenient.† In all parts of the country where the winters are not very severe (and always in the Southern or Western States) the roots are collecting a certain stock of nourishment during the whole autumn and winter. When a tree is pruned in autumn or winter this whole supply goes to the remaining branches, while in the case of spring pruning it is partly lost. North of the 43d degree of latitude, however, the winters are so severe that winter-pruning should be deferred till the last of February.

We should especially avoid pruning at that period in spring when

* Ignorant cultivators frequently weaken the energies of young trees, and cause them to grow up with lean and slender stems, by injudiciously trimming off the young side shoots and leaves in the growing season. By taking off these shoots the stem is deprived of all the leaves which would attract and elaborate the sap, thus preparing nourishment for the growth of the stem; and the trunk of the tree does not increase in size half so fast as when the side branches are allowed to remain for a time, pruning them away gradually. It is better, in the case of these young trees, to stop the side branches, when of moderate length, by pinching out the terminal bud.

† Experience of many years convinces us that, whatever theory may suggest, the best time to prune in order to promote growth, and to have the wound healed perfectly, is *very early* in spring, or as soon as the severity of winter has passed.

the buds are swelling, and the sap is in full flow, as the loss of sap by bleeding is very injurious to most trees, and in some brings on a serious and incurable canker in the limbs.

In pruning large limbs, some composition should always be at hand to cover the wound. This will not only prevent its cracking by the cold in winter-pruning, but will keep out the air, and maintain the exposed wood in a sound state until it is covered with a new layer of bark. Many compositions have been in fashion abroad for this purpose, which under our summer sun and wintry frosts are nearly worthless, as they generally crack and fall off in a single year. The following is a cheap and admirable application, which we recommend to all cultivators of fruit-trees.

Composition for wounds made in pruning. Take a quart of alcohol and dissolve in it as much gum-shellac as will make a liquid of the consistence of paint. Apply this to the wound with a common painter's brush; always paring the wound smoothly first with the knife. The liquid becomes perfectly hard, adheres closely, excludes the air perfectly, and is affected by no changes of weather; while at the same time its thinness offers no resistance to the lip of new bark that gradually closes over the wound. If the composition is kept in a well-corked bottle, sufficiently wide-mouthed to admit the brush, it will always be ready for use and suited to the want of the moment.

To prevent mice or rabbits from girdling trees. Great injury is done to young orchards in some districts by the *meadow mouse*. This little animal always works *under cover*, and therefore does its mischief in winter when the snow lies deeply upon the ground. A common and effectual mode of deterring it is that of treading down the snow firmly about the stem directly after every fall of snow. But this is a very troublesome affair.

The following mixture will be found to be an effectual prevention. Take one spadeful of hot slaked lime, one do. of clean cow-dung, half do. of soot, one handful of flowers of sulphur: mix the whole together with the addition of sufficient water to bring it to the consistency of thick paint. At the approach of winter paint the trunks of the trees sufficiently high to be beyond the reach of these vermin. Experience has proved that it does no injury to the tree. A dry day should be chosen for its application.

English nurserymen are in the habit of protecting nurseries of *small trees* from the attacks of *rabbits*, simply by distributing through the squares of the nursery coarse matches made by dipping bunches of rags, or bits of tow, in melted sulphur, and fastening these in split stakes a couple of feet high. The latter are stuck into the ground, among the trees, at from 12 to 20 feet apart, and are said completely to answer the purpose.

Wrapping the body of the tree with coarse hardware paper, letting the lower end of the paper go below the soil at the crown of the tree, will effectually prevent the attacks of rabbits.

Wash for the trunks and branches of fruit-trees. The best wash for the stems and branches of fruit-trees is made by dissolving two pounds of *potash* in two gallons of water. This is applied with a brush at any season, but perhaps with most effect in the spring. One, or at most two applications will rid the stem of trees of the bark-louse, and render it smooth and glossy. It is far more efficacious than whitewash, as a preservative against the attacks of insects, while it promotes the growth of the tree, and adds to the natural lively color of the bark.

The *wash of soft soap* is also a very good one for many purposes. Though not equal for general purposes to the potash wash, it is better for old trunks with thick and rigid bark, as a portion of it remains upon the surface of the bark for some time, and with the action of every rain is dissolved, and thus penetrates into all the crevices where insects may be lodged, destroying them, and softening the bark itself.

2. *Pruning to induce Fruitfulness.*

There are advantages and disadvantages attending all seasons of pruning, but our own experience has led us to believe that, practically, *a fortnight before midsummer is by far the best season on the whole for pruning in the Northern and Middle States.* Wounds made at this season heal over freely and rapidly; it is the most favorable time to judge of the shape and balance of the head, and to see at a glance which branches require removal: and all the stock of organizable matter in the tree is directed to the branches that remain.

When a young fruit-tree is too luxuriant, employing all its energies in making vigorous shoots, but forming few or no blossom buds, and producing no fruit, we have it in our power by different modes of pruning to lessen this over-luxuriance, and force it to expend its energies in fruit-bearing. A successful mode of doing this is by pruning the roots—a proceeding recently brought into very successful practice by European gardeners.

Root-pruning has the effect of at once cutting off a considerable supply of the nourishment formerly afforded by the roots of a tree. The leaves, losing part of their usual food, are neither able to grow as rapidly as before, nor to use all the nutritious matter already in the branches; the branches therefore become more stunted in their growth, the organizable matter accumulates, and fruit-buds are directly formed. The energies of the tree are no longer entirely carried off in growth, and the returning sap is employed in producing fruit-buds for the next year.

Root-pruning should be performed in autumn or winter, and it usually consists in laying bare the roots and cutting off smoothly at a distance of a few feet from the trunk (in proportion to the size of the tree) the principal roots. Mr. Rivers, an English nurseryman of celebrity, who has practised this mode with great success, digs a trench early in November, eighteen inches deep, round and under his trees to be root-pruned, cutting off the roots with a sharp spade. By following this practice every year he not only throws his trees into early bearing, but forces Apples, Pears, and the like, grafted on their own roots, to become prolific dwarfs, growing only six feet apart, trained in a conical form, full of fruit branches, and producing abundantly. Those dwarf trees, thus annually root-pruned, he supplies abundantly with old composted manure at the ends of the roots, thus keeping up their health and vigor. The plan is an admirable one for small gardens, or for amateurs who wish to grow a great many sorts in a small surface. Mr. Rivers, in a pamphlet on this subject, enumerates the following among the advantages of *systematic root-pruning*:—

“ 1. The facility of thinning (owing to the small size of the trees), and, in some varieties, of setting the blossoms of shy-bearing sorts, and of thinning and gathering the fruit.

“ 2. It will make the gardener independent of the natural soil of his

garden, as a few barrowfuls of rich mould will support a tree for a lengthened period, thus placing bad soils nearly on a level with those the most favorable.

"3. The capability of removing trees of fifteen or twenty years' growth with as much facility as furniture."

In conclusion, Mr. Rivers recommends *caution*; "enough of vigor must be left in the tree to support its crop of fruit, and one, two, or three seasons' cessation from root-pruning will often be found necessary."

Root-pruning in this country will, we think, be most valuable in its application to common standard trees, which are thrifty but bear little or no fruit. They will generally be found to require but a single pruning to bring them into a permanently fruitful condition; and some sorts of Pears and Plums, which do not usually give a fair crop till they are twelve or fourteen years old, may be brought into fruit by this means as soon as they are of proper size. Several nearly full-grown peach, pear, and plum trees, on a very rich soil on the Hudson, which were over-luxuriant but bore no fruit, were root-pruned by our advice, and yielded most excellent and abundant crops afterwards.

In the case of Apple orchards, where the permanent value depends on the size, *longevity*, and continued productiveness of the trees, it is better to wait patiently and not resort to pruning to bring them into bearing, as it cannot be denied that all excessive pruning shortens somewhat the life of a tree. Mr. Cox, indeed, recommended that the first fruit should never be allowed to ripen on a young apple orchard, as it lessens very materially the vigor of the trees.

Shortening-in the shoots of Peaches, Nectarines, and Apricots, as we shall hereafter point out, has a strong tendency to increase the fruitfulness of these trees, since by reducing the young wood the sap accumulates in the remainder of the branch, and many bearing shoots are produced instead of one. And the English practice of *spurring-in*, which consists in annually shortening the lateral shoots of trained Pears, Apples, and the like, in order to make them throw out short fruit branches or spurs, is founded on the same principle.

Bending down the limbs is an easy and simple means of throwing such branches directly into fruit. By this means the circulation is retarded, rapid growth ceases, organizable matter accumulates, and fruit-buds, as before stated, surely follow. The limbs are bent while flexible, in June or July, and tied down below a horizontal line until they retain of themselves their new position. When this can be easily applied, it is a never-failing mode of rendering such branches fruitful. It is stated in Loudon's "Gardener's Magazine" that "a very large crop of Pears was obtained by the Rev. Mr. Fisher, in Buckinghamshire, from trees which had not borne at all, by twisting and breaking down the young shoots late in the autumn, when the wood had become tough; and the pendent branches afterwards continued perfectly healthy."

Disbarking and Ringing are two modes that have been recommended by some authors, but of which, except as curious experiments, we entirely disapprove. Disbarking, that is, removing the outer bark of the trunk in February, May, or March, is and may be practised with good results on trees in very sheltered positions, and under glass, but must always be a somewhat dangerous practice in open orchards, and in a variable climate like ours; while its good effects may in a great meas-

ure be attained by keeping the bark in a healthy state by a wash of soft soap. *Ringing*, which is nothing more than stopping the descending sap in a branch, and forcing it to organize blossom-buds, by taking off a ring of bark, say a fourth or half an inch, near midsummer, is a mode always more or less injurious to the health of the branch, and if carried to any extent finally destroys the tree. It is gradually falling into disuse since root-pruning and other and better modes are becoming known. A ligature or bandage, tightly applied to the limb, will have temporarily the same effect as ringing, without so much injury to the branch.

Inducing Fruitfulness by other Means.

The influence of certain soils on the productiveness of fruit-trees is a subject of every-day observation, but the particular ingredients of the soil which insure this abundant bearing are not so well known. Limestone soils are almost invariably productive of all sorts of fruit; and certain strong loams in this country seem to be equally well adapted to this end.

In a curious work called the "Rejuvenescence of Plants," &c., by Dr. Schultz, of Berlin, the author, who has devoted considerable time to the subject, states that common salt and chloride of lime contribute greatly to the flowering of most plants, to which, however, they can only be applied with safety in small quantities. "Salts of lime," he continues, "appear to produce so nearly the same effect as those of potash and soda, that it is only necessary to place lime within their reach, if there is no deficiency of manure in the shape of general food. Lime will in the main promote, in an astonishing degree, the fruit and flowering of most plants, because calcareous salts promote evaporation and the concentration of sap."

Although we cannot coincide with many of Dr. Schultz's views as expressed in this work, yet the remarks just quoted agree so entirely with facts that have come under our own observation, that we gladly place them before the cultivator of fruit-trees. One of the most productive fruit-gardens in our knowledge is on a limestone soil, and another, more than usually prolific, in a neighborhood not very fruitful, is every year treated with a top-dressing of coarse salt, at the rate of two bushels to the acre. These facts are surely worth the attention of growers, and should be the subject of more extended and careful experiments.

Rendering trees more fruitful by *dwarfing*, and by adapting them to soils naturally unfruitful by growing them upon other and better stocks, we have already placed before the reader under the head of *Grafting*.

CHAPTER V.

TRAINING.

TRAINING fruit-trees is, thanks to our favorable climate, a proceeding entirely unnecessary in the greater part of the United States. Our fine dry summers, with the great abundance of strong light and sun, are suf

ficient to ripen fully the fruits of temperate climates, so that the whole art of training, at once the trial and triumph of skill with English fruit-gardeners, is quite dispensed with; and in the place of long lines of brick wall and espalier rails, surrounding and dividing the fruit-garden, all covered with carefully trained trees, we are proud to show the open orchard, and the borders in the fruit-garden filled with thrifty and productive standards. Nothing surprises a British gardener more, knowing the cold of our winter, than the first sight of peaches and other fine fruits arriving at full perfection in the Middle States with so little care; and he sees at once that three-fourths of the great expense of a fruit-garden here is rendered entirely needless.

Training fruit-trees, in this country, is therefore confined to the colder districts north of the 43° of latitude, and to the gardens of amateurs. There can, however, scarcely be a more beautiful display of the art of the horticulturist than a fine row of trained trees, their branches arranged with the utmost symmetry and regularity, and covered, in the fruit season, with large and richly colored fruit.

North of the 43° latitude (or north of the Mohawk) the peach does not ripen well, and this, as well as soem other rather tender trees, will, in such situations, generally yield abundant crops when trained on a common upright trellis, or espalier rail, seven or eight feet high.* Still farther north, as in Maine or Canada, a wall must be resorted to; but our own observation leads us to believe that, generally, the espalier rail will be found not only cheaper and more easily managed in training, but really preferable to a wall, as full exposure to light is sufficient without much additional heat. With regard to walls themselves, in the middle portions of the Union a southern aspect is almost always the worst, being too hot in midsummer; a wall running north and south, and affording east and west aspects, is much the best. The western aspect is indeed preferable for all tender fruits, as the blossoms are not there liable to injury from early frosts. A north wall is useful for producing a later crop.

The objects of training are, by a more complete exposure of the leaves and branches to the light and sun, to ripen fruits in a naturally unfavorable climate; to render them more fruitful—lessening vigor and excessive growth by the lateral or horizontal arrangement of the branches; and lastly, economy of space, as trees when trained on a flat surface occupy much less space in the fruit-garden than standards, and leave the borders more open for cropping with vegetables.

Training conical standards. A very easy and simple mode of training fruit-trees, which has lately come into great favor with amateurs, is the conical standard, or *Quenouille* (pronounced *kenool*) of the French. It is applied chiefly to pears, which when treated in this way may be planted about eight feet apart, and thus a great variety of sorts may be grown in a small garden. A great number of the specimen trees in the London Horticultural Society's Garden are trained in this manner; and Loudon remarks, that in 1840 the Royal Kitchen Garden of Versailles contained two hundred trees trained in the conical manner, with the

* Cedar or locust posts, set four or eight feet apart, with horizontal bars let in, and crossed by light perpendicular strips of pine from six to twelve inches apart, will form an excellent and durable trellis for espaliers. See Fig 28. Indeed many gardeners here prefer having a light trellis a few inches from the wall upon which to train, instead of nailing directly on the wall.

current year's shoots tied down *en quenouille*. "They had attained the height of from six to twelve feet before the branches were bent down; but the effect of this was to cover the shoots with blossom-buds, and to produce the most extraordinary crops."

To produce Quenouille standards, plant a young tree, three or four feet high, and, after the first summer's growth, head back the top and cut-in the side branches, as represented by the dotted lines on *a*, Fig. 21. The next season the tree will shoot out three or four tiers of side branches, according to its strength. The lowest should be left about eighteen inches from the ground, and, by pinching off superfluous shoots, others may be made to grow pretty regularly, so as not to crowd the head. At the end of this season head back the leader as in *b*, to strengthen the side shoots. Next season a fresh series of lateral shoots will be produced, four or five of which may be kept every year; and the third or fourth year the lower branches may be bent down in mid-

Quenouille or Conical Training, progressive stages.

Conical or Quenouille Training, complete.

summer, *c*, and kept in a pendulous position for a year or two, by tying them to stakes driven in the ground, or to the main stem. This successive growth at the top, and arrangement of the limbs below, must be continued till the requisite height—say ten feet—is attained, when, all the branches assuming their final form, the tree will resemble Fig. 22. A moderate pruning to produce new wood, and the occasional tying in of a rambling shoot, will be all that is required. The French quenouille training is performed with dwarf stocks, but the trees are more thrifty and durable when grafted on their own stocks, and kept within proper bounds by root-pruning after Mr. Rivers's method, explained in a previous page.

Pyramids and bushes are trees adapted for small gardens, and not standards such as are planted in orchards. Mr. Rivers, whose success in training and fruiting dwarf trees has hardly an equal, gives the following directions:—"If a young gardener intends to plant, and wishes to train

up his trees so that they will become quite perfect in shape, he should select plants one year old from the bud or graft, with single upright stems; these will of course have good buds down to the junction of the graft with the stock. The first spring a tree of this description should be headed down, so as to leave the stem about eighteen inches long. If the soil be rich, from five to six and seven shoots will be produced; one of these must be made the leader, and if not inclined to be quite perpendicular, it must be fastened to a stake. As soon in summer as the leading shoot is ten inches long, its end must be pinched off; and if it pushes forth two or more shoots, pinch off all but one to three leaves, leaving the topmost for a leader. The side shoots will in most cases assume a regular shape; if not, they may be this first season tied to slight stakes, to make them grow in the proper direction. This is best done by bringing down and fastening the end of each shoot to a slight stake, so that an open pyramid may be formed; for if it is too close and cypress-like, enough air is not admitted to the fruit. They may remain unpruned till the end of August, when each shoot must be shortened to within eight buds of the stem. This will leave the tree so that no pruning in winter will be required. The second season the tree will make vigorous growth; the side shoots which were topped last August will each put forth three, four, or more shoots. In June, as soon as these have made four leaves, they must be pinched off to three leaves, and if these spurs put forth shoots, which they often do, every shoot must be pinched down to one leaf, *all but the leading shoot of each side branch*. This must be left on, to exhaust the tree of its superabundant sap, till the end of August. The perpendicular leader must be topped once or twice—in short, as soon as it has grown ten inches, pinch off its top, and if it break into two or three shoots, pinch them all but the leader, as directed for the first season; in a few years most symmetrical trees may be formed.”

The best modes of training for this country, on walls or espaliers, are fan-cordon and horizontal training. The first is the simplest and easiest mode of training the Peach, the Apricot, Nectarine, and Cherry; and the latter is best adapted to the Pear. In training to a wall, the branches are fastened in their places by shreds of leather and nails; and as espaliers, by tying them with slips of bass matting to the rails of the trellis.

Cordon-training has within the past few years become quite a feature among French gardeners, and is now being practised with success by many amateurs in this country. There are a number of varied modes of training *en cordon*, among which those termed *oblique cordon* and *espalier* or *lateral cordon* are most in use. Oblique cordon training serves to test in a small space a large number of varieties, and may in many cases be adopted with great satisfaction. Dubreil says: “In its practice choose healthy and vigorous young trees of one year’s growth, carrying only one stem. Plant them sixteen inches apart, and incline them one over the other at an angle of sixty degrees. Cut off about one-third of the length at or just above a front fruit-bud. During the following summer favor as much as possible the development of the terminal shoot; all the others must be transformed into fruit branches by the same means as described for pyramidal trees. The second pruning has for its object to transform the lateral shoots into fruit-spurs; the new extension of the stem must be cut back one-third. If the terminal extension has grown but slightly, and shows signs of weakness, the cut must be made lower down on the two-years wood, in order to obtain a more vigorous terminal shoot. By

the time of the third pruning, the young stem has generally attained two-thirds of its entire length; it must then be inclined to an angle of 45° ."

The same pruning of side branches and terminal shoot must be performed as last year, and continued from year to year until the desired height for covering the wall or trellis is attained; afterwards it must be yearly cut back about two feet, for the purpose of allowing a vigorous shoot to grow from the end, and thus keep up a healthy circulation.

Espalier or lateral cordon training is adapted to the borders of walks in gardens, and is suited more to the Apple worked on the Paradise stock than any other variety of tree. It is termed double or single arm cordon, as the trees have arms trained one or both ways. Fig. 23 shows at *a* a young maiden tree pruned for planting, while *b* shows the same with its limbs tied down to a wire, which is upheld by stakes about one foot above the ground, and secured firmly at each end of the line.

Fig. 24 shows the plants after being two or three years trained in single cordon—the terminal shoot of each tree being united by inarching at the junction with the stem and branch.

The following account of fan-training and horizontal training is so concisely abridged from the practice of the best English gardens, in the "*Suburban Horticulturist*," that we cannot do better than to place it before the reader.

Fan-training in the common English manner. A maiden plant (a tree but one year from the graft) being planted, "is to be headed down to four buds or eyes, placed in such a manner as to throw out two shoots on each side, as shown in Fig. 25. The following season the two uppermost shoots are to be headed down to three eyes, placed in such a manner as to throw out one leading shoot and one shoot on each side; the two lowermost shoots are to be headed down to

Fan-training, first stage.

two eyes, so as to throw out one leading shoot and one shoot on the uppermost side, as shown in Fig. 26. We have now five leading shoots on each side, well placed, to form our future tree. Each of these shoots must be placed in the exact position in which it is to remain; and as it is these shoots which are to form the future tree, none of them are to be shortened. The tree should by no means be suffered to bear any fruit this year. Each shoot must now be allowed to produce, besides the leading shoot at its extremity, two other shoots on the uppermost side, one near to the bottom and one about mid-

Fan-training, second stage.

way up the stem ; there must also be one shoot on the undermost side, placed about midway between the other two. All the other shoots must be pinched off in their infant state. The tree will then assume, at the end of the year, the appearance shown in Fig. 27. From this time it may be allowed to bear what crop of fruit the gardener thinks it able to carry ; in determining which he ought never to overrate the vigor of the tree. All of these shoots except the leading ones must at the proper season be shortened, but to what length must be left entirely to the judgment of the gardener, it of course depending upon the vigor of the tree. In shortening the shoot, care should be taken to cut back to a wood-bud that will produce a shoot for the following year. Cut close to the bud, so that the wound may heal the following season. The following year each shoot at the extremities of the leading branches should produce, besides the leading shoot, one on the upper and two on the under part, more or less, according to the vigor of the tree ; whilst each of the secondary branches should produce, besides the leading shoot, one other placed near to the bottom ; for the grand art of pruning, in all systems to which this class of trees is subjected, consists in preserving a sufficient quantity of young wood at the bottom of the tree ; and on no account must the gardener cut away clean any shoots so placed, without well considering if they will be wanted, not only for the present but for the future good appearance of the tree. The quantity of young wood annually laid in must depend upon

Fan-training, third stage.

Fan-training, complete.

the vigor of the tree. It would be ridiculous to lay the same quantity into a weakly tree as into a tree in full vigor. The gardener here must use his own judgment. But if any of the leading shoots manifest a disposition to outstrip the others, a portion of young shoots must be laid in, and a greater quantity of fruit suffered to ripen on the over-vigorous branch. At the same time a smaller quantity of fruit than usual must

be left to ripen on the weaker branch. This will tend to restore the equilibrium better than any other method. Fig. 28 presents us with the figure of a tree in a more advanced state, well balanced, and well calculated for an equal distribution of the sap all over its surface. [We have varied this figure by representing it trained on a trellis, instead of a wall.] Whenever any of the lower shoots have advanced so far as to incommode the others, they should be cut back to a yearling shoot; this will give them room, and keep the lower part of the tree in order. In nailing to a wall, care must be taken not to bruise any part of the shoot; the wounds made by the knife heal quickly, but a bruise often proves incurable. Never let a nail gall any part of the tree; it will endanger the life of the branch. In nailing-in the young shoots, dispose them as straight and regular as possible; it will look workman-like. Whatever system of training is pursued, the leading branches should be laid-in in the exact position they are to remain; for wherever a large branch is brought down to fill the lower part of the wall, the free ascent of the sap is obstructed by the extension of the upper, and contraction of the lower parts of the branch. It is thus robbed of part of its former vigor, while it seldom fails to throw out, immediately behind the parts most bent, one or more vigorous shoots."

Horizontal training consists in preserving an upright leader, with lateral shoots trained at regular intervals. These intervals may be from a foot to eighteen inches for pears and apples, and about nine inches for cherries and plums. "A maiden plant with three shoots having been

Horizontal training, first stage.

procured, the two side shoots are laid in horizontally, and the centre one upright, as in Fig. 29; all the buds being rubbed off the latter but three, viz.: one next the top for a vertical leader, and one on each side near the top, for horizontal branches. In the course of the first summer after planting, the shoots may be allowed to grow without being stopped. In the autumn of the first year the two laterals produced are nailed or tied in, and also the shoots produced from the extremities of the lower laterals; the centre shoot being headed down as before, as shown in Fig. 30. But in the second summer, when the main shoot has attained the length of ten or twelve inches, it may be stopped; which, if the plant is in proper vigor, will cause it to throw out two horizontal branches, in addition to those which were thrown out from those of the preceding year. The tree will now be in its second summer, and will have

Horizontal training, second stage.

Horizontal training, third stage.

four horizontal branches on each side of the upright stem, as in Fig. 31; and, by persevering in this system, four horizontal branches will be

produced in each year till the tree reaches the top of the wall (or espalier), when the upright stem must terminate in two horizontal branches. In the following autumn the tree will have the appearance of Fig. 32."—*Suburban Horticulturist*, pp. 363 : 372.

Horizontal training, fourth year.

Training fruit-trees is nowhere in the United States practised to much extent, nor is it considered desirable in the general practice of fruit-growing. The additional labor is not met by a balance in superior quantity of product, and, while occasionally a few specimens may be procured in this manner of great beauty and excellence, the general crop is not satisfactory or profitable, either to the amateur or the market-grower.

CHAPTER VI.

TRANSPLANTING.

As nearly all fruit-trees are raised first in nurseries, and then removed to their final position in the orchard or fruit-garden; as upon the manner of this removal depends not only their slow or rapid growth, their feebleness or vigor afterwards, and in many cases even their life, it is evident that it is in the highest degree important to understand and practise well this *transplanting*.

The season best adapted for transplanting fruit-trees is a matter open to much difference of opinion among horticulturists; a difference founded mainly on experience, but without taking into account variation of climate and soils, two very important circumstances in all operations of this kind.

All physiologists, however, agree that the best season for transplanting deciduous trees is in autumn, directly after the fall of the leaf. The tree is then in a completely dormant state. Transplanted at this early season, whatever wounds may have been made in the roots commence healing at once, as a deposit directly takes place of granulous matter from the wound, and when the spring arrives the tree is already some-

what established, and ready to commence its growth. Early autumn planting is for this reason greatly to be preferred in all mild climates and dry soils; and even for very hardy trees, as the apple, in colder latitudes; as the fixed position in the ground, which trees planted then get by the autumnal and early spring rains, gives them an advantage at the next season of growth over newly-moved trees.

On the other hand, in northern portions of the Union, where the winters commence early, and are severe, spring planting is greatly preferred. There autumn and winter are not mild enough to allow this gradual process of healing and establishing the roots to go on; for when the ground is frozen to the depth of the roots of a tree, all that slow growth and connection of nutriment by the roots is necessarily at an end. And the more tender sorts of fruit-trees, the Peach and Apricot, which are less hardy when newly planted than when their roots are entire, and well fixed in the soil, are liable to injury in their branches by the cold. The proper time, in such a climate, is as early as the ground is in a fit condition in the spring.

Early in autumn, and in spring before the buds expand, may as a general rule be considered the best seasons for transplanting. It is true that there are instances of excellent success in planting at all seasons, except midsummer; and there are many who, from having been once or twice successful in transplanting when trees were nearly in leaf, avow that to be the best season; not taking into account that their success was probably entirely owing to a fortunately damp state of the atmosphere at the time, and abundant rains after the experiment was performed. In the Middle States we are frequently liable to a dry period in early summer, directly following the season of removal, and if transplanting is deferred to a late period in spring, many of the trees will perish from drought before their roots become established in the soil. Spring planting should therefore always be performed as soon as possible, that the roots may have the great benefit of the early and abundant rains of that season, and get well started before the heat of summer commences. For the neighborhood of New York, therefore, the best periods are from the fall of the leaf to the middle of November, in autumn, and from the close of winter to the middle of April, in the spring; though commonly the seasons of removal are frequently extended a month beyond these limits.

Taking up the trees is an important part of the operation. A planter should never forget that it is by the delicate and tender points or extremities of the root that trees take up their food; and that the chance of complete success is lessened by every one of these points that is bruised or destroyed. If we could remove trees with every fibre entire, as we do a plant in a pot, they would scarcely show any sign of their change of position. In most cases, especially in that of trees taken from nurseries, this is, by the operation of removal, nearly impossible. But although we may not hope to get every root entire, we may, with proper care, preserve by far the larger portion of them, and more particularly the small and delicate fibres. After being taken up, they should be planted directly; or, if this cannot be done, they should be kept from drying by a covering of mats, and, when sent to a distance, by being packed in damp moss.*

* We should notice an important exception to this in the case of trees packed

Preparing the places. Here is the fatal stumbling-block of all novices and ignorant persons in transplanting. An English gardener, when he is about to plant fruit-trees, talks about *preparing his borders*; an American says he will *dig his holes*; and we cannot give a more forcible illustration of the ideas of two persons as to the wants of a fruit-tree, or a better notion of the comparative provision made to supply these wants, than by contrasting the two phrases themselves. The one looks upon a tree as a living being, whose life is to be rendered long, vigorous, and fruitful by a good supply of food, and a soil mellow and easily penetrated by the smallest fibre; the other considers it very much in the light of a truncheon or a post, which he thrusts into the smallest possible hole, and supplies with the least portion of manure, trusting to what he seems to believe the inextinguishable powers of nature to make roots and branches under any circumstances. It is true that the terms differ somewhat from the nature of the culture and the greater preparation necessary in planting fruit-trees in England, but this is not by any means sufficient to justify the different modes of performing the same operation there and here.

In truth, in this country, where the sun and climate are so favorable, where pruning and training are comparatively so little necessary, the great requisite to success in the ordinary culture of fruit-trees is the *proper preparation of the soil* before a tree is planted. Whether a transplanted tree shall struggle several years to recover, or grow moderately after a short time, or at once start into a very luxuriant and vigorous growth, depends entirely upon the amount of care and labor the planter is willing to bestow on the soil for his trees. We have seen several instances where, side by side, one man planted his trees in large spaces of deeply moved and rich soil, and another in small holes in the common mode, which uniformly showed the trees of the first larger after five years than those of the last after twelve.

No fruit-tree should be planted in a hole of less size than three feet square, and eighteen inches to two feet deep. To this size and depth the soil should be removed and well pulverized, and it should, if necessary, be properly enriched by the application of well-rotted manure, which must be thoroughly mixed with the whole mass of prepared soil by repeated turnings with the spade. This preparation will answer, but the most skilful cultivators among us make their spaces four or five feet in diameter, or three times the size of the roots, and it is incredible how much the luxuriance and vigor of growth, even in a poor soil, is promoted by this. No after-mending of the soil, or top-dressings applied to the surface, can, in a climate of dry summers like ours, equal the effects of this early and deep loosening and enriching the soil. Its effects on the growth and health of the tree are permanent, and the little expense and care necessary in this preparation is a source of early and constant pleasure to the planter. This preparation may be made just before the tree is planted, but in heavy soils it is much better to do it several months previously; and no shallow ploughing of the soil can obviate the necessity and advantages of the practice where healthy, vigorous orchards or fruit-gardens are desired.

for shipping across the Atlantic. In this case they should be packed only in *dry* moss; the moisture of the sea air being sufficient to keep the roots in good condition, while if packed in damp moss they will be injured by rotting or excessive growth.

The whole art of transplanting, after this, consists in placing the roots as they were before, or in the most favorable position for growth. Begin by filling the hole with prepared soil, within as many inches of the top as will allow the tree to stand exactly as deep as it previously stood. With the spade, shape the soil for the roots in the form of a little hillock on which to place the roots—and not, as is commonly done, in the form of a hollow; the roots will then extend in their natural position, not being forced to turn up at the ends. Next examine the roots, and cut off all wounded parts, paring the wound smooth, cutting from the under side. Hold the tree upright on its little mound in the hole of prepared soil; extend the roots, and cover them carefully with the remaining pulverized soil. As much of the success of transplanting depends on bringing the soil in contact with every fibre, so as to leave no hollows to cause the decay of the roots, not only must this be secured by patiently filling in all cavities among the roots, but, when the trees are not quite small, it is customary to pour in a pail of water when the roots are nearly all covered with soil. This carries the liquid mould to every hidden part. After the water has settled away, fill up the hole, and avoid the common practice of shaking it up and down by the stem. In windy situations it will be necessary to place a stake by the side of each tree, to hold it upright, until it shall have taken firm root in the soil, but it is not needful in ordinary cases.

Avoid deep planting. More than half the losses in orchard planting in America arises from this cause, and the equally common one of crowding the earth too tightly about the roots. No tree should be placed deeper than it formerly grew, as its roots are stifled from the want of air, or starved by the poverty of the soil at the depth where they are placed. It is much the better and more natural process in fact to plant the tree so that it shall, when the whole is complete, appear just as deep as before, but standing on a little mound two or three inches higher than the level of the ground about. This, when the mound settles, will leave it nearly on the level with the previous surface.

Mulching is an excellent practice with transplanted trees, and more especially for those which are removed late in the spring. Mulching is nothing more than covering the ground about the stems with coarse straw, or litter from the barn-yard, which by preventing evaporation keeps the soil from becoming dry, and maintains it in that moist and equable condition of temperature most favorable to the growth of young roots. Very many trees, in a dry season, fail at midsummer, after having made a fine start, from the parched and variable condition of the earth about the roots. Watering frequently fails to save such trees, but mulching when they are planted will entirely obviate the necessity of watering in dry seasons, and promote growth under any circumstances. Indeed watering upon the surface, as commonly performed, is a most injurious practice, as the roots, stimulated at one period of the day by water, are only rendered more susceptible to the action of the hot sun at another, and the surface of the ground becomes so hard by repeated watering that the beneficial access of the air is almost cut off. If trees are well watered in the holes, while transplanting is going on, they will rarely need it again, and we may say *never*, if they are well mulched directly after planting.

The best manure to be used in preparing the soil for transplanting

trees is a compost formed of two-thirds muck or black peat earth, reduced by fermenting it several months in a heap with one-third fresh barn-yard manure. Almost every farm will supply this, and it is more permanent in its effects, and less drying in its nature, than the common manure of the stable. An admirable manure recently applied with great success is charcoal—the small broken bits and refuse of the charcoal pits—mixed intimately with the soil. Air-slaked lime is an excellent manure for fruit-trees in soils that are not naturally calcareous. Two or three handfuls may be mixed with the soil when preparing each space for planting, and a top-dressing may be applied with advantage occasionally afterwards, to increase their productiveness. But wherever large orchards or fruit-gardens are to be planted, the muck compost heap should be made ready beforehand, as it is the cheapest, most valuable, and durable of all manures for fruit-trees.

Pruning the heads of transplanted trees, at the season of removal, we think generally an injurious practice. It is certainly needless and hurtful in the case of small trees, or those of such a size as will allow the roots to be taken up nearly entire; for as the action of the branches and the roots is precisely reciprocal, and as new roots are rapidly formed just in proportion to the healthy action of the leaves, it follows that by needlessly cutting off the branches we lessen the vital action of the whole tree. At the same time, where trees are transplanted of so large a size that some of the roots are lost in removing them, it is necessary to cut back or shorten a few of the branches,—as many as will restore the balance of the system,—otherwise the perspiration of the leaves may be so great as to exhaust the supply of sap faster than the roots can collect it. A little judgment only is necessary to see at a glance how much of the top must be pruned away, before planting the tree, to equalize the loss between the branches and the roots.

When it is necessary to transplant fruit-trees of large size, the best practice is to prepare them previously by digging a trench round the whole mass of roots, undermining them, and cutting off all roots projecting beyond this line. The trench should be dug at such a distance from the tree as will include all the large and sufficient ball of roots, and it should be done early in the spring when it is desirable to remove the tree the next year. After all the roots that extend to this circular trench are cut off, the earth is replaced, and by the season following an abundance of small fibres is sent out by the amputated roots, which, when the whole is removed, will insure the success and speedy growth of the tree. This is more completely the case when the tree is prepared two years before transplanting. A variation of this mode, which has been found quite as successful and less laborious, consists in leaving the trench open and covering it with boards only, or boards with a top layer of turf. The tree then is somewhat checked in its growth, it throws out an abundance of small fibres into the ball of earth containing the roots, and is the next season transplanted with great ease and safety.

The proper size for transplanting varies somewhat with the sort of tree and the kind of culture intended. It is, however, a maxim equally well settled, both among theorists and the best practical men, that health, immediate vigor, and duration are all greatly promoted by transplanting fruit-trees of small size—from three to six or seven feet. We are fully aware with what impatience the beginner, or a person who knows

little of the culture of trees, looks upon trees of this size—one who is eager to plant an orchard and stock a garden with large trees, thinking to *gather a crop the next year*. The latter may indeed be done; but the transplanting so affects the tree that its first scanty crop is followed by a long season of rest and feeble growth, while the plantation of young trees is making wood rapidly, and soon comes into a healthy and long-continued state of productiveness—often long indeed before the large trees have fairly arrived at that condition. The small tree, transplanted with its system of roots and branches entire, suffers little or no check; the older and larger tree, losing part of its roots, requires several years to resume its former vigor. The constitution of the small tree is healthy and unimpaired; that of the large is frequently much enfeebled. A stout and vigorous habit—what the nurserymen call a *good stocky plant*—is the true criterion of merit in selecting fruit-trees for transplanting.

Trees intended for orchards, being often more exposed than those in gardens, should be somewhat larger—not less than six, or more than eight feet is the best size. For gardens, all experienced cultivators agree that a smaller size is preferable; we prefer plants two years old from the graft. Most gardeners abroad, when they select trees with more than usual care, take what are called maiden plants,—those one year old from the graft,—and there can be no doubt that, taking into account health, duration, and the ease with which such a tree can be made to grow into any form, this is truly the preferable size for removal into a fruit-garden. But we are an impatient people, and it is not till after another century of trial and experience in the culture of fruit-trees, that cultivators generally in this country will become aware of the truth of this fact.

The facility with which the different fruit-trees may be transplanted differs considerably. Plums are generally removed with most success, and after them nearly in the order as follows: Quinces, Apples, Pears, Peaches, Nectarines, Apricots, and Cherries; the latter succeeding with some difficulty when of large size.

Laying in by the heels is a practice adopted as a temporary kind of planting when a larger quantity of trees is at hand than can be set out immediately. A trench is opened, and the roots are laid in and covered with soil, the tops being previously placed in a sloping position, inclining to within a few feet of the surface. In this way they are kept fresh and in good order until it is convenient to plant them finally. In northern districts, where the autumn is often too severe for planting, and the spring is frequently too late to receive trees in time from nurseries farther south, it is a common and successful mode to procure trees in autumn, and lay them in by the heels until spring, covering over the tops of the more tender sorts, if necessary, with coarse litter.*

In planting an orchard, always avoid placing the trees in the same spot, or near, where an old tree stood before. Experience has taught us

* We have often known trees entirely destroyed by want of a little extra care in heading them in. Select first a dry knoll, or position where no water can stand, and, if possible, sheltered from the southern sun. After first digging a trench one foot or more deep, lay the trees down at an angle of about 45°, their tops to the south; then make the soil mellow and fine, and thoroughly intermingle it with the roots, filling all interstices, and covering them at least eighteen inches deep.

Trees are sometimes received in a frozen condition. They should then be placed at once, without unpacking, in a dark cellar, and left until gradually

that the growth of a young tree, in such a position, is weak and feeble ; the nourishment suitable to that kind of tree having already been exhausted by a previous growth, and the soil being half filled with old and decayed roots which are detrimental to the health of the young tree.

CHAPTER VII.

THE POSITION OF FRUIT-TREES—SOIL AND ASPECT.

IN our favorable climate many fruit-trees will thrive and produce some fruit in almost any soil, except dry sand or wet swamps. But there is much to be gained in all climates by a judicious selection of soil, when this is in our power, or by that improvement which may generally be effected in inferior soils, where we are necessarily limited to such. As we shall, in treating the culture of each genus of fruit, state more in detail the soils especially adapted to its growth, our remarks here will be confined to the subject of soils generally for the orchard and fruit-garden.

The soils usually selected for making plantations of fruit-trees may be divided into light sandy loams, gravelly loams, strong loams, and clayey loams; the first having a large proportion of sand, and the last a large proportion of clay.

The soil most inviting to the eye is a *light sandy loam*, and as it is also a very common soil, more than half the fruit-gardens in the country are composed of this mould. The easy manner in which it is worked, owing to its loose and very friable nature, and the rapidity with which, from its warmth, crops of all kinds come into bearing, cause it to be looked upon with almost universal favor. Notwithstanding this, a pretty careful observation for several years has convinced us that a light sandy soil is, on the whole, the worst soil for fruit-trees. Under the bright skies of July and August, a fruit-tree requires a soil which will retain and afford a moderate and continued supply of moisture, and here the sandy soil fails. In consequence of this the vigor of the tree is checked, and it becomes feeble in its growth, and is comparatively short-lived or unproductive. As a tree in a feeble state is always most liable to the attacks of insects, those on a sandy soil are the first to fall a prey to numerous maladies.* The open loose texture of a sandy soil, joined to its warmth, affords an easy passage and an excellent habitation for all insects that pass part of their lives in the ground, preparatory to rising out of it to attack the fruit, foliage, or branches of the tree.

thawed out ; or they may be at once—if the earth will allow—buried, tops and roots entire, beneath the ground, and there left for a few days, or until a moist cloudy day occurs for opening and exposing them to the light and air. This latter course is also a good one for trees that are received in a dry or shrivelled state.

* This remark applies to the middle and southern portions of this country. North of the 43° a light sandy soil is perhaps preferable, as warmer and earlier.

Such are some of the disadvantages of a light sandy soil; and in thoroughly examining many of the fruit-gardens of the Middle States the last few seasons, we could not fail to be struck with the fact that, in nine cases out of ten, where a variety of fruit was unusually liable to disease, to blight, or to the attacks of certain fruit-destroying insects, as the curculio, the trees themselves were on sandy soils; while on the other hand, and frequently in the same neighborhood, the same sorts were growing luxuriantly and bearing abundant crops where the soil was a rather strong loam.* For a few years the growth and productiveness of the trees upon sandy soil is all that can be desired; but the trees are shorter lived, and sooner fall into decay than where the soil is stronger. If there is any exception to this rule, it is only in the case of the Peach; and, judging from the superior flavor of this fruit on stronger soils, we are inclined to doubt the value of the exception even here.

Gravelly loams are frequently much better adapted for orchards than sandy, especially where the loam is of a strong quality, and the gravel is not in excess; and the hardier fruits usually do well on this kind of soil.

Strong loams, by which we mean a loam with only just a sufficient portion of sand to make it easily worked, are, on the whole, by far the best for fruit-gardens in this country. A strong loam is usually a deep soil, and affords, during the whole heat of summer, a proper supply of moisture and nourishment to the roots of trees. Fruit-trees do not come into a bearing state so soon in a strong as in a sandy loam, because the growth of wood is more vigorous, and fruit-buds are not so soon formed; but they bear larger crops, are much less liable to many diseases, and their longevity is much greater. The largest and most productive orchards of the Apple and Pear in this country are upon soils of this kind.

Clayey loams are, when well drained, and when the clay is not in excess, good fruit soils—they are usually strong and deep soils, though rather heavy and difficult to work. Trees that will flourish on these soils, such as the Apple, Pear, Cherry, Plum, and Apricot, usually are very free from disease or insects, and bear large crops. In a moist climate, like that of England, fruit-trees on a clayey loam would die of canker, brought on by the excessive quantity of water contained in the soil, but such is not the case under the high and warm temperature of our summers. The finest, largest, and most productive Plums and Pears within our knowledge, grow in sites on the North River, where the soil is a stiff clayey loam, almost approaching a clay. Those fruits that on light sandy soils are almost worthless, from their liability to disease and the attacks of insects, are here surprisingly luxuriant and fruitful.

It is, however, well to remark, that some varieties of fruit, perhaps from the circumstances of their origin, succeed better on sandy soils than any other; thus the Newtown Pippin will only arrive at perfection in a strong loam, while the Summer Queen is finer when grown on a

* As an instance in point, the owner of one of the most highly cultivated gardens in the vicinity of Boston was showing us, in despair, some trees of the Seckel Pear, upon which he could no longer get good crops or fair fruit, and lamenting the *degeneracy* of the sort. The next day we saw in a neighboring garden beautiful crops of this Pear growing with the least possible care. The garden in the first case was a light sandy loam, in the second, a strong loam.

sandy, soil. But there are exceptions to all rules, and what we have already stated, as to the relative quality of soils, will apply pretty generally to the whole of this country, and it may be added that calcareous soils, of whatever texture, are better than soils of the same quality where no limestone is present.

Trenching is the most complete method of improving a soil too sandy, when the subsoil below is of a loamy or clayey nature. Deep subsoil ploughing, by bringing up a sufficient quantity of the stratum below, will answer the same purpose. When the subsoil of a sandy soil is sand or gravel, the surface can only be improved by top-dressings or the application of manures. Top-dressing with clay is the most simple means of changing the nature of such a soil, and it is surprising how moderate a quantity of clay will give a closer texture to light sandy soils. In manuring such soils, we may greatly improve their nature as well as condition by using composts of peat or bog earth, swamp muck, or river mud, instead of common barn-yard or stable manure. The former are not only more permanent and better as manures for fruit-trees, but they gradually consolidate and improve the whole texture of the soil.

Indeed no fruit-garden, where the soil is not naturally deep and rich, is in *perfect* condition for planting trees, unless the soil has been well trenched two spades in depth. This creates a matrix for the roots so deep and permanent that they retain their vigor and luxuriance through the droughts of summer, and continue for a long time in a state of health and productiveness.

It is difficult to give any precise rules as to *aspect*. We have seen fine fruit-gardens here in all aspects. Perhaps the very best aspect on the whole is a gentle slope to the southwest, because in such positions the trees when in blossom are somewhat protected from the bad effects of a morning sun after spring frosts. But, to remedy this more perfectly, it is sometimes the practice to plant on the north sides of hills, and this is an effectual way where early frosts are fatal, and where the season is long and warm enough to ripen the fruit in any exposure. A fine south slope is, south of New York, frequently found too warm for many fruit-trees in soils that are light and dry.

Deep valleys with small streams of water are the worst situations for fruit-trees, as the cold air settles down in these valleys in a calm frosty night, and buds and blossoms are very frequently destroyed. We know a rich and fertile valley of this kind in Connecticut where the Cherry will scarcely grow, and a crop of the Apple or the Pear is not obtained once in ten years; while the adjacent hill-tops and high country, a couple or three miles distant, yield abundant crops annually. On the other hand, the borders of large rivers, as the Hudson, or of some of our large inland lakes, are the most favorable situations for fruit-trees, as the climate is rendered milder by large bodies of water. In the garden where we write, a fourth of a mile from the Hudson, we have frequently seen ice formed during the night of the thickness of a dollar, when the blossoms of the Apricot were fully expanded, without doing the least harm to that tender fruit. This is owing to the slight fog rising from the river in the morning, which, softening the rays of the sun, and dissolving gradually the frost, prevents the injurious effects of sudden thawing. At the same time, a couple of miles from the shores, this fruit will often be quite destroyed. In short, the season on the lower half of the Hudson may,

from the ameliorating influence of the river, be said to be a month longer—a fortnight earlier in spring and later in autumn—than in the same latitude a few miles distant; and crops of the more tender fruits are therefore much more certain on the banks of large rivers or lakes than in inland districts of the same climate.

As our native forests become cleared away the climate is changed and becomes more harsh; hence it is found desirable to construct some kind of protection from the point of most destructive harsh winds and storms. Belts of trees, either evergreen or deciduous, or both mingled, and surrounding or placed so as to screen from the northeast, north, and northwest, are considered highly advantageous; and when we consider that foliage is an absorbent and ameliorating agent in tempering climate, we feel that it is the duty as well as interest of every fruit-grower to plant as many such belts as his property and pecuniary means admit.

CHAPTER VIII.

GENERAL REMARKS ON INSECTS.

THE insects injurious to fruit-trees are numerous, and to combat them successfully requires a minute acquaintance with their character and habits. While considering the culture of each class of fruit in the succeeding pages, we shall point out the habits and suggest means of destroying the most important of these insects; but in the mean time we wish to call attention to some general practical hints on this subject.

In the first place, we cannot too strongly impress upon the attention of the fruit-grower the importance of watching carefully and making an early attack upon every species of insect. It is only necessary to look for a moment at the astonishing rapidity with which many kinds of insects increase, if allowed to get well established in a garden, to become fully aware of this. The common caterpillars are the young of moths or butterflies, and that careful observer of the habits of insects, Dr. Harris, says as each female lays from two to five hundred eggs, a thousand moths or butterflies will, on the average, produce three hundred thousand caterpillars: if one half this number, when arrived at maturity, are females, they will give forty-five millions of caterpillars in the second, and six thousand seven hundred and fifty millions in the third generation.* To take another example: the *aphides*, or plant-lice, which are frequently seen in great numbers on the tender shoots of fruit-trees, have an almost incredibly prolific power of increase—the investigations of Réaumur having shown that one individual in five generations may become the progenitor of nearly six thousand millions of descendants. With such surprising powers of propagation, were it not for the havoc caused among insects by various species preying upon each other, by birds and other animals, and especially by unfavorable seasons, vegetation would

* For much valuable information on the habits of insects injurious to vegetation, see the "Treatise on the Insects of Massachusetts," by Dr. T. W. Harris, Cambridge.

soon be entirely destroyed by them. As it is, the orchards and gardens of careless and slovenly cultivators are often overrun by them, and many of the finest crops suffer great injury or total loss from the want of a little timely care.

In all well-managed plantations of fruit, at the first appearance of any injurious insect, it will be immediately seized upon and destroyed. A few moments in the first stage of insect life—at the first birth of the new colony—will do more to rid us for the season of that species than whole days of toil after the matter has been so long neglected that the enemy has become well established. We know how reluctant all but the experienced grower are, to set about eradicating what at first seems a thing of such trifling consequence. But such persons should consider that whether it is done at first, or a fortnight after, is frequently the difference between ten and ten thousand. A very little time regularly devoted to the extirpation of noxious insects will keep a large place quite free from them. We know a very large garden filled with trees, and always remarkably free from insect ravages, which, while those even in its vicinity suffer greatly, is thus preserved by half an hour's examination of the whole premises two days in the week during the growing season. This is made early in the morning, the best time for the purpose, as the insects are quiet while the dew is yet upon the leaves, and whole races yet only partially developed may be swept off in a single moment. In default of other more rapid expedients, the old mode of *hand-picking*, and crushing or burning, is the safest and surest that can be adopted. For practical purposes, the numerous insects infesting fruit-trees may be divided into four classes: 1st, those which for a time harbor in the ground and may be attacked in the soil; 2d, winged and other species, which may be attacked among the branches; 3d, aphides or plant-lice, which infest the young shoots; 4th, moths, and all night-flying insects.

Insects, the larvæ or grubs of which harbor in the ground during a certain season, as the curculio or plum-weevil, are all more or less affected by the application of common salt as a top-dressing. On a larger scale, in farm crops, the ravages of the cut-worm are frequently prevented by sowing three bushels of salt to the acre, and we have seen it applied to all kinds of fruit-grounds with equal success. Salt seems to be strongly disagreeable to nearly all this class of insects, and the grubs perish where even a small quantity has for two or three seasons been applied to the soil. In a neighborhood where the peach-worm usually destroys half the peach-trees, and where whole crops of the plum are equally a victim to the plum-weevil, we have seen the former preserved in the healthiest condition by an annual application of a small handful of coarse salt about the collar of the tree at the surface of the ground; and the latter made to hold abundant crops by a top-dressing applied every spring of packing salt, at the rate of a quart to the surface occupied by the roots of every full-grown tree.

Salt, being a powerful agent, must be applied for this purpose with caution and judgment. In small quantities it promotes the verdure and luxuriance of fruit-trees, while if applied very frequently, or too plentifully, it will certainly cause the death of any tree. Two or three years' top-dressing in moderate quantity will usually be found sufficient to drive away these insects, and then the application need only be repeated once in two or three seasons. Any coarse refuse salt will answer the

purpose; and packing salt is preferable to that of finer quality, as it dissolves slowly by the action of the atmosphere.*

In the winged state most small insects may either be driven away by powerful odors, or killed by strong decoctions of tobacco, or a wash of diluted whale-oil or other strong soap. Attention has but recently been called to the repugnance of all insects to strong odors, and there is but little doubt that before a long time it will lead to the discovery of the means of preventing the attacks of most insects, by means of strong smelling liquids or odorous substances. The moths that attack furs, as every one knows, are driven away by pepper-corns or tobacco, and should future experiments prove that at certain seasons, when our trees are most likely to be attacked by insects, we may expel them by hanging bottles or rags filled with strong smelling liquids in our trees, it will certainly be a very simple and easy way of ridding ourselves of them. The brown scale, a troublesome enemy of the orange-tree, it is stated in the *Gardener's Chronicle*, has been destroyed by hanging plants of the common chamomile among its branches. The odor of the coal-tar of gas-works is exceedingly offensive to some insects injurious to fruits, and it has been found to drive away the wire-worm and other grubs that attack the roots of plants. The vapor of oil of turpentine is fatal to wasps, and that of tobacco-smoke to the green fly. Little as yet is certainly known respecting the exact power of the various smells in deterring insects from attacking trees. What we do know, however, gives us reason to believe that much may be hoped from experiments made with a variety of powerful-smelling substances.

Tobacco-water and diluted whale-oil soap are the two most efficient remedies for all the small insects which feed upon the young shoots and leaves of plants. Tobacco-water is made by boiling tobacco leaves, or the refuse stems and stalks of the tobacco-shops. A large pot is crowded full of them, and then filled up with water, which is boiled till a strong decoction is made. This is applied to the young shoots and leaves with a syringe, or, when the trees are growing in nursery-rows, with a common white-wash brush, dipping the latter in the liquid and shaking it sharply over the extremities or the infested part of each tree. This or the whale-oil soap-suds, or a mixture of both, will kill every species of plant-lice and nearly all other small insects to which young trees are subject.

The wash of whale-oil soap is made by mixing two pounds of this soap, which is one of the cheapest and strongest kinds, with fifteen gallons of water. This mixture is applied to the leaves and stems of plants with a syringe, or in any other convenient mode, and there are few of the smaller insects that are not destroyed or driven away by it. The merit of this mixture belongs to Mr. David Haggerston, of Boston, who first applied it with great success to the rose-slug, and received the premium of the Massachusetts Horticultural Society for its discovery. When this soap cannot be obtained, a good substitute may be made by turning into soap the lees of common oil-casks, by the application of potash and water in the usual way.

Moths and other insects which fly at night are destroyed in large numbers by the following mode, first discovered by Victor Adouin, of France. A flat saucer or vessel is set on the ground, in which is placed

* After repeated tests, it is doubtful whether the use of salt is as destructive to insect life as here stated. The use of salt as manure is undoubtedly a good stimulant to vegetable life and vigor.

a light, partially covered with a common bell-glass besmeared with oil. All the small moths are directly attracted by the light, fly towards it, and in their attempts to get at the light, are either caught by the glutinous sides of the bell-glass, or fall into the basin of oil beneath, and in either case soon perish. M. Adouin applied this to the destruction of the *pyralis*, a moth that is very troublesome in the French vineyards; with two hundred of these lights in a vineyard of four acres, and in a single night, 30,000 moths were killed and found dead on or about the vessels. By continuing his process through the season, it was estimated that he had destroyed female moths sufficient to have produced a progeny of over a million of caterpillars. In our orchards myriads of insects may be destroyed by lighting small bonfires of shavings or any refuse brush; and in districts where the apples are much worm-eaten, if repeated two or three nights at the proper season, this is a very efficient and cheap mode of getting rid of the moth which causes so much mischief. Dr. Harris, knowing how important it is to destroy the caterpillar in the moth state, has recommended flambeaux, made of tow wound round a stake and dipped in tar, to be stuck in the fruit-garden at night and lighted. Thousands of moths will find a speedy death, even in the short time which these flambeaux are burning. The melon-bug may be extirpated by myriads in the same way.

A simple and most effectual mode of ridding the fruit-garden of insects of every description, which we recommend as a general extirpator suited to all situations, is the following:—Take a number of common bottles, the wider mouthed the better, and fill them about half full of a mixture of water, molasses, and vinegar. Suspend these among the branches of trees and in various parts of the garden. In a fortnight they will be found full of dead insects of every description not too large to enter bottles—wasps, flies, beetles, slugs, grubs, and a great variety of others. The bottles must now be emptied and the liquid renewed. A zealous amateur of our acquaintance caught last season in this way *more than three bushels* of insects of various kinds; and, what is more satisfactory, preserved his garden almost entirely against their attacks in any shape.

The assistance of birds in destroying insects should be duly estimated by the fruit-grower. The quantity of eggs and insects in various states devoured annually by birds, when they are encouraged in gardens, is truly surprising. It is true that one or two species of these, as the ring-tail, annoy us by preying upon the earlier cherries, but even taking this into account, we are inclined to believe that we can much better spare a reasonable share of a few fruits than dispense with the good services of birds in ridding us of an excess of insects.

The most serviceable birds are the common sparrows, the wren, the red-breast, and in short most of the birds of this class. All these birds should be encouraged to build nests and inhabit the fruit-garden, and this may most effectually be done by not allowing a gun to be fired within its boundaries. The introduction of hedges or live fences greatly promotes the domestication of birds, as they afford an admirable shelter for their nests. Our own gardens are usually much more free from insects than those a mile or two distant, and we attribute this in part to our practice of encouraging birds, and to the thorn and arbor vitæ hedges growing here, and which are greatly resorted to by those of the feathered tribe which are the greatest enemies of the insect race.

Among animals, the *toad* and the *bat* are great insect destroyers. The common bat lives almost entirely upon them, and in its evening sallies devours a great number of moths, beetles, weevils, etc.; and the toad quietly makes away with numberless smaller insects.

CHAPTER IX.

THE APPLE.

Pyrus Malus, L. *Rosaceæ*, of botanists.

Pommier, of the French; *Apfelbaum*, German; *Apfel*, Dutch; *Melo pomo*, Italian; and *Manzana*, Spanish.

THE Apple is the world-renowned fruit of temperate climates. From the most remote periods it has been the subject of praise among writers and poets, and the old mythologies all endow its fruit with wonderful virtues. The allegorical tree of knowledge bore apples, and the celebrated golden fruit of the orchards of Hesperus, guarded by the sleepless dragon which it was one of the triumphs of Hercules to slay, were also apples, according to the old legends. Among the heathen gods of the north, there were apples fabled to possess the power of conferring immortality, which were carefully watched over by the goddess Iduna, and kept for the especial dessert of the gods who felt themselves growing old! As the mistletoe grew chiefly on the apple and the oak, the former tree was looked upon with great respect and reverence by the ancient Druids of Britain; and even to this day, in some parts of England, the antique custom of saluting the apple-trees in the orchards, in the hope of obtaining a good crop the next year, still lingers among the farmers of portions of Devonshire and Herefordshire. This old ceremony consists of saluting the tree with a portion of the contents of a wassail-bowl of cider, with a toast in it, by pouring a little of the cider about the roots, and even hanging a bit of the toast on the branches of the most barren, the farmer and his men dancing in a circle round the tree, and singing rude songs like the following:

“ Here’s to thee, old apple-tree.
Whence thou mayst bud, and whence thou mayst blow;
And whence thou mayst bear apples enow,
Hats full! caps full—
Bushels and sacks full!
Huzza!”

The species of crab from which all our sorts of Apples have originated, is wild in most parts of Europe. There are, indeed, two or three kinds of wild crab belonging to this country; as the *Pyrus coronaria*, or sweet-scented crab, with fruit about an inch in diameter, grows in many parts of the United States; and the wild crab of Oregon, *P. rivularis*, bearing a reddish-yellow fruit, about the size of a cherry, which the Chenook Indians use as an article of food; yet none of our cultivated varieties of Apple have been raised from these native crabs, but from seeds of the species brought here, by the colonists, from Europe.

The Apple-tree is, however, most perfectly naturalized in America, and, in the northern and middle portions of the United States, succeeds as well, or, as we believe, better than in any part of the world. The most celebrated apples of Germany and the north of Europe are not superior to many of the varieties originated here; and the American or Newtown Pippin is now pretty generally admitted to be the finest apple in the world. No better proof of the perfect adaptation of our soil and climate to this tree can be desired, than the seemingly spontaneous production of such varieties as this, the Baldwin, the Spitzenberg, or the Swaar—all fruits of delicious flavor, and great beauty of appearance.

The Apple is usually a very hardy and rather slow-growing fruit-tree, with a low-spreading rather irregular head, and bears an abundance of white blossoms, tinged with red. In a wild state it is very long-lived, but the finest garden sorts usually live about fifty or eighty years; though, by proper care, they may be kept healthy and productive much longer. Although the apple generally forms a tree of medium growth, there are many specimens in this country of enormous size. Among others, we recollect two in the grounds of Mr. Hall, of Raynham, Rhode Island, which, ten years ago, were 130 years old; the trunk of one of these trees then measured, at one foot from the ground, thirteen feet two inches, and the other twelve feet two inches. The trees bore that season about thirty or forty bushels; but, in the year 1780, they together bore one hundred and one bushels of apples. In Duxbury, Plymouth County, Mass., is a tree which in its girth measures twelve feet five inches, and which has yielded in a single season 121½ bushels.

In Lehigh County, Pa., there is an apple-tree which measures 17½ feet in circumference, one foot above the ground. The tree is fifty-four feet high, and the branches extend thirty-six feet each way from the trunk.

USES OF THE APPLE.

No fruit is more universally liked or generally used than the apple. It is exceedingly wholesome, and, medicinally, is considered cooling and laxative, and useful in all inflammatory diseases. The finest sorts are much esteemed for the dessert, and the little care required in its culture renders it the most abundant of all fruits in temperate climates. As the earliest sorts ripen about the last of June, and the latest can be preserved until that season, it may be considered as a fruit in perfection the whole year. Besides its merits for the dessert, the value of the apple is still greater for the kitchen; and in sauces, pies, tarts, preserves, and jellies, and roasted and boiled, this fruit is the constant and invaluable resource of the kitchen.

In seasons of scarcity, the small and usually considered refuse apples may be stewed, and then rubbed through a cullender, separating the seeds and skins from the pulp, forming a delicious sauce.

Apple-butter, made by stewing pared and sliced sweet apples in new cider until the whole is soft and pulpy, is a common and excellent article of food in many farmers' families, and is frequently made by the barrel. In France, nearly the same preparation is formed by simmering apples in new wine until the whole becomes a sort of marmalade, which is called *Raisiné*. The juice of the apple unfermented is, in some parts of the country, boiled down till it becomes molasses. When fermented it forms *cider*; and if this is carefully made from the best cider apples

it is nearly equal to wine; in fact, many hundreds of barrels of the cider of New Jersey have been manufactured, in a single year, into an imitation champagne, which is scarcely distinguished by many from that made from the grape.

Apples are also made into jelly, by grinding and pressing in the ordinary way for cider, then passed, in a thin and nearly continuous current, over an intensely heated clarifying or evaporating pan, such as is ordinarily used in the manufacture of molasses from the sorgho sugar-cane. About eight gallons of the apple-juice, or cider, will make one gallon of a very delicious jelly.

Dried apples are also a considerable article of commerce. Farmers usually pare and quarter them by hand, and dry them in the sun; but those who pursue it as a matter of trade pare them by machinery, and dry them slowly in ovens. They are then packed in bags or barrels, and used either at home, in sea stores, or are exported.

In perfumery, the pulp of this fruit, mixed intimately with lard, forms pomatum. The wood is employed for lasts, and for other purposes, by turners; and, being fine-grained and compact, is sometimes stained black and used for ebony by cabinet-makers.

The quality of an apple is always judged of by the use to which it is to be applied. A table or dessert apple of the finest quality should be of medium size, regular form, and fine color; and the flesh should be fine-grained, crisp, or tender, and of a sprightly or rich flavor and aroma. Very large-sized, or coarse apples are only admired by persons who have little knowledge of the true criterion of excellence. Apples for kitchen use should have the property of cooking evenly into a tender, pulpy consistence, and are generally acid in flavor; and, although there are many good cooking apples unfit for the table, many sorts, as the Fall Pippin and the Greening, are excellent for both purposes. To this we may add, that for the common apple-sauce made by farmers, a high-flavored sweet apple, which boils somewhat firm, is preferred, as this is generally made with cider. The very common use made of this cheap preserve at the North and West, and the recent practice of fattening hogs, horses, and other animals upon sweet apples, accounts for the much greater number of varieties of sweet apples held in esteem here than in any other country. In fact, so excellent has the saccharine matter of the apple been found for this purpose, that whole orchards of sweet apples are frequently planted here for the purpose of fattening swine and cattle, which are allowed to run at large in them.

Cider apples are varieties frequently useless for any other purpose. The best for this purpose are rather tough, piquant, and astringent; their juice has a high specific quality, and they are usually great bearers, as the Harrison, the Red Streak, and the Virginia Crab.

PROPAGATION.

The Apple for propagation is usually raised from seeds obtained from the pomace of the cider-mills, and a preference is always given to that from thrifty young orchards. These are sown in autumn, in broad drills, in good mellow soil, and they remain in the seed-beds—attention being paid to keeping the soil loose, and free from weeds, from one to three years, according to the richness of the soil. When the seedlings are a little more than a fourth of an inch in diameter, they

should be taken up in the spring or autumn, their tap-roots shortened, and then planted in nursery rows, one foot apart, and three to four feet between the rows. If the plants are thrifty and the soil good, they may be budded the following autumn, within one or two inches of the ground, and this is the most speedy mode of obtaining strong, straight, thrifty plants. Grafting is generally performed when the stocks are about half an inch thick; and for several modes of performing it on the Apple, see the remarks on *grafting* in a previous page. When young trees are feeble in the nursery, it is usual to head them back two-thirds the length of the graft, when they are three or four feet high, to make them throw up a strong, vigorous shoot.

Apple-stocks for dwarfs are raised by layers, as pointed out in the article on Layers.

Apple-trees for transplanting to orchards should be at least two years budded, and six or seven feet high, and they should have a proper balance of head or side branches.

SOIL AND SITUATION.

The Apple will grow on a great variety of soils, but it seldom thrives on very dry sands, or soils saturated with moisture. Its favorite soil, in all countries, is a strong loam of a calcareous or limestone nature. A deep, strong, gravelly, marly, or clayey loam, or a strong sandy loam on a gravelly subsoil, produces the greatest crops and the highest-flavored fruit, as well as the utmost longevity of the trees. Such a soil is moist rather than dry—the most favorable condition for this fruit. Too damp soils may often be rendered fit for the Apple by thorough draining, and too dry ones by deep subsoil ploughing, or trenching, where the subsoil is of a heavier texture. And many apple orchards in New England are very flourishing and productive on soils so stony and rock-covered (though naturally fertile) as to be unfit for any other crop.*

As regards site, apple orchards flourish best in southern and middle portions of the country on north slopes, and often even on the steep north sides of hills, where the climate is hot and dry. Farther north a southern or southeastern aspect is preferable, to ripen the crop and the wood more perfectly.

We may here remark that almost every district of the country has one or more varieties which, having had its origin there, seems also peculiarly adapted to the soil and climate of that locality. Thus the Newtown Pippin and the Spitzenberg are the great apples of New York; the Baldwin and the Roxbury Russet, of Massachusetts; the Bellflower and the Rambo, of Pennsylvania and New Jersey; and the Peck's Pleasant

* Blowing sands, says Mr. Coxe, when bottomed on a dry substratum, and aided by marl or meadow mud, will be found capable of producing very fine Apple-trees. Good cultivation and a system of high manuring will always remunerate the proprietor of an orchard, except it be planted on a quicksand or a cold clay; in such soils, no management can prevent an early decay. One of the most thrifty orchards I possess, was planted on a blowing sand, on which I carted three thousand loads of mud on ten acres, at an expense of about twenty-five dollars per acre, exclusive of much other manure; on this land I have raised good wheat and clover. Of five rows of the Winesap Apple planted upon it eight years ago, on the summit of a sandy knoll, not one has died out of near an hundred trees—all abundant bearers of large and fair apples.—*View of Fruit Trees*, p. 31.

and the Seek-no-further, of Connecticut; and though these apples are cultivated with greater or less success in other parts of the country, yet nowhere is their flavor and productiveness so perfect as in the best soils of their native districts—excepting in such other districts where a *soil containing the same elements* and a *corresponding climate* are also to be found.

PREPARING, PLANTING, AND CULTIVATION OF ORCHARDS.

With the exception of a few early and very choice sorts in the fruit-garden, the orchard is the place for this tree, and indeed, when we consider the great value and usefulness of apples to the farmer, it is easy to see that no farm is complete without a large and well-selected apple orchard.

The distance at which the trees should be planted in an orchard, depends upon the mode in which they are to be treated. When it is desired finally to cover and devote the whole ground to the trees, thirty feet apart is the proper interval; but where the farmer wishes to keep the land between the trees in grain and grass, fifty feet is not too great a distance in strong soils. Forty feet apart, however, is the usual distance at which the trees are planted in orchards.

Before transplanting, the ground should be well prepared for the trees by ploughing deeply and subsoiling the whole field one year or more previous to planting. Poor soils require manure; and turning under green crops, such as clover, peas, etc., serves to lighten and make porous, open, and enrich the soil. Where the subsoil is a heavy clay, it is best to thoroughly underdrain the whole by means of tile drains, at distances of two or three rods, and at the same time the surface drains should always be kept open, to prevent any water standing about the roots of the trees.

Vigorous, healthy young trees should be selected from the nurseries. As there is a great difference in the natural growth, shape, and size of the various sorts of apple-trees, those of the same kind should be planted in the rows together or near each other; this will not only facilitate culture and gathering the fruit, but will add to the neatness and orderly appearance of the orchard.

It is an indispensable requisite in all young orchards to keep the ground mellow and loose by cultivation; at least for the first few years, until the trees are well established. Indeed, of two adjoining orchards, one planted and kept in grass, and the other ploughed for the first five years, there will be an incredible difference in favor of the latter. Not only will these trees show rich, dark, luxuriant foliage, and clean smooth stems, while those neglected will have a starved and sickly look, but the size of the trees in the cultivated orchard will be treble that of the others at the end of this time, and a tree in one will be ready to bear an abundant crop before the other has commenced yielding a peck of good fruit. Fallow crops are the best for orchards—potatoes, beets, carrots, bush beans, and the like; while grains, such as rye, wheat, oats, etc., are very injurious; but whatever crops may be grown, it should constantly be borne in mind that the roots of the tree require the sole occupancy of the ground, so far as they extend, and therefore that an area of more than the diameter of the head of the tree should be kept clean of crops, weeds, and grass.

When the least symptom of failure or decay in a bearing orchard is

perceived, the ground should have a good top-dressing of manure, and of marl, or mild lime, in alternate years. It is folly to suppose that so strong-growing a tree as the apple, when planted thickly in an orchard, will not, after a few heavy crops of fruit, exhaust the soil of much of its proper food. If we desire our trees to continue in a healthy bearing state, we should therefore manure them as regularly as any other crop, and they will amply repay the expense. There is scarcely a farm where the *waste* of barn-yard manure, the urine, etc., if properly economized by mixing this animal excrement with the muck-heap, would not be amply sufficient to keep the orchards in the highest condition. And how many moss-covered barren orchards, formerly very productive, do we not every day see, which only require a plentiful new supply of food in a substantial top-dressing, thorough scraping of the stems, and washing with diluted soft soap, to bring them again into the finest state of vigor and productiveness.

The bearing year of the Apple, in common culture, only takes place every alternate year, owing to the excessive crops which it usually produces, by which they exhaust most of the organizable matter laid up by the tree, which then requires another season to recover and collect a sufficient supply again to form fruit-buds. When half the fruit is thinned out in a young state, leaving only a moderate crop, the apple, like other fruit-trees, will bear every year, as it will also if the soil is kept in high condition. The bearing year of an apple-tree, or a whole orchard, may be changed by picking off the fruit when the trees first show good crops, allowing it to remain only in the alternate seasons which we wish to make the bearing year.

PRUNING.

The Apple in orchards requires very little pruning if the trees, while the orchard is young, are carefully inspected every year early in March, and all crossing branches taken out while they are small. When the heads are once properly adjusted and well balanced, the less the pruning-saw and knife are used the better, and the cutting out of dead limbs, and removal of such as may interfere with others, or too greatly crowd up the head of the tree, is all that an orchard will usually require. But wherever a limb is pruned away the surface of the wound should be neatly smoothed, and if it exceeds an inch in diameter, it should be covered with the liquid shellac previously noticed.

INSECTS.

There are several insects that in some parts of the country are very destructive or injurious to this tree; a knowledge of the habits of which is therefore very important to the orchardist. These are chiefly the borer, the caterpillar, and the canker-worm.

The Apple-borer is, as we usually see it in the trunks of the Apple, Quince, and thorn trees, a fleshy white grub, which enters the tree at the collar, just at the surface of the ground, where the bark is tender, and either girdles the tree or perforates it through every part of the stem, finally causing its death. This grub is the larva of a brown and white striped beetle, half an inch long (*Saperda bivittata*), and it remains in this grub state two or three years, coming out of the tree in a butterfly

form early in June—flying in the night only, from tree to tree, after its food, and finally depositing its eggs, during this and the next month, in the collar of the tree.

The most effectual mode of destroying the borer is by picking it out with the point of a knife, or, when it cannot thus be reached, killing it by thrusting a flexible wire as far as possible into its hole. Dr. Harris recommends placing a bit of camphor in the mouth of the aperture and plugging the hole with soft wood. But it is always better to prevent the deposit of the egg, by placing about the trunk, early in the spring, a small mound of ashes or lime; or by drawing away the soil an inch or two deep at the base of the tree and wrapping with coarse hardware paper, tying it, and then replacing the earth; and where orchards have already become greatly infested with this insect, the beetles may be destroyed by thousands in June, by building small bonfires of shavings in various parts of the orchard. The attacks of the borer on nursery trees may in a great measure be prevented by washing the stems in May, quite down into the ground, with a solution of two pounds of potash in eight quarts of water.

The *Caterpillar* is a great pestilence in the Apple orchard. The species which is most troublesome to our fruit-trees (*Ursiophaga americana*) is bred by a sort of hackey moth, different from that most troublesome in Europe, but its habits as a caterpillar are quite as annoying to the orchardist. The moth of our common caterpillar is a reddish brown insect, whose expanded wings measure about an inch and a half. These moths appear in great abundance in midsummer, flying only at night, and often buzzing about the candles of our houses. In laying their eggs they choose principally the Apple or Cherry, and they deposit thousands of small eggs about the forks and extremities of the young branches. The next season, about the middle of May, these eggs begin to hatch, and the young caterpillars in myriads come forth, weaving their nests or tents in the fork of the branches. If they are allowed by the careless cultivator to go on and multiply, as they soon do incredibly fast, they will in a few seasons, sometimes in a single year, increase to such an extent as almost to cover the branches. In this caterpillar state they live six or seven weeks, feeding most ferociously upon the leaves, and often stripping whole trees of their foliage. Their effect upon the tree at this period of the season, when the leaves are most important to the health of the tree and the growth of the fruit, is most deplorable. The crop is stunted, the health of the tree enfeebled, and, if they are allowed to remain unmolested for several seasons, they will often destroy its life, or render it exceedingly decrepid and feeble.

To destroy the caterpillar various modes are adopted. One of the most effectual is to touch the nest with a sponge, attached to the end of a pole, and dipped in strong spirits of ammonia or naphtha from coal-oil refinings; the sponge should be turned slowly round in the nests, and every insect coming in contact will be instantly killed. This should be done early in the season. Or they may be brought down and destroyed with a round brush fixed to the end of a pole, and worked about in the nests. On small trees they may be stripped off with the hand, and crushed under the foot; and by this plain and simple mode, begun in time, with the aid of a ladder, they may in a large orchard be most effectually kept under by a few moments' daily labor of a single man. As they do not leave their nests until nine in the morning, the

extirpator of caterpillars should always be abroad and busy before that time, and while they are all lying quietly in the nests. And let him never forget that he may do more in an hour, when he commences early in the season, than he will in a whole day at a later period, when they are thoroughly scattered among the trees. If they are allowed to remain unmolested, they spin their cocoons about the middle of June, and in a fortnight's time comes forth from them a fresh brood of moths, which, if they are not put an end to by bonfires, will again lay the eggs of an infinite number of caterpillars for the next spring.

The Canker-worm (*Anisopteryx pometaria* of Harris) is in some parts of the country one of the worst enemies of the Apple, destroying also its foliage with great rapidity. It is not yet common here, but in some parts of New England it has become a serious enemy. The male is a moth, with pale ash-colored wings, with a black dot, a little more than an inch across. The female is wingless, oval, dark ash-colored above, and gray beneath.

The canker-worm usually rises out of the ground very early in the spring, chiefly in March, as soon as the ground is free from frost; though a few also find their way up in the autumn. The females, having no wings, climb slowly up the trunks of the trees, while the winged males hover about to pair with them. Very soon after this, if we examine the trees we shall see the eggs, of which every female lays some sixty or a hundred, glued over, closely arranged in rows, and placed in the forks of branches and among the young twigs. About the twentieth of May these eggs are hatched, and the canker-worms, dusky brown, or ash-colored, with a yellow stripe, make their appearance, and commence preying upon the foliage. When they are abundant they make rapid progress, and in places where the colony is firmly established, they will sometimes strip an orchard in a few days, making it look as if a fire had passed over it. After feeding about four weeks, they descend into the ground three or four inches, where they remain in a chrysalis form, to emerge again the next season. As the female is not provided with wings, they do not spread very rapidly from one place to another.

The attacks upon the canker-worm should be chiefly made upon the female in her way from the ground up the trunk of the tree.

The common mode of protecting Apple-trees is to surround the trunk with a belt or bandage of canvas, four or five inches wide, which is then thickly smeared with tar. In order to prevent the tar from soon becoming dry and hard, a little coarse train-oil must be well mixed with it; and it should be watched and renewed as often as it appears necessary. This tarred belt catches and detains all the females on their upward journey, and prevents them from ascending the tree to lay their eggs. And if kept in order it will very effectually deter and destroy them. When the canker-worm is abundant it is necessary to apply the tarred bandage in October, and let it remain till the last of May, but usually it will be sufficient to use it in the spring. It is probable that a mixture of coal-tar and common tar would be the best application, as it is more offensive, and will not so easily dry and become useless by exposure to the air and sun. Some persons apply the tar directly to the stems of the tree, but this has a very injurious effect upon the trunk. Old India rubber, melted in an iron vessel over a very hot fire, forms a very adhesive fluid which is not affected by exposure to the weather, and is considered, by those who have made use of it, the best substance

for smearing the bandages, as being a more effectual barrier, and seldom or never requiring renewal.

Mr. Jonathan Dennis, Jun., of Portsmouth, Rhode Island, has invented and patented a circular leaden trough, which surrounds the trunk of the tree, and is filled with oil, and stops effectually the ascent of the canker-worm. There appear, however, to be two objections to this trough, as it is frequently used; one, the escape of the oil, if not carefully used, which injures the tree; and the other, the injurious effect of nailing the troughs to the bark or trunk. They should be supported by wedges of wood driven in between the trough and the trunk, and the spaces completely filled up with liquid clay, put on with a brush. The insects must be taken out and the oil renewed from time to time. For districts where the canker-worm greatly abounds, this leaden trough is probably the most permanent and effectual remedy yet employed.

Circular strips of zinc or tin, about four inches wide, passing around the trunk of the tree, the lower end standing out in a flaring manner, resembling a bowl bottom upward, proves an effectual preventive remedy, as the insects cannot pass the lower rim.

Experiments made by the Hon. John Lowell, and Professor Peck, of Massachusetts, lead to a belief that if the ground under trees which suffer from this insect is dug and well pulverized to the depth of five inches, in October, and a good top-dressing of lime applied as far as the branches extend, the canker-worm will there be almost entirely destroyed. The elm, and linden-trees in many places, suffer equally with the Apple from the attacks of the canker-worm.

The bark-louse, a dull white, oval, scale-like insect, about a tenth of an inch long (a species of *coccus*), which sometimes appears in great numbers on the stems of young Apple and Pear trees, and stunts their growth, may be destroyed by a wash of soft soap or the potash solution. The best time to apply these is in the month of June, when the insects are young, or when the tree is devoid of foliage.

The woolly Aphis (*aphis lanigera*), or American blight* is a dreadful enemy of the Apple. It makes its appearance in the form of a minute white down in the crotches and crevices of the branches, which is composed of a great number of very minute woolly lice, that if allowed will increase with fearful rapidity, and produce a sickly and diseased state of the whole tree. Fortunately, this insect is easily destroyed. "This is effected by washing the parts with diluted sulphuric acid, which is formed by mixing three-fourths of an ounce by measure of the sulphuric acid of the shops with seven and a half ounces of water. It should be rubbed into the parts affected by means of a piece of rag tied to a stick, the operator taking care not to let it touch his clothes. After the bark of a tree has been washed with this mixture, the first shower will redissolve it, and convey it into the most minute crevice, so as effectually to destroy all insects that may have escaped."—(*Loudon's Magazine*, ix., p. 336.) It is the more common practice to destroy it by the use of whale-oil, soap or lime wash.

The Apple-worm or Codling moth (*Carpocapsa pomonella* of European writers) is the insect introduced with the Apple-tree from Europe

* It is not a little singular that this insect, which is not indigenous to this country, and is never seen here except where introduced with imported trees, should be called in England the *American blight*. It is the most inveterate enemy of the Apple in the north of France and Germany.

which appears in the early worm-eaten Apples and Pears in the form of a reddish white grub, and causes the fruit to fall prematurely from the trees. The perfect insect is a small moth, the fore-wings gray, with a large round brown spot on the hinder margin. These moths appear in the greatest numbers in the warm evenings of the first of June, and lay their eggs in the eye or blossom-end of the young fruit, especially of the early kinds of Apples and Pears. In a short time these eggs hatch, and the grub burrows its way till it reaches the core; the fruit then ripens prematurely, and drops to the ground. Here the worm leaves the fruit and creeps into the crevices of the bark and hollow of the tree, and spins its cocoon, which usually remains there till the ensuing spring, when the young moth again emerges from it. The readiest way of destroying them, when it can be done conveniently, is to allow swine and poultry to run at large in the orchards when the premature fruit is falling; or otherwise the fruit may be picked up daily and placed where the worms will be killed. It is said that if an old cloth is placed in the crotch of the tree about the time the fruit begins to drop, the Apple-worm will make it a retiring-place, and thousands may be caught and killed from time to time. As the cocoons are deposited chiefly under the old loose bark, the thorough cultivator will take care, by keeping the trunks of his trees smooth, to afford them little harbor; and by scraping and washing the trunks early in the spring, to destroy such as may have already taken up their quarters there.

When the fruit of orchards is much liable to the attacks of this insect, we cannot too much insist on the efficacy of small bonfires lighted in the evening, by which myriads of this and all other moths may be destroyed before they have time to deposit their eggs and cause worm-eaten fruit.

A simple preventive remedy, or method of trapping the insect when in the grub form, has been introduced by Dr. J. P. Trimble, of New Jersey, and consists in twisting a band or rope of hay, long enough to pass three or four times around the body of the tree, and putting it thereon, "securing its ends so as to prevent its becoming loose; as soon as the fruit shows signs of the worms being at work, or from the middle to the last of June. They should be examined every two weeks, as long as the warm weather lasts, the earlier broods of worms becoming moths and producing a second crop. If the orchard is pastured, the bands must of course be put out of the reach of animals. Sometimes it may be necessary to place them around the limbs; in that case the scales of rough bark on the body of the tree below them should be scraped off."

The Blight, which occasionally kills suddenly the ends of the limbs of the apple and the quince, is caused by an insect (*Bostrichus bicaudatus*) which affects the small twigs, by penetrating the wood at the axil of a leaf, and causing it to wither. It is designated the *Twig blight*. Little or no injury results, but it is always well to cut away the injured twig just below the wound.

The Apple-bark Beetle (*Tomicus mali*), described by Fitch, is a small, smooth, black or chestnut-red beetle; the larvæ feed under the bark and then enter the wood, sometimes killing the young tree.

GATHERING AND KEEPING THE FRUIT.

In order to secure soundness and preservation, it is indispensably

necessary that the fruit should be gathered by hand. For winter fruit the gathering is delayed as long as possible, avoiding severe frosts; and the most successful practice with our extensive orchardists is to place the good fruit directly, in a careful manner, in new, tight flour-barrels as soon as gathered from the tree. These barrels should be gently shaken while filling, and the head closely pressed in: they are then placed in a cool, shady exposure, under a shed open to the air, or on the north side of a building, protected by covering of boards over the top, where they remain for a fortnight, or until the cold becomes too severe, when they are carefully transferred to a cool, dry cellar, in which air can be admitted occasionally in brisk weather.

Another method, by some regarded as superior, and tending to keep the fruit longer and better, is to gather carefully, in a dry day, as late as possible in the fall, and place the fruit on a floor, or in open bins, from one foot to sixteen inches in depth. After about a week examine, and if the dampness, commonly called sweat, has passed off, prepare a good clean barrel, and as each fruit is placed in the barrel, see that it is made perfectly dry by wiping it with a soft cloth. As soon as the barrel is filled, head it up securely and place it in a cool, dry cellar.

A cellar for this purpose should be dug in dry, gravelly, or sandy soil, with, if possible, a slope to the north; or, at any rate, with openings on the north side for the admission of air very rarely in weather not excessively cold. Here the barrels should be placed in tiers *on their sides*, and the cellar should be kept as dark as possible. In such a cellar, one of the largest apple-growers in Dutchess County is able to keep the Greening Apple, which, in the fruit-room, usually decays in January, until the 1st of April, in the freshest and finest condition. Some persons place a layer of clean rye-straw between every layer of apples, when packing them in the barrels.

Apples are frequently kept by farmers in pits or ridges in the ground, covered with straw and a layer of earth, in the same manner as potatoes; but it is an inferior method, and the fruit very speedily decays when opened to the air. The English apple-growers lay their fruit in heaps, in cool, dry cellars, and cover them with straw.

Various plans and methods have been designed for the keeping of fruit, few, if any of which are found practically adapted to the general wants of a family. Among those most prominent is the Roberts Fruit House, which is constructed by forming a room inside of an ice-house, having the ice around the sides and overhead; and with an arrangement for drainage below, by means of a pipe beneath the floor, and a condensing-tube inside the chamber or fruit-room.

The Nyce Fruit House is constructed with upright walls, sheeted on the inside and outside with sheet-iron, nailed to upright studding, and having the inside space closely packed with sawdust or chaff. Above the fruit-room is a floor of galvanized iron, on which ice, five to six feet in depth, is packed, and from it a tube or pipe is led off, for the purpose of conveying the water as the ice melts. Below the floor of the fruit-room, which is also of galvanized iron, shavings three feet thick are first laid, and then coated with tar and pitch, to prevent any rise of moisture from below. The temperature is kept at all seasons at just above the freezing-point, and the moisture from the fruit engendered in the room is absorbed by the use of "bittern" from salt-works. This absorption of moisture by means of *chloride of calcium*, or the waste *bittern* of

salt-works, is the principal feature of novelty in this house. But while upon a large scale these fruit-houses are found of value, their adoption involves too much of expense in their first construction, and too great care, to meet the wants of the general fruit-grower. When a fruit-house or room is to be constructed, aside from the cellar, under the barn or dwelling, select a location where complete drainage can be had. Excavate so as that the lower fruit-room will be about two-thirds of its height under ground; lay the outside wall, and then, leaving a space of four inches, lay another inside cement wall. Construct windows so as to give free circulation, and yet keep the room dark by having blinds on the outer side, and sash opening on the inner wall. For winter, double sash will be required. For the upper room, the same principle of forming a double wall, leaving a space of at least four inches, is to be continued, and the arrangement of shelves or drawers through the centre, keeping a passage open all around, may be made to meet the wants for which the room is to be used.

When apples are exported, each fruit in the barrel should be wrapped in clean soft paper, and the barrels should be placed in a dry, airy place between decks.

CIDER.

To make the finest cider, Apples should be chosen which are especially suited to this purpose. The fruit should be gathered about the first of November, and coarse cloths or straw should be laid under the tree, to secure them against bruising when they are shaken from the tree. If the weather is fine the fruit is allowed to lie in heaps in the open air, or in airy sheds or lofts for some time, till it is thoroughly ripened. All immature and rotten fruit should then be rejected, and the remainder ground in the mill as nearly as possible to a uniform mass. This pulp should now remain in the vat from 24 to 48 hours, or even longer if the weather is cool, in order to heighten the color and increase the saccharine principle. It is then put into the press (without wetting the straw), from whence the liquor is strained, through hair-cloth or sieves, into perfectly clean, sweet, sound casks. The casks, with the bung out, are then placed in a cool cellar, or in a sheltered place in the open air. Here the fermentation commences, and as the pomace and froth work out of the bung-hole, the casks must be filled up every day with some of the same pressing, kept in a cask for this purpose. In two or three weeks this rising will cease, when the first fermentation is over, and the bung should at first be put in loosely—then in a day or two driven in tight—leaving a small vent-hole near it, which may also be stopped in a few days after. If the casks are in a cool airy cellar the fermentation will cease in a day or two, and this state may be known by the liquor becoming clear and bright, by the cessation of the discharge of fixed air, and by the thick crust which has collected on the surface. The clear cider should now be drawn off and placed in a clean cask. If the cider, which must be carefully watched in this state, to prevent the fermentation going too far, remains quiet, it may be allowed to stand till spring, and the addition at first of about a gill of finely powdered charcoal to a barrel will secure this end; but if a scum collects on the surface, and the fermentation seems inclined to proceed further, it must be immediately racked again. The vent-spile may now be driven tight, but examined occasionally. In the beginning of March

a final racking should take place, when, should the cider not be perfectly fine, about three-fourths of an ounce of isinglass should be dissolved in the cider and poured in each barrel, which will render it perfectly clear. It may be bottled now, or any period before the blossoming of the Apple or afterwards, late in May. When bottling, fill the bottles within an inch of the bottom of the cork, and allow the bottles to stand an hour before the corks are driven. They should then be sealed and kept in a cool cellar, with clean dry sand up to their necks, or laid on their sides in boxes or bins, with the same between each layer.

VARIETIES.

The varieties of the Apple at the present time are very numerous. The garden of the Horticultural Society of London, which contains the most complete collection of fruit in the world, enumerates now, 1845, about 900 varieties, and nearly 1500 have been tested there. Of these the larger proportion are of course inferior; but it is only by comparison in such an experimental garden that the value of the different varieties for a certain climate can be fully ascertained.

The European Apples generally are, in this climate, inferior to our first-rate native sorts, though many of them are of high merit also with us. There is much confusion in regard to names of Apples, and the variation of fruits from soil, location, or other causes, makes it difficult to identify the kinds, and until they are brought together and fruited on the same ground the certainty of their nomenclature will not be established. New varieties of Apples are constantly springing up in this country from the seed, in favorable soils; and these, when of superior quality, may, as a general rule, be considered much more valuable for orchard culture than foreign sorts, on account of their greater productiveness and longevity. Indeed every State has some fine Apples peculiar to it, and it is therefore impossible in the present state of pomology in this country to give a complete list of the finest Apples of the United States. To do this will require time, and an extended and careful examination of their relative merits collected in one garden. The following descriptions comprise all the finest American and foreign varieties yet known in our gardens.

CLASSIFICATION.

The distinctive characters of fruits have, during the past quarter of a century, become so much intermingled and hybridized that, after carefully studying them, and comparing them with the orders of classification adopted by authors, we have come to the conclusion that no definite order can safely be made to embrace them. Forms, colors, growths, and periods of ripening are so much interwoven and distributed as to defy all arbitrary rules of classification, and hence we have without hesitation abandoned it entirely, substituting in our work the simple order of the alphabet as confined to names, believing such course will prove the most available and useful.

TERMS USED IN DESCRIBING APPLES.

In identifying fruits, not only certain forms and features of the fruit itself are desirable, to have a definite description under plain and intelli-

gible terms, but often the form of the growth of the tree, as well as the color of its young wood, are essential to a clear knowledge for decision. The form and general appearance of a fruit may be changed by soil or climate, but the general habit of growth and color of the young wood is always the same, and in the ensuing pages this latter point has been kept in view and recorded, so far as knowledge could be obtained, respecting valuable varieties.

The terms used we have sought to make simple and uniform, and within the comprehension of all, rather than scientific. In describing trees, the character designed to be represented is that of the orchard, or trees in a healthy bearing condition, and the growth is said to be *strong* and *vigorous*, as the Rhode Island Greening, or Baldwin; *vigorous* and *slender*, as the Jonathan or Winesap; *stout* and *short-jointed*, as Jersey Sweet or Primate; *medium* and *vigorous*, as Fameuse, or Maiden's Blush. And for the general form of the tree, the word *upright spreading* is used to designate such as Baldwin; *spreading*, as the Rhode Island Greening; *round-headed*, as in the Early Harvest; *upright*, as with Benoni. In describing fruits, the word *base* means that part of the fruit in which the stem is planted; and *apex*, the blossom end, or crown, as it is sometimes termed. Forms are so much interwoven, as it were, one with another, that we have selected but four as the primary bases on which all others are built, and are subsidiary.

Oblate.

Roundish.

Conical.

Oblong.

These primary forms are *roundish*, *oblate*, *conical*, and *oblong*. The terms *round*, *roundish*, or *globular*, are sometimes used in connection, rather as qualifying expressions than as distinctive; for while the word *roundish*, which indicates the height and diameter as nearly equal, ap-

plies to many fruits, there is no perfectly round or globular apple known.

Oblate indicates the height as much less than diameter. *Conical*, is when the fruit is roundish, having the apex end contracted. *Oblong*, is when the fruit is longer than broad, and having the apex and base of nearly the same breadth. Connected and subsidiary terms, such as *roundish*, *conical*, or *conic*, are when the Apple unites the two primary forms of roundish and conical; or *elongated conical*, or *conic*, when the length is considerably beyond the breadth. *Truncate conic*, is when the fruit is flattened at the apex. *Ribbed*, or *obscurely ribbed*, when the surface has rising lines and channels from apex to base. *Oblique*, is when the fruit presents the appearance as of being one-sided, or when the axis is inclined to one side. *Oblate, not symmetric*, or *sides unequal*, when one side is less than the other. *Corrugated*, having depressed lines, furrows, or wrinkles. *Acute*, when narrowing to a sharp point. *Obtuse*, round or blunt. *Abrupt*, when the depression breaks off suddenly.

In designating the quality of fruits, the terms of the American Pomological Society have been adopted; but it must be remembered that these terms apply strictly and only to the actual quality of the fruit as a dessert sort.

Some varieties classed as best, and which are strictly of the highest quality as fruit, are, nevertheless, unprofitable as varieties to grow, except by the amateur, while many to which the term *very good*, or *very good to best*, is applied, are known to be highly valuable and profitable for market, as well as excellent for the dessert.

APPLES.

ABBOTT.

Origin unknown.

Fruit medium, oblate, inclining to conic, obscurely ribbed, greenish-yellow, shaded and striped with red, few light and brown dots. Stalk long, cavity broad, slightly russeted. Calyx closed. Basin small, uneven. Flesh whitish, crisp, tender, juicy, subacid. Core medium. Very good. December to March.

ABBOTT'S SWEET.

Origin, New Hampshire.

Fruit rather above medium, roundish, conical, yellow, covered with stripes and blotches of red, and many white dots. Flesh white, tender, juicy, and pleasant. Very sweet. Good to very good. December to March.

ABBOTT'S FIVE-SIDED SPICE.

Origin unknown.

Fruit medium, roundish oblate conic, pale yellow, splashed and striped with two shades of red, light-gray dots. Flesh whitish, moderately juicy, mild subacid. Good. Core small. October and November.

ABRAM.

Origin unknown. Grown extensively in Eastern Virginia and North Carolina.

Fruit below medium, roundish, yellow shaded, and splashed with red. Many light dots. Flesh white, tender, subacid. "Good." December to March.

ACKLAM'S RUSSET.

Aclemy Russet.

Origin, Acklam, England.

Fruit medium or below, roundish oblate, pale yellowish green, some gray russet and yellowish-gray specks. Flesh whitish, firm, crisp, subacid. "Good." November to February.

ADAMS.

Originated with James Adams, Union, Penn. Tree quite strong, vigorous, spreading. Young shoots dull reddish brown. Very productive.

Fruit large, roundish, oblate, slightly oblique, yellow, shaded and splashed with red and russet netting. Stalk short. Cavity large, deep. Calyx generally open. Segment long, reflexed. Basin large, abrupt. Flesh yellowish, tender, juicy, slightly aromatic. Very good. January to April.

ADAMS PEARMAIN.

Norfolk Pippin. Matchless.

Origin unknown. Tree a free, healthy grower. Young shoots. Good bearer.

Fruit medium or below, roundish conical, inclining to oblong, pale yellow, shaded, mottled and splashed with red, with many light dots. Flesh yellow, crisp, firm, juicy, rich, brisk, subacid, slightly aromatic. Very good. December to February.

AGATE D'ENCKHUYSEN.

Origin, Enckhuysen, Holland. Tree upright. Young shoots slender, dark reddish.

Fruit small or medium, conical, clear yellowish green, and with many small dots. Calyx large, open, or nearly so. Segments large. Basin deep. Stalk short, stout. Cavity acute, deep. Flesh white, very fine grained, rather firm, juicy, sugary, perfumed. January to March. (Verg.)

AGATHE.

Pomme Double Agathe.

Origin, Limbourg, Holland. Tree vigorous, productive. Fruit medium or large, conical oblate, deep yellow in the shade, bright red-cheek in sun. Many conspicuous gray dots. Flesh yellowish-white,

sometimes slightly rose-colored, tender, juicy, subacid, pleasant. Core large, open. October to February. (An. Pom.)

AGNES'S.

Origin, Lancaster Co., Pa. Fruit rather below medium, oblate, somewhat oblique. Skin yellowish, striped, and shaded with red, and sprinkled with light brown dots. Stalk short and small, inserted in a large cavity. Calyx closed, in a medium basin. Flesh tender, with a spicy, pleasant, subacid flavor. "Good." September, October.

AILES.

Origin, Chester Co., Pa., of vigorous growth, and productive. Fruit large, oblate, yellowish, shaded and striped with red. Stalk short. Cavity narrow. Calyx in a round moderate basin. Flesh yellow, fine, crisp, juicy, with a rich vinous flavor. Good. Highly esteemed for cooking, not in eating till spring, and will keep till midsummer.

ALANT.

Pomme d'Aunee.

Probably of German origin. Tree slender, short jointed. Young shoots reddish-brown.

Fruit medium, truncated conic, greenish-yellow, with indistinct dots. Calyx small. Basin deep. Stalk short. Cavity deep. Flesh yellow, tender, juicy, with a cinnamon aroma. Winter. (Verg.)

ALEXANDER.

Emperor Alexander. Russian Emperor. Aporta.
Victoria, *incorrectly*.

A very large, showy Russian variety. Tree vigorous, spreading, productive. Fruit very large, regularly formed, conical. Skin greenish-yellow, faintly streaked with red on the shaded side, but orange, brilliantly streaked, and marked with bright red in the sun. Calyx large, set in a deep basin. Stalk rather slender, three-fourths of an inch long, planted in a deep cavity. Flesh yellowish-white, crisp, tender, and juicy, with a rather pleasant flavor. Good. October to December.

ALFRISTON.

Lord Gwydr's Newtown Pippin. Oldaker's New
Shepherd's Pippin. Baltimore, *incorrectly*.

A third-rate Apple, valued in England for cooking. Fruit large, roundish, a little ribbed, and rather broadest at the base, pale greenish-yellow. Flesh yellowish-white, crisp, tender, with a tolerable, somewhat acid flavor. Good. October to January.

ALLEMAND.

Pepin d'Or Allemand.

Of Hanoverian origin. Tree a slender grower. Fruit small, conical truncated, pale yellow, with pearl-color spots. Flesh yellow, fine, tender, sugary vinous. Winter. (Virg.)

ALLEN'S CHOICE.

Origin, Pennsylvania. Fruit medium, oblate, sides unequal, yellow, mostly shaded, and striped with red. Flesh white, stained with red, coarse, crisp, juicy, aromatic. "Good." January.

ALLEN'S PIPPIN.

Origin, Chatham, N. C. Tree upright, productive. Fruit medium, oblate, greenish-yellow. Flesh whitish, tender, mild, subacid. Good. October to December.

ALL-HALLOW'S.

Origin from seed by Richard H. Graves, Ireland. Fruit medium, roundish, handsome. Flesh tender, juicy, very pleasant. October and November. A new variety, not yet fully tested in this country.

ALL-SUMMER.

Origin, Lancaster Co., Pa. Tree slow growth, spreading, an annual bearer, and very productive. Fruit small, oblate, greenish waxy yellow, slight tinge of red in sun. Stalk slender. Calyx small, closed. Flesh white, tender, pleasant. Almost "very good." July and August.

ALLUM.

Hallum. Rockingham Red.

Much grown in northern N. Carolina; valuable chiefly because of its productiveness and for its keeping properties. Fruit medium, oblate, irregular, deep red. Flesh whitish, crisp, tender, juicy, with a brisk acid flavor. Good. January to April.

ALSACE.

Origin, Alsace Township, Pa. Fruit medium, conical, whitish-yellow, blush in sun. Flesh whitish, juicy, pleasant. "Good." January to March. (Pa. Hort.)

AMELIA.

Of European origin. Fruit medium, roundish, conical, pale yellow, shaded, and obscurely splashed with two shades of crimson. Flesh whitish, firm, tender, juicy, mild subacid. Good. January and February.

AMERICAN BEAUTY.

Sterling Beauty. Beauty of America.

Origin, Sterling, Mass. Tree vigorous, productive, an annual bearer. Wood dull reddish brown, slightly downy.

Fruit large, form roundish, slightly inclining to conic, obscurely ribbed. Color a yellow ground mostly covered with red, which is quite dark in the sun, thickly sprinkled with small light and brown dots. Stalk rather short, somewhat slender. Cavity medium, with russet, the rays of which sometimes extend out over a portion of the fruit. Calyx small,

closed. Segments medium, slightly recurved. Basin medium, uneven. Flesh yellowish, rather compact, tender, juicy, rich mild, subacid, aromatic. Core small. Very good. December to April.

AMERICAN GOLDEN PIPPIN.

Golden Pippin.
Ribbed Pippin.
Golding.

New York Greening.
Newtown Greening.
Golden Apple.

This old Apple is one of our finest American fruits, and seems not to be generally known. It has been cultivated more than fifty years, and is considered one of the most profitable for orchard culture and marketing; it is also a superior Apple for family use. Growth strong, similar to R. I. Greening, but less drooping, making a round, spreading head; does not bear young, but very productive when a little advanced, and a popular fruit where known. Wood dark reddish, downy, with prominent flattened buds.

Fruit medium to large; form roundish oblate, inclining to conic, obscurely ribbed; color yellow, sometimes a brownish blush in sun, thinly

American Golden Pippin.

sprinkled with gray dots, often slightly netted with thin russet. Stalk short, moderately stout. Cavity large, deep. Calyx closed. Segments pointed, slightly recurved. Basin broad, open, slightly corrugated. Flesh yellowish, breaking juicy, rather coarse, rich, aromatic, subacid. Core rather large. Very good. November to February.

AMERICAN GOLDEN RUSSET.

Golden Russet.
Sheep Nose.

Bullock's Pippin.
Little Pearmain.

The American Golden Russet is one of the most delicious and tender

Apples, its flesh resembling more in texture that of a buttery Pear than that of an ordinary Apple. It is widely cultivated at the West and in New England as the Golden Russet, and though neither handsome nor large, is still a universal favorite, from its great productiveness and admirable flavor. The uncouth name of Coxe, *Sheep-nose*, is nearly obsolete, except in New Jersey, and we therefore adopt the present one, to which it is well entitled. The tree is thrifty, with upright shoots, dull reddish grayish brown.

Fruit below medium size, roundish-ovate, dull yellow, sprinkled with a very thin russet. Stalk rather long and slender. Calyx closed, and set in a rather narrow basin. Flesh yellowish, very tender, juicy, with a mild, rich, spicy flavor. Best. October to January.

American Golden Russet.

AMERICAN NONPAREIL.

Origin unknown. Tree vigorous, round, and regular. Fruit medium, oblong conic, yellow, streaked with lively red. Flesh white, crisp, juicy. August. (Coxe.)

AMERICAN PIPPIN.

Stone. Grindstone.

Tree thrifty, spreading, with crooked shoots. Valuable only for its late keeping and for cider.

Fruit of medium size and regular form, oblate, dull red in patches and stripes, on a dull green ground. Flesh white, firm, juicy, with a somewhat brisk, acid flavor. Good. Keeps till June.

AMERICAN PLATE.

Origin unknown. Tree of slow growth, hardy, very productive.

Fruit small, roundish, oblate, greenish, with a brown tinge. Flesh crisp, juicy, pleasant. December and January. (Ron.)

AMERICAN SUMMER PEARMAIN.

Early Summer Pearmain.

A rich, highly-flavored fruit, much esteemed where it is known. It appears to be quite different from the Summer Pearmain (of the English), and is probably a seedling raised from it. It ripens gradually from the tenth of August to the last of September. Tree moderately vigorous, with slender branches, round-headed. Young shoots dull reddish-brown.

Fruit of medium size, oblong, widest at the crown, and tapering slightly to the eye. Skin red, spotted with yellow in the shade, but streaked

American Summer Pearmain.

with livelier red and yellow on the sunny side. Stalk three-fourths of an inch long, and pretty deeply inserted. Eye deeply sunk. Calyx closed. Segments short, erect. Basin abrupt, slightly corrugated. Flesh yellow, remarkably tender, with a rich and pleasant flavor, and often bursts in falling from the tree. Quality best. Core medium.

ANANAS.

Rother Ananas. Bromelia Ananas.

Tree vigorous, productive.

Fruit medium, roundish, yellow, streaked with bright red in the sun, brown spots in shade. Stalk long, slender. Cavity deep, open. Calyx

irregular, open. Basin deep. Flesh white, tender, juicy, subacid, perfumed. Excellent. October. (Al. Pom.)

ANANAS DE LIEGE.

Calville Ananas de Liege.

Lutticher Ananas Calville.

Originated in Belgium. Tree moderately vigorous, with long, jointed, dark-reddish shoots.

Fruit large, conical, truncated, greenish, with patches of brown or brownish russet. Calyx large. Basin deep, abrupt. Stalk short. Cavity large and deep. Flesh white, half-fine, firm, a little dry, subacid. Cooking. January, February. (Verg.)

ANGLE.

Medium, roundish, yellow, nearly covered with stripes and splashes of light and dark red, with white dots. Flesh yellow, tender, sweet and good, fair and handsome. Good. First of September.

ANGLO-AMERICAN.

Raised by W. H. Read, Canada West. Tree vigorous and productive.

Fruit medium, oblate, yellowish, marbled, striped and splashed with bright red. Stalk short, rather slender, inserted in a cavity of moderate depth. Calyx closed. Segments long, partly recurved. Flesh white, tender, juicy, sweet, slightly aromatic. Very good. August, September.

ARCHIDUC ANTOINE.

Tree upright, vigorous. Young shoots reddish.

Fruit medium, roundish, yellow green, dotted with inconspicuous small brown dots. Calyx half open. Basin small. Stalk rather long. Cavity deep. Flesh whitish yellow, fine, tender, juicy, subacid. Early winter. (Verg.)

AROMATIC CAROLINA.

Origin, Pomaria, South Carolina. Tree vigorous, hardy, productive.

Fruit large, roundish, oblate, sides unequal, light yellow, slightly streaked with pale red. Flesh moderately firm, crisp, pleasant, mild, subacid, aromatic. Very good. August and September. William Sumner says this is exceedingly tender and melting, and in season all July.

AROMATIC RUSSET.

An English Apple, of vigorous, upright, rather slender growth, hardy and productive.

Fruit medium, roundish, truncate conic, greenish, with a thin gray russet, and a tinge of dull red in the sun. Flesh greenish white, firm, brisk, subacid, aromatic. November, February. (Lind.)

ASHLAND.

Origin, Clermont Co., O. Tree upright, moderate grower, a good and annual bearer.

Fruit medium, approaching conic, truncate, yellowish, striped and shaded with earmine, and considerably sprinkled with large light dots. Stalk small and short, inserted in a large open cavity surrounded by greenish russet. Calyx open, set in a round, abrupt basin. Flesh yellow, tender, juicy, with a very pleasant, mild, subacid flavor. Very good. January to April.

ASHMEAD'S KERNEL.

A variety from Gloucestershire, England. Tree hardy and productive.

Fruit small, roundish, oblate, greenish yellow, with tinge of brownish orange in the sun. Flesh yellowish, firm, crisp, juicy, aromatic. November to May. (Lind.)

ASHMORE.

Red Ashmore.

Origin unknown. Tree vigorous, upright, spreading. Young shoots dull reddish brown.

Fruit medium, form roundish oblate, inclining to conical, generally regular; color whitish yellow, washed or shaded with rich bright red, obscurely splashed, moderately sprinkled with light and gray dots. Skin glossy, smooth. Stalk medium; cavity broad, deep, slightly russeted. Calyx small, finely closed. Segments erect. Basin deep, open, slightly uneven. Flesh white, tender, juicy, mild, subacid. Core small. Very good. October, November.

Striped Ashmore is claimed by some as a distinct variety, differing only in its coloring.

ASTERUS.

D'Asterus. Strifling d'Hiver.

An English variety, valuable for cooking.

Fruit large, roundish, green, with some dull red streaks. Flesh firm, rich, subacid or acid. January to April. (Ron.)

AUGUSTINE.

Large, roundish, conic, yellow, striped with red, sweet and dry. August.

AUGUSTUS PEARMAIN.

An English variety. Fruit small to medium, roundish conical, yellow, with streaks of red, deepest in the sun. Calyx small, closed. Stalk short, and having a knobby attachment. Flesh tender, juicy, vinous, aromatic. November, December. (Hogg.)

AUNT ANNA.

Aunt Anna's Seedling.

Introduced by John Reeder, South Charleston, Ohio. Fruit medium, oblate, yellow, finely striped with red. Flesh yellow, tender, rather dry. (O. P. S. Rep.)

AUNT'S APPLE.

Origin unknown. Tree small, delicate, very productive. Fruit large, oblong, yellow, mostly covered and streaked with a lively red. Flesh yellow, breaking, juicy, not rich. November. (Coxe.)

AUNT HANNAH.

Origin, Essex Co., Mass. Tree of slow growth. Fruit medium, oblate, nearly globular. Skin golden yellowish, sprinkled with russet. Stem short, inserted in a cavity surrounded by russet. Calyx closed. Basin very shallow. Flesh yellow, fine-grained, with a rich peculiar flavor, slightly musky. Good. December to February.

AUNT SUSAN'S FAVORITE.

Originated from seed, by Mrs. Susan Tippet, in Missouri, about twenty-five years since. Tree hardy, thrifty, vigorous, round open head, good and regular bearer. Fruit large, roundish, flattened, light yellow, shaded and striped with shades of deep and light red. Stalk short. Cavity deep. Calyx closed. Flesh white, tender, juicy, mild, subacid. Good. August. (M. S. H. Soc.)

AUSTIN SWEET.

Origin, Mercer Co., Pa. Tree irregular spreading.

Fruit medium, roundish, inclining to conic, pale yellow, sprinkled with a few brown dots and patches of russet. Stalk short and small; cavity, wide open, deep, russeted. Calyx open. Segments short, erect. Basin abrupt, deep, uneven. Flesh white, moderately juicy, rich, sweet. Very good. Core medium. September to December.

AUTUMN GOLDEN PIPPIN.

An old English variety. Tree vigorous. Fruit small, lemon-yellow, little russeted. Flesh rich, and delicious flavor. (Ron.)

AUTUMN PEARMAIN.

Winter Pearmain.

A slow-growing tree, but attains a large size. Branches slender, spreading. Fruit of medium size, roundish, narrowing gradually toward the eye. Color brownish-yellow, mixed with green on the shaded side, but next the sun reddish, blended with yellow, streaked with deeper red, and sprinkled with numerous small brown specks. Stalk short, obliquely planted under a fleshy lip. Calyx small, set in a broad shallow basin, which is sometimes scarcely at all sunk, and obscurely plaited. Flesh pale yellow, crisp, firm, a little dry, but rich and high flavored. Core rather small. Quality very good. October to March.

AUTUMN ROMANITE.

Originated on the farm of Jacob Nicely, Cumberland Co., Pa. Fruit medium, round, somewhat flattened, beautiful red. Flesh yellow, pleasant. September. (A. Pom. S. Rep.)

AUTUMN ROSE.

Roseau d'Automne.

An old English variety. Tree vigorous, spreading. Fruit medium, red on bright rich yellow, russet at the stem. Flesh yellow, rich, juicy, tender, high flavored. September. (Coxe.)

AUTUMNAL SWAAR.

Fall Swaar of West.

Origin unknown. Tree hardy, vigorous, spreading. Fruit large, roundish, conic, orange-yellow, netted with russet, and sprinkled with star-shaped dots. Stalk rather short. Cavity broad, deep, slightly russeted. Calyx small and closed. Basin deep, abrupt, and corrugated. Flesh yellow, juicy, tender, with a pleasant, rich, mild, slightly aromatic subacid flavor. Core small. Very good. September

AUTUMN SWEET BOUGH.

Late Bough.

Sweet Bellflower.

Fall Bough.

Philadelphia Sweet.

White Sugar?

Origin unknown. Tree vigorous, upright, round-headed, very productive. One of the very best dessert sweet Apples of its season. Fruit medium, conical, angular, smooth, pale yellow, sprinkled with a few brown dots. Stalk of medium length, rather slender, inserted in a deep narrow cavity. Calyx closed. Segments long. Basin deep, corrugated. Flesh white, very tender, with a sweet, refreshing, vinous flavor. Very good. Last of August to first of October.

AUTUMNAL SWEET SWAAR.

Sweet Swaar.

Sweet Golden Pippin.

Origin unknown. Tree vigorous, spreading, productive. Fruit medium, oblate, inclining to conic, deep yellow, with occasional blush in sun. Stalk rather long, slender. Cavity broad and even. Calyx closed. Basin round, open, corrugated. Flesh yellow, tender, moderately juicy, rich and sweet. Core medium. Very good. September, October.

AUTUMN SEEK-NO-FARTHER.

Dr. Watson.

Origin unknown. A variety considerably grown in Indiana, where it is much esteemed. Tree moderately vigorous, spreading, productive. Fruit medium, oblate, sides sometimes unequal. Color greenish-white, shaded, and splashed in the sun with dull crimson. Stalk of medium length. Cavity broad, uneven. Calyx open. Basin large, rather deep. Flesh whitish-yellow, rather firm, juicy, rich, subacid. Core medium. Very good. September, October.

AVERILL.

Wolf's Den.

Origin, Pomfret, Conn. Tree vigorous, productive. Fruit rather large, irregularly conic, angular, greenish yellow, striped and shaded with red. Stem short and stout, inserted in a narrow cavity. Calyx closed, set in a very shallow slightly furrowed basin. Flesh whitish, tender, juicy, with a pleasant subacid flavor. Good. February to June.

BACCOLINUS.

Origin unknown. Tree vigorous, very productive. Fruit small, roundish to roundish oblong, whitish, shaded and splashed with light and dark red. Flesh firm, moderately juicy, vinous. Core small. Good. January to April.

BACHELOR'S BLUSH.

Origin unknown. An annual moderate bearer. Fruit rather large, form oblate depressed, often obscurely ribbed, color yellowish with blush in sun, sprinkled with a few light and gray dots. Stalk very short. Cavity large, deep. Calyx open. Segments short, erect. Basin medium, uneven. Flesh white, tender, crisp, juicy, rather rich, subacid. Core small. Very good. August and September.

BACHELOR'S GLORY.

An English variety. Fruit large, roundish, irregularly ribbed, golden yellow with crimson stripes. Calyx closed. Segments flat. Stalk medium. Cavity deep, funnel-shaped. Flesh yellow, tender, juicy, pleasant. October, November. (Hogg.)

BACKHOUSE'S LORD NELSON.

Origin, York, England. Tree vigorous.

Fruit large, roundish conic, yellowish with dull green shade. Flesh tender. Good. December to January. (Ron.)

BADDOW PIPPIN.

Ribston Pippin, Spring.

An English dessert Apple, valued for its keeping properties. Fruit medium, roundish oblate, ribbed, yellowish green, with dull red in the sun. Stalk short. Calyx large, open. Flesh whitish, firm, crisp, rich vinous. Good. April to May.

BAILEY'S GOLDEN.

Origin, Kennebec Co., Maine. Tree productive. Fruit large, oblong, flattened at base and crown, yellowish, slightly russeted, with a warm cheek. Stalk short, surrounded by russet in a broad deep cavity. Calyx large and open. Basin shallow. Flesh white, with a pleasant subacid flavor. Good. January to March.

BAILEY'S SPICE.

Origin, Plattsburg, N. Y. Tree moderately vigorous and productive. Fruit medium, roundish conical, light yellow, sometimes a faint blush. Stalk rather long, slender. Cavity rather deep. Calyx closed. Basin abrupt, corrugated. Flesh whitish, tender, juicy, lively subacid, slightly aromatic. Core large. Nearly very good. September and October.

BAILEY'S SWEET.

Edgerly's Sweet. *Howard's Sweet.* Paterson's Sweet.

Origin unknown, introduced by J. Edgerly of Perry, Wyoming Co., N. Y. Tree hardy, vigorous, upright, spreading, productive.

This variety is regarded as profitable for all purposes, although perhaps a little too tender skin for shipping long distances. Fruit large, form roundish conical, often approaching oblong, obscurely ribbed, color yellowish, mostly shaded and obscurely striped with red, and thickly sprinkled with minute dots. Stalk short and rather small, inserted in a narrow cavity. Calyx small, closed, set in a narrow irregular basin. Flesh white, tender, not very juicy, almost melting, with a honeyed sweet flavor. Core rather large. Very good. November to March.

BAKER.

Scott.

Origin, Ridgefield, Ct. Tree vigorous, spreading, abundant bearer, young wood reddish brown, with prominent round buds. In its native locality this Apple is highly esteemed both for market and cooking purposes.

Fruit large, roundish oblate, inclining to conic, yellowish, mostly shaded and splashed with shades of crimson. Stalk short, moderately stout. Cavity regular, medium. Calyx closed. Segments slightly recurved. Basin shallow, slightly corrugated. Flesh yellowish, rather coarse, often tinged with crimson near the skin, pleasant subacid. Very good. Core small. October to February.

BAKER'S SWEET.

Winter Golden Sweet. Long Stem Sweet. Late Golden Sweet.

An old fruit of Connecticut and Massachusetts, and much cultivated there. Tree moderately vigorous, slender, somewhat resembling Jonathan. Wood clear reddish brown.

Fruit medium, roundish, of a golden yellow color, with some patches of russet. Stalk long, inserted in a large smooth cavity. Calyx closed. Rather large basin. Flesh yellow, rich, exceedingly saccharine and pleasant. Good to very good. November, December.

BALM.

Origin, Vermont. Tree vigorous, productive.

Fruit medium or above, roundish, oblate conical, yellowish, mostly covered with red. Stalk slender. Flesh whitish, tender, moderately juicy, mild, pleasant. Good. October.

BALDWIN.

Woodpecker,
Felch ?

Pecker.
Red Baldwin.

Steele's Red Winter.
Butters.

The Baldwin stands at the head of all New England Apples, and is unquestionably a first-rate fruit in all respects. It is a native of Massachusetts, and is more largely cultivated for the Boston market than any other sort. It bears most abundantly with us, and we have had the satisfaction of raising larger, more beautiful, and highly flavored specimens here than we ever saw in its native region. The Baldwin in flavor and general characteristics evidently belongs to the same family as our Esopus Spitzenberg, and deserves its extensive popularity.

Tree vigorous, upright spreading, productive. Young shoots dull reddish brown.

Fruit large, roundish, and narrowing a little to the eye. Color yellow in the shade, but nearly covered and striped with crimson, red, and orange in the sun, dotted with a few russet dots, and with radiating streaks of russet about the stalk. Calyx closed, and set in a rather narrow plaited basin. Stalk half to three-fourths of an inch long, rather slender for so large a fruit, planted in an even, moderately deep cavity. Flesh

Baldwin.

yellowish white, crisp, with that agreeable mingling of the saccharine and acid which constitutes a rich, high flavor. Very good. The tree is a vigorous upright grower, and bears most abundantly. Ripe from November to March, but with us is in perfection in January.*

* The Baldwin, like nearly all other varieties of winter fruits, originated in the Northern and Eastern States; when grown in Southern latitudes they become

BALDWIN SWEET.

Fruit rather large, roundish, yellow, striped and shaded with red. Flesh yellow, rather compact, sweet and good. Productive. October, January.

BALTIMORE.

Cable's Gilliflower. Baltimore Pippin. Royal Pippin

Origin unknown. Tree healthy, hardy, moderately vigorous, making a round head that when loaded with fruit appears almost drooping. Young shoots slender, dull reddish brown. A profitable variety for market or table use.

Baltimore.

Fruit medium. Form roundish, conical, regular. Color pale yellow, shaded with light red, striped and splashed with dark red, almost purplish, having a grayish appearance of bloom, large light dots, with a dark centre. Stalk short. Cavity medium size, rather thinly russeted. Calyx small, closed. Segments drawn to a point. Basin shallow, nearly smooth. Flesh whitish, tender, juicy, mild, subacid. Core medium. Very good. December to April.

An apple received from Maryland as Baltimore proves identical with Fallawater.

BALTIMORE GREENING.

Origin unknown. Specimens received from John Edgerton, Coal Creek, Iowa.

Fruit large, globular flattened, greenish yellow, with a brownish

autumn or early winter sorts, and lose more or less of their sprightliness and good qualities as table fruits. On the other hand, the summer-ripening varieties, originating North, are greatly improved when grown at the South.

blush cheek in sun, some slight stripes of russet, and a few small raised gray dots. Stem short. Cavity broad, open, and deep. Calyx closed, or nearly so. Basin open, deep, slightly furrowed at base. Flesh yellowish, rather coarse, tender, mild, subacid. Very good. Core medium. December. (Elliott's Notes.)

BALTZBY

From Virginia. Tree spreading, productive. Fruit large, oblate, yellowish white, with a faint blush; dots scattered, small, white. Flesh white, firm, somewhat tough, juicy, almost sweet. Good. October.

BAR.

A large, fair apple, slightly tinged with red next the sun. Flesh white, juicy, sweet, and agreeable. Good. An early fall fruit, and keeps well through the winter.

BARBOUR.

Originated with J. Barbour, Lancaster Co., Pa. Fruit medium roundish, oblate, inclining to conical, mottled, and striped with red of different hues on a grayish ground, with numerous gray specks. Flesh yellowish, white, tender, juicy, flavor pleasant. Quality very good. (Pa. Rep.)

BARCELONA PEARMAIN.

Speckled Golden Reinette.	Speckled Pearmain
Polinia Pearmain	Reinette Rousse.
Reinette Rouge.	Reinette des Carmes.
Glace Rouge.	Cassel Reinette.
Kleine Casseler Reinette.	

A foreign variety of uncertain origin, which from its good qualities there, has evidently been widely grown under many names. Tree hardy and productive.

Fruit medium, roundish oblong, pale yellow, mostly covered with red, and many star-like russet specks. Flesh yellowish white, firm, crisp, rich, aromatic, subacid. November to March.

BARCHARD'S SEEDLING.

An English variety, valuable for kitchen use. Fruit medium, roundish oblate, yellow striped with red. Flesh white, sugary. October. (L. H. S.)

BARNHAM'S SWEET

Origin, Connecticut. Fruit medium, roundish, pale yellow, rough, russet. Flesh yellowish, rather dry, rich, sweet. Good for baking. November, December.

BARNHILT.

American, small, conical, yellow, striped with red. Flesh white, tough, dry. October, November.

BARK APPLE

Originated with the Messrs. Ronalds, England, and there regarded valuable for culinary use. Fruit medium, roundish conical, greenish yellow, blush in sun, some russet. Flesh firm, crisp, juicy acid. November to February. (Hogg.)

BARRE.

Colville Barre.

Origin unknown. Introduced from Angers in 1848. Fruit large, roundish conical, yellow, with spots or patches of greenish. Flesh yellowish white, juicy, acid. Decemher. (An. Tom.)

BARRETT.

Origin, Kensington, Conn. Fruit medium to large, conic, yellow, striped and splashed with carmine. Flesh yellow, juicy, tender, with a very pleasant vinous aromatic flavor, almost sweet. Good. January to March.

BARS.

Origin, Rhode Island. Fruit rather large, round, pale yellow, marbled, and nearly covered with red and a few russet spots. Stalk long, slender. Cavity small. Calyx closed. Segment slightly recurved. Basin medium, furrowed. Flesh whitish, tender, juicy, mild, subacid. Core small. Very good. September.

BARTLETT.

Origin unknown. Fruit large, roundish, ribbed, striped and splashed with bright red on yellow. Flesh whitish, mild subacid. Good. (Count. Gent.)

BARTON.

Originated with Michael Aikman, in the township of Barton, C. W. Fruit medium, oblate, slightly conic, light yellow, with light red cheek. Stalk short. Cavity even. Calyx small, regular. Basin medium. Flesh white, fine-grained, tender, juicy, mild, subacid. Core small. Very good. September October. A new variety promising of value for dessert. (Tat. Mss.)

BARTON'S INCOMPARABLE.

An English variety, regarded abroad as of the highest excellence for the dessert. Tree healthy and productive. Fruit below medium, roundish conical, five ribbed, yellowish green, with patches and specks of russet, orange in sun. Flesh yellowish white, crisp, juicy, sprightly, vinous. October to February. (Hogg.)

BAUMAN'S REINETTE.

Reinette Bauman.

Of Flemish origin, introduced and named by Van Mons. Fruit medium, roundish oblate, yellowish green, with numerous distinct brown dots. Flesh yellowish white, fine, firm, sugary, perfumed. January. (L. H. S.)

BAXTER'S PEARMAIN.

From Norfolk, England. Tree hardy, vigorous, productive. Fruit large, roundish, elongated conical, pale green, with shades and streaks of red in the sun. Flesh yellowish, firm, brisk, sprightly subacid. Valuable for all purposes. November to March. (Hogg.)

BEACHEMWELL SEEDLING.

Motteux's Seedling.

From Norfolk, England. Tree hardy, vigorous, productive. Fruit below medium, roundish, yellowish, with faint stripes and splashes of red, brown patches. Calyx and stalk prominent. Flesh yellowish white, tender, brisk, subacid. December to March. (Ron.)

BEADELL.

Hanover Seedling.

Originated on the farm of Edward Beadell, Westchester Co., N. Y. Tree strong, vigorous, spreading, good bearer. Fruit resembles the McLellan in form, color, size, and similar in flavor. Good to very good. Ripe in October.

BEAN SWEET.

Originally sent out by Judge Buel. Fruit medium, oblong rounded, nearly white. Flesh crisp, juicy. October to March. Baking. (Elliott.)

BEAR SWEET.

Origin unknown. Fruit medium, roundish, conical, yellowish, shaded and splashed with red. Flesh moderately tender, juicy, pleasant, sweet. Good for cooking. November.

BEAU.

Distributed by Judge Buel. Fruit large, roundish, oblate, yellowish green, with blush in sun, and white dots. Flesh white, crisp, juicy, acid. August to October. Culinary. (Ken.)

BEAUTY OF KENT.

A showy English sort for culinary uses. The tree grows very strong and upright, moderately productive.

Fruit very large, roundish, but flat at the base, and narrowing distinctly to the eye, where it is slightly ribbed, smooth, greenish-yellow, marked with large, broken stripes of purplish red. Stalk short, slender, deeply planted in a round, russeted, corrugated cavity. Calyx small, set in a narrow basin. Flesh juicy, crisp, tender, with a simple subacid flavor. Good. October and November.

BEAUTY OF THE WEST.

Western Beauty. Ohio Beauty.
Musgrove's Cooper.

Origin unknown. First sent out and noticed by Judge Buel some

thirty or more years since, and yet but little known. The tree is a strong, vigorous grower, forming a large spreading head, moderately productive. Young wood dull reddish brown.

Fruit large, roundish, oblate, conical, greenish yellow, nearly covered with pale dull red, striped with a darker shade, and dotted with large yellow specks. Stalk short. Calyx large, half open. Flesh greenish-white, not firm, tender, mild, subacid. Good. November to February.

BEDFORDSHIRE FOUNDLING.

Cambridge Pippin.

A large green English Apple, excellent for kitchen use. Fruit large, roundish, obscurely ribbed, deep green, paler at maturity. Flesh yellowish, tender, juicy, with a pleasant, acid flavor. Good. October to February.

BEEFSTEAK.

Garden Apple of some, incorrectly.

Origin, farm of Joel Davis, Amesbury, Mass. Habits similar to Baldwin, very productive.

Fruit medium, oblate, inclining to conical. Sides sometimes unequal. Skin whitish-yellow, shaded and splashed with light and dark red over two-thirds its surface, large areole dots. Stalk medium and slender, often with bracts. Cavity rather large, slightly russeted. Calyx closed. Segments slightly recurved. Basin medium, nearly smooth. Flesh white, crisp, tender, juicy, mild, subacid. Core medium. Very good. October, November.

BEELE'S RUSSET.

Origin unknown. Fruit medium to small, round, truncated, russeted. Flesh yellow, crisp, tender, juicy, subacid, aromatic. November, December. (Warder.)

BELDEN OR RED CHEEK

Origin unknown. Tree vigorous, upright, moderately productive. Fruit large, roundish, conic, greenish-yellow, with patches of russet, sometimes a little bronzed cheek. Flesh yellow, crisp, subacid, pleasant. Good. October, February.

BELDEN SWEET.

Grown in Connecticut, very prolific. Fruit medium, or below, roundish conic, light yellow, with a warm cheek. Stalk medium, in an acute, deep cavity. Calyx closed, in a small basin. Flesh white, tender, juicy, saccharine, with a pleasant, aromatic flavor. Core large. Good. December to March.

BELLE BONDE.

Billy Bond. Belly Bounder.

This variety is somewhat grown in Central New York, and claimed as having originated in France, in 1790, and brought there by one John

Deidens. Tree hardy, vigorous, spreading. Fruit medium, or above, roundish conical, pale-yellow, striped and splashed with red, and with large light dots. Flesh whitish, a little coarse, tender, brisk, subacid. Good for cooking. January and February.

BELLE BONNE.

Winter Belle boon. Winter Belle and Bonne. Rolland.

Fruit large, roundish, flattened, greenish-yellow, with a few reddish streaks in the sun. Flesh firm, juicy. October to January. Culinary. (Hogg.)

An old variety, first described by Parkinson, in 1629, and which is probably identical with the Belle et Bonne above described.

BELLE D'ANGERS.

Origin in doubt. Fruit large, roundish conical, pale-yellow, splashed and shaded with dull red. Flesh yellow, juicy, crisp, brisk, subacid, aromatic. Core medium. Very good. October.

BELLEGE.

Belledge Pippin.

Origin, Derbyshire, England. A dessert and culinary apple. Fruit below medium, roundish oblate, lemon yellow, tinged with pale brown in sun, many embedded gray dots. Flesh firm, crisp, pleasant, aromatic, acid. October, December. (Lind.)

BELLE ET BONNE.

Tenon Hills.

A large, fine apple, having a great reputation in the vicinity of Hartford, Conn., a vigorous grower and productive. Shoots dull reddish brown.

Fruit very large, roundish oblate, golden yellow, thickly sprinkled with small dots. Stalk short, inserted in a broad, deep cavity, surrounded by thin russet. Calyx closed. Basin moderate and uneven. Flesh yellow, coarse, juicy, with a pleasant, rather rich, subacid flavor. Good. A profitable variety for market. October to March.

BELLE GRIDELINE.

Belle Grisdeline.

An old variety, originated at Norwich, England. Tree healthy, vigorous. Good bearer. Fruit medium, round, regular, yellow, marbled, and washed with lively red, gray russet in sun. Flesh white, crisp, brisk, subacid. November to March. (Hogg.)

BELLFLOWER PIPPIN.

Originated with Joseph Curtis, Edgar Co., Ill. Tree resembles Yellow Bellflower, but more slender in its branches.

Fruit medium, or above, oblate, orange-yellow, sometime shaded with crimson in the sun, thinly sprinkled with gray dots. Flesh yellowish, crisp, tender, juicy, rather rich, subacid. Core small. Very good. December, January.

BELMONT

Gate.	White Apple.
Mamma Beam.	Waxen of some.
Golden Pippin of some.	Kelley White.

Origin, near Strasburgh, Lancaster Co., Pa., in the garden of Mrs. Beam, at her gate, hence the names "Gate Apple," and "Mamma Beam." It was taken to Ohio by Jacob Neisley, Sen., and became

Belmont.

very popular in Belmont Co., and we retain this name as being the most universal one. Tree vigorous, healthy, and very productive. Wood smooth, light reddish brown.

Fruit medium to large, globular, a little flattened and narrower towards the eye, sometimes oblong. Color light, waxen-yellow, often with a bright vermillion cheek. Stalk short. Cavity generally large. Calyx usually closed. Basin rather deep, corrugated. Flesh yellowish, crisp, tender, juicy, sometimes almost melting, of a mild agreeable flavor. Very good. November to February.

BELPRE KEEPER.

Fruit below medium, roundish, pale greenish-white, some shades of crimson in sun. Flesh greenish, crisp, tender, pleasant, subacid. Good. January to March.

BELVOIR PIPPIN.

Of English origin. Fruit small, roundish oblate, yellow with crimson in sun, russet at the stalk. Flesh pale yellow, firm, crisp, rich brisk acid. November, December. (Lind.)

BELZER.

Fruit medium, roundish, yellow striped with red. Flesh white, fine, sub-acid. Good. Middle August. (Hov. Mag.)

BEN DAVIS.

New York Pippin.
Victoria Pippin.
Victoria Red.
Red Pippin.
Kentucky Pippin.

Baltimore Red.
do. Pippin.
do. Red Streak.
Carolina Red Streak.
Funkhouser.

The origin of this apple is unknown. J. S. Downer of Kentucky writes that old trees are there found from which suckers are taken in way of propagating. The tree is very hardy, a free grower, with very

Ben. Davis.

dark reddish brown, slightly grayish young wood, forming an erect round head, bearing early and abundantly. In quality it is not first-rate, but from its early productiveness, habit of blooming late in Spring after late frosts, good size, fair even fruit, keeping and carrying well, it is very popular in all the Southwest and West.

Fruit medium to large. Form roundish, truncated conical, often sides unequal. Color yellowish, almost entirely overspread, splashed, and striped with two shades of red, and dotted sparsely with areole dots. Stalk medium, rather slender. Cavity narrow, deep, russeted.

Calyx partially open. Basin wide, abrupt, slightly corrugated. Flesh white, tender, moderately juicy, pleasant, subacid. Core medium to large. Good to very good. December to March.

BENNET.

Origin, Herefordshire, England, where it is valued for cider. Fruit medium, elongated, oblong, conical, dingy russet gray, orange, and muddy red. (Lind.)

BENONI.

This excellent early apple is a native of Dedham, Mass. The tree is of vigorous, upright, spreading habit; hardy and productive; light reddish brown. It is a valuable variety for market or table use.

Benoni.

Fruit rather below medium size. Form roundish oblate conical. Color pale yellow, shaded, striped, and marbled with dark crimson, and thinly sprinkled with bright dots. Stalk short, slender. Cavity deep russeted. Calyx closed. Segments persistent, sometimes a little recurved. Basin abrupt, quite deep, somewhat uneven. Flesh yellow, juicy, tender, pleasant, subacid. Core small. Very good. August.

BENTLEY'S SWEET.

Origin unknown. Supposed Virginia. Tree moderately vigorous, hardy, good bearer and keeper, valuable in the Southwest in rich soils.

Fruit medium, roundish, flattened at ends, sometimes slightly oblique, and sometimes sides unequal, pale yellowish green, shaded with pale red and moderately sprinkled with light and brown dots. Stalk long, slender, curved. Cavity smooth, deep. Calyx large, closed, or partially open. Segments medium length, erect, sometimes a little recurved. Basin large, deep, corrugated. Flesh fine, whitish, compact, sweet, somewhat honeyed flavor. Core small. Very good. January to May.

BENWELL'S PEARMAIN.

An English variety. Fruit medium, roundish conical, dull green, with stripe of red. Flesh yellowish white, crisp, juicy, brisk, aromatic. December, January. (Hogg.)

Bentley's Sweet.

BERE COURT PIPPIN.

Origin, Berkshire, England. Fruit medium round, slightly oblate, yellowish with stripes of red in sun. Flesh crisp, juicy, brisk, acid. September and October. (Hogg.)

BERGNER.

Originated with G. Bergner, near Hermann, Mo. Tree a rapid grower, with strong branches, somewhat drooping; hardy and an abundant bearer.

Fruit large, roundish oblate. Color a rich yellow ground, mostly covered, striped and splashed with shades of maroon red, with some yellow gray or russet dots. Stalk short. Cavity open, regular, deep. Calyx small, closed. Basin abrupt, deep, slightly plaited at base. Core small. Flesh yellow, crisp, juicy, sprightly, aromatic, quince-like. Very good. February to April.

BESS, POOL.

Best Pool.

Origin, Warwickshire, England. Tree hardy, vigorous, productive.

Fruit above medium, roundish, conical, regular, yellow, washed and striped with clear red. Flesh white, tender, juicy, vinous, subacid. The stem almost always has a fleshy protuberance on one side. November to March. (Hogg.)

BEST BACHE.

Bache's Kernel.

Origin, Herefordshire, England, where it is grown mostly for cider-making. Fruit medium, oblong, yellow, shaded and streaked with pale red. (Hogg.)

BETSEY.

An English variety, there regarded as a valuable dessert Apple. Fruit small, roundish oblate, conical; pale yellow with brownish russet in sun. Flesh greenish yellow, tender, juicy, rich, and sugary. November to January. (Hogg.)

BETSY'S FANCY.

Origin unknown. A free grower, rather spreading, good bearer.

Fruit scarcely medium, oblate, yellowish, shaded with dull red. Stem short, inserted in a moderate cavity. Calyx closed. Basin shallow and uneven. Flesh compact, tender, pleasant, mild, subacid flavor. Good to very good. December to March.

Bethlemite.

BETHLEMITE.

The origin of this fine apple is unknown. It was first brought to notice from the town of Bethlehem, in Ohio, and is undoubtedly a seedling of the Newtown Spitzenberg, which it much resembles. Tree an

upright, strong, stocky, short-jointed grower, with young shoots, dull reddish brown, quite downy. A productive bearer, the fruit keeping and carrying well; very valuable for all purposes.

Fruit, medium, oblate, inclining to conical, regular. Color pale yellow, striped, shaded and splashed with shades of light and dark red nearly over the whole surface, thin grayish tinge, and pretty thickly sprinkled with light and brown dots. Stalk rather short, slender. Cavity large, considerably russeted. Calyx open or partially closed. Segments large and generally erect. Basin large, slightly corrugated. Flesh white, compact, crisp, juicy, rich, mild subacid, slightly aromatic. Core small. Very good. December to March.

BETTER THAN GOOD.

Origin uncertain. Tree thrifty, but rather slender, very productive. Fruit medium, oblate, pale yellow, with a few brown dots. Stalk short, inserted in a broad cavity. Calyx closed. Basin large and open. Flesh yellowish, very tender, juicy, with a mild, pleasant, subacid flavor. Good to very good. November to January.

BEVAN'S FAVORITE.

Origin, Salem, New Jersey, where it is a favorite. Tree vigorous and productive. Fruit medium, oblate, slightly conic, yellow, striped and splashed with red. Flesh white, firm, crisp, subacid. Good. August.

BIGG'S NONSUCH.

Origin, Middlesex, England. Tree hardy and productive. Fruit medium, round, broadest at base, yellow, striped with bright crimson. Flesh yellowish, tender, juicy. Culinary use. October to December. (Hogg.)

BILLY BARKER.

Originated on the farm of Wm. Barker, Wake Co., N. C. Tree upright grower and good bearer. Fruit large, green, oval, elongated. Flesh yellowish, juicy, tender, brisk, vinous. August. (Gar. Mon.)

BILLY'S PIPPIN.

Fruit large, round ovate, smooth, shaded and indistinctly striped with rich red on yellow. Flesh subacid. Very good. (Conn. Gent.)

BIRMINGHAM.

Of moderate growth, productive. Fruit medium, obliquely oblate, yellow, sprinkled with a few whitish dots. Stalk long, slender, in a broad, deep cavity. Calyx closed, in a large corrugated basin. Flesh yellowish, tender, rather acid, good for cooking. September.

BIRMINGHAM PIPPIN.

Grumas Pippin.

Stone Pippin.

Brunmage Pippin.

Grummage Pippin.

Tree of small growth, with short, stout shoots, productive. Fruit small, roundish flattened, dingy yellow, with gray russet, especially

russeted at base. Flesh greenish, crisp, juicy, brisk, pleasant. January to June. (Lind.)

BISCHOFF'S REINETTE.

Fruit medium, roundish conical, lemon yellow, with marblings of russet. Flesh whitish-yellow, juicy, sugary, vinous, aromatic. November to March. (Hogg.)

BISHOP'S BOURNE.

Received from C. C. Hamilton, Cornwallis, Nova Scotia. Fruit medium, roundish conical, pale yellow, shaded, and obscurely splashed and striped on the sunny side, few gray and light dots. Stalk medium, slender. Cavity slightly russeted. Calyx partially closed. Segments long, erect. Basin abrupt, deep, corrugated. Flesh white, crisp, tender, juicy, mild, subacid, slightly aromatic. Very good. Core small. November, December.

BLACK COAL.

Welcome.

Baltimore Red.

Baltimore Red Streak.

Origin unknown. Tree vigorous, very productive. Fruit rather large, roundish, deep red, almost black, with a slight bloom, and many white dots. Flesh white, slightly tinged with red, crisp, agreeable, moderately juicy. Good. Core medium. November to February.

BLACK OXFORD.

Originated in Maine, where it is by many highly esteemed, especially as a good keeper and great bearer.

Fruit medium, roundish oblate, slightly conic, yellow, nearly covered with shades of red, numerous light-colored dots. Flesh whitish, compact, not very juicy, mild subacid. Good. March to May.

BLACK JACK.

Received from W. C. Hampton, Ohio. Fruit medium, oblate, slightly conic, yellowish, mostly overspread with dark rich red, few light gray dots. Flesh whitish-yellow, rather dry, rich, sweet. Good for baking. January, February.

BLACK WARRIOR.

Origin, Alabama. Fruit medium or small, roundish, inclining to conic, regular, greenish, with a few brown dots. Flesh whitish, moderately juicy, rather firm, subacid. good. Core small. November, December.

BLACKSTONE VALLEY SWEET.

Originated in Massachusetts. Tree productive. Fruit medium, oblate, often depressed, inclining to conic, greenish-yellow, some nettings of russet, gray and green dots. Flesh white, fine-grained, sweet, and rich. Good for cooking. August. Core small.

BLACK ANNETTE.

An old variety, considerably grown in some parts of the Eastern States. Tree a good bearer. Fruit medium, small, roundish, dark red. Flesh white, tender, negative in character, pleasant. Good. November, December.

BLACK APPLE.

Small Black.

Jersey Black.

Black American.

An old variety, described and put out by Cox, and now found in many sections. The trees are healthy, moderate growers, forming medium-sized, spreading round heads, with drooping limbs. It is a pleasant table fruit, although not of high or rich flavor.

Fruit medium. Form roundish oblate, deep red, with a bloom. Flesh white, sometimes slightly stained with pinkish red. Good. November to February.

BLACK GILLIFLOWER.

Medium size, oblong conical. Skin very dark, dull red. Flesh white, dry, mild, subacid. Good. November to February. Very productive, and some call it a profitable market fruit.

BLAND'S JUBILEE.

Originated in Norwich, England. Fruit large, round, slightly conical, obscurely ribbed, clear yellow, with many large russet dots or patches, and russet at the calyx. Flesh yellowish, tender, crisp, juicy, sugary, perfumed. October to January. (Hogg.)

BLAKE.

Originated in Westbrook, Cumberland Co., Maine. Fruit medium to large, roundish, greenish yellow, quite yellow at maturity. Flesh firm, fine, crisp, juicy, subacid. Good. October to January. (Me. Rep.)

BLAKELY.

Origin, Pawlet, Vermont, on the farm of Mr. Blakely. Vigorous, upright growth, regular bearer.

Fruit large, regularly oblate, slightly conic, yellow, with a sunny cheek thinly sprinkled with reddish dots. Stalk small and short, inserted in a broad cavity of moderate depth. Calyx nearly closed. Basin small and shallow. Flesh tender, juicy, with a very pleasant, mild, subacid flavor. Good. January, March.

BLECKENSDECKER.

Originated at Zoar, Ohio. Fruit medium, oblate, inclining to conic, yellow, shaded and splashed with two shades of red or crimson. Flesh white, rather firm, tender, juicy, subacid. Hardly good. November to February.

BLEDSE PIPPIN.

Raised by John Bledsoe, of Carroll Co., Kentucky. Growth moderate, rather spreading, productive, a promising winter Apple for the South.

Fruit very large, regular, roundish, flattened at the base, tapering to the apex, greenish yellow, very obscurely striped. Stalk short. Cavity deep, slightly russeted. Calyx partly closed, in a somewhat furrowed basin. Flesh white, fine texture, crisp, juicy, with a mild, pleasant subacid flavor. Good. December to April. (Ky. Hort. Soc.)

BLENHEIM PIPPIN.

Blenheim.
Northwick Pippin.

Blenheim Orange.
Kempster's Pippin.

Woodstock Pippin.

An old variety, originated at Woodstock, in Oxfordshire, England. Tree a strong and vigorous grower, a regular and abundant bearer.

Fruit large, roundish oblate, conical, yellowish, becoming deep orange, stained on the sunny side with dull and dark red stripes. Stalk short and stout, in a deep cavity. Calyx large, open, in a deep broad basin. Flesh yellow, breaking, very sweet, pleasant. Good. October, December.

BLINKBONNY.

Blinkbonny Seedling.

Raised by — Cleghorn, Montreal, Canada. Tree vigorous, upright spreading, very productive. Fruit medium or below, roundish oblate, pale whitish yellow. Stalk long, slender. Calyx closed. Flesh white, rather firm, pleasant, subacid. Core small. Good. September.

BLOCKLEY.

Blockley Pippin.

Origin, near Philadelphia. Growth upright, moderate, a good bearer.

Fruit medium or large, roundish oblate. Color fine yellow, sometimes with a faint blush, thinly sprinkled with brown dots. Stalk short, rather stout, inserted in a deep russeted cavity. Calyx partially closed, set in a broad, deep, corrugated basin. Flesh yellowish, compact, rich, sprightly, mild subacid. Good. November to January.

BLONDIN.

Originated with Reuben Ragan, Indiana. Fruit very large, oblate, unequal, greenish yellow, splashed and striped with red, dots large gray. Flesh greenish yellow, tender, juicy. October, November. (Warder.)

BLOOMING ORANGE.

Under this name W. G. Waring, of Centre Co., Pa., has introduced an Apple said to have been brought from Herefordshire, England. We have been unable, from the few specimens examined, to identify it with any known sort. Tree vigorous, with strong, smooth shoots, resembling the Rhode Island Greening in color, but of upright growth.

Fruit large, roundish oblate, inclining to conic, yellowish, striped, splashed, and shaded with dull red, with large whitish and gray dots. Flesh white, juicy, pleasant subacid. Good to very good. Core medium. November and December. This may yet prove to be some known kind but as we have not fruited it ourself, cannot decide.

BLUE MOUNTAIN.

Trout Apple or Forelle.

Blauberger.

Introduced by W. G. Waring. Tree hardy, moderate grower, forming a small round head. Young shoots, slender, dark brown.

Fruit rather large, roundish oblate, whitish, with broken splashes and stripes of light red, dotted with few gray dots. Stalk rather short. Calyx small and closed. Basin medium, corrugated. Flesh white, crisp, juicy, brisk subacid. Core large. Good to very good. November to February.

BLUE MOUNTAIN SWEET.

Origin unknown.

Fruit medium size, roundish, slightly oblate, greenish yellow, with a shade of brown. Flesh fine-grained, solid, sweet. Very good. (Count. Gent.)

BLUE PEARMAIN.

Fruit of the largest size, roundish, regularly formed, very slightly conical. Color stripes of dark purplish-red, over a dull ground, and appearing bluish from the white bloom. Flesh yellowish, mild, rather rich, aromatic, and very good. The tree grows strongly, and bears moderate crops. October to February.

BLUFF SWEET.

From the banks of the White River.

Fruit medium to small, round, regular, smooth, green. Flesh greenish white, sweet. Good. July. (Warder.)

BOAS.

Kelter.

A Pennsylvania Apple, introduced by Rev. Mr. Boas, of Berks Co. Tree a strong grower and productive.

Fruit medium, oblate or roundish oblate, pale yellow, shaded and indistinctly splashed and striped with crimson over most of its surface. Stalk short and stout. Cavity medium. Calyx closed or partly open. Basin slightly corrugated. Flesh whitish yellow, fine-grained, juicy, pleasant, brisk subacid. Core small. Very good. January to March.

BOALSBURG.

A seedling of Centre Co., Pa. Large, oblong, inclining to conical, delicately mottled, and striped with red on a yellow ground. Stem short, thick, inserted in a deep acuminate russeted cavity. Basin deep, moderately wide. Flesh yellow, juicy, sprightly. Good. February

BOHANNAN.

Buchanan.

A Southern fruit introduced by Lewis Sanders, of Kentucky. Tree upright spreading, young shoots, light reddish brown. Good regular bearer.

Fruit rather large, roundish oblate, approaching conic, fine yellow, with a bright crimson cheek in the sun. Stalk slender, inserted in a round,

uneven, slightly russeted cavity. Calyx closed in a narrow abrupt basin. Flesh yellow, tender, juicy, with a fine spicy subacid flavor. Core large. Good culinary. September, August.

BONUM.

Magnum Bonum.

Raised by Squire Kinney, Davidson Co., N. C. Tree upright spreading, hardy and vigorous, an early and abundant bearer. Young shoots, smooth reddish gray.

Bonum.

Fruit medium, oblate, yellow, mostly shaded with deep crimson, and indistinct stripes and splashes of dark red, rather thinly sprinkled with pretty large light dots, a portion of them having a dark centre. Stalk long and slender. Cavity medium to large, often with a little green russet. Calyx closed. Segments rather long and sometimes recurved. Basin shallow, slightly corrugated. Flesh white, often stained next the skin, firm, tender, juicy, rich, mild subacid. Core small. Very good. November to December.

BORDEN'S EARLY.

Origin unknown. Tree vigorous, spreading, productive.

Fruit medium, roundish oblate, conical, yellow, striped, and splashed with two shades of red. Flesh yellowish, crisp, juicy, mild subacid. Core large. Good. A desirable cooking apple.

BOROVITSKY.

A Russian Apple of medium size, roundish, angular. Skin pale whitish yellow, faintly striped. Flesh white, firm, subacid. August.

There may be a distinct variety under this name, but, so far as received by me, it has proved to be identical with Duchess of Oldenburg.

BORSDORFFER.

Bursdorff.	King George the Third.
Queen's.	Reinette Bâtarde.
Edler Winter Borsdorffer.	Bursdorffer.
Garret Pippin.	King.
Le Grand Bohemian Borsdorffer.	Reinette de Misnie.

A small celebrated German Apple.

Fruit roundish oval, narrowing at the eye. Skin pale yellow, with a full red cheek, sprinkled with a little russet. Flesh yellowish white, very firm and crisp, with a rich, brisk, perfumed flavor. November to February.

BORSDORF OGNON.

Reinette Plate. Zweibel Apfel.

Of German origin. Tree with short, stocky, yellowish-brown shoots, regular roundish head.

Fruit small, greenish yellow, with large, distinct gray spots. Flesh white, firm, subacid, perfumed, rich flavor. Winter. (Verg.)

BONNE VIRGINIE.

A Belgian variety.

Fruit medium, roundish, flattened at base, glossy greenish yellow, with red in the sun. Flesh white, firm, sugary, slightly acid, agreeably perfumed. October. (Alb. Pom.)

BOSSOM.

Originated at Petworth, England.

Fruit large, conical, pale greenish yellow, very much russeted, and with bright red on sunny side. Flesh yellowish, crisp, juicy, sugary, subacid. Valuable as a cooking-apple. November to March. (Lind.)

BOTIGNE.

De Boutigne.

Of Belgic origin. Tree vigorous, upright, with large reddish-brown shoots, downy at the end.

Fruit rather large, oblong conical, yellow, washed over with carmine red, and marbled with spots of gray and black. Flesh yellowish, firm, very juicy, sugary. Core long, irregular. November to March. (Alb. Pom.)

BOTTLE GREENING.

This variety was found near the Vermont and New York State line, and takes its name from a hollow in the original tree, where workmen were accustomed to keeping their bottle. It was introduced to notice and disseminated by Eben Wight, of Dorechester, Mass. Tree a fine grower, vigorous, spreading. Young wood reddish yellow.

Fruit medium, oblate inclining to conic, greenish-yellow, shaded with dull crimson in the sun, a slight bloom, and thinly sprinkled with light dots. Stalk rather short. Cavity broad. Calyx closed. Basin small, corrugated. Flesh white, subacid, almost melting. Core small. Very good. January, February.

BOURASSA.

A foreign variety, succeeds well at the North, apt to shrivel, and does not keep well.

Fruit medium, roundish conic, ribbed, yellowish, rich orange russet on the sunny side. Flesh white, sometimes stained, tender, with a pleasant aromatic flavor. Good. November, December.

BOWYER'S RUSSET.

An English variety. Valuable for desert there in September. Tree healthy and productive.

Fruit small, roundish conical, yellowish, russeted. Flesh yellowish white, crisp, brisk, aromatic. September. (Lind.)

BOWKER.

Tree vigorous, rather spreading, good bearer.

Fruit medium, roundish flattened, slightly conic, pale yellow, tinged with crimson, sparsely covered with brown, and gray dots. Flesh white, tender, juicy, pleasant, mild, subacid. Good. October.

BOWLING'S SWEET.

From Spottsylvania Co., Va. A very vigorous grower and very productive.

Fruit medium, roundish. Color dull red, on a yellow ground. Flesh rich, juicy, sweet, and entirely free from acid. Good. October to January.

BOXFORD.

Fruit medium, oblate. Skin whitish, striped with red. Flesh compact, crisp, juicy, subacid. Good. September, October.

BRADDICK'S NONPAREIL.

Originated at Surrey, England.

Fruit small, roundish conical, or flattened at base, yellowish, with brownish red in the sun, and russet near the calyx. Flesh yellowish, rich, sugary, aromatic. October, December. (Lind.)

BRADLEY'S AUTUMN.

Originated in orchard of Mr. Bradley, Plymouth, Mich. Tree thrifty, with a spreading top, productive.

Fruit large, roundish oval, somewhat ribbed, whitish-yellow, shaded where exposed to the sun with fine crimson, and pretty thickly sprinkled with brown dots. Stalk rather short and small. Cavity uneven, acute. Calyx closed. Segments erect. Basin rather abrupt, furrowed. Flesh white, moderately juicy, brisk, subacid. Core large. Good. Excellent for cooking. October to January.

BRANDYWINE.

Origin unknown.

Fruit above medium, roundish conical, slightly ribbed, a little ob-

lique, yellowish, shaded, splashed, and striped with red over half to two-thirds its surface, many large, light dots. Stalk short and small. Cavity deep. Calyx closed, or partially open. Basin large. Flesh yellowish, crisp, juicy, tender, mild, somewhat rich, subacid, slightly aromatic. Core small. Good to very good. November to February.

BRABANT BELLFLOWER.

Brabant Belle-fleur. Iron Apple.

The Brabant Belle-fleur is a variety from Holland. The habit of the tree is spreading, and it requires to be grafted high to make a good head.

Fruit large, roundish oblong, slightly ribbed. Skin pale yellow, much striped with red. Calyx large, set in a pretty wide, irregular basin. Flesh firm, juicy, with a rich, pleasant, subacid flavor. Good. Valuable for cooking. October to January.

BREEDON PIPPIN.

A variety from Berkshire, England. Tree hardy, slender, productive.

Fruit small, roundish oblate, dull yellow, tinged with orange, becoming red in the sun, with traces of russet. Flesh yellowish, firm, with a vinous brisk flavor. October, November. (Lind.)

BRENNAMAN.

Raised by Mr. Brennaman, Lancaster Co., Pa. Tree vigorous, upright, productive. Young wood short-jointed, reddish-brown, somewhat downy.

Fruit rather above medium size, roundish oblate, yellowish, nearly covered with red stripes, and splashed. Stem short, in a large cavity. Calyx closed in a deep basin. Flesh white, tender, juicy, with a pleasant, subacid flavor. Good. Excellent for cooking. August, September.

BREWER.

From Massachusetts, a good grower, an annual bearer.

Fruit very large, roundish, yellow, with a slight blush. Flesh yellowish, tender, pleasant, mild, subacid. Good. October, November.

BREWER'S PIPPIN.

An English variety.

Fruit medium, roundish, brownish yellow, with red stripes. Flesh white, crisp, tender, subacid. Cooking. November. (L. H. S.)

BRICKLEY SEEDLING.

Of English origin. Tree hardy, productive.

Fruit small, roundish conical, greenish yellow, red when exposed to the sun. Flesh yellowish, firm, rich, sugary. January to April. (Lind.)

BRIGG'S AUBURN.

Origin, Auburn, Me. Tree hardy, vigorous, and productive; fruit large, oblate, somewhat ribbed, whitish yellow, blush in sun, with a few light and gray dots. Flesh white, firm, pleasant, mild, subacid. Core medium. Good. September, October.

BRIDGEWATER PIPPIN

An old English culinary sort.

Fruit large, roundish, slightly flattened, ribbed, deep yellow, with blush of red in sun and near the stalk. Flesh yellowish, brisk, pleasant. October, December. (Hogg.)

BRILL'S SEEDLING.

A chance seedling of Francis Brill, Newark, N. J. Tree a rapid upright grower, with light-colored shoots.

Fruit large, oblong conical, much ribbed, yellow, moderately sprinkled with gray dots. Skin oily. Stalk rather short. Calyx closed. Basin large, corrugated. Flesh yellowish, tender, juicy, sprightly, subacid. Core very large and open. Good to very good. November. An apple of good promise as a profitable market sort, being large and showy.

BRIMER.

Yoder.

Of Pennsylvania origin.

Fruit medium, oblate inclining to conic, sides sometimes unequal and slightly ribbed, whitish yellow, with a tinge of red in the sun, and thinly sprinkled with gray dots. Flesh whitish, crisp, rather tender, juicy, pleasant, subacid. Good to very good. Core small. February, March.

BRINCKLEY WHITE SWEET.

Unknown origin.

Fruit small, roundish oblate, pale whitish green, dull red on the sunny side, few gray dots. Flesh white, crisp, tender, juicy, sweet, honeyed flavor. Very good. October.

BRINGEWOOD PIPPIN.

Originated with Thomas Andrew Knight, Esq., Herefordshire, England. Tree hardy, but a slender grower.

Fruit small, roundish, rich yellow, dotted and marked with russet.

Flesh yellowish, firm, crisp, sugary, aromatic, dry. October to March. (Lind.)

BRISTOL PEARMAIN.

Origin, Hampshire, England.

Fruit small, oblong, ribbed, dull yellowish green, stripes of crimson and patches of gray russet. Flesh yellow, firm, not juicy or of much value. October to February. (Hogg.)

BRISTOL.

An old variety, much grown in Connecticut many years since. A pleasant but not rich fruit. Tree hardy, rather slender, drooping when in fruit.

Fruit medium or below, roundish, inclining to conic, dark rich crimson red. Flesh very white, often stained under the skin, tender, juicy. Good to very good. Core rather large. January to March.

BRITTLE SWEET.

Origin unknown. Tree moderately vigorous, very productive. This valuable apple is little known ; in beauty and quality it may be classed as among the best, and deserves more attention.

Fruit above medium, roundish, approaching conical. Color pale yellow, shaded, splashed and marbled over nearly the entire surface, with shades of light and dark crimson red, many small gray and white dots. Stalk rather short, slender. Cavity regular, broad, moderately deep. Calyx closed. Segments small, often recurved. Basin small corrugated. Flesh yellowish, crisp, tender, juicy with a peculiar honeyed sweet, and slightly aromatic. Core rather large. Very good. October and November.

BROAD-END.

Winter Brooding.

Kentish Brooding.

Brooding.

An old English culinary apple, in use from November to Christmas. Tree strong, vigorous, productive.

Fruit large, roundish oblate, yellowish green, red in sun, with patches of russet. Flesh yellowish white, firm, crisp, subacid. (Hogg.)

BROAD-EYE PIPPIN.

Another old English sort for culinary use.

Fruit large, oblate, greenish yellow, tinged with red in the sun. Flesh yellowish white, firm, crisp, brisk, juicy. January. (Hogg.)

Broadwell.

BROADWELL.

Broadwell Sweet.

Originated with Jacob Broadwell, near Cincinnati, O. An extremely valuable sweet apple, either for the table or cooking. Tree vigorous, quite hardy, very spreading, irregular, productive. Young shoots dull reddish brown, downy.

Fruit medium, oblate, somewhat conic. Color clear bright yellow, brownish blush in the sun exposure, with carmine spots. Dots few, greenish, suffused beneath. Stalk rather short. Cavity broad, russeted. Calyx closed, with short segments. Basin abrupt, regular. Flesh whitish, firm juicy, rich, sweet. Core small. Very good. November to February.

BROOKES.

An old Norman Apple. Tree a free but slender grower, abundant bearer.

Fruit small, conical, golden orange, with bright red next the sun, some russet. Flesh yellowish, firm, rich, sweet, aromatic. October to February. (Ron.)

BRONSON SWEET.

Origin unknown. This variety was many years since carried by a Dr. Bronson from Connecticut to Ohio, without name, and there received its present title. Tree a moderate grower, making a round head.

Fruit medium, oblate, sometimes oblate conic, yellowish, mostly overspread, striped, and splashed with red. Flesh white, compact, moderately juicy, pleasant, sweet. Good. October, November.

BROWN.

A Pennsylvania Apple.

Fruit medium, oblate, slightly ribbed, yellow, striped, splashed and shaded with light and dark crimson over two-thirds the surface. Flesh yellowish, crisp, tender, juicy, rather rich, subacid. Very good. Core small. October, November.

BROWN KENTING.

An English dessert apple.

Fruit above medium, roundish, slightly ribbed, yellowish, with russet marblings and brown russet in the sun. Flesh yellowish, crisp, brisk, aromatic. October to December. (Hogg.)

BROWN'S SUMMER BEAUTY.

Origin, Slough, England. Tree vigorous, good bearer.

Fruit medium, roundish conical, dull greenish yellow, with a red cheek. Flesh delicate, rich, juicy. A fine table apple. September. (Ron.)

BROWNLEE'S RUSSET.

Brownlee's Seedling Russet. Reinette Grise Brownlee's.

An English variety. Tree vigorous.

Fruit large, roundish, flattened greenish, with brownish red next the sun. Flesh greenish white, tender, juicy, sweet, aromatic. Good for cooking or the dessert. From January to May. (Hogg.)

BROWNITE.

Brown's Winter.

Origin, supposed Delaware. Tree a regular grower, with spreading branches.

Fruit below medium, roundish oblong, conical. Flesh tender, crisp, sprightly. Mid-winter. (Coxe.)

BROUGHTON.

A valuable English dessert Apple.

Fruit small, conical, regular, greenish yellow, covered with lively red, becoming deep red in sun, and with many russet dots. Flesh greenish yellow, tender, brisk, rich flavor. October to December. (Hogg.)

BUCHANAN'S PIPPIN.

Buchanan's Seedling.

Raised by Robert Buchanan, Cincinnati, O. Tree vigorous, round-headed, very productive.

Fruit medium, oblate or roundish oblate. Color yellow, splashed and striped with light and dark crimson, in the sun dark crimson maroon, many light conspicuous dots. Stalk short and small. Cavity medium to large, russeted. Calyx partially closed. Segments medium erect, or partially recurved. Basin rather abrupt, slightly corrugated. Flesh yellowish, rather firm, crisp, juicy, pleasant, slightly aromatic, subacid. Core close and small. Very good. January to April.

BUCKINGHAM.

Queen.	Equinately.	Sol. Carter.
Fall Queen.	Byer's.	Winter Queen.
Winter Queen.	Ox-Eye of some in Ky.	Ne Plus Ultra.
Kentucky Queen.	Bachelor.	King.
Lexington Queen.	Merit.	Byer's Red.
Frankfort Queen.	Blackburn.	Red Gloria Mundi of some.
Ladies' Favorite of Tenn.	Henshaw.	Red Horse of some.

The origin of this Apple appears all unknown. It has been long grown in Virginia, Kentucky, and other Southwestern States, and is there a profitable and popular variety, valuable either for market or table use. It matures often in November, but will keep into February. Tree hardy, healthy, moderately vigorous and productive, forming a round-headed spreading tree of medium size. Young shoots rather slender, dull reddish brown.

Fruit medium to large. Form oblate, inclining to conic. Color greenish yellow, mostly covered, shaded, striped, and splashed with two shades of crimson or purplish red, many light brown dots. Stalk short. Cavity broad, deep, slightly russeted. Calyx closed. Segments to a point. Basin rather large, deep, slightly corrugated. Flesh yellowish, rather coarse, breaking, tender, juicy, mild, sprightly, subacid. Core small. Very good to best. November to February.

BUCKS COUNTY PIPPIN.

Origin, Bucks Co., Pa. Tree upright, spreading. Young shoot pretty stout, short-jointed, reddish brown, downy, with prominent downy buds.

Fruit rather large, oblate or roundish oblate, oblique, greenish yellow, sometimes with a dull blush in the sun, brown dots. Stalk short. Cavity large, irregular. Calyx closed or partially open. Basin abrupt,

slightly furrowed. Flesh yellowish, crisp, juicy, tender, brisk, subacid. Very good. November to March.

Buckingham.

BUCK MEADOW.

Origin, Norwich, Conn., productive.

Fruit above medium, roundish, lightly conic, yellow, marbled and streaked with red. Flesh yellowish, tender, juicy, with a rather rich, pleasant, vinous flavor. Good. November to March.

BUEL'S FAVORITE.

Spotted Pippin.

Gray Pippin.

Fruit medium, roundish, greenish yellow. Flesh white, firm. November. Hardly good.

BUEL'S SWEET.

Fruit small, roundish conical, yellow, shaded with rich deep red in sun, brown dots. Flesh white, compact, not tender, moderately juicy, not quite good. Winter.

BUFFINGTON'S EARLY.

Origin said to be on the Brandywine, Pa. Tree of good upright growth, bears moderately.

Fruit medium or below, oblate, yellowish white, sometimes a faint blush. Stalk short. Cavity large, slightly russeted. Calyx closed. Basin shallow, slightly corrugated. Flesh tender, juicy, with a sprightly subacid flavor. Good. Middle of August.

BUFF.

Granny Buff.

Origin, Haywood Co., N. C. Tree vigorous, upright, productive. Fruit large to very large. Form roundish oblate, irregular. Sides unequal. Color whitish yellow, overspread with broad, broken splashes and stripes of dark crimson. Stalk short, rather slender. Cavity large, deep, much russeted. Calyx open or partially closed. Segments medium length, separated and partially recurved. Basin deep, abrupt, slightly corrugated. Flesh white, rather coarse, breaking, subacid. Core medium. Good. December and January.

BULL'S GOLDEN REINETTE.

An English variety. Fruit medium, roundish oblate, yellowish, highly colored with crimson red in the sun. Flesh yellowish, tender, juicy, sweet. December, January. (Hogg.)

BULLETT.

Bartlett.

Priestly of some.

An old variety, origin unknown. Fruit medium, oblong truncated, bright red and yellow. Flesh light yellow, subacid. Good. Valuable only as a long keeper. January to June.

BULLETT.

Green Abram.

North Carolina Greening.

An old variety of Southern origin, formerly much grown in Virginia, Kentucky, and North Carolina, but now superseded by better sorts. Tree hardy, a slow, rather slender grower, of a drooping habit, productive.

Fruit medium, oblate, oblique, greenish, mostly overspread with stripes and shades of red and grayish russet. Flesh white, firm, moderately juicy, peculiar subacid. Good. Core small, compact. January to June. Valuable only for its long keeping quality.

BURRELL'S RED.

An English Apple of robust growth and productive. Fruit above medium, conical, red, approaching scarlet. Flesh juicy, agreeable acid. November to January. (Ron.)

BURR'S SEEDLING.

Origin, Marlborough, England. Fruit medium roundish, slightly conical, yellow, bluish red in the sun, patches and dots of russet. Flesh yellowish, tender, juicy, subacid. October to December. (Hogg.)

BURR'S WINTER SWEET.

Raised by Elisha Burr, Hingham, Mass., a good grower, comes early into bearing, productive.

Fruit medium, oblate inclining to conic, yellow, marbled and striped with light and dark red. Stalk short, inserted in a large cavity. Calyx closed. Basin small. Flesh yellowish, fine grained, tender, juicy,

with a sugary aromatic flavor. Very good. Core small. November to March.

BURST OPEN.

Origin unknown. Fruit medium, oblate, much ribbed, pale whitish yellow, splashed and striped with light and dark crimson, few gray and light dots. Flesh whitish, tender, moderately juicy, mild subacid. Good. Core medium. November.

BURROUGHS GREENING.

Origin, farm of Stephen M. Burroughs, Vergennes, Vt. Good grower, tree spreading, and regular bearer. Medium, nearly globular, inclining to conic. Skin greenish, yellow. Stem long, slender. Calyx closed. Basin furrowed. Flesh solid, juicy, crisp, with a pleasant spicy subacid flavor. Good. January and February.

BUSH'S BEAUTY.

Origin on the farm of Henry Bush, near Sandusky, O. Tree spreading, a yearly abundant bearer. Fruit medium, roundish, flattened at base. Surface irregular, creamy white, striped and splashed with vermilion pink, a little russet toward the stalk. Flesh white, crisp, tender, acid. Good. September, October. Valuable for market.

BUSH.

Origin, farm of Christian Dale, near Boalsburg, Centre Co., Pa. Rather above medium, oblate inclining to conical, light yellow, faint blush in the sun, brown dots. Flesh white, rather firm, mild subacid. Nearly very good. Core small. September.

BUSHWHACKER.

A variety found wild near Nyack, N. J. Fruit large, roundish conical, yellow. Good. February to May.

BUTTER.

From Pennsylvania. Tree vigorous, upright, very productive. Fruit above medium, roundish, yellow, fair. Stalk short. Cavity deep and round. Calyx small, closed. Basin large and open. Flesh whitish, very sweet and rich, valuable for cooking, and esteemed for making apple-butter. September and October.

Another *Butter apple* is described in Elliott as follows:—"Fruit below medium, regular roundish, red marbling and overspreading yellow, few yellow russet dots, russet near and in cavity of stem. Stem long, slender. Cavity narrow, deep. Calyx half closed. Basin abrupt, ribbed. Core medium. Seeds roundish ovate. Flesh yellowish white, tender, sweet. Very good. November to February."

Another *Butter* is thus described by Warder, with Fulkerson's as a synonym:—"Fruit small, very regular, oblate. Surface very smooth and so covered with mixed red as rarely to show the yellow ground color; upon this are laid darker stripes of deep red. Dots minute and inconspicuous. Basin medium, regular, folded. Eye rather large, closed. Cavity acute. Stem of medium thickness, rather long. Core wide; large, plump pointed

seed. Flesh yellow, tender, fine-grained, juicy, with a sweet rich and aromatic flavor. October to January."

There are, besides these, three or four different varieties under the name of Butter, which appears to be a favorite name with some to apply to any good sweet apple for sauce or cooking.

BYAM'S SWEET.

Of unknown origin. An eastern variety.

Fruit medium, oblate, inclining to conic, yellowish, with a shade of red in the sun, gray dots. Flesh whitish, rather tender, juicy, lively, sweet pleasant flavor. Core small. Very good. October.

BYSON WOOD RUSSET.

Byson Wood.

An English Apple, there esteemed for dessert.

Fruit below medium, oblate, greenish yellow, covered with gray russet. Flesh greenish, firm, crisp, juicy, brisk, sugary, aromatic. December to February. (Hogg.)

CABASHEA.

20-Ounce Pippin. King.

Origin unknown. Tree a vigorous grower, poor bearer, and unprofitable. Young shoots very dark reddish brown, downy.

Fruit very large, roundish oblate, conical, yellow striped and splashed with dull red. Flesh whitish, coarse, subacid. Poor. December to February.

CABBAGE-HEAD.

Probable origin, New Jersey. Tree a vigorous grower and good bearer.

Fruit large, oblate conical, golden yellow, with a few gray dots. Flesh yellow, a little coarse, crisp, juicy, brisk, subacid. Good. Core medium. December.

CACHE.

A native of Pulaski Co., Ill. Tree healthy and productive.

Fruit medium, roundish conical, greenish, with a shade of brownish crimson in the sun, gray dots. Flesh white, close-grained, not very juicy, mild subacid. Good to very good. Core small. November.

CAKE APPLE.

Connecticut Cake.

Origin, Connecticut. Medium, oblate, much depressed, yellowish, with a blush. Flesh juicy, tender, pleasant, subacid, almost sweet. Good, sometimes very good. A great keeper, and in some localities considered valuable on account of its productiveness, fair even size, and keeping quality. January to March.

CALEB SWEET.

Of Pennsylvania origin. Tree vigorous and very productive.

Fruit medium, oblate conical, yellow, with a tinge of brown in sun. Flesh yellowish, crisp, rich, sweet. Core small. Good. September.

CALVILLE BLANCHE À COTE'S.

Of French origin. Tree vigorous, productive, with long jointed branches of reddish brown.

Fruit medium, conical, flattened at base, lemon yellow, with red in sun. Flesh white, fine-grained, tender, acid. December to May. (Verg.)

CALVILLE MALINGRE.

Pomme de Malingre, and many other synonyms.

An old variety. Origin in doubt.

Fruit very large, elongated, ribbed, yellow, deep red next the sun, with stripes of darker red. Flesh white, delicate, juicy, agreeable, acid. A culinary apple. From July to April. (Hogg.)

CALVILLE ROUGE DE MICOUD.

This is an old French Apple, said to blossom and get three crops of fruit in a season.

The fruit is large to small in size, mostly covered with red, with a yellowish-white sweet flesh. (Lind.)

CALEF'S SWEET.

Magoun Apple.

Origin, Kingston, N. H.

Fruit large, roundish flattened, yellow, with gray dots and crimson specks. Flesh white, very rich and sweet. November to January. (Maine Report.)

CAMACK'S SWEET.

Camack's Winter Sweet. Grape Vine.

Origin, Macon Co., N. C. Tree a slow grower, with small wiry branches, irregular spreading, an early and abundant bearer.

Fruit medium, roundish, sometimes conical, light yellow green, red in sun. Flesh yellowish, firm, juicy, brisk, pleasant, saccharine. Good. Core small. February.

CAMPBELL.

This new variety is an accidental seedling in the grounds of George W. Campbell, Delaware, O. He describes the tree as a vigorous strong grower, open spreading habit, shoots stout, blunt, leaves large and abundant, a good regular bearer.

Fruit medium, roundish, oblate, a little oblique, pea green, with broken dull red stripes in the sun or toward the stalk end, and with more or less of russet from the stalk cavity; scattering rough distinct dots. Stalk short. Cavity deep, open, narrow, russeted. Calyx closed with broken segments. Basin very deep, slightly furrowed. Flesh greenish white, crisp, breaking, half tender, mild, juicy, subacid, pleasant. Good to very good. Core small. Slightly hollow in centre. Seeds dark blackish, pointed. December to February.

CAMBUSNETHAN PIPPIN.

Winter Red Streak.

Watch Apple.

A Scotch variety, medium, roundish, light yellow, striped and shaded with crimson and dark red. Flesh yellowish, juicy, subacid. Good to very good. September, December.

CAMPFIELD.

Newark Sweeting.

Sweet Maiden's Blush.

A capital New Jersey cider apple, ranking next to the Harrison. It forms a fine large tree, with straight, spreading limbs, and is very productive. Fine for baking and stock feeding.

Fruit of medium size, roundish, rather flattened. Skin smooth, washed and striped with red, over a greenish-yellow ground. Flesh white, rather dry, firm, rich and sweet. Good. April, May.

CAN.

A very old Apple, originated in Schenectady, N. Y. Tree a good bearer.

Fruit above medium, oblong, yellow, shaded with crimson. Flesh whitish, not juicy, pleasant. Good. November.

CANN.

Winter Sweet Bough.

Winter Bough.

Sweet Cann.

Tree vigorous and productive.

Fruit large, roundish, conic, greenish yellow, with a dull crimson cheek, slightly sprinkled with brown dots. Flesh white, compact, not very juicy, rich, sweet, and pleasant. Core large. December to March. A good cooking and market apple.

CANADA REINETTE.

Canadian Reinette.

Grosse Reinette d'Angleterre.

Pomme du Caen.

Reinette du Canada Blanche.

Reinette Grosse du Canada.

Reinette du Canada à Cortes.

De Bretagne.

Portugal.

Januarea.

Wahr Reinette.

Praire Rambour Reinette.

It is easy to see that the Canada Reinette is a popular and highly esteemed variety in Europe, by the great number of synonyms under which it is known. It is doubtful, notwithstanding its name, whether it is truly of Canadian origin, as Merlet, a French writer, describes the same fruit in the 17th century, and some authors think it was first brought to this continent from Normandy, and carried back under its new name. At any rate, it is a very large and handsome fruit, a good bearer, and of excellent quality in all respects. Wherever grown in this country it sustains its foreign reputation, the tree being of vigorous habit, spreading, open, and productive. Young shoots clear reddish-brown, slightly downy.

Fruit of the largest size, oblate conical, flattened; rather irregular, with projecting ribs; broad at the base, narrowing towards the eye, four inches in diameter, and three deep. Skin greenish-yellow, slightly washed with brown on the sunny side, sprinkled with dots and russet

patches. Stalk short, inserted in a wide hollow. Calyx short and large, set in a rather deep, irregular basin. Flesh nearly white, rather firm, juicy, with a rich, lively, subacid flavor. Very good to best. Ripe in December, and, if picked early in autumn, it will keep till April.

The Canada Reinette Grise is very much like the above, and may prove identical.

Canada Reinette.

CANE CREEK SWEET.

Origin, Burke Co., on Cane Creek, N. C.

Fruit medium, roundish, pale greenish-yellow, shade of brown. Flesh white, rather firm, mild, sweet. Core medium. Good. July, August.

CANNON PEARMAIN.

Tree vigorous, spreading, and productive; much grown in North Carolina, and some portions of the West.

Fruit medium, roundish conic. Color yellow, striped, and marbled with red and dark crimson, with large grayish dots. Stalk short. Cavity small, russeted. Calyx large, open. Basin large, round, deep, and open, corrugated. Flesh yellow, firm, with a rich, brisk, subacid flavor. Very good. December to March.

CANTERBURY REINETTE.

Reinette de Cantorbery.

Tree moderately vigorous.

Fruit large, roundish oblate, conical, greenish-yellow. Stalk long. Cavity deep. Calyx closed. Flesh white, coarse, juicy, sharp, acid. January to March. (Alb. Pom.)

CAPITAL.

Origin, Indiana.

Fruit small, globular, truncate, deep red on greenish yellow. Flesh yellow, breaking, juicy, subacid. Good. December to January. (Warder.)

CAPRON'S PLEASANT.

Fruit medium, or above, roundish oblate, greenish yellow, with a brownish tinge. Stalk rather stout, inserted in an open cavity, slightly russeted. Calyx large, closed, in a medium basin. Flesh yellow, juicy, tender, mild, subacid, and very agreeable. Good. Core small. September to October.

CARAWAY RUSSET.

From England.

Fruit below medium, oblate, pale brown russet, with an orange tinge in sun. Flesh firm, crisp, juicy, sweet. February. (Hogg.)

CARBAGE.

Medium, roundish conic, yellow. Flesh tender, juicy, sweet, without much flavor. September, October.

CARDINAL RED.

Of European origin.

Fruit medium, oblate, inclining to conic; sides unequal; very dark red, almost blackish next the stalk; some light gray dots. Flesh white, rather firm, juicy, sprightly subacid. Good. Core small. January, February.

CAREY'S SEEDLING.

Ohio origin.

Fruit small, roundish, yellow, slight blush in sun. Flesh yellowish white, tender, subacid. Good. October, November.

CARLISLE CODLIN.

A dwarf variety of the old English Codlin. Tree hardy, and abundant bearer.

Fruit above medium, ovate, flattened at base, pale yellow with a few russety specks. Flesh white, tender, crisp, juicy. A good cooking apple from August to September. (Hogg.)

CARMEL SWEET.

Speckled Sweet.

A native of Carmel, Putnam Co., N. Y. Tree vigorous, upright, spreading. Very productive. Young shoots dull reddish brown, smooth.

Fruit medium, oblate, greenish yellow, with a blush, many fine red dots. Flesh white, juicy, tender, sweet, and rich. Very good. October, November.

CARNAHAN'S FAVORITE.

Origin, with Mr. Carnahan, Cincinnati, O. Tree vigorous, produc-

tive. Fruit large, roundish conic. Color yellowish, striped and shaded with red, and much sprinkled with green or russet dots. Flesh fine grained, juicy, with a very pleasant vinous flavor. Good. December to March.

CARNATION.

Fruit medium size, a delicious subacid apple, fully first-rate, dark-red, splashed with russet. Flesh white, brittle, and very juicy. Both the calyx and stem are sunk in deep depressions. 10th of August. (White's Gard.)

CAROLINE.

Said to have originated near Tremont, O. Tree a strong upright grower and abundant bearer.

Fruit medium, roundish, slightly oblate, pale lemon yellow, brownish blush in the sun. Calyx large. Stalk slender. Flesh white, tender, mild, subacid. Core rather large. Very good. September.

CAROLINE.

Carolina Baldwin.

Origin, premises of A. G. Baldwin, Hanover, N. J. Tree vigorous and productive.

Fruit medium, oblate, yellowish, mostly shaded with maroon, obscurely striped, and splashed with light and dark red, and thickly covered with light dots. Flesh yellowish, crisp, juicy, mild, subacid, rather rich. Very good. Core medium. December to March.

CAROLINE.

From Norfolk, England.

Fruit above middle size, roundish, rich yellow, streaked with red. Flesh firm, brisk juice, high flavor. Cooking. November to February. (Lind.)

CAROLINE AUGUSTE.

Of Belgic origin. Tree vigorous, with upright reddish brown shoots.

Fruit medium, roundish, pale green with spots of brown. Flesh white, tinged with rose on the sunny side, fine acid, with a pine-apple perfume. September. (Verg.)

CAROLINA RED JUNE.

Knight's Red June.
Red June.

Blush June.
Georgia June.

Wilson's June.

Origin somewhat uncertain, supposed to be Carolina. Tree very vigorous, upright, an early and abundant bearer, much esteemed at the South and Southwest as their best early Apple, ripe a few days after Early Harvest, not equal to it in flavor, but more profitable as an orchard fruit.

Fruit medium or below, oval, irregular, inclining to conic. Skin smooth, nearly the whole surface shaded with deep red, and almost of a purplish hue on the sunny side, and covered with a light bloom. Stalk

variable in length, inserted in a small narrow cavity. Calyx closed. Segments long, reflexed. Basin narrow, plaited. Flesh very white, tender, juicy, with a brisk subacid flavor. Core rather large. Very good.*

Carolina Red June.

CAROLINA SWEET.

Fruit rather large, roundish, a little flattened, yellow, slightly shaded in the sun. Flesh yellow, dry, sweet. Poor. August.

CAROLINA WATSON.

Of Southern origin.

Fruit large, oblate conical, greenish, shaded, splashed and striped with dull red, large light dots, with dark centres. Flesh white, coarse, mild, subacid. Good. August.

CARPENTER.

Originated from a seed of the Belmont, with Charles Carpenter, Kelley Island. Tree a moderate grower, forming a medium-sized round, spreading head.

Fruit medium roundish oblate, yellow, oily surface, shaded with a brownish crimson in sun, and occasional marblings of russet. Flesh yellowish, rather firm, rather rich, pleasant subacid. Good, or almost very good. Core small. Productive. Good keeper. January to March.

* *Carolina Striped June*—(Carolina June). This is generally confounded with the above, and is scarcely distinguishable except that, as it ripens, it becomes striped. One is doubtless a seedling from the other.

CARPENTIN REINETTE.

Kleine Graue Reinette. Der Carpentin.

A German Apple. Tree a free grower and good bearer.

Fruit small, roundish oblong, yellowish green, striped and washed with red, dark red in the sun. Flesh yellowish white, tender, juicy, vinous, aromatic. December to April. (Hogg.)

CARTER.

Royal Pippin.

Origin, farm of Nath. Carter, Leominster, Mass. A vigorous grower and productive.

Fruit above medium, roundish oblate, yellow, slightly shaded, striped, and marbled with red. Stalk short, inserted in a deep cavity. Calyx closed, set in a large basin. Flesh tender, rather coarse, juicy, pleasant, subacid. Good to very good. Core small. October to January.

CARTER'S BLUE.

Lady Fitzpatrick.

This variety originated at Mount Meigs, near Montgomery, Ala. Tree a fine upright grower, an early bearer. Young shoots reddish brown, very close grained.

Fruit large, roundish oblate, greenish, washed and striped with dull red and covered with a blue bloom. Stalk slender. Calyx closed. Flesh yellowish white, crisp, sugary, rich, aromatic. Very good. September to November.

CARVER.

Origin, Norristown, Pa. Tree productive.

Fruit large, roundish, lemon yellow. Stalk short. Calyx small, closed. Flesh yellowish, juicy, tender, vinous, subacid. Good. August.

There is also a Carver Apple from Montgomery Co., which is red, and a winter fruit.

CARY'S SUMMER.

Of unknown origin. Probably an old variety.

Fruit large, round, flattened, rich yellow, splashed with crimson. Flesh yellow, tender, juicy, subacid. Good. Core medium. June to September. (Warder.)

CASE.

An Apple somewhat grown in Connecticut.

Fruit medium, roundish oblate, light and dark red, striped and splashed. Flesh whitish, juicy, tender, crisp, aromatic, pleasant, subacid. Good. November.

CASH SWEET.

Medium size, oblate, conic. Skin whitish, with a blush. Flesh white, sweet, and rather dry. September.

CASTLE MAJOR.

An English cooking Apple.

Fruit medium, roundish oblate, greenish yellow, with white specks. Flesh firm, juicy, brisk, acid. January to April. (Lind.)

CATFACE.

From Kentucky.

Fruit large, conical, truncated, greenish yellow, with streaks of red. Flesh white, tender, brisk, subacid. Good. February, March.

CATHEAD SWEET.

Tree hardy, good bearer.

Fruit large, roundish conic, greenish yellow, slight blush. Flesh white, tender, sweet, not rich. Good. October.

CATLINE.

Gregson Apple.

Origin, Maryland. Tree of slow growth, very productive, much esteemed in the lower part of Delaware. Below medium size, oblate, yellow, bright red cheek, with stripes. Flesh tender, rich, juicy, and sweet. Good. October to December.

There is also a *White* Catline, which is smaller in size, oblate, greenish white, and maturing in September and October. It is juicy, tender, pleasant. Good.

CATSHEAD.

Round Catshead.

Cathead Greening.

A very large Apple, cultivated for drying in some parts of the country, but of little other value except as a cooking apple.

Fruit of the largest size, round, quite smooth, pale green. Flesh tender, with a subacid juice. Good. October and November.

CATO.

Origin, probably Maryland.

Fruit small, oblate, white shaded, and splashed with bright red, deep in sun, few light dots. Flesh white, often stained next the skin, tender, sprightly, subacid. Good. January to March.

CATOOGA.

Corbin.

Cattoogaja.

Cuttugaja.

A Southern variety.

Fruit large, roundish, sides unequal, yellow, with brown dots. Flesh whitish yellow, tender, juicy, subacid. Good. Cooking fruit. November.

CAYWOOD.

Origin, Ulster Co., N. Y. Only valued as a keeper.

Fruit medium, oblate. Skin bright yellow, with a tinge of red on the sunny side. Stalk rather long, in a broad, shallow cavity. Calyx

small, closed. Basin broad and wrinkled. Flesh yellowish, rather firm, pleasant, but not juicy or rich. Good. December, May.

CEDAR FALLS.

A native of Forsyth Co., N. C.

Fruit medium to large, a little oblate in form, deep yellow, nearly covered with purplish red; patch of russet around the stalk. Flesh yellow, firm, aromatic, subacid. November to February. (White.)

CELESTIA.

Originated with L. S. Mote, Miami Co., O. A new variety of good promise as an amateur sort.

Fruit large, form roundish, conical, slightly ribbed. Color pale yellow, moderately sprinkled with gray or brown dots, and sometimes large dots of red. Stalk rather short and slender. Cavity deep, uneven. Calyx closed. Segments long, slender, partially recurved. Basin rather small, furrowed. Flesh yellowish, crisp, tender, juicy, very pleasant, rich, mild, subacid. Core rather large. Very good. October.

CELLINI.

An English culinary Apple.

Fruit medium, roundish oblate, deep yellow, with streaks and mottlings of dark crimson. Stalk short. Cavity slightly russeted. Calyx large, open. Basin corrugated. Flesh white, tender, juicy, brisk, and pleasant. Very good. September, October.

CHALLENGE.

Raised by D. C. Richmond, Sandusky, O. A thrifty grower, and exceedingly productive. Wood grayish brown.

Fruit large, oblate, slightly conic, deep yellow, sprinkled with brownish dots. Stalk rather short. Cavity large, slightly russeted. Calyx closed. Basin deep, corrugated. Flesh yellowish, tender, juicy, sweet. Very good. October to June.

CHAMPAIGNE REINETTE.

Reinette de Champagne.

Soskrieger.

Origin unknown.

Fruit medium, roundish oblate, greenish yellow, with more or less of russet. Flesh yellowish, mild, subacid, vinous. Very good. December to January. (Verg.)

CHANDLER.

Late Chandler.

Of Connecticut origin, where it is a favorite. Tree moderately vigorous, great bearer.

Fruit large, roundish, slightly flattened, and one-sided or angular in its form, obscurely ribbed on its sides, thickly streaked and overspread with dull red with a few streaks of bright red, on a greenish yellow ground, the red sprinkled with light gray dots. Core and seeds small. Flesh greenish white, tender juicy, with a moderately rich, subacid flavor. Good. November to February.

CHANAY.

A Pennsylvania Apple, valuable mainly as a long keeper. Tree a straggling grower, vigorous and good bearer.

Fruit medium, oblate or roundish oblate, inclining to conic, pale yellow, shaded in the sun with crimson, and sprinkled with light gray dots. Flesh whitish, firm, moderately juicy, with a sprightly subacid flavor. Good to very good. Core small. December to March.

CHAPMAN'S ORANGE.

Fruit small, deep orange, juicy, rich, subacid. October.

CHARLEY'S WINTER.

Raised by H. R. Robey, Fredericksburgh, Va.

Fruit medium or below, oblate inclining to conic, pale yellow, often shaded with crimson in the sun. Flesh yellow, compact, juicy, crisp, brisk subacid. Good. January, February.

CHASE'S SEEDLING.

Origin, Maine.

Fruit medium, roundish, pale yellow, splashed and marbled over nearly the entire surface with red. Flesh white, tender, moderately juicy, mild subacid. Good. September.

CHATTAHOOCHEE.

A Southern variety from the banks of the Chattahoochee River, Ga. Tree vigorous, upright, productive.

Fruit medium or below in size, roundish oblate, oblique, slightly conic, greenish yellow, faint brownish blush in sun. Stalk very short. Cavity large, open, deep, somewhat russeted. Calyx partially open, with short segments, broad, divided, sometimes closed, sometimes erect. Basin deep, broad, abrupt, slightly furrowed. Flesh yellowish white, breaking, crisp, partially tender, subacid, pleasant. Good. Season, December to April.

CHEESE.

Origin, Lewisburgh, Pa. Tree strong, vigorous, spreading, productive annually.

Fruit medium to large, oblate, greenish, mostly overspread and striped with red, small grayish dots. Flesh white, fine-grained, tender, subacid. Good. November to February.

CHEESEBOROUGH RUSSET.

Pumpkin Sweet of some.	Kingsbury Russet.
Forever Pippin.	Cheeseboro.
Howard Russet.	York Russet.

Sweet Russet.

An old fruit of little value, large, conical, green russet. Flesh coarse, dry, mild, subacid, almost sweet. Poor. October, November.

CHELTENHAM.

Calf Pasture.

The Cheltenham is a handsome and popular market variety that origi-

nated at Cheltenham Township, Montgomery Co., Pa., in a field where calves were pastured, and hence the synonym by which it is locally known. It is a moderate grower, but very productive.

Fruit medium, roundish, striped and marbled with red on a yellow ground. Stalk short. Cavity narrow. Calyx small, closed. Basin deep. Flesh whitish yellow, tender, juicy, pleasant. Good. September.

CHENANGO STRAWBERRY.

Frank.
Buckley.

Sherwood's Favorite.
Strawberry.

Jackson Apple.
Smyrna.

Originated in the town of Lebanon, Madison Co., N. Y. It is an apple pleasant to the taste and much esteemed as a table fruit wherever grown. Tree is vigorous, spreading. Young wood light reddish brown, downy.

Fruit medium, oblong conic or oblong truncated conic, indistinctly

Chenango Strawberry.

ribbed. Color whitish, shaded, splashed and mottled with light and dark crimson over most of the surface, light dots. Stalk rather short small. Cavity acute, somewhat uneven. Calyx closed, or partially open. Segments erect. Basin rather large, abrupt, slightly corrugated. Flesh white, tender, juicy, peculiar mild, subacid. Core rather large. Very good. September and October.

CHENEY.

Originated on the old Cheney farm, South Manchester, Conn. Tree upright, spreading, an early and regular bearer.

Fruit medium, oblate, yellow shaded with rich crimson over the whole surface. Flesh white, tender, juicy, pleasant, subacid, slightly aromatic. Good to very good. September and October.

CHESTATEE.

A Southern fruit of unknown origin. Tree vigorous, upright, spreading. Wood smooth, reddish gray, with very small reddish buds.

Fruit medium, oblate inclining to conic, pale yellow with a slight blush in the sun. Flesh whitish, crisp, juicy, sprightly subacid. Good. November.

CHESTER.

Chester Red Streak.

Origin, Chester Co., Pa.

Fruit medium, oblate, whitish yellow, sometimes with a sunny check and sprinkled with carmine dots. Flesh white, tender, juicy, pleasant, subacid, aromatic. Good. November to December.

CHESTER PEARMAIN.

An English dessert Apple. Tree hardy, free grower, attaining a considerable size, good bearer.

Fruit medium, oblate, conical, pale yellow, striped with crimson in the sun, some russet. Flesh yellowish white, tender, juicy. Second-rate. October to December. (Hogg.)

CHESTER SPITZENBERG.

A Pennsylvania Apple. Tree a good grower and productive. Young wood dark dull reddish brown, very stout.

Fruit medium, roundish, inclining to oblate, yellowish, splashed and striped nearly over the whole surface with light and dark red. Flesh yellowish, rather compact, moderately juicy, subacid, slightly aromatic. Good. February to April.

CHESTOA.

Rabbit's Head.

A Southern variety.

Fruit large, elongated conical, irregular at apex end, deep rich yellow, striped, splashed and shaded with red, and with many minute dark specks. Flesh whitish, crisp, juicy, rather rich, vinous, aromatic. Very good. November to March.

CHIEF GOOD.

Summum Bonum.

From Kentucky, near Louisville.

Fruit medium to large, roundish, flattened at base, light yellow, streaked and mottled with red. Flesh white, tender, juicy, subacid, aromatic. September, October. (Elliott.)

CHRISTIANA.

Origin, on the premises of John R. Brinckle, near Wilmington, Del.

Fruit medium, oblate, splashes and stripes of rich crimson red over a

yellow ground. Flesh yellowish white, moderately juicy, sprightly, mild, subacid. Good to very good. November.

CHRISTIE'S PIPPIN.

Origin, Kingston-on-Thames, England. Tree of slender growth, good bearer.

Fruit medium, oblate, lemon yellow, with faint red stripes, russety dots. Flesh yellowish, tender, agreeable, mild subacid. December to February. A dessert apple of the first quality. (Ron.)

CHRIST'S GOLD REINETTE.

Christ's Deutsche GoldreINETTE.

Of German origin.

Fruit above medium, oblate, golden yellow, red cheek in sun, and much cinnamon-colored russet. Flesh fine, juicy, aromatic, vinous. November to May. (Hogg.)

CHRONICAL.

Cotton Apple.

This variety originated on the farm of John Cotton, Putnam Co., Ind. It is a thrifty grower, with a rather upright spreading habit, very hardy, and a moderate annual bearer. It is valued much for properties enabling it to be kept in good condition for two years without extra care.

Fruit medium, roundish, slightly conical, greenish yellow, with splashes and stripes of dull red, few light dots with dark centres. Flesh yellowish white, compact, firm, mild subacid. Core small, close. Good.

CHURCHILL GREENING.

Origin uncertain. Tree vigorous and productive.

Fruit large, oblate, somewhat conic, ribbed, yellowish green, shaded with dull red, and thickly sprinkled with green dots. Flesh yellow, tender, granular, with a brisk, vinous, almost saccharine flavor. Good. December to February.

CHURCH'S LATE SWEET.

A Southern Apple of unknown origin.

Fruit medium, roundish inclining to conic, rich yellow, with occasionally a shade of crimson in the sun. Flesh yellowish, compact, rather rich, mild subacid, almost sweet. Good. February to May.

CITRON DES CARMES.

A French Apple. Fruit small, oblong, light dull brown, dry. Poor. December. (Ron.)

CITRONEN REINETTE.

Reinette de Citron.

An Apple of German origin, there regarded as of value for the dessert.

Fruit large, roundish conical, bright yellow, with blush in the sun. Flesh very white, fine-grained, juicy, brisk, sugary, vinous. December to June. (Hogg.)

CLAPPER FLAT.

Flat Apple.

Origin, town of Bethlehem, Albany Co., N. Y. Tree productive.

Fruit above medium, oblate inclining to conic, pale yellow, mostly covered, shaded and splashed with deep red. Flesh yellowish, moderately juicy, tender, pleasant subacid. Good. Highly valued for cooking September, October.

CLARA PIPPIN.

Origin, Cranford, England.

Fruit small, roundish ovate, orange, with brownish red in the sun. Flesh deep orange, firm, rich, brisk, sugary. December to May. (Hogg.)

CLARKE.

A new variety originated with J. N. Clarke, Naples, N. Y., who states it a strong grower, with an open top, and annually productive.

Fruit medium or above, roundish inclining to conic, slightly angular, pale whitish yellow, shaded, striped and splashed with light and dark crimson, few gray dots. Stalk short, slender. Cavity narrow, rather deep. Calyx small, closed. Segments slightly recurved. Basin small, a little corrugated. Flesh white, tender, juicy, sprightly, vinous, subacid. Very good. October, November.

CLARKE'S DELAWARE.

Originated with John C. Clarke, Maryland. Tree very productive.

Fruit nearly medium size, roundish, inclining to oblong, oblique, smooth, yellow, shaded in the sun with orange red, many gray dots. Flesh whitish, moderately tender, juicy, mild subacid. Almost very good. December to March.

CLARKE PEARMAIN.

Yellow Pearmain.

Columbian Russet.

Gloucester Pearmain.

Golden Pearmain.

From North Carolina, an old variety. Tree of slow growth, very productive.

Fruit medium, roundish oblate, slightly conical, greenish yellow, shaded, striped and marbled with red and russet dots. Stalk very short. Cavity small, slightly russeted. Calyx closed. Basin small. Flesh yellow, rather firm, crisp, rich, subacid. Very good. Core small. December.

CLARKSON.

Originated on the premises of David Clarkson, Plymouth, Wayne Co., Mich. Tree a good grower and bearer.

Fruit above medium, oblate conic, clear white, shaded with crimson in the sun, with light and brown dots. Flesh white, fine-grained, tender, juicy, sharp subacid, slightly aromatic. Core rather large. Good. Valuable for cooking and drying only.

CLAYGATE PEARMAIN.

An English Apple.

Fruit medium, roundish conical, greenish yellow, nearly covered with brownish red. Flesh yellow, tender, rich, aromatic. Good. November to March.

CLAYTON.

Origin, Indiana.

Fruit large, conical, flattened, regular, greenish yellow, covered, striped, and splashed with dull red. Flesh yellow, breaking, subacid. Good. Kitchen and market. January to March. (Warder.)

CLEPINGTON.

An English dessert Apple. Fruit small, round oblate, yellow. September.

CLEY PIPPIN.

Also an English dessert Apple, there counted as of first-rate quality. Fruit small, roundish, yellow. October to March. (H. S. C.)

CLUSTER.

Tree productive.

Fruit small, yellow, oblate, sweet. November.

Another Cluster Apple is small, roundish conical, or oblong conical, greenish white. Flesh white. Poor. December, February.

CLUSTER GOLDEN PIPPIN.

Cluster Pippin.

Twin Cluster Pippin.

Thickset.

An old variety. A hardy tree, slender grower, good bearer, producing its fruit in clusters, and often with two fruits united or grown together.

Fruit small, round, flattened, yellow, with orange in the sun, and patches of gray russet. Flesh yellowish, firm, crisp, subacid perfumed. November to March. (Hogg.)

CLUSTER PEARMAIN.

Introduced by R. Ragan, of Indiana.

Fruit full medium size, round, flattened, regular, inclined, yellowish green, mixed and striped light red, dots large, gray and yellow, white bloom. Flesh yellowish white, breaking, granular, subacid, aromatic. Good to very good. An autumn fruit, acceptable as a substitute for Rambo. (Warder.)

CLYDE BEAUTY.

Mackie's Clyde Beauty.

Raised by Mr. Mackie, Clyde, Wayne Co., N. Y. Tree vigorous, upright, very productive.

Fruit large, roundish, conic, angular, greenish, oily, sprinkled and mottled with dull red and bright red in the sun. Stalk short, slender, inserted in an acute cavity. Calyx closed, set in a small corrugated basin. Flesh white, tender, juicy, brisk subacid. Good. October to January.

COBHAM.

From Kent, England. Tree hardy, vigorous, and productive.

Fruit medium to large, roundish oblate, dull yellowish green, faint red in the sun, some light russet. Flesh pale yellow, crisp, saccharine, aromatic. November, December. (Lind.)

COBOURG PIPPIN.

An Apple originated in Warwickshire, England.

Fruit small, oblate conical, pea green, with large russet dots. Flesh firm, rich, acid. March. (Ron.)

COCCAGEE.

Cocko Gee.

An Irish Apple, mostly valued for cider.

Fruit medium, roundish, conical, pale yellow. Flesh yellowish, acid. October, December. (Hogg.)

COCKLE PIPPIN.

Nutmeg Cockle.

Nutmeg Pippin.

White Cockle.

Brown Cockle.

A variety from Sussex, England. Tree healthy, hardy. Shoots moderately stout, chestnut colored.

Fruit medium, roundish conical, slightly ribbed, green, with brown russet. Flesh yellowish, firm, crisp, aromatic. Good. January to April.

COCKLIN'S FAVORITE.

Grandfather.

Introduced by Jacob Cocklin, York, Pa. Tree a good upright grower productive.

Fruit below medium, roundish oblate, whitish, thinly shaded with light crimson in the sun, moderately sprinkled with light dots. Stalk medium, very slender. Cavity large, deep, sometimes thinly russeted. Calyx closed. Segments medium, erect, sometimes slightly recurved. Basin abrupt, deep, rather uneven. Flesh white, very tender, juicy, mild, pleasant subacid. Very good. Core small. November.

COCKPIT.

Origin, North of England.

Fruit medium, roundish oblate, truncated, yellow. Flesh tender, brisk, a pleasant apple for table or kitchen. November, December. (Ron.)

COE'S GOLDEN DROP.

An English Apple, the origin of which is in doubt. Tree hardy, free upright grower, and productive.

Fruit small, roundish conical, fine yellow, with a shade of crimson in the sun. Flesh yellowish, crisp, juicy, rich, brisk subacid, slightly aromatic. Good to very good. November, February.

COGSWELL.

Cogswell Pearmain.

This excellent Apple originated in the town of Griswold, near Norwich, Ct., on a farm which came into the possession of William Cogswell about the year 1798. The original tree was then about forty or fifty years old. The fruit was first exhibited in 1816 or '18, before the Massachusetts Horticultural Society.

It is an extremely valuable variety wherever grown, either for table or market purposes, a good keeper, and bears carriage to market long distances without apparent injury. Tree a vigorous, upright, spreading grower, an abundant bearer of very regular, even-sized fruit. Young shoots dark reddish brown, somewhat downy.

Cogswell.

Fruit size above medium. Form roundish oblate, regular. Color rich yellow, nearly covered with red, marked and streaked with bright red, pretty thickly sprinkled with areole dots. Stalk short, rather slender. Cavity large, thinly russeted. Calyx small, nearly closed. Basin small, shallow. Flesh yellowish, fine-grained, tender, juicy, scarcely subacid, rich aromatic. Core small. Very good to best. December to March.

COLE.

Scarlet Perfume.

Duling?

A variety from England, of second quality, but admired for its beauty of appearance.

Fruit medium, roundish oblate, conic, ribbed. Color deep crimson on a yellowish ground, or sometimes entirely red, with a little russet. Stalk medium, woolly, planted in a cavity broad and deep. Calyx large, in a broad basin. Flesh white, rather firm, juicy, yellowish, somewhat rich and agreeable. Nearly very good. September and October.

COLUMBIAN.

Received from Pennsylvania.

Fruit medium, oblate, slightly inclining to conical, yellowish, shaded, splashed and striped with light and dark crimson, few light gray dots. Flesh whitish yellow, tender, juicy, sprightly subacid, slightly aromatic. Very good. Core small. October, November.

COLVERT.

Prussian.

An old variety, of uncertain origin, valued mainly for cooking. Tree a strong grower, and an enormous bearer.

Fruit large, oblate, inclining to conic, greenish yellow, striped and shaded with dull red in sun. Flesh greenish white, tender, brisk subacid. Good. October, November.

CONANT'S RED.

Much cultivated in Southern Ohio.

Fruit full medium, regular, oblate, sometimes nearly round, yellow, obscurely mixed with red, on which are streaks of russet, dots fawn-colored. Flesh yellow, fine-grained, juicy, subacid to sweet, aromatic. September, December. (Warder.)

CONDIT SWEET.

A New Jersey Apple.

Fruit small, roundish, whitish yellow, tinge of brown in the sun. Flesh yellowish, tender, juicy, pleasant, sweet. Good. September.

CONGRESS.

Jackson Apple.

Tyler Apple.

A Massachusetts variety, cultivated in the New England States for half a century or more. Tree very vigorous, spreading, abundant bearer. Fruit valuable mainly for cooking or market.

Fruit large to very large, roundish oblate, slightly conic, yellowish, splashed, striped, and marbled with red. Flesh whitish, coarse, juicy, tender, brisk subacid. Good. Core large. November, December.

CONNECTICUT SUMMER SWEET.

Fruit medium, roundish, yellow and red striped. Flesh yellowish, sweet, tough. August. (Elliott.)

CONNETT'S SWEET.

Tree strong, upright grower, early and abundant bearer.

Fruit large, roundish, flattened, yellow, mostly covered with dark red. Flesh yellow, fine-grained, tender, sweet. Very good. December to March. (Elliott.)

CONTIN REINETTE.

From Ross-shire, Scotland. Tree hardy, a slender grower, and sure bearer.

Fruit medium, roundish, dull yellow, red in the sun. Flesh yellowish, firm, pleasant, acid. October, November. (Hogg.)

CONWAY.

Origin unknown.

Fruit medium, oblate, obscurely ribbed, greenish yellow, with a bronzed cheek in the sun, few brown gray dots and traces of russet. Flesh yellowish, crisp, juicy, vinous, slightly aromatic. Very good. December to April.

COOK'S RED WINTER.

Fruit medium to large, produced by Jacob Cook, Edisto, S. C. Tree vigorous and regular bearer. October to April. (Summer Notes.)

COOLEGE'S FAVORITE.

Said to have originated in Cambridge, Mass. Tree productive.

Fruit medium, roundish conical, deep yellow, splashed and marbled with red, becoming brilliant in the sun, russet at the stem, and with whitish specks over the whole. Stalk long, slender. Cavity deep, broad. Calyx in a shallow plaited basin. Flesh fine-grained, tender, and juicy, pleasant subacid. Very good. September, October. (J. of H.)

COOPER.

Beauty Red.

Lady Washington.

Origin unknown; supposed to be an old Eastern variety, as yet unrecognized. Thrives well at the West, and much esteemed there by many. Growth vigorous, upright, and productive.

Fruit large, roundish oblate, sides unequal. Color greenish yellow, with a few stripes and splashes of bright red, thickly sprinkled with brown dots. Flesh tender, juicy, vinous, with a pleasant but not high flavor. Good. October to December.

COOPER'S EARLY WHITE.

Grown in Illinois and other Western States, where it is regarded by many as productive and profitable.

Fruit medium, roundish, little flattened, pale yellow with faint blush, tinge of green at the stem. Flesh white, crisp, sprightly. September and October. (Elliott.)

COOPER'S MARKET.

Cooper's Redling.

Rigley.

Redling:

Tree hardy, vigorous, upright, with long slender branches, very productive and a late keeper. Valuable for market in New Jersey.

Fruit medium, oblate conic, yellowish, shaded with red and striped with crimson. Stalk short. Cavity deep, narrow. Calyx closed. Basin small. Flesh white, tender, with a brisk subacid flavor. Good. December to May.

COOPER'S RUSSETING.

Originated in Gloucester Co., N. J. Tree irregular in form, healthy grower, abundant bearer.

Fruit small, oblong, conical, pale yellow mixed with russet. Flesh rich, sweet, dry. Valuable for cooking or for cider. October to December.

CORLIE'S SWEET.

Origin on the farm of A. Corlies, Shrewsbury, New Jersey. Tree vigorous, round-headed, great bearer.

Fruit medium, roundish, conical, whitish yellow, light blush in sun. Flesh white, firm, moderately juicy, pleasant sweet, fine for cooking. Hardly good. September, November.

CORNELL'S FANCY.

Cornell's Favorite.

From Pennsylvania. Tree vigorous and productive.

Fruit medium, oblong, conical. Color waxen yellow, shaded and splashed with crimson. Stalk of medium length. Cavity rather large. Calyx closed, abrupt, corrugated. Flesh white, tender, crisp, juicy, with a pleasant subacid flavor. Core medium or large. Very good.

CORNFIELD.

A Southern variety from J. S. Downer.

Fruit medium, roundish oblate, truncate regular, yellow, covered with mixed deep red, striped. Flesh yellow, fine-grained, tender, rather dry, subacid. Good. December. (Warder.)

CORNISH AROMATIC.

An English Apple.

Fruit of medium size, roundish, angular. Color rich red, much marked with russet yellow dots, on a pale russet ground. Flesh yellow, with a rich, aromatic, subacid flavor. Good. October to December.

CORNISH GILLIFLOWER.

Cornish July-flower.
Calville d'Angleterre.

Pomme Regelans.
Cornwallisser.

Red Gilliflower?
Nelken Apfel.

An old English Apple. Tree a poor grower and shy bearer.

Fruit medium size, roundish, conical, narrowing much to the eye where it is ribbed, dull green, or dark yellowish green, with a sunny side of brownish red, intermixed with a few streaks of richer red. Flesh yellowish, firm, with a rich, high flavor, and a slight aromatic perfume. Good. November to April.

CORNISH SPICE.

Origin unknown.

Fruit small, oblate, pale yellow, slight shade in sun. Flesh yellowish, crisp, juicy, slightly aromatic, subacid. Good. November.

CORSE'S FAVORITE.

A Canadian Apple, valuable for stewing.

Fruit medium, oblate, depressed, yellowish green. Flesh whitish, juicy, brisk, subacid. Good. September.

COS, OR CAAS.

A native of Kingston, N. Y., where it is productive and highly esteemed.

Fruit large, one-sided or angular, roundish, broad, and flattened at the stalk, narrowing a good deal to the eye. Skin smooth, pale greenish yellow in the shade, but red in the sun, with splashes and specks of bright red, and a few yellow dots. Flesh white, tender, with a mild, agreeable flavor. Good to very good. December to March.

COSTARD.

Coulthard. Prussian Pippin.

An old English culinary Apple mentioned by Lawson in 1597, and was in the fruiterers' bills in the time of Edward the First, 1292, under name of Pomme Costard. Tree hardy, strong, vigorous, with downy shoots, productive.

Fruit large, roundish oblong, prominently ribbed, dull yellowish green, embedded all over with gray specks. Flesh greenish white, tender, juicy, brisk, subacid. October to December. (Hogg.)

COTSVILLE SPITZENBERG.

A variety received from Nelson & Son, Mercer Co., Pa., by whom it was obtained as a seedling of the Rambo, from Ohio. It looks much like the Baltimore, on p. 86, and may prove identical.

Fruit medium, roundish, slightly conical, whitish, covered over with deep crimson in the sun, lighter in the shade, a little russet, and pretty thickly sprinkled with light dots. Flesh whitish, sometimes a little stained, tender, juicy, pleasant, mild subacid, slightly aromatic. Core small. Very good. December to February.

CORAL BLUSH.

From Ross-shire, Scotland. Tree hardy, vigorous, upright, productive.

Fruit medium, roundish, pale yellow, dull red in the sun. Flesh yellowish, crisp, juicy, brisk. A good culinary sort. December. (Lind.)

COURT PENDU DE TOURNAY.

Reinette d'Orleans.

Originated in Holland. Tree vigorous, productive.

Fruit small to medium, roundish, conical. Flesh creamy white, tender, fine, aromatic. (An. Pom.)

COURT PENDU PLAT.

Court-pendu.
Court-pendu plat rougeâtre.
Capendu.
Garnon's Apple.
Court-pendu Extra.
Rond Gros.
Rose.

Court-pendu Musqué.
Rouge Musqué.
Coriandre Rose.
Pomme de Berlin.
Wellatón Pippin.
Russian.
Princess Noble Zoëte.

A popular French variety.

Fruit of medium size, regularly formed, and quite flat. Skin rich, deep crimson on the sunny side, with a little pale greenish yellow in the

shade. Stalk short, inserted in a very deep cavity. Calyx large, set in a wide shallow basin. Flesh yellow, crisp, with a rich brisk acid flavor. Good. The tree bears young and plentifully. November to February.

COURT PENDU ROSE.

Court Pendu Rosat.

Of French origin. Tree vigorous, productive.

Fruit small, roundish, flattened, yellow, marked with gray dots, and shaded with bright red around the stem. Flesh white, fine, juicy, vinous, acid, perfumed. (An. Pom.)

COURT OF WICK.

Court of Wick Pippin.
Court de Wick.
Rival Golden Pippin.
Fry's Pippin.

Golden Drop.
Wood's Huntingdon.
Barlow.
Transparent Pippin.

Philip's Reinette.
Knightwick Pippin.
Week's Pippin.
Yellow.

A highly-flavored English dessert Apple of the Golden Pippin class, which does not succeed well with us.

Fruit below the middle size, regularly formed, roundish oblate, somewhat flattened, greenish yellow in the shade, but becoming a warm orange, with a little red in the sun. Flesh yellow, crisp, and juicy, with a high poignant flavor. Very good. October to February.

COWARNE RED.

Origin, Herefordshire, England.

Fruit medium, roundish, narrowing to the crown, pale yellow, bright red where exposed to the sun, sometimes deep purplish crimson. Valuable for cider. (Hogg.)

COWARNE'S QUEENING.

Northern Greening.

Tree upright, compact, an abundant bearer.

Fruit very large, roundish, conical, golden yellow, red in the sun. Flesh white, tender. Fine for cooking or drying. November to January. (Ron.)

COX'S ORANGE PIPPIN.

An English variety much esteemed for dessert. Tree is well adapted for dwarfing on the paradise stock, and a free bearer.

Fruit medium, oblate, yellowish, shaded, splashed and slightly mottled nearly over the whole surface with crimson. Flesh yellowish, rather firm, juicy, brisk, rich, subacid. Core small. Very Good. September, October.

COX'S POMONA.

A variety from England, valuable as a culinary apple.

Fruit medium, oblate, somewhat conic, greenish yellow, shade of crimson in the sun. Flesh white, crisp, juicy, brisk subacid. Good. Core small. October.

CRACKING.

Origin, farm of Henry Barger, Harrison Co., O. Tree spreading, vigorous, and productive. Young shoots reddish brown, slightly downy.

Fruit fair, large, roundish, slightly flattened, inclining to conic, obscurely ribbed, pale yellow, with a slight tinge of red, thinly sprinkled with large dots. Stalk medium, in a rather deep slightly russeted cavity. Calyx closed in a corrugated basin. Flesh yellowish white, crisp, tender, juicy, subacid. Good. Core large. Valuable for cooking. October, November.

CRAM OR KRAM.

An old fruit nearly out of use and not worth cultivating.

CRANBERRY.

From Georgia.

Fruit medium, roundish conical. Color yellow, brightly striped with carmine on the unexposed side, and of deeper red on the side next the sun. Many gray russet dots. Calyx small, closed. Flesh whitish. Good.

CRANBERRY PIPPIN.

This strikingly beautiful Apple was found growing on a farm near Hudson, N. Y. It is only second-rate in point of flavor—but it is an excellent cooking and market apple.

Fruit medium, roundish oblate, regular. Skin very smooth, light yellow, with a bright scarlet cheek. Flesh white, moderately juicy, brisk subacid. Good. November to February.

CRANBERRY RUSSET.

Introduced to notice by J. Austin Scott, Toledo, O.

Fruit medium to large, oblate, compressed. Surface rough, russeted, blushed carmine, uneven. Flesh breaking, tender, not very juicy, acid. Good. Said to be superior for cooking. November, December. (Warder.)

CRAWFORD.

Of unknown origin.

Fruit medium, roundish oblate inclining to conic, yellowish, with a tinge of crimson in the sun, few grayish dots. Flesh yellowish, tender, juicy, rather rich, slightly aromatic, subacid. Very good. November to March.

CRAWFORD'S KEEPER.

Originated in Lawrence Co., O. Tree strong grower and a great bearer. Young shoots slender, clear, smooth, light reddish brown.

Fruit above medium, roundish truncated conical, oblique. Color light yellow, mostly overspread with a rich red, large light gray specks. Stem very short. Cavity large, deep, acute, slightly russeted. Calyx closed or nearly so. Segments divided. Basin very deep, broad, abrupt, slightly furrowed. Flesh yellowish white, breaking moderately juicy, mild, sweet, subacid. Good to very good. January to March.

CRAY PIPPIN.

Raised in Kent, England, where it is said to be a valuable dessert Apple.

Fruit below medium, conical, pale yellow, tinge of red in the

sun. Flesh yellow, crisp, sweet, and highly flavored. October. (Hogg.)

CRAYTON.

Fruit medium to large, fine flavor. November to April. (Summer's MS.)

CREAM.

Origin, Queens Co., L. I., N. Y. Tree a vigorous grower, forming a compact head, an early bearer, and by some thought valuable for dessert or culinary purposes.

Fruit medium or below, roundish oblate, yellowish, thickly sprinkled with brown and gray dots. Flesh yellowish, fine-grained, tender, juicy, pleasant, sweet and rich. September and October.

CREED'S MARIGOLD.

Raised from seed of the Scarlet Nonpareil, in Kent, England.

Fruit medium, roundish, deep rich yellow, orange in the sun, covered and striped with shades of rich red. Flesh yellow, tender, juicy, sugary, richly flavored. October, November. (Hogg.)

CREDE'S QUITTENREINETTE.

Credo's Gutten Reinette.

A German variety of medium size, roundish, lemon yellow with star-like russety dots. Flesh white, very fine and juicy, sugary, vinous, quince flavor. December to March. (Hogg.)

CREEK.

A native of Hellam township, York, Pa., where it is highly prized on account of its quality and extraordinary productiveness. Tree vigorous, upright, slightly spreading.

Fruit medium, oblate, slightly conical, greenish yellow, obscurely striped and splashed with light and dark red. Flesh white, tender, juicy, mild, pleasant, subacid. Core small. Very good. December to March.

CREEPER.

Common in Berkshire, England.

Fruit below medium, roundish, somewhat conical, dark green, nearly overspread with red, striped in the sun with darker shades. Flesh white, tender, juicy, sweet, slight aroma. September. (Hogg.)

CREGO RED STREAK.

From Columbia Co., N. Y. Tree very productive.

Fruit medium, roundish oblate, whitish, with stripes and shades of red. Flesh white, sharp subacid. Hardly good. September.

CRIMSON QUEENING.

Scarlet Queening.

Red Queening.

Summer Queening.

Herefordshire Queening.

A second-rate English variety.

Fruit medium size, conical, mostly covered with deep crimson. Flesh

white, with a red tinge under the skin, tender, juicy, sweet, aromatic. December to March. (Hogg.)

CRISPIN.

Of unknown origin.

Fruit large, roundish, oblong truncated, greenish, shaded and striped with shades of red. Flesh whitish, dry, compact, subacid. Not quite good. December to May.

CRITTENDEN.

A new variety, seedling from Kentucky, introduced to notice by J. C. Teas, of Indiana. Tree a sure and prolific bearer.

Fruit medium size, roundish, dull red on yellow. Flesh juicy, very sweet. Good. Keeps until May or June.

CROFTON PIPPIN.

An Apple from Ireland. Tree blossoms late, and bearing its fruit at ends of the branches gives it a drooping appearance.

Fruit below medium size, roundish oblate, greenish, mostly overspread with red. Flesh firm, rich, juicy. December, January. (Ron.)

CROOK'S SEEDLING.

From the county of Way, Indiana, where it is esteemed as a market sort. Tree forms an open round head, a great bearer.

Fruit full medium size, red striped on yellow ground. Good. October.

CROPSEY'S FAVORITE.

Originated with D. W. Cropsey, Plainfield, Will Co., Ill.

Fruit full medium, roundish, yellow, mixed and splashed with carmine. Flesh yellow, breaking, fine-grained, juicy, subacid. December. (Warder.)

CROTCHER.

Supposed to be a native of Dorchester Co., Md. Tree moderate, rather upright grower, producing large crops of very even-sized fruit.

Fruit medium, oblate conical, slightly truncated. Color waxen white, with a slight blush, and thinly sprinkled with light and green dots. Stalk short. Cavity deep, large, partially russeted. Calyx closed. Basin rather large, abrupt, a little uneven. Flesh whitish, crisp, tender, juicy, refreshing, subacid. Very good. August.

CROW EGG.

An old variety of not very good quality, oblong oval, long stem, greenish yellow, tender, sweet, large core. October, November.

There is also another Crow Egg in Kentucky, of conical form, yellow, striped with dull red. Stem short. Flesh yellow, compact, subacid. Good. December, January.

CROW NEST.

Originated at Kelley's Island, O., in the orchard of Chas. Carpenter. Tree vigorous, productive.

Fruit full medium, round, truncated, greenish yellow, thinly covered with russet. Flesh green, tender, breaking, subacid, only good for cooking. November to January. (Warder.)

CULLASAGA.

Raised by Miss Ann Bryson, Macon Co., N. C. Good grower, and a standard winter fruit for the South. Very productive.

Fruit medium or large, roundish, inclining to conic, sides sometimes unequal. Skin yellowish, mostly shaded and striped with dark crimson, and sprinkled with whitish dots. Stalk small and short, inserted in a deep cavity, surrounded by russet. Calyx open, set in a shallow corrugated basin. Flesh yellowish, rather compact, moderately juicy, mild subacid. Good. November to April.

CULLAWHEE.

A Southern seedling, with slender wood. Tree resembling the Buff.

Fruit medium, or above, oblate, slightly inclining to conic, pale yellow, nearly overspread, shaded and splashed with two shades of red, light crimson and dark dots. Flesh white, tender, juicy, brisk subacid. Good. December to March.

CULP.

Origin, Jefferson Co., O. Introduced by George Culp. Tree very vigorous, spreading, productive.

Fruit medium, roundish oblate, conic, waxen yellow, shaded with blush or dull crimson. Flesh firm, crisp, juicy, agreeable, subacid. Good December to March.

CUMBERLAND SEEDLING.

Supposed to have originated in Cumberland Co., Pa. Tree a fine grower and great bearer.

Fruit medium, oblate inclining to conic, sides unequal, pale yellow, mostly splashed and shaded with dark crimson, few large light dots. Flesh yellowish, rather firm, juicy, brisk subacid. Good to very good. October, December.

CUMBERLAND SPICE.

From Cumberland Co., N. J. Tree thrifty, upright, spreading, productive.

Fruit rather above medium, roundish conic, pale yellow, rarely with a blush, sprinkled with brown dots. Flesh white, tender, juicy, and pleasant subacid; apt to shrivel. Good. Core large and hollow. December to February.

CURRY'S RED WINTER.

Origin unknown. Came from Eastern North Carolina. Tree vigorous and very productive.

Fruit medium, oblong. Color yellow ground nearly covered with pale red and russet dots. Stalk rather short, slender set in a small cavity. Calyx large and open. Basin large. Flesh white, and solid, and keeps well into January. (So. Cult.)

CURTIS GREENING.

Origin uncertain, found in Illinois.

Fruit medium to large, oblong, truncated, axis inclined, yellow bronzy. Flesh yellow, breaking, subacid. Good. January to February. (Warder.)

CURTIS SWEET.

Introduced to notice by Joseph Curtis, St. Alban's, Vt. Tree vigorous, upright, productive, and hardy.

Fruit large, roundish, conical, ribbed, pale yellow, sprinkled, marbled, and splashed with crimson, and thickly covered with crimson dots. Flesh white, fine-grained, very tender, with a very pleasant sweet flavor. Core large. Good. August to October.

CUSTARD.

Originated in the grounds of L. B. Langworthy, Greece, Monroe Co., N. Y. Tree productive.

Fruit medium, to small, roundish, or roundish oblate, inclining to conic, greenish yellow, faintly marbled and splashed with dull red, deeper in the sun. Flesh whitish, very tender, juicy, very mild, almost sweet, agreeable, good for the amateur. Core small. Very good. November, December.

CUT PIPPIN.

West's Spitzenberg.
Honemaker Pippin.

Haymaker.
Hommacher Apfel.

From Western Pennsylvania. Tree vigorous, productive.

Fruit medium to large, greenish. Flesh greenish, juicy, subacid. Good. December to April. (Elliott.)

DAHLONGEA.

Of Southern origin, but precise locality unknown.

Fruit medium, roundish conical, light greenish yellow, shaded, splashed, and marbled with crimson, a slight bloom, and thickly sprinkled with light dots. Flesh whitish, moderately tender, juicy, subacid. Good. February to March.

DAHLTON.

Dahlton Pippin.

Origin unknown. So far as we know, only grown in Massachusetts.

Fruit medium, oblate, greenish yellow, slight blush in the sun, greenish dots. Flesh whitish, juicy, tender, mild subacid. Good. September, October.

DAME JEANNETTE.

Joannetten's Reinette.

Of French origin.

Fruit small to medium, roundish, conical, yellowish, with a bronzed cheek in sun. Stalk slender. Calyx large. Flesh white, veined with yellow, mild subacid, perfumed. December. (Verg.)

DANA.

Origin, near Cincinnati, O. Tree large, productive.

Fruit small, flat rich, yellow partially covered with mixed red, distinctly striped with carmine, white bloom. Flesh yellow, fine-grained, subacid. August. (Warder.)

DANA GREENING.

Fruit medium or below, oblate, greenish yellow, few gray dots. Flesh whitish, crisp, pleasant subacid. Good. December to March.

DANA'S STRIPED SWEET.

From Ohio.

Fruit medium or below, oblate, sides sometimes unequal, yellowish shaded, and striped with red. Flesh white, crisp, juicy, mild, pleasant sweet. Good. December to March.

DANIEL.

From Henry Co., Ind.

Fruit medium, roundish oblate, greenish yellow, partially striped and splashed with dull crimson. Flesh white, fine-grained, tender, juicy, pleasant subacid. Good. August and September.

DANIEL'S APPLE.

An old variety. Origin unknown, of no value.

Fruit medium, roundish conical, greenish, with dull crimson. Flesh white, coarse, tender, juicy, subacid. Core large and hollow. October.

DAN PEARMAIN.

Originated in Indiana.

Fruit medium to small, round, flattened, yellow, covered, mixed, and striped with bright red. Flesh yellow, breaking, tender, mild subacid, rich. Too small for profit. December to March. (Warder.)

DANVERS WINTER SWEET.

Epse's Sweet.

Origin, Massachusetts, in the town of Danvers, from which this variety takes its name, it has been for a long time one of the best market apples, but we think it inferior to the Ladies' Sweeting. It is an abundant bearer, and a very rapid tree in its growth. Young shoots dark grayish brown, slightly downy.

Fruit of medium size, roundish oblong. Skin smooth, dull yellow, with an orange blush. Stalk slender, inclining to one side. Calyx set in a smooth, narrow basin. Flesh yellow, firm, sweet, and rich. Very good. It bakes well, and is fit for use the whole winter, and often till April.

DAPPER.

From Georgia.

Fruit small, roundish, truncate, yellow, with crimson specks. (Pa. Rep.)

DARLINGTON.

Darlington Russet.

Native of Northern Ohio.

Fruit medium, roundish, smooth russet. Flesh white. Hardly very good. January to June. (Elliott.)

DARLING PIPPIN.

An old English sort, described in 1665.

Fruit medium, oblate conical, lemon yellow, small pearly specks. Flesh yellowish, firm, juicy pleasant subacid. November to January. (Lind.)

DARTMOUTH SWEET.

An old Massachusetts variety.

Fruit medium, oblate, yellow, sprinkled with brown dots. Flesh yellowish, moderately juicy, tender, sweet. Good. October.

DAVIS.

Origin, Plymouth, Wayne Co., Mich., on the farm of Jehiel Davis. Tree vigorous, upright, bears annually.

Fruit small, roundish, flattened at base and crown, yellowish, shaded, and obscurely striped with crimson, russeted at the crown, and sprinkled with gray dots. Flesh whitish, fine-grained, compact, juicy, crisp, sprightly, subacid. Good. April, May.

DAVIS'S SWEET.

Origin said to be Monroe Co., O. Tree vigorous, productive.

Fruit medium, roundish oblate, sometimes rather conical, regular. Color yellow, shaded with mixed red, splashed crimson, numerous large gray or fawn-color dots. Skin not smooth, thick. Stem long, slender. Cavity acute, regular. Calyx medium, closed. Basin small, abrupt, russeted. Flesh yellow, fine-grained, rather sweet. Core medium. Quality good. April to July. (A. Pom. S.)

DAWSON'S CLUSTER.

From Clark Co., O.

Fruit medium, oblong, truncate, pale yellow, blushed lightly with brown. Flesh yellowish white, tender, juicy, subacid. Good. November. (Warder.)

DAY.

Royal Pippin.

A native of Kentucky.

Fruit large, round, somewhat conic, yellow striped, splashed, and nottled with bright red. Flesh white, firm, breaking, subacid. Poor. January. Kitchen use.

DAYTON.

Haley.

From Maine.

Fruit medium, roundish conic, whitish yellow, marbled and striped with red. Flesh juicy, tender, subacid. Good. Core large. December.

DEFIANCE.

Originated with H. N. Gillett, Ohio, from seed of Pryor's Red.

Fruit medium, oblate conical, yellow, nearly overspread, shaded, splashed, and striped with rich red. Flesh white, tender, not juicy, rich peculiar aroma. Good. August, September.

DELAWARE.

Trumpington.

Of unknown origin, supposed American, although heretofore found described only in Ronalds.

Fruit of medium size, oblate, golden yellow, blotched with deep red. Flesh firm, rich, high-flavored. October to December.

DELIGHT.

From Robert Buchanan, Cincinnati, O.

Fruit medium, roundish oblate, yellow, some russet, and a red cheek in the sun. Flesh yellowish, firm, mild subacid, almost sweet. Good. December to March. (Elliott.)

DEMOCRAT.

Varick.

An Apple considerably grown in Tompkins Co., N. Y., the origin of which cannot be correctly traced. The trees are great bearers, fruit keeping well, and always meeting a ready sale in market. Tree an upright, good grower, annually productive. Young shoots reddish brown.

Democrat.

Fruit—size medium, or above; form roundish conical, obscurely ribbed. Color pale whitish yellow, shaded, partially striped, and splashed nearly over the whole surface with light and dark crimson, and pretty

thickly sprinkled with small light dots. Stalk medium, slender. Cavity large, deep, acute. Calyx small, closed. Segments small and short to a point. Basin medium, rather deep, corrugated. Flesh white, sometimes a little stained next the skin, very tender, juicy, mild, pleasant subacid. Very good. Core large. December to March.

DEMOCRAT.

Warder describes an Apple under this name obtained of George Powers, Perrysburgh, O., as follows:

Fruit medium, roundish conic, yellow, blushed scarlet. Dots minute. Flesh yellow, breaking, juicy, subacid, aromatic. Good to very good. October, December.

DERRY NONSUCH.

Dinsmore.

Londonderry.

Origin unknown, from Keene, N. H., and held in estimation there. Tree thrifty and productive, a late keeper.

Fruit above medium, oblong or conic, yellow, sprinkled, shaded, and splashed with crimson. Stalk short, in a moderate cavity. Calyx large, closed. Basin shallow, uneven. Flesh yellowish, juicy, tender, slightly aromatic, agreeably subacid. Good. January to April.

DETROIT BLACK.

Crimson Pippin.

Grand Sachem.

Black Detroit.

Washington Pearmain.

A showy, large, dark, blood-red fruit, but rather coarse, and scarcely worth cultivation.

Fruit very large, roundish, distinctly ribbed, and irregular in its outline. Skin smooth, deep, dingy red over the whole surface. Flesh white, rather dry, and without much flavor. Good. September.

DETROIT RED.

Detroit.

Black Apple of some.

Large Black.

This fruit, commonly known in Western New York and Michigan as the Detroit, is supposed to have been brought to the neighborhood of Detroit by early French settlers, and thence disseminated.

Fruit of medium or rather large size, roundish, somewhat conical, bright crimson at first, but becoming dark blackish purple at maturity, somewhat dotted and marbled with specks of fawn color on the sunny side. Flesh white (sometimes stained with red to the core in exposed specimens), crisp, juicy, of agreeable, sprightly subacid flavor. Good. October to February.

DEVONSHIRE BUCKLAND.

Dredge's White Lily.

White Lily.

Lily Buckland.

An English culinary Apple.

Fruit above medium, roundish oblate, waxen yellow. Flesh yellow, crisp, juicy, brisk, sweet. October to February. (Hogg.)

DEVONSHIRE GOLDEN BALL.

An English Apple, described by Ronalds as follows:

Fruit large, globular, straw-colored, with flesh of unstriped carmine.

A beautiful sauce apple, with an agreeable acid. January and February. Tree grows well and bears freely.

DEVONSHIRE QUARRENDEN.

Red Quarrenden.

Sack Apple.

An English fruit, scarcely of medium size, roundish, flattened, and slightly narrowed at the eye. Skin rich deep crimson, with lighter crimson, sprinkled with numerous green dots. Flesh nearly white, crisp, juicy, with a pleasant subacid flavor. Good. Ripe during all August and September.

DEVONSHIRE QUEEN.

Ronalds describes this as a favorite apple in the West of England.

Fruit rather large, roundish oblate, straw-colored, with bright red stripes. Flesh juicy, high flavored, for table or sauce.

DEVONSHIRE RED STREAK.

Another old West of England fruit, which, when grown in the States, becomes increased in size.

Fruit medium, roundish conical, yellowish with many stripes of red, few brown dots. Flesh yellow, tender, brisk, subacid. Good. Core large, hollow. November, December.

DEVONSHIRE WILDING.

A cider Apple much valued in North Devon, England. Tree a strong grower and free bearer.

Fruit medium, roundish, yellowish green. Flesh firm, sharp, acid.

DIEL'S REINETTE.

Reinette Diel.

Diel Kernobst.

This variety was raised by Van Mons. Tree strong, healthy, vigorous grower, and abundant bearer.

Fruit below medium, roundish oblate, orange yellow at maturity, with crimson and russet dots and spots. Flesh white, firm, crisp, juicy rich, spicy. December to March.

DICKSON'S EMPEROR.

From Scotland.

Fruit large, slightly ribbed, yellow, with dashes of carmine, dull red in sun. Flesh yellowish white, juicy. Good. November, January. (Elliott.)

DICKSKILL.

This Apple was first found among the Dutch, on the west end of Long Island. It is valued where known for being an early and regular bearer, but is not an attractive market fruit.

Fruit medium, oblate, greenish yellow, mostly covered, shaded and splashed with dull red. Flesh whitish, crisp, juicy, tender, mild, almost sweet, subacid. Good. November, December.

DIETZER ROTHE MANDEL REINETTE.

A German dessert Apple, which should bear the test of American

palates before being highly praised. Tree a fine grower and productive. Hogg thus describes it:—

Fruit medium, roundish, clear yellow, with light red, slightly broken into stripes in the sun. Flesh fine, yellowish, firm, juicy, rich, aromatic, subacid. December.

DILLINGHAM.

Raised by D. C. Richmond, of Sandusky, O. Tree moderately vigorous, productive, and particularly excellent for baking. Wood light reddish brown. Buds prominent, downy.

Fruit medium, roundish, inclining to conic, greenish yellow, with green and red dots. Stalk short. Cavity deep. Calyx closed in a median basin. Flesh yellowish, fine-grained, juicy, sweet. Good. November to February.

DISHAROON.

Origin, Habersham County, Georgia, growth upright and vigorous, productive.

Fruit medium, roundish conical, greenish white, covered with gray dots. Flesh yellowish white, juicy, tender, with a pleasant subacid flavor. Good. November to December.

DOBB'S KERNEL GOLDEN PIPPIN.

From Gloucester, England, and only estimated over the old Golden Pippin because of more free growth, and more productive.

Fruit small, oblate, rich, golden yellow. Flesh firm, crisp, sharp subacid. March to April. (Ron.)

DOCTOR.

Red Doctor. De Witt.

A Pennsylvania Apple; the tree is rather an indifferent grower and bearer.

Fruit medium, roundish oblate, yellow, striped and washed with two or three shades of red, with a few darker spots. Flesh tender, juicy, breaking, slightly aromatic, subacid. Good. October, January.

DOCTOR HELSHAM'S PIPPIN.

From Norfolk Co., England. Tree slender, productive.

Fruit medium, roundish conical, yellowish green, slight red in sun. Flesh white, sweet, slightly aromatic. August, September. (Lind.)

DOCTOR FULCHER.

Origin, Todd Co., Ky. Tree thrifty, an early abundant bearer. Shoots slender.

Fruit medium, globular, truncated, yellow marbled, and splashed with carmine. Flesh yellow, fine-grained, tender, juicy, subacid. December, January. (Warder.)

DODGE'S CRIMSON.

Cumberland Black.

Originated with J. W. Dodge, Pomona, Tenn. Tree a free grower, making a round or spreading head, with slender limbs, which droop

with the weight of the fruit. Young shoots very dark brown ; an annual and great bearer.

Fruit medium, roundish conical, deep rich red, almost purplish, few small light dots. Flesh white, sometimes stained a little next the skin, firm-grained, tender, juicy, sprightly, vinous. Good to very good. December, January.

DOMINE.

English Rambo of some.
Hogan.
English Red Streak.

Wells.
Striped R. I. Greening.
English Beauty of Pa.

Cheat.
Cling Tight.

This Apple, extensively planted in the orchards on the Hudson and west, so much resembles the Rambo externally, that the two are often confounded together, and the outline of the latter fruit (see Rambo) may be taken as nearly a fac-simile of this. The Domine is, however, of a livelier color, and the flavor and season of the two fruits are very distinct,—the Rambo being rather a high-flavored early winter or autumn apple, while the Domine is a sprightly, juicy, long-keeping winter fruit.

Fruit of medium size, flat. Skin lively greenish yellow in the shade, with stripes and splashes of bright red in the sun, and pretty large russet specks. Stalk long and slender, planted in a wide cavity and inclining to one side. Calyx small, in a broad basin, moderately sunk. Flesh white, exceedingly tender and juicy, with a sprightly pleasant, though

Domine.

not high flavor. Young wood of a smooth, lively light brown, and the trees are very hardy, and the most rapid growers and prodigious early bearers that we know—the branches being literally weighed down by the rope-like clusters of fruit.

The Domine does not appear to be described by any foreign author. Coxe says that he received it from England, but the apple he describes and figures does not appear to be ours, and we have never met with it in any collection here. It is highly probable that this is a native fruit. It is excellent from December till April.

DONNELAN'S SEEDLING.

Of American origin.

Fruit medium, roundish, greenish yellow, dull red stripes. Flesh yellowish, dry, subacid. September. (Elliott.)

DOUX D'ARGENT.

Doux d'Angers. D'Eve. Ostogate.

Supposed French origin. Tree vigorous, productive, with straight, downy young shoots.

Fruit medium, oblate, conical, waxen yellow, bright red in the sun. Flesh white, firm, crisp, not very juicy, partially sweet. December, January.

DOWELL'S PIPPIN.

An old Berkshire, England, dessert Apple.

Fruit medium, roundish, conical, green, with russet and brownish red in the sun. Flesh firm, crisp, juicy, aromatic. October.

DOWNING'S PARAGON.

Raised by A. G. Downing, near Canton, Ill. Growth upright, not very strong. Bears regularly and well.

Fruit above medium, roundish, truncated. Skin light yellow, with a sunny cheek. Flesh whitish, juicy, tender, sweet, rich, aromatic. Good to very good. September to December.

DOWNTON PIPPIN.

Elton Pippin.

Downton Golden Pippin.

Knight's Golden Pippin.

St. Mary's Pippin.

A rather early variety of the English Golden Pippin, raised by Mr. Knight, of Downton Castle.

Fruit a little larger than the Golden Pippin, about two and a quarter inches in diameter, roundish, flat at the ends. Skin smooth, yellow. Flesh yellowish, crisp, with a brisk, rich tart flavor. Very good. October and November.

DOW'S WINTER PIPPIN.

Origin, on the grounds of V. P. Dow, Greenbush, near Albany, N. Y. Tree productive.

Fruit large, oblate, green inclining to yellow, slightly shaded in the sun with crimson, few brown dots. Flesh greenish, tender, juicy, brisk subacid, slightly aromatic. Good. November.

DRAP D'OR.

Fennouillet Jaune.

Vrai Drap d'Or.

Embroidered Pippin.

Bay Apple.

Pomme de Caractère. Bonne de Mai.

Tree straggling, unproductive, moderately vigorous.

This is distinct from the Drap d'Or of Lindley, and of Noisette, and

most French authors, which is quite a small apple ; but it is the *Vrai Drap d'Or* of the old Duhamel, pl. xii. Fig. 4.

Fruit large, roundish oblate. Skin smooth, yellow or dead gold color, with distinct small brown dots or specks. Flesh crisp, juicy, mild subacid. Good. August to October.

There are two or three apples under this name—one is similar in size to the above, but the tree is of stronger growth, dropping its fruit before mature, which is rather coarse, spongy. Flesh quite inferior.

Another variety, the *Drap d'Or* of Knoop, is small, bright yellow, firm and crisp.

DREDGE'S FAIR MAID OF WISHFORD.

A variety from near Salisbury, England. Tree a free grower, and good bearer.

Fruit medium, roundish, yellow, with patches of brown russet, and streaks of red in sun. Flesh yellowish, firm, brisk, juicy, sugary. December to March. (Hogg.)

DREDGE'S FAME.

Tree hardy, vigorous grower, productive.

Fruit medium, roundish, dingy yellow, patches of thin russet, pale red in the sun. Flesh greenish yellow, firm, crisp, brisk, sugary, aromatic. December to March. (Hogg.)

DREDGE'S GOLDEN PIPPIN.

Ronalds describes this as a little larger than the original, flattish in shape, clear yellow, firm, and sweet. February to March.

DUCHESS DE BRABANT.

Reinette Duchesse de Brabant.

Tree very vigorous.

Fruit large, variable in form, yellow, spotted with reddish gray dots, crimson cheek in the sun. Flesh yellowish white, firm, crisp, juicy, acid. September to December. (An. Pom.)

DUCHESS OF OLDENBURGH.

Smith's Beauty of Newark.

New Brunswick.

This handsome Russian Apple proves one of the most hardy and profitable varieties in cultivation, and especially in our northwestern sections. The tree is vigorous, forming a roundish, upright, spreading head, requiring little or no pruning, and producing abundantly a fruit of fair, even, and regular size, that, although not of the first quality, always commands a ready sale, as it is valuable for market and cooking, and passably good for dessert. Young shoots smooth, reddish.

Fruit medium size, regularly formed, roundish oblate. Skin smooth, finely washed and streaked with red on a golden or yellow ground. Calyx

pretty large and nearly closed, set in a wide, even hollow. There is a faint blue bloom on this fruit. The flesh is juicy, sprightly subacid. Ripens early in September.

Duchess of Oldenburgh.

DUCKETT.

A Southern fruit.

Fruit rather large, oblate, light waxen yellow, often with a crimson cheek. Flesh white, tender, juicy, pleasant, aromatic. Good. Very good at the South, where it is ripe October to November.

DUFFIELD PIPPIN.

Probably an old variety, claimed as a seedling of the Rev. George Duffield's ancestors.

Fruit medium, roundish oblate, pale yellow, with shade of light crimson in the sun. Flesh yellowish, juicy, tender, pleasant, subacid. Good. November.

DU HALDER.

Probably a Holland variety. Tree vigorous, very productive.

Fruit large, roundish conical, golden yellow, with gray white dots. Flesh white, fine, semi-tender, sugary acid. November to May. (An. Pom.)

DUKE OF BEAUFORT'S PIPPIN.

Fruit large, roundish oblate, ribbed, greenish, with faint streaks in the sun of pale red. Flesh greenish white, crisp, and subacid. November, December. (Lind.)

DUKE OF DEVONSHIRE.

An English dessert Apple.

Fruit of medium size, roundish, lemon yellow, with a dull red cheek. Flesh yellowish, crisp, juicy, rich, sugary, fine aroma. February to May. (Hogg.)

DULCE DOMAN.

Sweet Home.

Introduced by E. H. Cocklin, Cumberland Co., Pa. Tree of upright growth, moderately vigorous and productive.

Fruit medium, oblate, greenish yellow with a shade of red in the sun. Flesh firm, yellowish, moderately juicy, mild honeyed sweet. Good to very good. Baking and stewing. November, February.

DUMELOW'S SEEDLING.

Wellington.

Dumelow's Crab.

English, rather large, roundish, yellow, with a blush. Flesh yellow, crisp, brisk, acid. Good. November to March.

DUMPLING.

Crooked Limb Pippin.

French Pippin of Indiana.

Watrous Dumpling.

Fruit large, roundish oblong, light yellow, blush in the sun. Flesh white, indifferent. October, December. (Elliott.)

DUNCAN.

Fruit medium, roundish oblate conical, ribbed, yellow, with rich deep red in the sun. Flesh yellowish white, crisp, juicy, pleasantly acid. November to January. (Hogg.)

DUSTEN.

Of unknown origin, but grown in Weare, N. H.

Fruit medium, oblate, whitish yellow, few gray dots. Flesh white, tender, juicy, pleasant subacid. Good. November.

DUTCH CODLIN.

Chalmer's Large.

A very large kitchen Apple, valued only for cooking, from August to September.

Fruit of the largest size, irregularly roundish, or rather oblong, strongly marked by ribs extending from the base to the eye. Skin pale yellow, becoming orange yellow on the sunny side. Flesh white, subacid, and moderately juicy. Good.

DUTCH MIGNONNE.

Reinette Dorée.

Pomme de Laak.

Grosser Casselar Reinette.

Paternoster Apfel.

Settin Pippin.

Copmanthorpe Crab.

A popular Apple from Holland. Tree moderately vigorous, upright, spreading, young wood dark brown, downy, productive.

Fruit medium, roundish oblate, slightly conic. Skin rather rough, yellow, shaded, striped, and splashed with shades of light and dark

rich red, and moderately sprinkled with light and brown dots. Stalk medium, slender. Cavity large, often russeted. Calyx partially open. Segments erect. Basin large, slightly corrugated. Flesh yellowish, a little coarse, tender, juicy, slightly subacid. Core small. Good to very good. December to March.

The foregoing is not the Dutch Mignonne which was described in the first edition of this book. That variety differs in being a more vigorous grower, forming a very large spreading tree, and bearing its fruit singly and very evenly distributed over the whole of the branches. We are uncertain of its true name. Young wood very stout, dark reddish brown.

Fruit large, often very large, roundish oblate. Skin dull orange, half covered or more with rich, dull red, dotted and mottled with large yellow russet specks. Calyx very large. Segments divided and reflexed. Basin very broad, large, and deep, slightly corrugated. Flesh yellowish, a little coarse, breaking, tender, rich, aromatic. Very good. November to February.

DUZENBURY.

This valuable new Apple originated on the farm of Charles Duzenbury, Phillipstown, Putnam Co., N. Y. The tree is a vigorous grower, forming a handsome spreading head, producing abundantly a medium-sized, regular, uniform fruit, which keeps and retains its flavor until May. Young wood, dark brownish red.

Fruit medium; form roundish conical, truncated; color greenish yellow, shaded and rather obscurely splashed with dull red over nearly two-thirds its surface, and sprinkled with a few gray and light dots. Stalk rather short. Cavity rather large and deep. Calyx closed. Segments medium, erect to a point. Basin rather abrupt, slightly corrugated. Flesh whitish yellow, crisp, tender, moderately juicy, very mild, and pleasant subacid, almost sweet. Core small. Very good. February to May.

DYER, OR POMME ROYALE.

Golden Spice.
White Spice.
Smithfield Spice.
Mygatt's Bergamot.
Beard Burden.

Pinneo's Favorite.
Woodstock.
Tompkins.
Coe's Spice.
Bullripe.

A popular dessert Apple, very sprightly, tender, and excellent. Tree a moderate grower. Young wood grayish brown. It is supposed to be of French origin, and to have been brought to Rhode Island more than a hundred years ago. It was renamed Dyer by the Massachusetts Horticultural Society, who supposed it to be a seedling of Mr. Dyer, of Rhode Island, but the old and familiar name of *Pomme Royale* should be preferred.

Fruit of medium size, roundish, pretty regularly formed. Skin smooth, pale greenish yellow, with a faint blush and a few dark specks on one side. Stalk about half an inch long, set in a smooth, round cavity. Calyx closed. Basin plaited, moderately deep. Core round, hollow. Flesh white, very tender and juicy; flavor very mild and

agreeable, aromatic, slightly subacid. Very good to best. September October.

Dyer, or Pomme Royale.

EARLY CHANDLER.

Fruit medium or small, roundish. Color mostly shaded and striped with fine red on yellow ground. Stalk short, in a regular cavity. Calyx closed, in a large basin. Flesh yellow, tender, juicy, with a pleasant subacid flavor. Fine for cooking, too acid for eating. Good. August.

EARLY HARVEST.

Prince's Harvest, or Early French Reinette, of Cox.	
July Pippin.	Tart Bough.
Yellow Harvest.	Early French Reinette.
Large White Juneating.	Sinclair's Yellow.

An American Apple; and taking into account its beauty, its excellent qualities for the dessert and for cooking, and its productiveness, we think it the finest early apple yet known. It begins to ripen about the first of July, and continues in use all that month. The smallest collection of apples should comprise this and the Red Astrachan. Tree moderately vigorous, upright, spreading. Young shoots reddish brown.

Fruit medium size. Form roundish, often roundish oblate, medium size. Skin very smooth, with a few faint white dots, bright straw-color when fully ripe. Stalk half to three-fourths of an inch long, rather slender, inserted in a hollow of moderate depth. Calyx set in a shal-

low basin. Flesh very white, tender, and juicy, crisp, with a rich, sprightly subacid flavor. Very good to best. Core small.

Early Harvest.

EARLY JOE.

Origin, orchard of Heman Chapin, Ontario Co., N. Y. Tree of slow growth, productive, requires high culture for fair fruit.

Fruit below medium, oblate, very slightly conic, smooth, yellowish,

Early Joe.

shaded and striped with red, and thickly sprinkled with greenish spots. Stalk of medium length, inserted in a large cavity surrounded by russet. Calyx closed. Basin moderate. Flesh whitish, tender, juicy, with a

very agreeable vinous flavor. Best. Ripe middle of August to middle of September.

There is a Luce's Early Joe which is distinct from this, being larger, and not as good quality.

EARLY JULIEN.

This Apple is of Scotch origin, the tree healthy and hardy, and a good bearer.

Fruit medium size, roundish, slightly flattened, pale yellow, deepening in the sun. Flesh yellowish white, juicy, brisk subacid, pleasant. August. (Lind.)

EARLY LONG STEM.

Early Spice.

Origin unknown. Specimens received from Henry Avery, Burlington, Iowa.

Fruit small, oblong conical, slightly ribbed. Skin greenish yellow. Stem long, slender, in a large cavity, slightly russeted. Calyx closed. Basin shallow, corrugated. Flesh white, tender, juicy, slightly aromatic, subacid. Good. August.

EARLY MARROW.

A large Scotch Apple, roundish conical, ribbed. Skin yellowish white, with a tinge of red in the sun. Flesh tender, and bakes well; productive. Good. September and October.

EARLY NONPAREIL.

Stagg's Nonpareil.	New Nonpareil.	Hick's Fancy.
Summer Nonpareil.	Lacy's Nonpareil.	

Originated about 1780, in Norfolk, England. Tree a free upright grower, hardy, early, and abundant bearer.

Fruit medium, roundish oblate, dull yellow with gray russet, and russet dots. Flesh yellowish white, tender, juicy, brisk, rich, aromatic. October, November. (Lind.)

EARLY NONPAREIL.

A variety grown in Illinois, the origin of which we cannot learn. It is barely possible that this may prove identical with the foregoing.

Fruit medium to large, roundish oblate, strongly ribbed, whitish, thinly shaded, striped and splashed with red gray dots. Flesh white, sometimes stained next the skin, very tender, juicy, sprightly subacid. Good. Core large. September.

EARLY PENNOCK.

Shakers' Yellow.	Indian Queen.
August Apple.	New Jersey Red Streak.
Warren Pennock.	Harmony.

A very productive and favorite variety with many at the West.

Fruit large, roundish conic, ribbed, light yellow, splashed, mottled, and shaded with light red. Flesh whitish, a little coarse, subacid. Good. Core large. Last of August and September.

Tree hardy, an early and abundant bearer. The fruit, however, is only showy, and salable in market where a better quality of fruit is unknown.

EARLY QUEENING.

Fruit medium or below, roundish, yellow, striped and mingled with red. Flesh whitish, slightly subacid. August. Tree rather spreading, with light brown shoots.

EARLY RED MARGARET.

Margaret, or Striped Juneating.	Striped June.
Early Red Juneating.	Striped Juneating.
Red Juneating.	Eve-Apple of the Irish.
Margaretha Apfel of the Germans.	

An excellent early Apple, ripening about the middle of July, or directly after the Early Harvest. The tree while young is rather slender, with reddish brown upright woolly shoots. It is a moderate bearer.

Fruit below medium size, roundish ovate, tapering towards the eye. Skin greenish yellow, pretty well covered by stripes of dark red. Flesh white, subacid, and, when freshly gathered from the tree, of a rich, agreeable flavor. Good.

EARLY RED STREAK.

Fruit medium, roundish, yellowish, mostly covered with red, marbled and splashed. Flesh white, tender, juicy, crisp, subacid. August, September.

There are a number of distinct apples under the name of Early Red, or Early Red Streak, and we have been unable to decide perfectly as to which the name truly belongs. None of them, however, are more than moderately good. One, under name of Philadelphia Queen, is also similar to Early Red, and may be the same. The origin is variously claimed, but all unknown.

Fall Stripe may also prove identical with one of the above.

EARLY RED SWEET.

From Pennsylvania.

Fruit medium, roundish, sweet. Not desirable.

EARLY RIPE.

Supposed Pennsylvania origin, but unknown. Tree a free grower, and productive.

Fruit medium, roundish oblate, pale yellow, sprinkled with a few gray dots. Stalk long, in a slightly russeted cavity. Calyx small, closed. Flesh white, tender, juicy, subacid. Good. August.

There is also another apple under name of *Early Ripe*, which is small, oblate. Stalk short. Flesh brisk subacid.

EARLY SPICE.

An English culinary Apple. Fruit medium, roundish, pale yellow. Flesh white, marrowy, poor. August. (Hogg.)

There is also an Early Spice originated in Chatham, N. C., which is

small, round, yellow. Flesh yellow, dry, high flavored. Tree productive. Young shoots slender.

EARLY STRAWBERRY.

American Red Juneating.

Red Juneating.

A beautiful variety, which is said to have originated in the neighborhood of New York, and appears in the markets there from July till September. It is quite distinct from the Early Red Margaret, which has no fragrance, and a short stem.

Fruit roundish, narrowing towards the eye. Skin smooth and fair,

Early Strawberry.

finely striped and stained with bright and dark red, on a yellowish white ground. Stalk an inch and a half long, rather slender and uneven, inserted in a deep cavity. Calyx rather small, in a shallow, narrow basin. Flesh white, slightly tinged with red next the skin, tender, subacid, and very sprightly and brisk in flavor, with an agreeable aroma. Very good.

EARLY SWEET.

Originated with W. C. Hampton, Ohio. Tree upright, productive.

Fruit medium or below, roundish, whitish yellow. Flesh white, tender, moderately juicy, sweet. Good. August.

EARLY TART.

Supposed seedling of Lancaster Co., Pa. Tree productive.

Fruit medium, roundish, inclining to conic, pale yellow, light shade of

crimson in sun. Stalk short. Calyx closed. Flesh white, tender, juicy, brisk subacid. Good for cooking. August.

EARLY TART HARVEST.

Tree moderately vigorous, productive.

Fruit medium, oblate, slightly conic, obscurely ribbed, waxen white, sometimes greenish, rarely a blush in sun. Stalk medium. Calyx closed. Flesh white, very tender, juicy, brisk subacid. Very good. Core medium. Ripe about two weeks later than Early Harvest.

EARLY WAX.

Wax Apple.

An English variety.

Fruit below medium, oblong, roundish, somewhat ribbed, waxen yellow. Flesh yellowish white, tender, soft, sweet. August. (Hogg.)

EARLY YELLOW REINETTE.

Reinette Jaune Hatif.

Fruit medium, conical, yellow and red. Flesh rich and juicy. August.

EASTER PIPPIN.

Young's Long Keeping.	Ironstone Pippin.
Claremont Pippin.	French Crab. Forsyth (not of Cox).

Remarkable for keeping sound and firm two years. It is an English variety.

Fruit of medium size. Skin deep green, with a pale brown blush. Flesh very firm, and though not juicy, of a good subacid flavor.

EAST GRINSTEAD.

Ronalds describes this as a Sussex Apple of great excellence for table or kitchen.

Fruit medium, roundish conical, dull greenish yellow, with splashes of dull faint red. Flesh white, juicy, acid. March to May.

EATON.

Origin unknown, found a grafted tree in the garden of J. B. Eaton, Buffalo, N. Y., and described in the Am. Pom. Soc. Reprints, 1854.

Fruit large, oblong conical, dull green, striped with dull red, deeper when exposed to the sun. Stalk rather slender. Calyx large. Flesh white, tender, juicy, subacid. Good to very good. November, December.

EDEL KÖNIG.

Rc.-Très-Noble.

A German culinary Apple of first-rate quality.

Fruit large, roundish conical, truncated, ribbed, yellowish green,

deep purplish crimson in sun. Flesh white, tinged with pink, tender, juicy, sugary, raspberry flavor. October, November. (Hogg.)

EDGAR'S.

An English Apple, which Ronalds describes as of medium size, roundish, yellow laced with bright red striping. A beautiful fruit, excellent for the dessert or kitchen. November, December.

EDWARD'S.

Origin, Chatham Co., N. C.

Fruit nearly medium, roundish oblate, greenish yellow, lightly striped with delicate red. Flesh rich, juicy, firm. One of best keepers. (Con. Gent.)

EGGERMONT.

Eggermont's Calville.

Fruit medium, oblate. Skin glossy, lemon yellow, slight lines of russet. Flesh white, firm, juicy, marrowy, sugary, vinous. November. (Hogg.)

EGG TOP.

Eve. Sheep Nose. Round Top. Wine of some.

Fruit medium, elongated, oblong, conic oval, mostly overspread, and splashed and striped with shades of red. Flesh white, tender, moderately juicy, subacid. Scarcely good. November, December.

EGYPTIAN BELLE.

From J. M. Smith, of Greenville, Ill.

Fruit large, roundish flattened, yellowish white, striped, stained, and splashed with light and deep carmine. Flesh juicy, white, fine-grained, subacid. August. (Gar. Mon.)

EGYPTIAN RUSSET.

Bagby Russet.

From Southern Illinois, origin unknown. This Apple is much esteemed where known for its rich, high flavor, and as a good keeper. Some think it the best of all the russets. The tree forms an upright, symmetrical, round head, with grayish reddish brown, somewhat downy young shoots. Productive.

Fruit medium. Form roundish, approaching conical, slightly ribbed. Color golden yellow, netted and patched with russet over half or two-thirds of its surface, often with a cheek of crimson or fawn in the sun, and moderately sprinkled with brown dots. Stalk short and small. Cavity medium or rather broad. Calyx open or partially closed. Segments short. Basin medium. Flesh yellowish, tender, juicy, rich, slightly aromatic, pleasant subacid. Very good. December to March.

ELDON PIPPIN.

Fruit small, round, somewhat oblate, ribbed near the calyx, yellow

shaded or covered with crimson next the sun. Flesh yellowish, very juicy, sweet, rich, aromatic. December to April. (Hogg.)

ELFORD PIPPIN.

Hogg describes this as a dessert Apple of first quality. Tree a healthy vigorous grower and good bearer.

Fruit roundish, ribbed near the calyx, yellowish green, with markings of russet in the shade, red, and striped with darker red next the sun. Flesh yellowish, crisp, brisk, sugary, vinous. October, December.

ELICKE'S WINTER SWEET.

Origin, Lebanon Co., Pa. An upright grower and a good bearer.

Fruit above medium, obliquely depressed, yellow, striped and mottled with crimson. Flesh yellowish, a little coarse, tender, not very juicy, but very sweet, and excellent for apple butter. Good. December to January.

ELLIJAY.

From Clarksville, Ga.

Fruit large, oblique, roundish conic, pale yellow, often a blush red cheek in sun. Flesh white, rather tender, juicy, subacid. Hardly good. Core large and hollow. Most valued for cooking. November, December.

ELLIS.

From Connecticut. Small, roundish, greenish yellow, brown cheek. Flesh firm, juicy, pleasant, a long keeper. Good. April, May.

ELLSWORTH

Miller's Seedling.

Originated in Columbia Co., N. Y., on the farm of John C. Miller.

Tree pretty vigorous growth, erect, young wood, much like Swaar in color, very productive.

Fruit medium, roundish, fine yellow, sometimes a shade of crimson in the sun. Nettings of russet and gray dots. Stalk long, slender. Cavity rather large, russeted. Calyx closed. Segments small, short, erect. Basin medium, slightly corrugated. Flesh white, firm, tender, juicy, rich, sprightly subacid. Very good or best. Core small. January to March.

EMPEROR.

Described by Verry Aldrich in the *Prairie Farmer* as follows:—

Fruit medium, roundish, one-sided, orange striped and shaded with red on the sun side, covered with white specks. Stalk short and slender. Cavity deep. Flesh white, fine-grained, tender, juicy, pleasant, almost sweet.

ENE'S WINTER SWEET.

A Southern Apple, introduced by J. S. Downer, Elkton, Ky.

Fruit medium, oblate, greenish yellow, blushed in sun, russeted. Flesh yellow, fine-grained, sweet. Good. December.

Ellsworth.

ENFIELD PEARMAIN.

A moderate grower and a fair bearer.

Fruit below medium, nearly globular, deep red, sprinkled with minute dots. Stalk long and slender, in a large cavity, surrounded by thin russet. Calyx partially closed, in a broad, shallow basin. Flesh tender, fine-grained, juicy, with a pleasant, mild, rich flavor, resembling Seek-no-Further. Good. December to February.

ENGLISH BEAUTY.

Origin unknown.

Fruit large, roundish oblate, slightly conical, yellow, mostly over-spread, striped, shaded and splashed with crimson, and sprinkled with light and brown dots. Flesh whitish, tender, juicy, sprightly mild subacid. Almost very good. December to March.

ENGLISH CRAB.

Fruit small, oblate, yellow with dark red. Flesh deep yellow, mild subacid. Good. January.

ENGLISH GILLIFLOWER.

Origin unknown.

Fruit large, roundish oblate, approaching conic, slightly ribbed,

light yellow, splashed, striped, and shaded with crimson and thickly sprinkled with brown dots. Stalk very short. Cavity russeted. Calyx nearly closed. Basin abrupt. Flesh yellowish, tender, juicy, mild subacid. Almost very good. November, December.

ENGLISH GRANAT REINETTE.

Pomme Granate.

Hogg describes this as a first-rate German dessert Apple. Tree a medium grower and great bearer.

Fruit medium, roundish oblate, lemon yellow, two-thirds overwashed and striped with crimson. Flesh yellowish white, very fine, firm, crisp, juicy, very rich vinous, aromatic. December to March.

ENGLISH REINETTE.

Reinette d'Angleterre.

This is distinct from Grosse Reinette d'Angleterre, or from English Golden Pippin.

Fruit medium, roundish, inclining to conical, slightly ribbed, yellow shaded, marbled, and indistinctly splashed on the sunny side with light crimson. Stalk rather long. Calyx open. Flesh yellow, crisp, juicy, with a rather rich brisk subacid. Very good. December, January.

English Russet.

ENGLISH RUSSET.

Poughkeepsie Russet.

Po'keepsie Russet.

The English Russet is a valuable, long-keeping variety, extensively cultivated, and well known by this name, but which we have not been able to identify with any English sort. It is not fit for use until Feb-

ruary, and may be kept till July, which, together with its great productiveness and good flavor, renders it a very valuable market fruit.

The trees grow very straight, and form upright heads, and the wood is smooth and of a reddish brown.

Fruit of medium size, roundish, slightly conical, and very regularly formed. Skin pale greenish yellow, about two-thirds covered with russet, which is thickest near the stalk. Calyx small, closed, and set in an even, round basin, of moderate depth. Stalk rather small, projecting even with the base, and pretty deeply inserted in a narrow, smooth cavity. Flesh yellowish white, firm, crisp, with a pleasant, mild, slightly subacid flavor. Good. January to May.

The *English Russet* described by Warder is entirely distinct, being, as he describes, large, globular, flattened, somewhat one-sided. Surface uneven, green. In season from December to January.

ENGLISH SWEET.

Ramsdell's Sweet.	Ramsdell's Sweeting.	Hurlbut Sweet ?
Ramsdell's Red Pumpkin Sweet.	Red Pumpkin Sweet.	Avery Sweet.
Randall's Red Winter.		

This old variety is esteemed where grown for the large crops which it bears, and as a showy sweet apple for market, and profitable for stock feeding, as well as superior for cooking.

The tree is very vigorous, grows remarkably straight and upright, comes early into bearing, and yields every year enormously. Young shoots clear reddish brown, slightly grayish.

Fruit rather above medium size, oblong, regularly shaped, and tapering slightly towards the eye, dark red, dotted with fawn-colored specks, and covered with a blue bloom. Flesh yellowish, very tender and mellow, unusually sweet and rich. Good to very good. In weight the apple is light. October to February.

EPSY.

From Vermont. A handsome productive fruit, small, elongated conic, deep red, almost crimson. Flesh whitish, brisk subacid. Scarcely good. December, January.

EPTINGS PREMIUM.

Large, greenish, with red stripes. Flesh juicy and excellent. (Sumner's MS.)

EPTINGS RED WINTER.

Large, beautiful red, resembling Carolina Red June. Flesh yellow, with rich pine-apple flavor. Keeps well to Christmas. (Sumner's MS.)

ERIE SWEET.

From Erie, Pa.

Fruit medium, roundish oblate, whitish yellow. Flesh white, tender, juicy, mild, pleasant sweet. Good. September, October.

ESSEX PIPPIN.

An English variety.

Fruit small, roundish oblate, yellowish green, tinge of red in the sun. Flesh yellowish, firm, crisp, brisk, sugary. October to February. (Hogg.)

ESOPUS SPITZENBURGH.

Æsopus Spitzenberg.

Æsopus Spitzenburg.

True Spitzenburgh.

The Esopus Spitzenburgh is a handsome, truly delicious Apple, and is generally considered by all good judges equal to the Newtown Pippin, and unsurpassed as a dessert fruit by any other variety. It originated at Esopus, a famous apple district, originally settled by the Low Dutch, on the Hudson. But throughout the whole of New York it is considered the first of apples. The tree has rather slender shoots, and when in bearing has long and hanging limbs.

Esopus Spitzenburgh.

Fruit large, oblong, tapering roundly to the eye. Skin smooth, nearly covered with rich, lively red, dotted with distinct yellowish russet dots. On the shaded side is a yellowish ground with streaks and broken stripes of red. Stalk rather long—three-fourths of an inch—and slender, projecting beyond the base, and inserted in a wide cavity. Calyx small, and closed, set in a shallow basin, which is slightly furrowed. Flesh yellow, rather firm, crisp, juicy, with a delicious rich, brisk flavor. Best. Seeds in a hollow core. December to February.

ESTEN.

Origin, Rhode Island. Tree vigorous, productive.

Fruit large, roundish, slightly ribbed, smooth, yellow, sometimes with a blush. Dots large, green and light. Flesh yellowish, crisp, juicy, slightly aromatic, mild subacid. Good. November.

ETOILE.

Calville Etoile.

Reinette Etoile.

Origin supposed Holland. Tree vigorous, very productive.

Fruit large, roundish oblate, rich red, with gray shade, and many gray dots. Flesh white, veined with red, tender, sugary, slightly acid. November to February. (Alb. Pom.)

EUSTIS.

Ben Apple.

Origin, South Reading, Mass. Moderate grower, a good bearer.

Fruit rather large, roundish oblate, slightly conic, yellow, striped and shaded with fine red, and sprinkled with greenish dots. Stalk medium, inserted in a deep cavity, surrounded by russet. Calyx partially open. Basin narrow, rather deep. Flesh yellowish, firm, crisp, mild subacid. Very good. November to January.

EVENING PARTY.

Origin, Berks Co., Pa. Tree vigorous, roundish, upright spreading, with slender branches. Young shoots dark grayish brown, many small dots.

The fruit hangs well to the tree, and the foliage remains until quite late.

Evening Party.

Fruit small or medium, oblate, sides often unequal, yellow, chiefly shaded, splashed, and striped with red, becoming dark red in the sun,

pretty thickly studded with light dots, especially near the calyx. Stalk short, inserted in a round, deep, acute cavity, sometimes russeted. Calyx closed. Basin rather large and even. Flesh juicy, whitish, tender, crisp, with a brisk saccharine, somewhat vinous, aromatic flavor, an excellent dessert fruit. Very good. December and January.

EWALT.

Bullock's Pippin of some.

Origin, Bedford Co., Pa. Tree very vigorous, upright spreading.

Fruit large, roundish, approaching conic, obscurely ribbed, bright yellow, shades of crimson in the sun. Stalk short, stout. Cavity deep, irregular. Basin abrupt, deep, furrowed. Flesh white, tender, brisk subacid. Good to very good. November to March.

EYER'S GREENING.

Lindley describes this fruit as of middle size, somewhat round, pale green, tinged with brown in the sun. Flesh green, sweetish subacid. Culinary. November to March.

EXCEL.

Origin, Sharon, Conn. A strong grower and a good bearer.

Fruit large, oblate conic, yellowish, marbled, splashed, and shaded with red, some nettings and patches of russet. Flesh yellow, tender, juicy, brisk, subacid. Core large. Good to very good. December to February.

EXQUISITE.

Origin, orchard of A. G. Downing, Canton, Ill. Growth moderate, upright, and very productive.

Fruit below medium, oblate. Skin yellow, striped and marked with red. Stem short and small, surrounded by russet, in a deep, broad cavity. Calyx small, partially closed, set in a shallow basin. Flesh white, juicy, melting, with a very rich, vinous flavor, almost saccharine. Good to very good. A delightful apple for the table. September to November.

FAIL-ME-NEVER.

Neverfail.

A Scottish Apple for cooking purposes. Tree hardy and productive.

Fruit above medium, oblate, ribbed, red, becoming deep red in the sun. Flesh white, sugary. Good. November, March. (Lind.)

FAIRBANKS.

Origin, Winthrop, Maine.

Fruit medium, oblate conic, light yellow, striped with red, and patched with russet. Stem long. Cavity broad and shallow. Flesh yellowish, juicy, with a rich, vinous flavor. Good. September to October. (Me. P. S. R.)

FAIRFIELD SUMMER QUEEN.

Origin unknown.

Fruit medium, roundish oblate conic, obscurely ribbed, pale yellow, striped, splashed, and shaded with two shades of red. Stalk long, slender. Cavity large. Calyx closed. Basin uneven. Flesh yellowish, juicy, tender, brisk subacid, slightly aromatic. Very Good. Core small. September.

FAIR MAID.

From Pennsylvania.

Fruit rather large, roundish oblate, striped with carmine, subacid. Inferior.

FAIR MAID OF TAUNTON.

An English Apple.

Fruit small, roundish oblate, straw color, with faint red in the sun. Flesh yellowish white, tender, juicy, sweet. November to February. (Hogg.)

FAIR'S NONPAREIL.

Fruit small, roundish, yellow, with tinge of red in the sun. Flesh firm, crisp, juicy, vinous. November to February. (Hogg.)

FALLAWATER.

Falwalder.	Pim's Beauty of the West.	Winter Blush
Fornwalder.	Pound.	Green Mountain Pippin.
Tulpehocken.	Mountain Pippin.	Molly Whopper.
Pfarrer Walter.	Fall de Walldes.	Falder.
Baltimore, erroneously.	Brubacker.	Fallawalder.
	Fallawalder.	

A favorite Apple of Pennsylvania, of which State it is a native. Tree a strong grower and very productive.

Fruit very large, globular, inclining to conic. Skin yellowish green, shaded with dull red, and sprinkled with large gray dots. Stalk very short, inserted in a deep cavity. Calyx small and closed, set in a slightly plaited basin. Flesh greenish white, juicy, crisp, rather tender, pleasant, subacid flavor. Good. November, February.

FALL BUTTER.

There are dozens of this name. Warder describes one from Indiana as:

Fruit large, globular, greenish yellow. Flesh yellowish white, juicy, sweet. December, January.

FALL GREENING.

The original tree of this variety was found on the grounds of S. M. Van Wyck, Claverack, Columbia Co., N. Y. Tree a moderately vigorous grower, round-headed, almost pendent, very productive, valuable.

Fruit medium, roundish oblate, greenish yellow. Flesh greenish white, tender, pleasant, subacid. Good to very good. December to February. Tree a good grower and bearer, and sells well in market.

There is another *Fall Greening*, which is more oblate in form. Similar color. Flesh whitish yellow, juicy, sprightly subacid. September to November. The tree a poor grower.

FALL HARVEY.

A fine large fall fruit from Essex Co., Mass., highly esteemed in that neighborhood. We do not think it comparable to the Fall Pippin.

Fruit large, roundish, a little flattened, obscurely ribbed or irregular about the stalk, which is rather slender, an inch long, set in a wide, deep cavity. Calyx closed, small, in a rather shallow corrugated basin. Skin pale straw yellow, with a few scattered dots. Flesh white, juicy, crisp, with a rich, good flavor. Good to very good. October and November.

FALL JENNETING.

Summer Jenneting.

Tree vigorous, and very productive.

Fruit large, oblate, slightly conic, almost ribbed, pale greenish yellow, with a blush. Flesh whitish, tender, juicy, brisk subacid. Good. September and October.

FALL LIMBERTWIG.

Origin unknown.

Fruit medium, roundish oblate conic, pale yellow, shaded and splashed with red. Flesh whitish, tender, juicy, brisk subacid. Good. November.

FALL ORANGE.

Orange.	Holden.	Hogpen.	White Graft of Wis.
Holden Pippin.	Jones' Pippin.	Red Cheek.	Long Island.

Origin, Holden, Mass. A very strong, erect grower, good bearer, and hardy. Young shoots smooth, dark brownish red.

Fruit fair, large, roundish, pale yellow, sometimes with a dull red cheek and sprinkled with brownish dots. Stalk short, inserted in a deep, narrow cavity, very slightly surrounded by russet. Calyx large, partially closed, basin rather deep, narrow. Flesh white, tender, juicy, subacid. Too acid for a dessert, good for cooking. October, November.

FALL PEARMAN.

Tree thrifty, moderate bearer. From Connecticut.

Fruit fair and handsome, medium, roundish conic, slightly angular. Skin yellow, striped, splashed, and shaded with crimson, and sprinkled with gray and green dots. Stalk medium, in a deep, slightly russeted cavity. Calyx partially closed. Basin rather deep, slightly corrugated. Flesh white, tender, juicy, subacid, rather rich flavor. Good to very good. September, October.

FALL PIPPIN.

York Pippin.
Pound Pippin.

Episcopal.
Golden Pippin, erroneously. Pound Royal of some.
Cathead, incorrectly.

Philadelphia Pippin.

The Fall Pippin is, we think, decidedly an American variety. It is very probably a seedling raised in this country from the *White Span-*

Fall Pippin.

ish Reinette, or the Holland pippin, both of which it so much resembles, and from which it, in fact, differs most strongly in the season of maturity. The Fall Pippin is a noble fruit, and is considered the first of autumn apples in the Middle States, where its beauty, large size, and its delicious flavor for the table or for cooking, render it very popular.

The tree is a very vigorous, strong grower, upright spreading. Young shoots reddish brown.

Fruit very large, roundish, generally a little flattened, pretty regular, sometimes with obscure ribs at the eye. Stalk rather long, three-fourths of an inch, projecting considerably beyond the fruit (which distinguishes it from the Holland Pippin), set in a rather small, shallow, round cavity. Calyx open, not very large, rather deeply sunk in a round, narrow basin. Skin smooth, yellowish green, becoming a fine yellow, with often a tinge of brownish blush on one side, and with a few scattered dots. Flesh white, very tender and mellow, with a rich, aromatic flavor. Very good to best. October to December.

FALL SPITZENBURGH.

From Vermont. Tree a fair grower and good bearer.

Fruit medium, roundish conic, red striped. Flesh tender, juicy, pleasant subacid. Good. October, November.

FALL SEEK-NO-FURTHER.

Winter Seek-no-Further.

Origin unknown. Tree much the habit of the Rhode Island Greening, thrifty and productive.

Fruit very large, oblate, yellow, mostly shaded with red, striped with darker red, and covered with numerous grayish dots. Flesh whitish, tender, moderately juicy, with a pleasant subacid flavor. Good. October and November.

There is another apple under name of Fall Seek-no-Further which we have received from Iowa, of medium size, roundish, greenish, with slight blush in the sun. Flesh white, tender, mild, subacid. Very good and keeps till March.

FALL WINE.

Sweet Wine.
Ohio Wine.

Sharpe's Spice.
Uncle Sam's best.

Musk Spice.
Hower or House.

Origin unknown, probably an old Eastern fruit called "Wine" or "Sweet Wine," but not now much cultivated on account of the fruit being defective. In the rich Western soils it thrives admirably, producing fine fruit, yet in a few localities they complain of its being knurly. Tree healthy, but of rather slender growth, bearing moderate crops annually.

Fall Wine.

Fruit above medium. Stem rather long, slender, in a broad, deep cavity, surrounded by clear waxen yellow. Calyx partially closed in a broad, deep, corrugated basin. Skin striped and shaded with red,

on a light ground, with numerous russet dots. Flesh yellowish, juicy, tender, with a rich, aromatic, *very* mild, subacid flavor, almost sweet. Very good to best. September, November.

FALL WINESAP.

A Western variety, the origin of which is unknown.

Tree a free clean grower, moderately spreading, somewhat drooping as the tree acquires age, productive and an early bearer.

Fruit medium, roundish, sometimes slightly conical, yellowish green, with considerable blush in the sun. Flesh white, fine-grained, tender, juicy, subacid. Good. October, December.

FAMA GUSTA.

An old English sort. Tree vigorous, straggling in habit.

Fruit medium to large, roundish oblong conical, deep yellow, faint red in sun. Flesh yellowish, tender, sweet. Good for cooking. November, December.

FAMEUSE.

Pomme de Neige.

Sanguineus.

Snow Chimney.

Snow.

A very celebrated Canada fruit (probably an old French variety), which has its name from the snow-white color of its flesh, or, as some say, from the village from whence it was first taken to England. It is an excellent,

Fameuse.

productive, autumn apple, and is especially valuable in northern latitudes.

Tree moderately vigorous, round-headed, hardy. Young shoots reddish brown.

Fruit of medium size, roundish, somewhat flattened. Skin with a

ground of pale greenish yellow, mixed with faint streaks of pale red on the shady side, but marked with blotches and short stripes of darker red, and becoming a fine deep red in the sun. Stalk quite slender, half an inch long, planted in a narrow funnel-shaped cavity. Calyx small, and set in a shallow, rather narrow basin. Flesh remarkably white, very tender, juicy, and with a slight perfume. Very good, almost best. Ripe in October and November. A regular bearer and a handsome dessert fruit.

There is a variety under name of *Striped Fameuse*, claimed to be distinct, the fruit being more striped and less highly colored.

FAMILY.

McLoud's Family.

A native of Georgia. Tree a fine regular grower and productive.

Fruit medium, oblate conical, yellowish, shaded, striped, and splashed

Family.

with dull red over half or more of its surface, thickly sprinkled with large light dots. Stalk short and small. Cavity pretty large, slightly russeted. Calyx closed. Segments medium, partially recurved. Basin medium, a little wrinkled. Flesh white, tender, juicy, mild, pleasant, subacid. Very good. August, September.

FANCHER.

Origin unknown.

Fruit large to very large, globular, regular. Surface smooth, yellow, blushed. Flesh white, fine-grained breaking, juicy, very sweet. Good to very good. Baking. September, October. (Warder.)

FANNY.

Originated near Strasburgh, Lancaster Co., Pa., on the farm formerly owned by Jacob Beam. Tree vigorous, spreading, very productive. Young wood dark grayish purple, two shades darker than Red Astrachan, and grayish.

Fruit large, roundish oblate, slightly conic, deep rich crimson red,

Fanny.

moderately sprinkled with light dots. Stalk short, small. Cavity large, deep. Calyx closed. Segments short. Flesh white, a little stained next the skin, tender, juicy, pleasant subacid. Very good. Core small. August. A new Apple of great promise as a market sort.

FARLEIGH PIPPIN.

Farley Pippin.

Originated at Farleigh in Kent, England. Tree strong, vigorous, upright, hardy, productive.

Fruit medium, oblong conical, ribbed, yellowish, brownish red in the sun. Flesh greenish, firm, rich, and sugary. January to April. (Lind.)

FARLEY'S RED.

A native of Oldham, Ky. Tree a moderate grower, hardy and productive.

Fruit roundish, inclining to conic. Skin yellowish, shaded and striped with deep crimson, and specked with light dots. Flesh whitish, very firm, crisp, juicy, with a pleasant vinous flavor. Good. January, April.

FATHER.

A seedling originated about 1795 by General Amos Hall, in West Bloomfield, Ontario Co., N. Y. Tree a thrifty, upright grower, forming a handsome head, a good and constant bearer.

Fruit medium, nearly oblate, more or less ribbed, greenish yellow. Flesh whitish, very tender and juicy, subacid. Good. November, December.

FAUST

Faust's Winter.

Foust.

Origin, North Carolina.

Fruit medium, roundish, yellow, sometimes faintly shaded with red in the sun, and thinly sprinkled with light dots. Stalk short, stout. Calyx nearly closed. Flesh whitish yellow, moderately juicy, pleasant subacid. Good, almost very good. November, December.

FAVORITE.

From Kentucky.

Fruit small, roundish, yellow, striped and splashed with red. Flesh yellow, juicy, mild subacid. Good. November, January. (Elliott.)

FAY'S RUSSET.

Origin, Bennington, Vt., on the farm of Mr. Fay. Tree moderate grower and very productive.

Fruit rather below medium size, oblate conic. Color light yellow, mostly covered with russet, having a crimson cheek obscurely striped. Stalk short and small, inserted in a moderate acute cavity. Calyx partially closed. Segments long, in a shallow somewhat furrowed basin. Flesh white, tender, sprightly, pleasantly subacid. Very good. April, June. Core small.

FEARNS PIPPIN.

Clifton Nonsuch.

Ferris Pippin.

Florence Pippin.

An English variety, not as desirable here as there. Tree upright, vigorous, hardy, and productive.

Fruit medium, roundish oblate, greenish yellow, becoming red in the sun. Flesh yellowish white, firm, juicy, rich, and pleasant. November, March. (Lind.)

FEDERAL PEARMAIN.

An old English sort, once prized for the dessert.

Fruit small, roundish conical, yellowish, with red and streaks of red in the sun, patches and dots of russet. Flesh fine, delicate, very juicy, rich sugary, vinous. December to March. (Hogg.)

FELL'S WINTER SWEET.

A variety received from F. K. Phoenix, of Illinois. Origin unknown. Tree a great bearer.

Fruit medium, roundish, greenish yellow, with cheek of brown crimson in the sun. Flesh white, mild, rich, sweet. Good. Valuable for cooking and keeping only.

FENLEY.

Finley. Findley. Horse, erroneously.

This Apple originated in Kentucky, and was first brought into notice by the gentleman after whose name it has been called. It is grown to considerable extent South and West, and counted valuable, especially for kitchen use. Tree vigorous, upright, and productive. Young wood dark reddish, grayish, downy.

Fruit large, oblate, slightly conic, pale yellow or yellowish, sprinkled with a few brown dots. Stalk short. Cavity broad, russeted. Calyx closed. Basin pretty large. Flesh yellow, crisp, juicy, pleasant subacid. Good to very good. September.

FENOUILLET GRIS.

Fruit small, roundish. Skin light russet on yellow ground. Flesh firm, with a saccharine, perfumed flavor. Good. December to February.

FENOUILLET JAUNE.

Embroidered Pippin. Drap d'Or. Pomme de Caractère.

A French fruit, which has not proved of much value here.

Fruit small, roundish, yellow gray russet network. Flesh white, firm, aromatic flavor. Good. October to March.

FENOUILLET ROUGE.

Bardin. Court-pendu Gris.

Fruit small, roundish. Skin rough, grayish, with dark brownish red. Flesh firm, sugary. Good. October, January.

FERDINAND.

A seedling of Pomaria, S. C. Tree vigorous, upright.

Fruit large, oblate, deep orange yellow, moderately sprinkled with large brown dots. Stalk short. Calyx large, closed. Flesh yellow, moderately juicy, tender, mild subacid. Good to very good. November to March.

FERRIS.

Rhode Island Seek no Further. Westchester Seek no Further.

An old variety of unknown origin, brought into Westchester Co., N. Y., about sixty years ago, where it is quite extensively grown and considered a profitable market apple. The tree makes an upright, round, rather open head, a great bearer every other year, and moderate bearer in alternate years.

Fruit large, oblate, inclining to conic, whitish green, shaded, splashed, and striped over most of the surface with shades of crimson. Flesh

white, tender, juicy, refreshing, vinous, mild subacid. Very good. November, December.

FERRIS.

Origin, Wilmington, Del., where its value is mainly for its keeping qualities and productiveness.

Fruit below medium, roundish oblate, slightly conic, whitish, shaded and indistinctly splashed with dark red. Flesh greenish white, rather firm, juicy, subacid, good. March, April.

FETT.

Fat Apple.

Origin unknown.

Fruit small to medium, roundish oblate, red shaded and striped with crimson. Stem slender. Cavity almost closed, or appearing as if full. Flesh white, sometimes stained under the skin, crisp, subacid. Good. January.

FIELD.

Originated in York Co., Pa. Tree an upright grower, productive.

Fruit medium, roundish, whitish shaded, splashed, and striped with crimson. Flesh yellowish, crisp, juicy, pleasant, mild subacid, half spicy quince-like flavor. Good. November, January.

FINK.

Fink's Seedling.

Origin, farm of Joseph Fink, Somerset, O. Tree a strong, vigorous, upright grower and a profuse bearer.

Fruit small, oblate, whitish yellow, with a crimson cheek in the sun. Flesh whitish, fine-grained, compact, moderately pleasant, aromatic, subacid. Good to very good. A long keeper, often the fruit of two years' growth being shown at the same time.

FIRST AND LAST.

An English culinary Apple.

Fruit medium, roundish, narrowing toward each end, yellow with crimson in the sun, and brown russet. Flesh yellowish, tender, sweet, brisk, spicy aroma. September to May. (Hogg.)

FISHKILL BEAUTY.

Origin, Fishkill, N. Y. Tree vigorous, spreading.

Fruit medium or above, roundish oblate, whitish yellow, bluish in the sun. Flesh white, very tender, juicy, mild subacid. Good. September, October. Apt to decay on the tree.

FISH'S SEEDLING.

Origin, Keene, New Hampshire. Tree vigorous and productive, highly esteemed in its locality

Fruit medium, oblate, oblique, deep red on the sunny side, indistinctly striped with darker red and yellow, and sprinkled with yellow dots. Flesh greenish white, tender, melting, vinous, saccharine flavor. Good. October, November.

FISKE.

Origin unknown. Tree productive.

Fruit large, roundish oblate, pale yellow, shaded, and faintly splashed with shades of crimson. Flesh white, crisp, tender, juicy, pleasant, subacid. Good to very good. December to March.

FLAKE'S FALL.

Originated with the late Col. Flake, of Mercer, Pa., where it is esteemed a valuable and profitable apple, either for market or the table. Tree a moderate grower, rather upright, a good bearer.

Flake's Fall.

Fruit large, form oblate, slightly conic. Color yellowish, overspread, shaded, striped, and splashed with light and dark crimson, becoming very dark in the sun, thickly sprinkled with light and russet dots, some with dark centre. Stalk very short, and rather stout. Cavity large, deep, russeted, the splashes and nettings extending outside. Calyx open, or partially closed. Segments large, to a point, and rather separated. Basin medium, uneven. Flesh white, tender, moderately juicy, mild subacid, peculiarly aromatic. Core small. Very good. October, November.

FLANDERS PIPPIN.

From Berkshire, England.

Fruit medium, oblate, ribbed, greenish yellow, dull red in the sun. Flesh white, tender, juicy, brisk subacid. Cooking. October, November. (Hogg.)

FLANDERS REINETTE.

Reinette de Flandre.

Tree vigorous, productive.

Fruit medium, roundish, yellow, with grayish red in the sun and near the stalk. Flesh yellowish white, firm, sugary. December to January. (Alb. Pom.)

FLAT PIPPIN.

Needles.

Origin, Ohio.

Fruit large, oblate, ribbed, greenish white, tinge of red in the sun. Flesh whitish, juicy, subacid. Good. November, December.

FLAT SWEET.

An old Eastern fruit, and much valued where known.

Fruit large, oblate, slightly conic, yellow, sometimes with sunny cheek, and slight russet. Flesh white, tender, juicy, with a fine, rich, saccharine flavor. Good. Valued for baking. October to March.

FLAT SWEET.

From Illinois.

Fruit medium or below, oblate, yellow, splashed, striped, and shaded with light and dark crimson over all, few large light dots. Stalk short. Flesh white, stained next the skin, firm, juicy, mild subacid, scarcely sweet. Good. September.

FLEET'S NONPAREIL.

Origin unknown.

Fruit medium, oblate, slightly conic, pale yellow or whitish. Flesh white, crisp, juicy, brisk subacid. Good for cooking. September.

FLEINER.

Of German origin. Tree vigorous, upright, productive. Wood dull reddish brown, slightly grayish.

Fruit medium, oblong conical, whitish yellow, shaded with crimson in sun. Flesh white, tender, juicy, brisk sharp subacid. Good. October, November.

FLORA.

A Southern Apple.

Fruit medium, oblate, yellowish, shaded, splashed, and mottled with crimson. Flesh whitish, mild subacid. Hardly good. August.

FLORY.

Flory's Bellflower.

Sheep Shire.

Origin, Montgomery Co., Ohio. A new variety, highly regarded in the vicinity of its origin. Tree upright grower, abundant bearer.

Fruit medium, roundish conical, rich yellow, with small patches of russet and minute raised russet dots. Flesh yellowish, tender, moderately juicy, subacid. Good. October, November.

FLOWER OF KENT.

A large and handsome English Apple, chiefly valued for baking and kitchen use.

Fruit quite large, roundish conic, tawny yellow, washed with dull red, with occasionally a few stripes of brighter red. Flesh greenish yellow, abounding with a lively subacid juice. Good cooking. October to January.

FLUSHING SPITZENBURGH.

This variety has been confounded with the Esopus Spitzenburgh, but is really quite distinct. The tree makes strong reddish brown shoots, different from the slender yellowish ones of that sort.

The fruit is roundish conical. Stalk set in a narrow cavity projecting beyond the fruit. Skin nearly covered with red, on a greenish yellow ground, dotted with large fawn spots, and coated with a slight bloom. Calyx small, in an even basin. Flesh white, juicy, crisp, nearly sweet, and of pleasant flavor, but without the brisk richness or yellow color of the Esopus Spitzenburgh. Good. October to February.

FOCHT.

A seedling of Lebanon Co., Pa. Tree forms a low open head, productive.

Fruit large, oblate, slightly conic, pale yellow, sometimes with a blush. Flesh white, tender, juicy, good, subacid. October, December. Excellent for culinary purposes.

FOOTE'S NONPAREIL.

Origin, farm of Jonathan Foote, Lee, Mass. Tree thrifty, vigorous, spreading, an annual bearer.

Fruit small, oblong conic truncated, yellow shaded and indistinctly splashed with crimson. Flesh firm, juicy, pleasant aromatic subacid. Very good. Core large. November.

FORANGE.

Origin, Fairfield Co., Ohio. Tree good grower, round head, good bearer.

Fruit large, pale yellow. Flesh white, fine-grained, rich sweet. Good. September.

FORD APPLE.

Origin, farm of David Ford, Canaan, Columbia Co., N. Y.

Fruit large, roundish, slightly conical. Color rich yellow. Flesh yellowish white, solid, moderately tender, with a high, rich, rather acid flavor. Good. October, January.

FOREST.

Red Codlin.

This variety we received from J. S. Foster, New Hartford, N. Y., who does not claim it as original, but that it is probably a foreigner. We have not been able to identify it with any known sort. Tree of upright growth, very hardy, and an annual bearer.

Fruit above medium, roundish oblong conical, often ribbed, yellow, mostly overspread, shaded, splashed, and striped with faint reddish crimson, and many large light dots. Stalk rather short. Cavity deep, irregular. Calyx small, closed. Basin small, abrupt, furrowed. Flesh yellow, crisp, tender, juicy, rich, pleasant, slightly aromatic, subacid, almost sweet. Core small. Very good. December to March.

FOREST STYRE.

Styre. Stire.

A cider fruit, from Gloucestershire, England. Tree upright, willow-like in growth. Fruit small, roundish oblate, pale yellow, blush in sun. Flesh firm, brisk acid. (Lind.)

FORGE.

Origin, Sussex Co., England. Tree strong, stocky, short-jointed, forming a spreading open head, productive.

Fruit small to medium, roundish oblate, obscurely ribbed, whitish yellow, overspread, shaded, splashed, striped, and mottled with red. Flesh yellowish white, tender, juicy, pleasant, subacid. Very good. October, December.

FORMAN'S CREW.

An old dessert Apple, originated in Glamorganshire, England. Tree healthy, upright. Young wood reddish chestnut, downy.

Fruit below medium, oblate conic, yellowish green, brownish in sun. Flesh greenish yellow, juicy, rich subacid. November, February. (Lind.)

FORT MIAMI.

Origin near Fort Miami, Ohio. Tree thrifty, healthy, productive, but not an early bearer.

Fruit medium, roundish oblong conic, truncated, pale yellow with a brownish tinge, considerably russeted in the sun. Stalk rather short. Cavity medium, acute, deep. Calyx open. Basin abrupt, corrugated. Flesh yellowish, fine, crisp, juicy, rather rich subacid, aromatic. Very good. March to May.

FOSTER SWEET.

Origin unknown. Introduced by J. W. Foster, Dorchester, Mass.

Fruit medium, roundish oblate, slightly conic, obscurely ribbed, whitish yellow, shaded with dark red and stripes and splashes in the sun, few light dots. Stalk short. Cavity small. Calyx closed. Basin rather deep. Flesh whitish, juicy, tender, mild subacid, almost sweet. Good to very good. Core medium. September.

FOULDON PEARMAIN.

Horrex's Pearmain.

Origin, Norfolk, England.

Fruit medium, roundish, pale yellow, blush in the sun. Flesh yellowish white, firm, crisp, brisk, sharp subacid. November to March. (Lind.)

FOUNDLING.

Shirley.

Groton.

Origin, Groton, Mass. Tree moderately vigorous, spreading, productive.

Fruit above medium, roundish oblate, inclining to conic. Color yellowish green, striped and shaded with deep rich red. Stalk short, slender, in a large, somewhat furrowed cavity. Calyx closed. Basin small, furrowed. Flesh yellow, tender, juicy, with a pleasant, rich vinous aroma. Very good. August, September.

FOURTH OF JULY.

Siberian August.

Tetofsky, erroneously.

McAdow's June.

Stewart's Nonpareil?

August Apple.

A German Apple, introduced by C. F. Jaeger, of Columbus, Ohio.

Fourth of July.

Valuable mainly for its hardiness and early maturity as a cooking or market variety. Tree a strong upright grower, forming a fine head. Young shoots long dark reddish brown.

Fruit medium or below, roundish oblate conical, slightly ribbed, whitish yellow, covered with a thin whitish bloom, and striped and splashed with bright red, large light dots. Stalk rather short and slender, often with bracts. Cavity medium, regular. Calyx closed. Segments rather long, generally recurved. Basin small, slightly uneven. Flesh white, juicy, sprightly, brisk subacid. Good. Core small. July. In fruit this closely resembles the Tetofsky, but the color of the wood, habit of growth, and foliage of old trees render its distinctiveness plain.

FOX-WHELP.

An old English cider Apple.

Fruit medium, roundish, ribbed at crown, yellow and red mixed, and streaked. Flesh firm. October, November. (Lind.)

FRAISE.

Of French origin. Tree moderately vigorous, productive.

Fruit small, roundish conical, yellow, mostly overspread, and washed with bright red. Flesh fine-grained, tender, subacid. (Soc. V. M.)

FRAMBOISE.

Framboos. Calville Rouge d'Automne, incorrectly.

Of German origin.

Fruit medium to large, roundish oblong, truncated, somewhat ribbed, greenish yellow, spotted and striped with shades of bright and deep red, much red in sun. Flesh white, fine, tender, mellow, juicy, sugary. September. (An. Pom.)

FRANCHOT.

Originated in Otsego Co., N. Y. Tree productive.

Fruit medium, roundish conical, yellow, shaded and splashed with red. Flesh yellowish, juicy, crisp, pleasant, aromatic. Good. October to January.

FRANKLIN'S GOLDEN PIPPIN.

Sudlow's Fall Pippin.

Dr. Hogg says: This is an American Apple, and was introduced into England by John Sudlow.

Fruit of medium size, roundish, slightly conic, very regular in shape, rather broadest at the base, deep yellow, freckled with numerous dark spots. Flesh pale yellow, crisp, juicy, rich subacid. Good to very good. The tree grows freely, and forms an upright head. October.

Under the name of *Franklin Golden Pippin* we have received an apple from Illinois, and now somewhat grown there, which is quite distinct from the above. It was introduced West from Pennsylvania, under name of *Golden Pippin*, but in its new locality has had attached, by whom we know not, the prefix of Franklin. There are so many Golden Pippins that it is difficult to decide which shall be entitled to priority of name.

Fruit medium, roundish conical, slightly ribbed, pale lemon yellow moderately sprinkled with light and gray dots. Stalk short, slender. Cavity deep. Calyx firmly closed. Basin corrugated. Flesh yellowish, tender, moderately juicy, mild subacid. Very good. November-December.

FREEMAN.

Origin, New Jersey. Tree productive.

Fruit medium, ovate truncated conical, mottled and splashed with red. Flesh white, often stained next the skin, tender, slightly subacid, nearly sweet. Good to very good. Valued mainly as a late keeper.

FREEZE AND THAW.

Of Pennsylvania origin.

Fruit medium, oblate, slightly conic, light yellow, with shades and splashes of red. Flesh whitish, rather firm, subacid. Poor. November to February.

FREMONT PIPPIN.

Originated on the farm of James Armitage, Soleberry, Pa.

Fruit medium, roundish conical, ribbed, lemon yellow, slightly shaded with crimson in the sun. Stalk long. Cavity deep. Calyx small, closed. Basin small. Flesh white, crisp, juicy, brisk subacid. Very good. Core medium. January, February.

FRENCH.

An old New England variety, origin unknown.

Fruit medium to large, oblate, slightly conical, yellow, striped and splashed with red. Flesh yellow, crisp, rich acid. Good. November.

FRENCH BELLFLOWER.

Bellefleur de France.

Double Bellefleur.

Dobbel Bellefleur.

A French Apple, described in the *Annals of Pomology* as:—

Fruit very large, roundish, slightly conical, yellowish, with carmine red cheek in the sun. Flesh yellowish white, half-tender, melting, sweet, subacid.

FRENCH CRAB.

Ronalds describes this as follows: Tree very hardy, somewhat pendent in its growth, and bears well. A long keeper.

Fruit above medium, globular, green, becoming yellow at maturity. Flesh firm, pleasant, brisk.

FRENCH NONPAREIL.

Origin unknown. Tree vigorous, moderately productive.

Fruit medium, roundish oblate, sides unequal, greenish yellow, shaded, splashed, and marbled with red. Flesh whitish, crisp, juicy, pleasant, mild subacid. Good to very good. Core small. October, November.

FRENCH PIPPIN.

Of unknown origin. Tree hardy and vigorous, with dark reddish brown shoots.

Fruit rather large, roundish oblate, greenish yellow, with a faint dull cheek, thinly sprinkled with large brown dots, and traces of russet. Flesh yellowish, tender, pleasant, subacid. Good. Core small. October, January.

Quite distinct from Newark or French Pippin, which has slender branches. There are several apples under name of French Pippin, and it is difficult to decide which has priority to the name, except as connected with the oldest description.

FRENCH REINETTE.

Reinette Franche.	Reinette Blanche.	Weisse Reinette.
Reinette Blanche, dite Prime.	Franz Rennette.	Franz'sische Edelreinette.
Reinette de Normandy.		

An old French Apple described by various authors, valued mainly as a long keeper. Coxé says the tree is handsome, of vigorous growth and an abundant bearer.

Fruit large, roundish oblong conical, truncated, yellow, with some russet, and red in sun. Flesh firm, yellowish white, rich and sprightly subacid.

FRENCH RUSSET.

French Pippin.

This old Apple is described in Ronalds as a sauce or cooking fruit of medium size, globular, yellowish, with faint red in the sun, considerably russeted. Flesh white, tender, subacid. November, January.

FRENCH'S SWEET.

Origin, farm of B. V. French, Braintree, Mass. Tree very productive.

Fruit above medium, roundish oblate, yellow, with a shade of brown in the sun. Flesh yellowish, crisp, moderately juicy, compact, rich, sweet. Valued for cooking. October, November.

FRIAR.

An English cider Apple, described by Hogg as of good size, somewhat conical, greenish, with dull red in the sun. Tree vigorous and productive.

FRISLAND REINETTE.

Reinette de Frisland.

Of German origin, described in the Album of Pomology. Tree vigorous, productive.

Fruit large, roundish oblate conical, bright yellow, brownish red in the sun, reddish gray near the stalk. Flesh white, firm, agreeable, subacid. December to January.

FRONCLIN.

Originated in Lancaster Co., Pa., where the original tree is supposed to be over one hundred years old. It is a rapid grower, bearing profusely even when young, but the fruit is rather too acid to please many tastes.

Fruit below medium, oblate, whitish, shaded and splashed with rich red. Flesh yellowish white, tender, juicy, sharp subacid. Good. September, November.

FRONT DOOR.

From Michigan, origin unknown.

Fruit medium to large, oblate, yellow, striped and splashed with red. Flesh whitish, tender, juicy, subacid. Good. September.

FULLERTON SWEET.

Origin unknown, found in the orchard of William Fullerton, Orange Co., N. Y. It much resembles the Autumn Sweet Bough.

Fruit below medium, roundish conical, pale yellow, with a few brown dots. Flesh white, juicy, tender, honeyed sweet. Very good. Core small. October, November.

FULTON.

A Western fruit, originated in the orchard or nursery of A. G. Downing, Canton, Fulton Co., Ill., a vigorous grower, hardy, regular in form, an annual and productive bearer. Young shoots slender, clear light reddish brown.

Size about medium, oblate, light yellow, sprinkled with green or gray dots, having a blush on the sunny side. Stalk three-fourths of an inch, rather slender, inserted in a broad deep cavity. Calyx large, open. Segments small, recurved, in a pretty large basin. Flesh yellowish, juicy, tender, mild subacid, almost sweet. Good to very good. Core small. November to February.

FULTON STRAWBERRY.

Origin same as the Fulton. Tree vigorous, stout, spreading grower, hardy, does not come early into bearing. Young wood grayish brown, slightly downy.

Fruit medium, oblate, whitish, mostly overspread, striped, splashed, and mottled with shades of red. Flesh whitish, tinged with pink, juicy, pleasant subacid. Good. Core small. September.

FULWOOD.

Green Fulwood.

Lindley and Hogg both describe this culinary Apple as large, roundish, ribbed, green, with broken stripes of dull red in sun. Flesh greenish white, firm, crisp, brisk acid. November to March.

There is also a *White Fulwood* described which is probably identical with the above.

GABRIEL.

Ladies' Blush.

Tree of rather slender growth, productive.

Fruit medium, roundish oblate, whitish-green, shaded and splashed with crimson, and sprinkled with gray dots. Stalk medium, inserted in a cavity of moderate depth. Calyx partially closed, set in a moderate uneven basin. Flesh yellowish, tender, juicy, rich subacid. Core small. Good to very good. October and November.

GAESDONKER GOLD REINETTE.

A German dessert Apple.

Fruit below medium, oblate, golden yellow, reddish cheek in sun, and some russet. Calyx partially closed, with long, pointed segments. Flesh yellowish, fine, firm, juicy, rich aromatic subacid. December to March. (Hogg.)

GANGES.

Fruit pretty large, oblong, green, with red in the sun. Flesh yellowish, subacid. Cooking. (Lind.)

GARDEN.

Originated with Hezekiah Ellis, in Spottsylvania Co., Va.

Fruit small, oblate, yellow, shaded, splashed, and striped with two shades of red nearly over the whole surface, moderately sprinkled with light and gray dots. Stalk long, slender. Cavity medium, thinly russeted. Calyx closed. Segments rather long, partially recurved. Basin abrupt, slightly corrugated. Flesh white, a little stained next the skin, crisp, juicy, mild subacid. Good to very good. November, December.

Warder, in his *American Pomology*, page 435, describes a *Garden Apple*, and gives at the same time *Garden Royal* as a synonym, which latter must be erroneous, as there is a distinct fruit under that name. Warder's description is as follows:

Fruit pretty large, roundish flat, regular. Surface smooth, yellowish green, slightly shaded red, scattered stripes carmine, dots minute black. Basin wide, regular, small, closed. Cavity deep, acute, regular, green. Stem short to medium, sometimes knobby. Core wide, closed or open, regular, clasping the eye. Flesh pale yellow or whitish, tender, fine-grained, juicy, subacid, aromatic, saccharine, agreeable. August to October.

GARDEN.

Comstock's Garden.

Origin uncertain. Tree moderately vigorous, productive.

Fruit medium size, roundish oblate. Skin whitish, nearly covered with narrow stripes of light and dark red, and thickly sprinkled with conspicuous light dots. Stalk short and slender. Calyx nearly closed. Basin medium, slightly furrowed. Flesh white tinged with red, not very tender, but valuable as a cooking fruit. September, October.

GARDEN ROYAL.

Originated on the farm of——Bowker, Sudbury, Mass. Tree of

moderate, very upright growth, forming a beautiful roundish, regular even head, very productive. Young shoots dark dull reddish brown, slightly grayish or imperfect downy.

Garden Royal.

Fruit medium or below. Form roundish oblate, very slightly conic. Color greenish yellow, shaded, striped, and splashed with rich red, a little dull or grayish toward the stalk. Sprinkled with light and gray dots. Stalk medium, slender. Cavity deep, acute. Calyx open or partially closed. Segments sometimes a little recurved. Basin shallow, slightly uneven. Flesh yellow, very tender, juicy, rich, mild subacid, aromatic. Best. Core small. Last of August, September.

GARDEN STRIPE.

Tree moderately vigorous, spreading, and drooping.

Fruit below medium, roundish oblate, yellowish, broadly striped, splashed and shaded with shades of deep red. Flesh tender, juicy, subacid. Good. September.

GARDEN SWEET.

A New England Apple. Tree hardy, thrifty, and productive. Young shoots strong, light reddish brown, slightly downy.

Fruit medium, roundish oblong conic. Color yellow, shaded and splashed with crimson nearly over the whole surface, many light and gray dots. Stalk rather short and small. Cavity acute. Calyx closed. Segments partially recurved. Basin large, abrupt, corrugated. Flesh yellowish white, tender, juicy, rich, sweet. Very good. Core medium. September and October. A valuable variety for cooking or stock feeding, continuing a long time in use.

GARDNER SWEET.

Gardner Sweeting.

Kenrick says: Tree grows slow, but is very productive.

Fruit above medium, roundish, pale color, covered with small specks, bright blush next the sun. Flesh firm, sweet. December to March.

GARDNER'S SWEET PEARMAIN.

An old Long Island Apple.

Fruit medium, oblate, sides unequal, yellowish, shaded, splashed, and striped with light and dark red nearly over the whole surface, thickly sprinkled with light dots. Flesh whitish, tender, juicy, sweet, and pleasant. Good. Core small. September.

GARRETTSON'S EARLY.

Somerset Harvest.

Originated on the farm of Jno. Garrettson, Somerset, N. J. Tree vigorous, upright spreading, productive. Young wood brown, slightly downy.

Fruit medium, roundish conic, yellowish, thickly covered with light specks. Stalk short. Cavity deep, acute. Calyx closed, in a small, abrupt, furrowed basin. Flesh white, tender, juicy, brisk subacid. Good, valuable for cooking. September.

GARTER.

A cider fruit of England. Fruit medium, oblong, pale yellow and red.

GAULT'S BELLFLOWER.

Fruit large, roundish, pale yellow. Flesh white, coarse. October, December. (Elliott.)

GAUMONT.

Supposed French origin.

Fruit large, roundish oblong oblate, ribbed, golden yellow with a few light gray dots. Stalk short. Calyx open. Basin very deep. Flesh yellow, compact, juicy, rich subacid. October, November.

GENERAL HASKELL.

Origin said to be Graves Co., Ky. Tree a good grower and productive.

Fruit medium, red, esteemed for its fine appearance and being a long keeper.

GENESEE CHIEF.

Origin unknown. Tree a strong, vigorous grower.

Fruit large, roundish conical, uneven or ribbed, whitish, almost waxy, shaded with crimson in the sun, few faint dots. Flesh white, tender, juicy, subacid. Good. Core large. September. Cooking.

GENEVA PIPPIN.

Winter Pippin of Geneva.

An Apple bearing the above local name was found growing in the garden of Mrs. Crittendon, Geneva, and is deserving of notice. The appearance of the tree and fruit is strikingly like that of the Fall Pippin, but is a late keeper, continuing in perfection until May. Young wood reddish brown, slightly downy.

Geneva Pippin.

Fruit large, roundish oblate, fine yellow, with rarely a bronzed cheek, sparsely covered with gray dots. Stalk short and small, inserted in a narrow cavity. Calyx open. Segments long. Basin open. Flesh yellow, tender, juicy, vinous. Very good or best. January to May.

GENTLE'S LARGE RED.

Origin unknown.

Fruit large, roundish, slightly conic, sides unequal, yellow, shaded, splashed, and striped with dull red, many light and brown dots. Stalk long and slender. Calyx closed. Flesh whitish, juicy, tender, mild, pleasant subacid. November. Good.

GEORGE.

Origin, Muskingum Co., Ohio. Tree healthy, spreading, an abundant bearer.

Fruit medium, roundish oblate, pale yellow, with considerable russet specks and markings. Calyx large, open. Flesh whitish, firm, juicy, mild acid. Good. July.

GESTREIFTER SOMMER ZIMMETAPFEL.

La Cannelle.

An excellent little German dessert Apple described by Hogg. Tree a good grower and bearer.

Fruit small, roundish oblate, lemon yellow, with crimson stripes in the sun. Flesh yellowish white, fine, juicy, very aromatic, cinnamon. August and September. (Hogg.)

GEWISS GOOD.

Gewiss Guth. Indeed Good.

Origin, Berks Co., Pa. Tree vigorous, upright spreading.

Fruit medium, roundish oblate, often conic, light yellow, slightly shaded with carmine. Stalk short, inserted in a deep, narrow, slightly russeted cavity. Calyx partially closed. Basin deep, slightly corrugated. Flesh juicy, tender, crisp, with a somewhat spicy, subacid flavor. Good. December, February.

GIANT.

A Pennsylvania variety.

Fruit large, roundish conical, dull red, striped. Flesh greenish white, tender. Poor.

GILES.

Elliott describes this as from Wallingford, Conn.

Fruit medium, conical, dark red. Flesh tender, juicy. Very good. October, November.

Gilpin.

GILPIN.

Carthouse.
Roman Knight.

Small Romanite.
Romanite of the West.

Gray Romanite.
Little Romanite.

A handsome cider fruit, from Virginia, which is also a good table fruit from February to May. A very hardy, vigorous, and fruitful tree.

Fruit of medium size, roundish oblong. Skin very smooth and handsome, richly streaked with deep red and yellow. Stalk short, deeply inserted. Calyx in a round, rather deep basin. Flesh yellow, firm, juicy and rich, becoming tender and sprightly in the spring. Good.

GIPSON'S KENTUCKY.

Gipson's Kentucky Seedling.

Originated on the farm of A. Gipson, Calhoun Co., Ky.

Fruit below medium, roundish, sides unequal, greenish, with dark red in the sun. Flesh pale yellow, juicy, sprightly subacid. January to April.

GLADNEY'S RED.

Originated in Mississippi.

Fruit medium, roundish, yellowish, shaded, mottled, and obscurely striped with light red nearly over the whole surface, and covered with a thin bloom. Stalk long and slender. Calyx closed, with long reflexed segments. Flesh yellowish, rather firm, moderately juicy, slightly aromatic, subacid. Core small. Good. January, February.

GLANZ REINETTE.

Tyroler Glanz-reinette.

A beautiful waxen-like Apple of German origin.

Tree a strong grower, forming a round head, very productive.

Fruit medium, roundish oblate, waxy lemon yellow, blush of red in the sun. Stalk long. Cavity russeted. Basin furrowed. Flesh snow white, fine, juicy, rich, sugary, vinous. December. (Hogg.)

GLEASON SWEET.

Fruit medium, roundish conical, yellow, shaded and splashed with crimson over most of the surface. Flesh white, tender, juicy, scarcely sweet. Good. Core small. November.

GLENDALE.

Warder says: "Believed to have originated near Glendale, Hamilton Co., Ohio." Tree vigorous, thrifty, spreading, productive.

Fruit large, roundish, somewhat conical, yellow, striped and clouded with bright red, dots small, russet. Flesh yellowish, mild, subacid, almost saccharine. Good. September, October.

GLORIA MUNDI.

Monstrous Pippin.

Belle Josephine.

Baltimore of some.

Glazenwood Gloria Mundi.

Baltimore Pippin.

New York Gloria Mundi.

American Mammoth.

Mississippi?

Ox Apple.

Origin unknown. Tree vigorous. Not productive or profitable.

Fruit very large, roundish oblate, ribbed, greenish yellow. Flesh coarse, tender, with a pleasant acid flavor. Good. October to January.

GLORY OF ENGLAND.

Fruit large, oblate, ribbed, yellow, with streaks and dots of crimson, whitish specks and some russet. Flesh greenish yellow, tender, soft, juicy, sprightly acid. Cooking. (Hogg.)

GLORY OF THE WEST.

Tree a strong vigorous grower and great bearer.

Fruit large, oblate, ribbed, yellow, red in the sun, minute russet dots. Flesh yellowish white, firm, juicy, brisk, slightly perfumed, acid. October, December. (Hogg.)

GLOUCESTER WHITE.

Origin, Gloucester Co., Va. Tree vigorous and very productive.

Fruit medium, roundish oblate, fine yellow. Flesh yellow, juicy, crisp, pleasant, subacid. Good. October, November.

GOBLE RUSSET.

Sweet Seek-no-Further.

Origin unknown. Elliott describes the fruit as medium to large, oblong flattened, yellow russet, marbled with red. Flesh whitish yellow, dry, sweet. October to December.

GOGAR PIPPIN.

Stone Pippin.

A variety from Edinburgh, Scotland.

Fruit medium, roundish, obscurely ribbed, greenish, with brownish red in the sun. Flesh greenish white, juicy, brisk acid. January, February.

GOLAY.

Originated near Vevay, Indiana.

Fruit medium, oblate, somewhat conic, truncated, yellow, mixed, striped with purplish red, dots minute, gray, scattered, indented. Flesh yellowish white, breaking tender, juicy, rich subacid. Good to best. January to May. (Warder.)

GOLDEN.

Fruit medium, roundish, ribbed, light yellow. Flesh yellowish, acid. July. (Elliott.)

GOLDEN BALL.

Origin, Conn. Tree a vigorous grower, but only a moderate bearer.

Fruit large, roundish, somewhat ribbed, golden yellow, with a few dots. Flesh crisp, tender, subacid. Good. December, March.

GOLDEN BURR.

Burr Knot.

Ronalds describes this as a variety easily grown from cuttings, because of the knots or joints on the shoots.

A large apple, roundish, yellow, with flush of faint red in the sun. Useful for kitchen. November, December.

GOLDEN GOSS.

Received from Western New York. Tree vigorous, upright, productive.

Fruit rather large, roundish conical, slightly ribbed, golden yellow, faintly shaded in the sun with red. Flesh white, firm, juicy, mild subacid. Good to very good. November, December.

GOLDEN HARVEY.

Brandy Apple.

An excellent, high-flavored little dessert Apple from England, of slender growth.

Fruit small, irregularly round. Skin rather rough, dull russet over a yellow ground, with a russety red cheek. Flesh yellow, of fine texture, with a spicy, rich, subacid flavor. The fruit is apt to shrivel. December to April.

GOLDEN KNOB.

Tree vigorous, productive.

Fruit small, roundish oblate, golden yellow, some russet and tinge of red in sun. Flesh greenish white, crisp, juicy, brisk, sweet. December to March.

GOLDEN LUSTRE.

A culinary Apple from England.

Fruit medium, conical, yellow, with patches and stripes of bright red in the sun. Flesh pale yellow, firm, subacid. November to April.

GOLDEN MONDAY.

Monstow's Pepping.

Hogg describes this as from the Berkshire orchards, as a dessert Apple of first-rate quality.

Fruit small, roundish oblate, golden yellow, with crimson dots in the sun. Nettings and lines of thin brown russet. Flesh yellowish white, crisp, sugary, brisk, perfumed. October, December.

GOLDEN NOBLE.

An old English variety, valuable for cooking. Lindley describes it as pretty large, roundish conical, bright yellow with a few small reddish spots and patches of russet. Flesh yellow, tender, pleasant, subacid. November, December.

GOLDEN NONPAREIL.

Fruit small, roundish, golden yellow, with russet and blush red in the sun. Flesh crisp, sharp acid. October, December.

GOLDEN PEARMAIN.

Dutch Pearmain. Ruckman's Pearmain. Red Russet of some.

An old English Apple. Tree upright, very productive.

Fruit medium, roundish conical, yellow, orange in sun. Patches and dots of russet. Flesh yellowish, firm, crisp, juicy, sweet. Very good. November.

Ronalds describes an entirely different Apple under this name, as follows :

Fruit small, oblong roundish conical, yellow, with some slight russet and a good deal of red striping. Flesh firm, rich, and high-flavored. December, January.

GOLDEN PIPPIN.

Golden Pippin.	London Golden Pippin.
Old Golden Pippin.	Warter's Golden Pippin.
Balgone Pippin.	Bayfordbury Golden Pippin.
Milton Golden Pippin.	Pepin d'Or.
Russet Golden Pippin.	Pomme d'Or.
Herefordshire Golden Pippin.	Koenig's Pippelin.
	Reinette d'Angleterre.

The Golden Pippin of the English is the queen of all dessert Apples, in the estimation of the English connoisseurs, as it unites the qualities of small size, fine form, and color, with high flavor and durability. It is a very old variety, being mentioned by Evelyn in 1660, but it still thrives well in many parts of England.

Fruit small, round, and regularly formed, gold color, dotted with gray russety dots, with also obscure white specks imbedded under the skin. Flesh yellowish, crisp, rather acid, but with a rich, brisk, high flavor. Very good. A great bearer, but requires a strong, deep, sandy loam. November to March. Does not succeed well here.

There are many varieties of the English Golden Pippin, differing but little in general appearance and size, and very little in flavor, from the old sort, but of rather more thrifty growth; the best of these are Hughes', and Kirke's new Cluster Golden Pippins.

GOLDEN PIPPIN.

Pittstown Pippin.

This is an old Apple, grown many years ago in Adams, Mass., from whence it was brought to Pittstown, and has been recently christened after that place. The tree is an upright vigorous grower, with large strong branches. Shoots dull brownish red, slightly downy.

Fruit rather large, roundish oblate, sometimes conic, and sides unequal, greenish yellow with a blush in sun exposure. Flesh yellowish, tender, juicy, sprightly subacid. Core rather large. Good for cooking. September and October.

GOLDEN PIPPIN.

Pound Royal of some.
Butter Pippin.

York Pippin.
Large Golden Pippin.

Mammoth.

This Apple is considerably grown in the New England States and Western New York, and is one of the largest of its class, specimens sometimes weighing 20 ounces. Tree very vigorous and very productive on deep rich soils; on light soils it is often a shy bearer, the fruit much smaller.

Fruit very large, roundish, ribbed, greenish yellow, becoming quite yellow at full maturity, slight blush of brown crimson in sun-exposed specimens. Flesh yellowish, coarse, juicy, tender, mild subacid. Core small. Good to very good. November, December.

There is another Golden Pippin sometimes known as Porter in Michigan, which is of medium size, roundish oblate, greenish yellow, mild subacid. Ripe in September and October.

There are also several other Apples under this popular name, many of which doubtless will be found identical with named sorts.

GOLDEN RED.

From Long Island. Origin unknown.

Fruit medium or below, roundish oblate, yellow, shaded, splashed, and mottled nearly over the whole surface. Flesh yellowish, crisp, moderately juicy, pleasant subacid. Core small. December, January. Fruit liable to rot on the tree, not profitable.

GOLDEN REINETTE.

Reinette, Golden.

Wyker Pippin.

Aurore.

Elizabet.

Kirke's Golden Reinette.

Wyggers.

Yellow German Reinette.

Megginch Favorite.

Reinette d'Aix.

Dundee.

English Pippin.

Reinette Giden.

Court pendu Doré.

Princesse Noble, of the French.

The Golden Reinette is a very popular dessert fruit in England and on the Continent, combining beauty and high flavor.

Fruit below medium size, very regularly formed, roundish, a little flattened. Skin smooth, golden yellow, washed and striped with fine soft red on the sunny side, mingled with scattered russet dots. Flesh yellow, crisp, with a rich, brisk subacid. Good. October to January.

GOLDEN REINETTE OF VANDERLAANS.

Reinette dorée de Van der Laans.

Originated with Van der Laans of Rynland, in Holland. Tree strong, stout branches.

Fruit medium, roundish conical, greenish, with indistinct grayish brown spots. Calyx large, half open. Stalk short. Cavity deep. Flesh greenish white, fine, firm, perfumed, subacid. October to December. (Verg.)

The German Golden Reinette may possibly prove identical with the above.

GOLDEN RUSSET.

English Golden Russet. English Golden. Russet Golden.

This is an old English Apple described by Ronalds and Lindley as Golden Russet, and as that is its commonly accepted name in this country we have followed it. It is one of the popular Apples, succeeding in nearly all sections, and especially in rich Western soils. The tree is thrifty, vigorous, spreading, rather irregular, forming a bushy head. Young shoots slender, dull reddish brown, slightly downy, with numerous small white dots. An early bearer.

Fruit medium or below, roundish, or roundish oblate. Skin rough. Color yellow, mostly covered with dull russet, and having a bronzed cheek in the sun. Stalk short, small. Cavity medium, or rather deep. Calyx closed. Segments rather long, often a little recurved. Basin broad, rather large, slightly corrugated. Flesh whitish yellow, fine-grained, rather compact, sprightly, mild subacid. Good to very good. December to March.

GOLDEN RUSSET, OF MASSACHUSETTS.

Tree vigorous, upright, and productive. Young shoots clear reddish brown.

Fruit medium, roundish oblate, conic. Skin golden russet, with a sunny cheek. Stalk small and short, inserted in a deep cavity. Calyx nearly closed. Segments small, recurved. Basin deep, round, and open. Flesh yellowish white, tender, rich, mild, sweet subacid. Very good. January, April.

There are many Golden Russets about the country, and it is difficult to identify them. This is from Massachusetts, and distinct from those grown in New York, and West.

GOLDEN SEEDLING.

Supposed origin, Missouri.

Fruit large, roundish oblate, greenish yellow blush in the sun. Flesh yellowish, juicy, sharp subacid. February to May.

GOLDEN STREAK.

A cider Apple from Somersetshire, England.

Fruit medium, roundish oblate, clear yellow, with stripes of red. Flesh yellow, brisk, pleasant acid. (Hogg.)

GOLDEN SWEET.

Orange Sweeting. Early Golden Sweet.

A celebrated Connecticut fruit. Tree very vigorous, spreading, forming a tree of moderate size, hardy and very productive. Young shoots reddish brown.

Fruit above the medium size, roundish, scarcely flattened, fair, and well formed; when fully ripe, pale yellow or straw color. Stalk about

an inch long, slender at its junction with the fruit. Calyx closed, and set in a basin of moderate depth. Flesh tender, sweet, rich, and excellent. Good to very good. August and September. A valuable sort for cooking, market, or stock feeding.

Golden Sweet.

GOLDEN WILDING.

Origin, near Fayetteville, N. C. Tree thrifty, upright, productive.

Fruit medium, roundish oblate, a little oblique, golden yellow, thickly sprinkled with brown dots. Stalk rather short and small. Cavity deep, russeted. Calyx open. Flesh yellow, firm, crisp, brisk subacid. Core small. Good. November to March.

GOLDEN WORCESTER.

A small dessert Apple described by Ronalds as perfectly round, rich golden, slightly tinged with red. Flesh firm, yellow. January.

GOLD REINETTE VON BORDEAUX.

Bordeauer Gold Reinette.

Hogg describes this as a valuable and beautiful sort. We do not know of its having fruited in this country.

Fruit very large, obtuse pearmain shaped, greenish, becoming rich yellow and washed with bright red in the sun, traces of russet, and gray russet dots. Stalk short, fleshy. Calyx open. Flesh yellowish white, fine, tender, juicy, rich aromatic. December to March.

GOODYEAR.

Goodyear's Seedling.

Origin, Cumberland Co., Pa. Tree a fine grower, and productive.

Fruit medium, roundish, fine red. Flesh firm, juicy, subacid. Good December to April.

GOOSEBERRY.

An English cooking Apple. Tree vigorous, spreading.

Fruit large, roundish conical, greenish yellow, sometimes slight tinge of red in sun. Flesh yellowish, crisp, juicy, brisk subacid. Good to very good for cooking. Core large. December, February.

GOOSEBERRY PIPPIN.

A handsome little English dessert Apple.

Fruit small, roundish, yellow, with splashes and marblings of red. Flesh fine-grained, tender, juicy, brisk, sweet subacid. November to February.

GOULD'S SWEET.

Origin unknown. First brought to notice from Mercer Co., Pa. Tree of rather slow spreading growth, productive.

Fruit medium, roundish oblate conical, yellow, deep orange in the sun, brown dots. Flesh yellowish, moderately tender, juicy, mild, rich, sweet. Core rather small. A good cooking fruit. December to March.

GOVERNOR.

American. Large, yellowish, tinged with red, juicy, acid, cooking. October, January. (Elliott.)

GOVERNOR CHARTER.

Governor Charter's Seedling.

A variety described in the *Prairie Farmer* as a valuable market Apple. Tree hardy and productive.

Fruit medium, roundish conical, obscurely ribbed, light yellow, with blush in the sun. Flesh white, firm, juicy, pleasant, scarcely acid, slightly aromatic. Core small. October.

GRACEY.

Origin, Greenville, Ill.

Fruit above medium, roundish conical, light green, with greenish white specks. Flesh greenish white, coarse, mild subacid. August. (Gar. Mon.)

GRANGE.

Origin, Herefordshire, England. Tree hardy and productive.

Fruit below medium, roundish, yellow. Flesh yellow, firm, crisp brisk. October, November. (Ron.)

GRANGE'S PEARMMAIN.

Grange's Pippin.

An English culinary Apple. Tree hardy, productive.

Fruit large, roundish conical, yellow, with broken stripes of red. Flesh yellowish white, tender, juicy, brisk pleasant acid. November, February. (Hogg.)

GRANIWINKLE.

Originated in one of the eastern counties of New Jersey. Tree vigorous, upright, spreading, productive.

Fruit medium, roundish, slightly conical, yellowish, shaded with light red, and striped and splashed with a deeper shade. Flesh white, fine-grained, juicy, moderately tender, rich pleasant honeyed sweet. Core small. Very good. Valuable for stock, cider, or for cooking. October to December.

GRANITE BEAUTY.

Aunt Dorcas.

Grandmother's Apple.

Clothes-yard Apple.

Origin, on the farm of Z. Breed, Weare, N. H. Tree hardy, vigorous, upright, spreading. An annual bearer. Young wood light reddish brown, slightly downy.

Fruit medium to large, roundish oblong, largest at the centre, and narrowing toward stalk and calyx, uneven surface, or obscurely ribbed. Skin somewhat oily. Color pale yellow, mostly overspread, striped, splashed, and mottled with two shades of red, brown dots. Stalk short, slender. Cavity uneven, or ribbed, acute. Calyx closed. Segments short, erect. Basin medium, corrugated. Flesh whitish, tender, juicy, mild pleasant subacid. Core large, open. Good to very good. December to February.

GRANNY EARLE.

Fruit small, roundish oval, green, striped and splashed with red. Flesh white, crisp, tender. Very good. November, January. (Hov. Mag.)

GRAVENSTEIN.

Grave Slize.

A superb-looking German Apple, which originated at Gravenstein in Holstein, and is thought one of the finest apples of the North of Europe. It fully sustains its reputation here, and is, unquestionably, a fruit of first-rate quality. Tree very vigorous, spreading, forming a large, broad head. Very productive. An early bearer. Young wood reddish brown.

Fruit large, rather flattened, and a little one-sided or angular, broadest at the base. Stalk quite short and strong, deeply set. Calyx large, closed, in a wide, deep, rather irregular basin. Segments long, irregular, recurved. Skin greenish yellow at first, but becoming bright yellow, and beautifully dashed and pencilled, and marbled with light and

deep red and orange. Flesh tender and crisp, with a high-flavored, somewhat aromatic taste. Very good. September and October. A valuable apple for market or cooking, succeeding admirably wherever grown.

Gravenstein.

GREAT UNKNOWN.

Origin unknown. Found in the orchard of S. McDowell, Macon, Ga.

Fruit large, regular, oblate roundish, inclining to conic, yellow shaded and marbled with carmine. Stalk slender. Calyx open. Flesh yellowish, tender, juicy, subacid. Very good. December. (White.)

Green Cheese.

GREEN CHEESE.

Green Crank.	Yellow Crank.	Southern Greening.
Southern Golden Pippin.	Winter Greening.	Carolina Greening.
Green Skin.	Winter Cheese.	Turner's Cheese.
	Greening.	

An old variety, grown largely in Kentucky and other Southwestern States. It has been extensively propagated by suckers, but the exact place of the original tree is unknown. Although not best in quality, it has so many good properties adapting it to the South and Southwest, that it is widely disseminated under the various synonyms given above.

Tree moderately vigorous, upright, and has the habit of blooming late, which gives it a special value. A good bearer and long keeper. Young shoots slender, grayish brown.

Fruit medium, oblate, occasionally oblique, pale greenish yellow, moderately sprinkled with brown dots. Stalk short, slender. Cavity large, deep, russeted. Calyx closed. Segments slightly recurved. Basin broad, deep, uneven. Flesh yellowish white, tender, crisp, juicy, rich, sprightly subacid. Core small, compact. Very good. November to March.

GREEN'S CHOICE.

Origin, Chester Co., Pa. Tree vigorous and productive.

Fruit medium, roundish conical, yellow, striped with red. Flesh tender, juicy, very mild subacid, or almost sweet. Good. Ripe last of August and first of September.

GREEN DOMINE.

Fruit medium, oblate, greenish yellow, washed or obscurely striped with dull red. Flesh whitish, firm, with a pleasant, peculiar flavor. Good. December, February.

GREEN MOUNTAIN PIPPIN.

From Georgia, and much grown there as a market fruit.

Fruit medium, roundish, inclining to oblong, flattened at base and crown, greenish yellow. Flesh white, crisp, juicy, tender, pleasant subacid. Good. November, February.

GREEN NEWTOWN PIPPIN.

Hunt's Fine Green Pippin.	Newtown Pippin.	American Newtown Pippin.
Brooke's Pippin ?	Green Winter Pippin.	Petersburgh Pippin.
Hunt's Green Newtown Pippin ?		

The Newtown Pippin stands at the head of all Apples, and is, when in perfection, acknowledged to be unrivalled in all the qualities which constitute a high-flavored dessert apple, to which it combines the quality of long keeping without the least shrivelling, retaining its high flavor to the last. It commands the highest price in Covent Garden Market, London. This variety is a native of Newtown, Long Island, and it requires a pretty strong, deep, warm soil to attain its full perfection, and in the orchard it should be well manured every two or three years. The tree

is of rather slender and slow growth, and even while young is always remarkable for its rough bark.

Fruit of medium size, roundish, a little irregular in its outline, caused by two or three obscure ribs on the sides—and broadest at the base, next the stalk; about three inches in diameter, and two and a half deep. Color dull green, becoming olive green when ripe, with a faint, dull brownish blush on one side, dotted with small gray specks, and with delicate russet rays around the stalk. Calyx quite small and closed, set in a narrow and shallow basin. Stalk half an inch long, rather slender, deeply sunk in a wide, funnel-shaped cavity. Flesh greenish white, very juicy, crisp, with a fine aroma, and an exceedingly high and delicious flavor. Best. When the fruit is not grown on healthy trees, it is liable to be spotted

Green Newtown Pippin.

with black spots. This is one of the finest keeping apples, and is in eating from December to May, but is in the finest perfection in March.

This is entirely distinct from Yellow Newtown Pippin.

GREEN REINETTE.

Reinette Verte.
Groene Renet.

Groene Franse Renette.
Grune Reinette.

Tree vigorous and healthy, a good bearer.

Fruit medium, roundish, flattened at base, ribbed at apex, yellowish green with a tinge of red. Flesh yellowish white, tender, juicy, aromatic. December to May. (Hogg.)

GREEN SEEK-NO-FURTHER.

White Seek-no-Further. Flushing Seek-no-Further. Seek-no-Further of Cox. Origin in the garden of the late Wm. Prince, Flushing, L. I.

Tree while young very slow in its growth, but makes a compact, well-formed head in the orchard.

Fruit apt to be knotty and unfair. Rather large, roundish conical, yellowish green, sprinkled with green and brown dots. Stalk short, in a moderate cavity. Calyx closed, in a rather deep basin. Flesh white, crisp, tender, juicy, pleasant, mild subacid. Very good. October, January.

GREEN TIFFIN.

Mage's Johnny.

From Lancashire, England. Tree a fair grower and bearer.

Fruit medium, round conical, yellowish green with a few russet and red dots. Flesh white, crisp, tender, acid. September, December. (Hogg.)

GREEN SWEET.

Honey Greening.

Tree vigorous, upright spreading, and productive.

Fruit medium, roundish oblate, somewhat conic. Skin green, sometimes becoming a little yellow at maturity, covered with greenish or light russet dots. Stalk of medium length. Cavity rather deep, covered with russet. Basin shallow and abrupt, somewhat furrowed. Flesh whitish, tender, juicy, sweet, pleasant. Good. December to March.

GREEN SWEET OF INDIANA.

This Apple is somewhat grown in Indiana, and we have not met with it elsewhere.

Fruit medium to large, roundish conical, greenish yellow, with brown dots. Flesh yellowish, tender, juicy, sweet and pleasant. Good. September.

GREENUP'S PIPPIN.

Greenus's Pippin.

This English Apple is described by Hogg as popular and highly esteemed, the tree being hardy and an abundant bearer.

Fruit above medium, roundish, with on one side a prominent rib, pale straw color, bright red next the sun. Flesh pale yellowish white, tender, juicy, sweet, brisk. October to December.

GREEN WOODCOCK.

Origin, Sussex, England; described by Hogg as follows:

Fruit medium, roundish oblate yellowish, mottled and striped with red in the sun. Flesh white, tender, juicy, brisk. October, December.

GREIST'S FINE WINTER.

From York, Pa. Tree a strong grower, regular, moderate bearer.

Fruit rather large oblate or roundish oblate, yellow, splashed and shaded in sun with light red. Flesh yellow, compact, crisp, juicy, brisk subacid. Good. December, February.

GREY CANADA REINETTE.

Canada Reinette Gris.

Origin unknown.

Fruit large, oblate, yellow, covered with yellow russet, and moderately sprinkled with gray dots. Flesh white, crisp, brisk subacid. November, December.

GREY FRENCH REINETTE.

Reinette Grise. Reinette Franche Grauwe.
Reinette Grise Française.

There are a number of varieties of Reinette Grise, or Gray Reinette. The one here, however, is considered by Lindley as distinct, and among the most valuable of its class. It is of French origin. Tree a moderate grower and good bearer. Young wood of a chestnut color.

Fruit medium, roundish oblate, broadest at base, covered with brownish gray russet. Flesh yellow, moderately juicy, rich subacid. November, December.

GREYHOUSE.

Hoopes. Hopsey.

Origin, supposed New Jersey. Has been long grown and highly valued for cider-making. Tree strong, erect grower, and productive.

Fruit medium, oblate, nearly globular, dull red, with faint stripes. Flesh firm and dry, poor in quality. A long keeper.

GREY LEADINGTON.

Leadington's Graner Pippin. Grey Leadington Pippin.

A favorite Scottish Apple. Tree vigorous, hardy, and productive.

Fruit medium, roundish oblong conical, greenish yellow, with cinnamon russet and red in the sun. Flesh white, firm, tender, very juicy, aromatic. October, December. (Lind.)

GREY REINETTE.

Reinette Grise Extra. Reinette Grise. Belle Fille.
Reinette Grise d'Hiver. Prager.

An old French Apple.

Fruit medium, roundish, yellowish green, with brownish red in sun. Flesh yellow, firm, crisp, brisk subacid. November, February. (Hogg.)

GRIFFITH.

Sweet Maiden's Blush.

Raised by Caleb Mendenhall, West Milton, near Dayton, O. Tree hardy, spreading, productive.

Fruit medium, roundish oblate, clear pale yellow, with light blush red cheek in the sun. Stalk short. Cavity rather large. Basin small. Flesh fine-grained, tender, juicy, a little tart. September. (L. S. Mote's MSS.)

GRIMES' GOLDEN PIPPIN.

Grimes Golden.

This valuable Apple originated many years since, on the farm of Thomas Grimes, Brooke Co., Va. In its native locality it is highly prized for the peculiar hardihood of the tree, withstanding uninjured the most severe winters, and never breaking in its limbs. Also for its uniform regular annual productiveness.

Grimes' Golden Pippin.

Tree vigorous, hardy, upright spreading, very productive, branches with peculiar knobs at the base of each, connecting it with the main limbs. Young wood dark dull red brown, grayish.

Fruit medium, roundish oblate, slightly conical. Skin uneven. Color rich golden yellow, sprinkled moderately with small gray and light dots. Stalk rather short and slender. Cavity rather deep, sometimes slightly russeted. Calyx closed, or partially open. Basin abrupt, uneven. Flesh yellow, compact, crisp, tender, juicy, rich, sprightly, spicy subacid, peculiar aroma. Core rather small. Very good to best. December to March.

GROS FAROS.

Faros.

Fruit medium, oblate, roundish, yellow, with considerable red in the sun. Flesh greenish white, juicy, sweet subacid. December, January.

GROSH.

Originated in Snufftown, Lancaster Co., Pa. Tree upright, with stout brown shoots; an annual bearer.

Fruit very large, oblate, oblique, greenish white, striped with light and dark red. Flesh white, loose, soft texture, juicy, acid. September. Good. Cooking. (Gar. Mon.)

GROUZIER.

Received from New Jersey. Origin unknown.

Fruit medium, roundish conical, greenish, partially striped and splashed with light red. Flesh whitish, tender, juicy, mild subacid. Good. November, December.

GROOVELAND SWEET.

Origin unknown.

Fruit medium, roundish oblate, slightly conic, a little oblique, sides unequal, yellow, a tinge of red in the sun. Flesh whitish, crisp, tender, juicy, mild, pleasant, sweet. Good. December to March.

GRUVER'S EARLY.

Originated on the farm of ——— Mayer, Springfield, Pa.

Fruit medium, roundish, whitish yellow, with stripes and splashes of red. Flesh whitish, juicy, pleasant, mild subacid. Good. August.

GUERNSEY PIPPIN.

Fruit small, roundish, brown russet on yellow, bronzed in the sun. Flesh firm, crisp, juicy, brisk sweet. December, January.

GULLETT.

Origin unknown.

Fruit large, oblate conical, greenish yellow, with dull stripes. Flesh juicy. February.

GULLY.

Origin, Lancaster Co., Pa.

Fruit small, white blush in the sun. Flesh white, juicy. August.

HABERSHAM'S PEARMAN.

Tree of upright growth.

Fruit medium, ovate form, bright crimson. Stalk short, slender. Calyx medium. Flesh white, rather dry, firm, subacid. September. (White.)

HAGLOE CRAB.

This is a celebrated old English cider fruit.

Fruit small, ill-shaped, something between an apple and a crab, more long than broad, wide at the base and narrow at the crown, which is a little sunk, and the eye flat, pale yellow, a little marbled in different directions, with a russet gray, and having a few red specks or streaks on the sunny side.

HAGUE PIPPIN.

Originated in 1816, by Samuel Hague, Centreville, Ind. Tree hardy, vigorous grower, and productive. Young shoots strong, light reddish brown, slightly downy.

Fruit medium to large, roundish conical, pale yellow, mostly covered, shaded, splashed and striped with red, thickly sprinkled with light dots. Stalk short. Flesh rather coarse, yellowish, crisp, moderately juicy, mild subacid. Core large. Good. January, February.

HAIN.

Origin, Berks Co., Pa. A vigorous grower and profuse bearer.

Fruit large, globular, inclining to oblong, yellow, striped, marbled, and mottled with red. Flesh white, juicy, tender, rich sweet. Good. November, March.

Hall.

HALL.

Hall's Seedling.

Hall's Red.

Jenny Seedling.

Origin, on the grounds of Mr. Hall, Franklin Co., N. C. Tree of moderate growth, hardy, upright, with long, slender, reddish brown, grayish branches, and remarkably firm wood. The tree never attains a very large size; is very productive, and is considered in North Carolina the best long-keeping dessert apple they cultivate.

Fruit small, oblate, slightly conic. Skin smooth, thick, mostly shaded with crimson, and covered with various colored dots. Stalk of medium length, slender, curved, inserted in a round, deep, open cavity. Calyx closed, generally in a small uneven basin. Flesh yellowish, fine-grained, juicy, with a very rich, vinous, saccharine, aromatic flavor. Very good. December to April.

HALL DOOR.

An English Apple described by Ronalds as desirable for cooking.

Fruit large, oblate, greenish, with few red stripes. Flesh white, coarse, subacid. December, January.

HALL'S SWEET.

Of unknown origin.

Fruit large, roundish oblate, yellow, shaded, striped, and splashed with red, many light dots. Flesh sometimes a little stained, not very juicy, rich, sweet. Good. September.

HAMLEDON DEUX ANS.

Origin, Hampshire, England.

Fruit medium, roundish oblate, yellow, mostly overspread and indistinctly splashed with red. Flesh yellowish, juicy, pleasant subacid. Good. November.

HAMILTON.

Wonder?

Origin unknown. Came from the South.

Fruit large, roundish, irregular, somewhat ribbed, red on yellow, splashed with purple. Dots large, yellow. Calyx large, open. Flesh yellow, breaking, rather juicy, subacid. Good. September, October. (Am. Hort. An.)

HAMMOND.

Fruit medium to large, green. Flesh juicy. November, and keeps to March (Sumner, MS.)

HAMPTON BELLFLOWER.

A seedling from the Bellflower, grown by W. C. Hampton, Mt. Victory, Ohio.

Fruit large, light yellow ground, speckled and splashed with carmine, red in the sun, few russet gray dots and marblings. Stalk medium. Calyx partially open. Segments recurved and with fine points. Basin open, slightly uneven at base. Flesh white, tender, breaking, rather coarse, mild pleasant subacid. Good. Core small. November and December.

HAMPTON'S FALL SWEET.

Origin, W. C. Hampton, Ohio.

Fruit medium, roundish, yellow, striped with red. Flesh tender, sweet, rather dry. Good. October.

HAMPTON'S HONEY SWEET.

Origin, W. C. Hampton, Ohio.

Fruit medium, elongated truncate conic, yellow, faintly striped with red. Flesh white, tender, sweet. Good. December to April.

HAMPTON'S LATE SWEET.

Sweet Jersey.

Origin, W. C. Hampton, Ohio. Tree vigorous, with slender branches, hardy and productive.

Fruit medium, roundish conic, whitish, splashed, striped, and shaded with red. Flesh white, stained next the skin, tender, juicy, pleasant subacid. Good to very good. October.

HAMPTON'S RUSSET.

Origin, W. C. Hampton, Ohio.

Fruit medium to small, roundish conical, yellowish, thinly covered with light russet, splashes and stripes of red. Flesh yellowish, tender, juicy, lively subacid. Good. November, January.

HANCOCK.

Originated in Chester Co., Pa. Tree a strong upright grower, not an early bearer.

Fruit large, roundish, yellowish green, shaded and rather indistinctly splashed with light red. Flesh yellowish, compact, moderately juicy, coarse, pleasant subacid. Core small. Good. December to March.

HANNAH.

Origin unknown.

Fruit medium to large, roundish, pale yellow, with stripes and splashes of dull red. Flesh white, coarse, breaking, subacid. Hardly good. Cooking only. October, November.

HANWELL SOURING.

Origin, Oxfordshire, England.

Fruit medium, oblate conic, greenish yellow, faint blush in the sun. Flesh white, crisp, fine, brisk acid. Good. Cooking. December to April.

HARE.

Watermelon.

We received this desirable Apple from New Jersey, but have been unable to learn its history. Tree moderately vigorous, upright. Wood grayish brown.

Fruit large, roundish oblate, slightly conic, greenish, sprinkled with a few gray dots. Stalk short, slender. Calyx small, closed. Flesh white, very tender, juicy, mild pleasant sweet. Very good. Core rather large. October, November.

HARBORD'S PIPPIN.

Colored Harbord's Pippin.

Origin, Norfolk, England.

Fruit large, roundish conical, pale yellowish green, partially russeted. Flesh white, soft, juicy, brisk, acid. November to March. (Hogg.)

HARGREAVE'S GREEN SWEET.

An English variety, somewhat valued there.

Fruit medium, roundish, ridged at apex, yellow, with faint streaks of red in the sun. Flesh yellowish, tender, juicy, sweet. September, October.

HARNISH.

From Pennsylvania, said to have originated in Lancaster Co.

Fruit medium, roundish oblate, mostly shaded with dark red, and sprinkled with grayish dots. Flesh compact, tender, not juicy, almost sweet, pleasant. Good. September to October.

HARRIS.

Ben Harris.

Originated with Marston Harris, Rockingham Co., N. C. Tree vigorous, erect, productive, popular in its native locality. Young wood grayish brown, slightly downy.

Fruit large, roundish oblate, bright straw color, occasionally with a pink blush. Stalk very short and stout. Cavity deep. Basin large and deep. Flesh white, coarse, pleasant subacid, continues a long time, valuable for market and culinary purposes. Good. September to November.

HARRISON.

New Jersey is the most celebrated cider-making district in America, and this Apple, which originated in Essex County of that State, has long enjoyed the highest reputation as a cider fruit. Ten bushels of the Apples make a barrel of cider. The tree grows thriftily and bears very large crops.

Fruit medium size, ovate or roundish oblong. Skin yellow, with roughish, distinct black specks. Stalk one inch or more long. Flesh yellow, rather dry and tough, but with a rich flavor, producing a high-colored cider, of great body. The fruit is very free from rot, falls easily from the tree about the first of November, and keeps well.

HARRY SWEET.

Originated in Mercer Co., Pa. Tree of slow, upright growth.

Fruit medium, roundish, inclining to conic. Sides sometimes unequal. Skin thick, greenish yellow, dull blush in the sun, and nettings of russet. Flesh whitish, crisp, a little coarse, moderately juicy, mild sweet. Good. December to April.

HARTFORD SWEET.

Spencer Sweeting.

Keney's Sweet.

Origin, farm of Mr. Spencer, near Hartford, and introduced by Dr. E. W. Bull. Tree moderately vigorous, hardy, and productive.

Fruit rather large, roundish, slightly flattened. Skin smooth and

fair, almost covered and striped with fine red over a yellowish green ground, and sprinkled with small gray dots. Stalk nearly three-quarters of an inch long, slender, inserted in a rather shallow, round cavity. Calyx broad, closed, with few segments, set in a slightly uneven basin which is but little sunk. Flesh yellowish, very juicy, tender, rich saccharine. Good. December to May or June. A valuable market apple.

HARVEST RED STREAK.

Early Red Streak.

Striped Harvest.

An old variety, origin unknown. Tree a free grower, upright, spreading, productive.

Fruit medium, oblate, whitish, striped and splashed with two shades of red. Flesh white, coarse, tender, juicy, brisk subacid. Valuable for cooking. August and September.

HARVEY.

Doctor Harvey.

One of the oldest of English Apples.

Fruit large, roundish oval, greenish yellow, with russet tracings. Flesh whitish, firm, brisk subacid. Good for cooking. October to January. (Lind.)

^a HARVEY'S PIPPIN.

Dredge's Beauty of Wilts.

Of English origin. Hogg says:—"Tree a free grower and excellent bearer."

Fruit medium, roundish, yellow, washed with fine red, and marked with crimson dots. Flesh firm, crisp, juicy, rich. December to February.

HARVEY'S WILTSHIRE DEFIANCE.

This Apple is described by Hogg as very handsome and of first-rate quality.

Fruit very large, conical, distinctly five-ribbed, yellow, with many minute russety dots, and some patches of russet. Flesh yellowish, firm, crisp, juicy, sugary, vinous. Core very small. October to January.

HASKELL SWEET.

Sassafras Sweet.

Origin, farm of Deacon Haskell, Ipswich, Mass. Tree vigorous, upright, spreading and productive. Young wood light grayish brown.

Fruit medium or above, oblate. Color greenish yellow, sometimes with a blush. Stalk short, inserted in a rather broad, deep cavity. Calyx closed. Basin broad and large, of medium depth. Flesh yellowish, tender, juicy, very sweet, rich, aromatic. Very good to best. September, October.

HAUTE BONTÉ.

Reinette grise haute bonté.

Blandilalie.

An old French dessert Apple.

Fruit medium, roundish, ribbed, yellow, with faint tinge of red in the sun. Flesh greenish white, tender, juicy, brisk subacid. December to February.

Haskell Sweet.

HAWLEY.

Origin, Columbia Co., N. Y. Tree vigorous, and bears annually.

Fruit large, roundish oblate conic. Skin fine yellow, somewhat waxy or oily, and considerably dotted. Stalk short, inserted in a rather deep cavity. Calyx small, nearly closed, in a moderate, somewhat furrowed basin. Flesh whitish, very tender, juicy, rich, mild subacid. Ripe September.

A fruit of very good quality, but as it soon decays, its value is thereby much depreciated.

HAWTHORNDEN.

White Hawthornden.

A celebrated Scotch Apple, which originated at Hawthornden, the birthplace of the poet Drummond. It resembles, somewhat, our Maiden's Blush, but is inferior to that fruit in flavor. An excellent bearer, a handsome fruit, and good for cooking or drying, and exceedingly profitable for market.

Tree vigorous, upright, spreading, and, when in bearing, somewhat pendulous. Young shoots very short-jointed, dull reddish brown. Buds prominent.

Fruit rather above the medium size, pretty regularly formed, roundish, rather flattened. Skin very smooth, pale light yellow, nearly white in the shade, with a fine blush where exposed to the sun. Flesh white, juicy, of a simple, pleasant flavor. Good. September.

There is a *New*, or winter *Hawthornden*, the wood of which is brownish red, tree more robust, the fruit larger, and a longer keeper than the above.

HAY BOYS.

Fruit large, oblate, pale yellow. Flesh yellow, breaking, sweet. Good to very good. August. (Warder.)

HECTOR.

A seedling of Chester Co., Pa.

Fruit large, roundish, conical, striped and mottled with red on a yellow ground. Flesh yellowish, breaking, subacid, pleasant. Good. December to March.

HELEN'S FAVORITE.

From Troy, Ohio.

Fruit medium, roundish, dark red shades. Flesh white, streaked with red, tender, juicy. January, February. (Elliott.)

HEMPHILL.

From Person Co., N. C. An erect, vigorous grower, and bears profusely.

Fruit oblate, slightly conic, whitish yellow, very much shaded with red, and thickly sprinkled with grayish dots. Flesh yellowish white, compact, mild subacid. Good. November, May.

HENRY APPLE.

A strong, vigorous grower, and productive, from Vermont.

Fruit large, oblong conic, yellow, with a slightly bronzed cheek, and many small, grayish dots. Flesh yellow, tender, not very juicy, pleasant. Good. October, January.

HENWOOD.

Originated in Indiana. Tree in growth and appearance much resembling Yellow Belleflower.

Fruit large, oblong conical, clear smooth yellow, with rarely a blush in the sun. Stalk long, slender. Calyx small. Basin corrugated. Flesh yellowish white, crisp, tender, juicy, sharp subacid. Very good. January to April.

HEPLER.

Raised by Mr. Hepler, of Reading, Pa.

Fruit medium, roundish. Color light yellow, shaded with dull red. Flesh white, juicy, pleasant subacid. Good. December to April.

HEREFORDSHIRE PEARMAIN.

Royal Pearmain, of some.	Parmin Royal.	Old Pearmain.
Royale d'Angleterre.	Parmin.	

An old and popular English Apple, about which, as connected with other Pearmains, there is much confusion. The variety we have received, and grown for many years, is of a strong, vigorous, spreading growth. Young shoots dull grayish brown, slightly downy, moderately strong.

Fruit medium, roundish conical. Color yellow, shaded, splashed, and marbled with dark red, and thickly sprinkled with conspicuous light areole dots. Stalk short. Cavity medium, slight russet. Calyx partially open. Basin rather abrupt, deep, corrugated. Flesh yellowish, crisp, juicy, rich, slightly aromatic, subacid. Very good. November to February.

HERMAN.

Origin, farm of Mr. Herman, Cumberland Co., Pa. Tree vigorous and spreading, quite prolific.

Fruit medium, oblong conic, red striped on green ground. Flesh greenish, tender, juicy, subacid. Good. November to February.

There is also another *Hermann*, which originated at Hermann, Mo., from seed of Rawles Janet. Tree a fine grower, upright, and very productive.

Fruit medium, conical, bright red, with gray dots. Flesh whitish, juicy, pleasant subacid. December to May.

HESS.

Origin, Lancaster Co., Pa.

Fruit medium, form variable, sometimes roundish, often conical, red, in stripes of different hues. Flesh greenish white, tender. Good. December, February.

HETTERICH.

Origin, Pennsylvania. Tree an irregular grower.

Fruit medium to large, roundish oblate, yellow. Flesh whitish, tender, acid. Good. November, January.

HEWE'S VIRGINIA CRAB.

Hughe's Virginia Crab.

The Virginia Crab makes a very high-flavored dry cider, which, by connoisseurs, is thought unsurpassed in flavor by any other, and retains its soundness a long time. It is a prodigious bearer, and the tree is very hardy, though of small size.

Fruit quite small, about an inch and a half in diameter, nearly round. Skin dull red, dotted with white specks, and obscurely streaked with greenish yellow. Stalk long and slender. Flesh fibrous, with an acid, rough, and astringent flavor, and, when ground, runs clear and limpid from the press, and ferments very slowly. The Virginia Crab is often mixed with rich pulpy apples, to which it imparts a good deal of its fine quality.

The Roane's White Crab is a sub-variety of the foregoing, about the same size, with a yellow skin. It makes a rich, strong, bright liquor, and keeps throughout the summer, in a well-bunged cask, perfectly sweet.

HEWITT'S SWEET.

Large, oblate, yellow, splashed with red. Flesh whitish, sweet, tender and pleasant. Good. October, November. Productive.

HICK'S.

Buckram.

Originated with Isaac Hicks, North Hempstead, L. I. Tree an upright, strong grower, an early and abundant bearer. Young shoots stout, very short-jointed, dark brown, fine downy. Buds broad, flat, prominent, especially at ends.

Fruit medium or above, roundish, color pale greenish yellow, somewhat striped and splashed with crimson, thinly sprinkled with light and gray dots. Stalk rather short. Cavity deep, slightly russeted. Calyx closed. Segments short, often a little recurved. Basin rather large and uneven. Flesh whitish, tender, moderately juicy, rich, sweet, slightly aromatic. Core rather large. Very good. August. A new Apple, of good promise.

HIESTER.

Heaster.
Stehly.

Heister.
Miller.

Baer.

Originated in Reading, Berks Co., Pa. Tree large, vigorous, spreading, productive. Young shoots very dark blackish brown.

Fruit medium, roundish oblate, yellowish, shaded and indistinctly splashed and mottled with two shades of red, few light gray dots. Flesh white, crisp, juicy, tender, pleasant subacid. Good. November to March.

HIGBY SWEET.

Lady Cheek Sweet.

Ladies' Blush.

Originated in Trumbull Co., O. This is one of the most delicate of sweet Apples, valuable either for the table or market. Tree a thrifty, upright grower, an early and good bearer. Young shoots very short-jointed, moderately stout, dark rich reddish brown, with very few light specks.

Fruit medium, roundish, slightly conical, sometimes oblique. Color

light waxen yellow, shaded with fine clear rich red in the sun, thinly sprinkled with gray and light dots. Stalk short. Cavity acute, rather deep, sometimes a little russeted. Calyx closed. Segments short, erect. Basin narrow, deep, uneven. Flesh white, very tender, juicy, sweet, excellent. Core small. Very good to best. November to January.

Higby Sweet.

HIGHLANDER.

Origin, Sudbury, Vermont. Tree a good grower, very productive.

Fruit medium, oblate, approaching conic, greenish, mottled, and striped with red. Flesh white, juicy, tender, with a pleasant vinous flavor. Good. September, October.

HIGHTOP.

Supposed origin, Wayne Co., Ind.

Fruit medium to large, flat, roundish, regular. Surface smooth, mixed dull red, striped carmine, dots scattered, minute. Flesh pale yellow, fine-grained, tender, juicy, subacid, aromatic. December, January. (Warder.)

HIGHTOP SWEET.

Summer Sweet.

Sweet June.

Origin, Plymouth, Mass. An old variety, highly prized at the West. Growth upright, vigorous. Tree hardy, very productive, light reddish brown shoots.

Fruit medium or below, roundish, regular. Skin very smooth. Color light yellow, partially covered with green dots. Stalk medium, inserted in a deep narrow cavity, surrounded by thin russet. Calyx small,

closed. Basin shallow, slightly furrowed. Flesh yellowish, very sweet, not very juicy, but pleasant and rich. Very good. August.

Hightop Sweet.

HILL'S FAVORITE.

Origin, Leominster, Mass. A thrifty grower, and very productive.

Fruit medium, roundish oblate, slightly conic, yellow, mostly shaded and striped with red, covered with thin bloom and numerous whitish dots. Stalk short. Cavity medium, uneven. Calyx closed. Basin small, shallow. Flesh yellow, fine-grained, tender, juicy, pleasant, slightly subacid, aromatic. Good to very good. Middle of September, and in use for a month.

HILL'S SWEET.

Of unknown origin. Tree a strong, upright grower, very productive.

Fruit medium, oblate or roundish oblate, yellow, mostly covered with two shades of red, many light dots. Stalk short. Cavity large, deep. Calyx closed. Basin large, uneven. Flesh yellowish white, tender, moderately juicy, rich, sweet, pleasant. Good to very good. Core small. January to April.

HILTON.

Origin, Columbia Co., N. Y. Tree vigorous and productive.

Fruit large, roundish, yellowish green. Flesh tender, juicy, subacid, excellent for culinary purposes. Good. September to October.

HINNERSLEY.

Origin, Bucks Co., Pa.

Fruit rather small, roundish oblong conical, greenish, thickly sprink-

led with light and brown dots. Flesh greenish white, fine-grained, rather tender, moderately juicy, mild subacid. Good. December to March.

HOARY MORNING.

Dainty Apple.

Downy.

Sam. Rawlings.

An English fruit for culinary purposes, large, oblate conic, yellow, splashed and striped with red, and covered with a bloom. Flesh white, firm, brisk subacid. Good. October, December.

HOBBS' SWEET.

Originated on the farm of Samuel Hobbs, Randolph, Pa. Tree hardy, vigorous, with a round head, productive, valuable for cooking.

Fruit large, roundish oblate, greenish yellow. Flesh tender, sweet. October, November. (Hobb's MS.)

HOCKETT'S SWEET.

Origin, North Carolina. Tree a good bearer, and the fruit profitable for stock feeding.

Fruit medium, roundish oblate, yellow, shaded, splashed, and striped with deep red. Flesh yellowish white, moderately juicy, crisp, rather rich, sweet. Good. December to March.

HODGE'S LIMBER TWIG.

Origin unknown.

Fruit small, roundish, whitish, thinly shaded, splashed, and striped in the sun. Flesh white, rather firm, juicy, sprightly subacid. Very good. October, December.

HOG ISLAND SWEET.

Canada Sweet.

Sweet Pippin.

English Sweet, erroneously.

Origin, Hog Island, adjoining Long Island. Tree vigorous and productive. Wood dark brown, slightly downy, short-jointed, valuable for family use and stock feeding.

Fruit of medium size, oblate, yellow, striped with red, with a bright crimson cheek. Stalk rather short, slender, inserted in a deep, abrupt cavity. Calyx closed, set in a broad basin of moderate depth. Flesh yellow, juicy, crisp, tender, slightly aromatic, with a very sweet, rich, excellent flavor. Good to very good. September, October.

HOLBERT'S VICTORIA.

An English Apple, described by Hogg as small, ovate, yellow, with pale gray russet. Flesh yellowish, firm, juicy, vinous, aromatic. December to May.

HOLCOMB.

Fruit medium, oblate, yellow, shaded and obscurely splashed with

red in the sun. Flesh whitish, fine, tender, moderately juicy, pleasant, almost sweet. Good. December to March.

HOLLADY.

Raised by John Hollady, Spottsylvania Co., Va. A very thrifty, upright grower, a good bearer.

Fruit medium, oblate. Color yellow, with a faint blush, and sprinkled with gray dots. Flesh yellowish, compact, tender, aromatic. Good. November to March.

HOLLANDBURY.

Hollingbury.
Beau Rouge.

Hawberry Pippin.
Bonne Rouge.
Kirke's Scarlet Admirable.

Horsley Pippin.
Howbury Pippin.

An old English culinary Apple. Tree strong, vigorous grower.

Fruit very large, roundish, flattened, ribbed, yellow, much red in the sun. Flesh white, tender, juicy, brisk subacid. October, December.

HOLLAND PIPPIN.

Reinette d'Hollande.

Summer Pippin.

Pie Apple.

This and the Fall Pippin are frequently confounded together. They are indeed of the same origin. One of the strongest points of difference lies in their time of ripening.

The Holland Pippin begins to fall from the tree and is fit for pies about the middle of August, and from that time to the first of November is one of the very best kitchen apples.

Fruit very large, roundish, a little more square in outline than the Fall Pippin, and not so much flattened, though a good deal like it, a little narrowed next the eye. Stalk half an inch long, thick, deeply sunk. Calyx small, closed, moderately sunk in a slight plaited basin. Skin greenish yellow or pale green, becoming pale yellow when fully ripe, washed on one side with a little dull red or pale brown, with a few scattered, large, greenish dots. Good.

HOLLAND SWEET.

Fruit medium, conic, green, with stripes of dull red. Flesh firm, sweet, and valuable for long keeping and culinary uses. Good. January to May.

HOLLOW CORE.

There are two varieties under this name. One grown in New Jersey, of medium size, roundish oblong, yellow, with shade of light red. Flesh whitish, tender, juicy, sprightly subacid. Good. Core very large and hollow. December, January.

The other, described by Hogg, is medium size, conical, ribbed, greenish, with pale red next the sun. Flesh white, tender, brisk, pleasant. Core very large, with open cells. September.

HOLLOW CROWN.

Hartford.

Tyler.

Kelsey.

An old New England Apple, commonly grown there, origin unknown. Tree a strong, upright grower.

Fruit large, roundish, slightly conic, yellow, splashed, striped, and marbled with red, thinly sprinkled with light dots. Flesh yellowish, somewhat coarse, crisp, tender, juicy, pleasant, brisk subacid. Good. November, December. Valuable for cooking or market.

HOLLOW CROWN PIPPIN.

Hollow-Eyed Pippin.

An English culinary Apple.

Fruit medium, roundish oblate, yellowish, with a blush cheek in the sun. Flesh firm, juicy, subacid. October, November.

HOLLY.

Hardskin.
Persimmon.

Northern Hardskin.
Simmon.

Origin, Georgia. Tree moderately vigorous, upright, healthy, and an early bearer.

Fruit medium size, roundish oblate, red, on a yellow ground, somewhat striped. Calyx closed. Flesh deep yellow, firm, juicy, sweet, aromatic. Good. November to March.

HOLMES.

This is an old variety, first described in Thatcher's Treatise on Orcharding, and yet considerably grown in Massachusetts. The tree is vigorous and very productive.

Fruit medium, roundish, slightly oblate, pale yellow, with bright blush in the sun, and many large russet specks. Stalk short, slender. Cavity shallow. Calyx large, partially open. Basin ribbed. Flesh yellowish, tender, fine, juicy, sweet subacid. December, January.

HOLMES'S SWEET.

Origin, Niagara Co., N. Y. Tree vigorous, productive. Young shoots dark reddish brown.

Fruit medium, roundish conical, waxy yellow, red cheek in the sun. Stalk medium. Cavity deep. Calyx open. Basin shallow. Flesh yellow, tender, rather juicy, spicy, sweet subacid. Very good. November and February.

HOLSTEN SWEET.

Origin unknown.

Fruit medium to large, round, greenish yellow, bronzy. Flesh whitish yellow, fine-grained, tender, juicy, very sweet, aromatic, rich. December, February. (Warder.)

HONEY GREENING.

Poppy Greening. Honey Sweet, incorrectly.

Origin uncertain. Tree vigorous, of rather a straggling, spreading habit, very productive. Young shoots light clear reddish yellowish brown.

Fruit medium to large, roundish oblate, greenish yellow, a slight blush in the sun, few light and gray dots. Stalk rather long, slender. Cavity deep. Calyx closed. Basin abrupt, corrugated. Flesh white, fine-grained, very tender, moderately juicy, with a honeyed sweet. Very good. Core small. November, February.

HONEY SWEET.

Origin unknown. There are a number of sorts under name of Honey Sweet, it being a popular application for every good sweet apple. The one we now describe, however, we have found more generally grown than any other, and therefore our application of the name to it.

Tree very upright, vigorous. Young shoots light reddish brown.

Fruit medium, roundish oblate, inclining to conic, pale yellow; bronzed, crimson in the sun, with a few green and gray dots. Stalk rather long. Cavity large, russeted. Calyx closed. Basin corrugated. Flesh white, moderately juicy, rather compact, honeyed sweet. Good. Valuable for baking or stock. August.

HOOD.

Hood's Seedling.

A nice and handsome little fruit, oblong conical in form, yellow, mottled, marbled, and splashed with two shades of red. Flesh whitish, firm, pleasant, sweet. November, December.

HOOKER.

Origin, Windsor, Conn. Growth upright, vigorous, productive.

Fruit medium, conic, slightly oblique, greenish yellow, shaded with dull crimson, striped with red, and sprinkled with large russet dots. Flesh greenish, tender, juicy, pleasant subacid. Good. November to January.

HOOVER.

Wattaugah.

Originated in South Carolina. It is pretty extensively disseminated and much favored where grown. The trees are quite distinct, having large foliage and retaining it until quite late into winter. It forms a beautiful upright spreading tree. Young shoots clear reddish brown, slightly downy.

Fruit medium, roundish, sometimes roundish oblate, slightly oblique, yellowish, mostly overspread, splashed, and striped with two shades of red, some conspicuous light dots, and patches of russet. Stalk rather long. Cavity large, thinly russeted. Calyx open. Basin slightly fur-

rowed. Flesh yellowish, rather firm, tender, juicy, rich subacid. Core small. Very good. November to February.

Hoover.

HOPKINS.

Supposed origin, Maryland. Tree vigorous, spreading, not an early bearer.

Fruit medium or below, roundish oblate, sometimes with unequal sides, yellowish, shaded, splashed, and mottled with light and dark red. Stalk rather short. Calyx small. Flesh white, crisp, juicy, pleasant subacid. Good to very good. October, November.

HOPPER.

From South Carolina.

Fruit large, roundish, flattened, sides unequal, greenish yellow, with a brown orange cheek in the sun, and a little russet about the stem. Flesh white, firm, moderately juicy, subacid. Good.

HORMEAD PEARMMAIN.

Arundel Pearmain.

Hormeado Pippin.

An English variety, yet but little grown in this country.

Fruit medium, roundish, or nearly roundish conical, pale yellow, moderately sprinkled with gray dots. Stalk medium, slender. Cavity russeted. Calyx nearly closed. Basin shallow, corrugated. Flesh white, crisp, tender, juicy, brisk subacid. Good to very good. November, December.

HORN.

Leech's Red Winter.

Origin unknown. Tree vigorous, with stout diverging branches.

Fruit medium or below, oblate, sides unequal, whitish yellow, shaded and obscurely striped with light red, many small light dots. Flesh yellowish white, half tender, moderately juicy, mild subacid. Good. December to March.

HORSE APPLE.

Haas.

Summer Horse.

Yellow Hoss.

Tripp's Horse.

Origin supposed to be North Carolina. Tree vigorous, an annual, early and abundant bearer, valuable for drying and culinary purposes. Young wood light reddish brown.

Horse.

Fruit large, roundish, yellow, sometimes tinged with red, and small patches of russet. Flesh yellow, rather firm and coarse, tender, pleasant subacid. Good. Last of July and first of August.

There is said to be another Horse Apple, ripening a month or more later; we have not examined it.

HORSHAM RUSSET.

Origin, Norwich, England. Tree hardy and productive.

Fruit small, roundish, warm yellowish gray russet, bronzed in sun. Flesh white, firm, crisp, brisk subacid. November, December.

HOSKREIGER.

Heidelocher.

Fruit large, oblate, yellowish green, with streaks of red in the sun. Flesh white, tender, brisk subacid. November, March. (Hogg.)

HOUSUM'S RED.

Originated in Berks Co., Pa.

Fruit medium, roundish oblong, yellow, shaded and obscurely splashed with red, light dots. Flesh white, rather compact, crisp, moderately tender, juicy, pleasant subacid, slightly aromatic. Very good. Core small. December, February.

HOWARD'S EDMONT.

Origin, Pennsylvania.

Fruit large, roundish oblate, greenish yellow, partially splashed and striped with red, light gray dots. Flesh yellowish, crisp, tender, juicy, sprightly subacid. Good. November, December.

HUBBARD.

Origin unknown. Tree vigorous, productive.

Fruit rather large, roundish oblong conic, yellow, with a few brown dots. Flesh yellow, tender, juicy, pleasant subacid. Good. October.

HUBBARD'S PEARMAIN.

Hubbard's Russet Pearmain. Golden Vining.

This little English fruit is described by Lindley as one of the richest of dessert Apples. Tree healthy, with slender young wood of a pale grayish brown color.

Fruit small, roundish conical, regular, yellow, sometimes covered with pale brown russet, mottled red, bronzed in the sun. Flesh yellow, firm, very rich, sugary, aromatic. November to March.

HUBBARD'S SUGAR.

Origin, Guilford Co., N. C. Tree upright, moderately vigorous. Young shoots, light reddish brown.

Fruit medium, oblate, greenish yellow, striped with red. Flesh rich, juicy, and fine. September.

HUBBARDSTON NONSUCH.

John May. Old Town Pippin. Hubbardston.

A fine, large, early winter fruit, which originated in the town of Hubbardston, Mass. The tree is a vigorous grower, forming a handsome branching head, and bears very large crops. Young shoots dull grayish brown, slightly downy. It is worthy of extensive orchard culture.

Fruit large, roundish oblong, much narrower near the eye. Skin smooth, striped with splashes, and irregular broken stripes of pale and bright red, which nearly cover a yellowish ground. The calyx open, and the stalk short, in a russeted hollow. Flesh yellow, juicy, and ten-

der, with an agreeable mingling of sweetness and acidity in its flavor. Very good to best. October to January.

Hubbardston Nonsuch.

HUBBARDTON PIPPIN.

Origin uncertain. Tree thrifty, spreading, irregular, strong grower, and productive. Young shoots clear reddish brown.

Fruit large or very large, variable in form, globular, inclining to conic, slightly oblique, yellow, shaded and striped with red. Stalk short, inserted in a moderate cavity. Calyx closed. Basin small, corrugated. Flesh tender, yellowish, crisp, juicy, pleasant subacid, slightly aromatic. Core large and open. Very good. November to March.

HUGHES.

Origin, Berks Co., Pa. Tree upright, spreading, vigorous, said to be an abundant bearer.

Fruit large, roundish, greenish yellow, with a blush, and numerous gray dots. Flesh fine, tender, juicy, agreeable, saccharine without being sweet. Good. March, April.

HUGHES' GOLDEN PIPPIN.

An English Apple, described by Ronalds as an excellent table sort. Tree hardy, with long slender shoots, productive.

Fruit below medium, roundish oblate, yellow, with some russet patches and dots. Flesh yellowish white, firm, rich, brisk, spicy aromatic. December, January.

HULL BLOSSOM.

Origin unknown.

Fruit medium, roundish, slightly conic, pale yellow, much shaded, splashed and striped with red, many light dots. Flesh whitish, tender, juicy, pleasant, sweet. Good. October.

HULL SWEET.

Of unknown origin.

Fruit medium, roundish oblate, mostly overspread with shades of light and dark red, few large light dots. Flesh whitish, juicy, tender, rich, pleasant, sweet. Good to very good. October.

HUNGE.

Hunger

Origin uncertain, popular, and long cultivated in North Carolina. Tree vigorous and very productive.

Fruit large, roundish, green, with a blush. Flesh soft, subacid, pleasant, valuable for drying and culinary uses. Good. September, October.

HUNT.

Supposed origin, Eastern Indiana.

Fruit medium, roundish oblate, yellow, mixed, striped, bright red, numerous yellow dots. Flesh yellow, fine-grained, juicy, subacid, aromatic. December, January. (Warder.)

HUNTHOUSE.

A Yorkshire English Apple.

Fruit medium, roundish oblate conical, yellow, tinged with red in the sun, and crimson dots and faint streaks. Flesh white, firm, coarse, acid. December. (Hogg.)

HUNT'S CONNECTICUT.

Guttry.

Baldwin, erroneously.

An old variety. Origin unknown.

Fruit large, round oblate, yellow, marbled and shaded with dull red, gray specks. Stalk short. Cavity often russeted. Calyx large. Basin quite shallow. Flesh yellowish, rather dry, breaking, subacid. Good. November to March.

HUNT'S DEUX ANS.

An English dessert Apple, which has the character of keeping two years.

Fruit medium, roundish oblate conical, russeted, with gray and large brown russet dots in the sun. Flesh yellowish white, firm, juicy, aromatic.

HUNT'S DUKE OF GLOUCESTER.

Hunt's Nonpareil ?

This variety is claimed by Hogg as distinct from Hunt's Nonpareil, which is a synonym given it by Lindley. We have not examined them.

Fruit below medium, roundish, greenish, almost covered with thin russet, reddish brown in sun. Flesh white, crisp, juicy, high flavored December January.

HUNT'S RUSSET.

Supposed to have originated with the Hunt family, of Concord, Mass., many years since. Tree hardy, moderate grower, upright, spreading when in bearing, an annual and good bearer. Young shoots light reddish brown, slightly grayish.

Hunt's Russet.

Fruit medium, or below, roundish oblate, slightly conic. Color yellow, mostly covered with thin dull russet, with a blush of bright rich red in the sun, few brown dots. Stalk varying in length. Cavity large, deep, acute. Calyx partially open. Segments medium, a little reflexed. Basin medium, slightly corrugated. Flesh yellowish white, fine-grained, tender, juicy, rich, brisk subacid, slightly aromatic. Very good or best. Core compact. January to April.

HURLBUT.

Hurlbut Stripe.

Origin, farm of General Hurlbut, Winchester, Conn. Tree very vigorous, and great bearer. Young wood dark brownish red, slightly downy. Buds prominent.

Fruit medium, oblate, slightly conic, angular. Skin yellow, shaded

with red stripes, and splashed with darker red, and thinly sprinkled with light dots. Stalk short, rather slender, inserted in a broad deep cavity, surrounded by russet. Calyx closed. Basin rather shallow. Flesh white, crisp, tender, juicy, mild, sprightly subacid. Good to very good. Core small. October, December.

HUTCHESON.

Origin, supposed Logan Co., Ky. Tree of rather slow growth, healthy and productive. Esteemed, where known, for its fine appearance and long keeping.

Fruit medium, roundish, inclining to conic, yellow, overspread with rich red, large light dots. Stalk short. Cavity narrow. Calyx closed. Basin abrupt, deep. Flesh white, firm, moderately juicy, mild subacid, almost sweet. Core small. Good to very good. December to April.

HUTTON SQUARE.

A coarse culinary Apple, from England.

Fruit large, roundish, sides unequal, yellowish, with dull red in the sun. Flesh white, coarse, brisk, sweet. Good. November, December.

IMPERIAL.

Magnifique.

Maltranche.

Of French origin.

Fruit medium, oblate, inclining to conic, yellow, shaded, splashed, and striped with light and dark red, deepest in the sun. Stalk short. Calyx closed. Flesh white, crisp, tender, juicy, refreshing subacid. Good. October, November. (Warder.)

INDIANA BEAUTY.

Origin, Indiana.

Fruit large, roundish, oblong, unequal, yellow, partially covered mixed scarlet, splashed carmine. Flesh yellowish, breaking, juicy, subacid. Good. September, November.

INDIANA FAVORITE.

Supposed to have originated on the farm of Peter Morris, Fayette Co., Indiana. Growth healthy, spreading, and a good bearer.

Fruit medium or large, roundish, flattened at the ends, slightly one-sided, yellowish, shaded and streaked with red, and covered with russet specks. Flesh white, tender, juicy, vinous, almost sweet, and very pleasant. Good. January to April.

INDIAN PRINCE.

Fruit medium, roundish, deep red, sprinkled with whitish dots. Flesh yellowish, rather firm, juicy, with a pleasant aromatic flavor. Hardly good. September, October.

INGRAM.

A new variety, grown from seed of Rawls Janet, by Martin Ingram, of Greene Co., Mo. Tree productive, and the fruit especially valued for its long keeping.

Fruit medium or below, roundish oblate, orange yellow, mostly overspread with broken stripes of rich warm red, gray russet dots, and slight marblings. Stalk slender. Calyx small. Flesh yellowish white, moderately juicy, crisp, mild subacid. Core above medium. Seeds dark brown. February to June. (Hort.)

IRISH PEACH APPLE.

Early Crofton.

Fruit of medium size, round or a little flattened, yellowish green, with small dots in the shade, washed and streaked with brownish red in the sun. Flesh white, tender, juicy, and pretty well flavored. Hardly good. August.

IRISH REINETTE.

An English culinary Apple.

Fruit medium, roundish oblong, ribbed, yellowish green, dull brownish in the sun, and with patches of russet. Flesh yellowish white, crisp, juicy, brisk sharp acid. Hardly good. November to February.

ISLAND BEAUTY.

Chicago?

Origin unknown. Tree vigorous, upright, spreading.

Fruit large, roundish, pale yellow, with a shade of brown in the sun, moderately sprinkled with indistinct light dots. Flesh whitish, tender, juicy, brisk subacid. Good. Core rather large. September.

ISLE OF WIGHT PIPPIN.

Isle of Wight Orange.

Orange Pippin.

Pomme d'Orange.

A very old Apple, described in Ronalds as fine for dessert.

Fruit small, roundish, yellow, bright orange in sun, with sometimes a brownish cheek. Flesh firm, juicy, rich, aromatic, acid. January, February.

ISLEWORTH CRAB.

Brentford Crab.

Fruit medium, roundish conical, yellow, brownish tinge in sun. Flesh white, crisp, juicy. Poor. October.

ITALIAN ROSE.

Weisse Italianische Rosmarinapfel.

An Italian dessert Apple.

Fruit medium, roundish oblong conical, yellow, with pale red, some-

what striped in the sun. Flesh white, tender, juicy, sugary, vinous. December. (Diel.)

JABE.

Originated in Boxford, Mass. Tree thrifty, hardy, and a regular, abundant bearer.

Fruit small, oblate, light straw color, beautiful blush cheek, and crimson spots in the sun. Flesh yellowish white, fine-grained, tender, juicy, pleasant subacid. September, November. (Me. Rep.)

JABEZ SWEET.

Originated on the premises of Jabez Barnes, near Middletown, Conn. Tree healthy, vigorous, and productive.

Fruit medium, roundish conical, yellow, with a few dark specks. Flesh white, tender, juicy, rich, sweet. Good to very good. December, February.

JACKSON.

Origin, Bucks Co., Pa. Tree upright grower. Young wood dark brown.

Fruit medium, roundish oblate, greenish yellow, with many dark green blotches and gray dots, a very few faint stripes, and warm mottled brown cheek. Flesh greenish, fine texture, tender, juicy. Good to very good. October, February.

JACQUES LEBEL.

An English fruit of much beauty, but ordinary quality.

Fruit large, roundish oblate, lemon yellow, shaded with red in the sun, many gray dots. Stalk large. Cavity deep. Calyx half closed. Flesh white, tender, mild subacid. January. (Alb. Pom.)

JANE.

Origin, Bucks Co., Pa. Tree of medium upright growth, an annual bearer.

Fruit medium, roundish, yellowish, shaded with deep red in the sun, lighter in the shade, some obscure splashes and stripes, few light and gray dots. Flesh yellow, compact, moderately juicy, mild subacid, almost sweet. Good. December to March.

JARMINITE.

Origin, Highland Co., Ohio. Tree vigorous, very productive.

Fruit medium, oblate roundish, green, partially covered with mixed and striped dull red. Flesh breaking, firm, mild subacid, almost sweet. December to March. (Warder.)

JEFFERIS.

Origin, Chester Co., Pa. Growth moderate, very productive. A fair

and handsome fruit of excellent quality, in use all of September. Young wood light reddish brown, smooth.

Fruit medium, oblate, inclining to conic, yellow, shaded and splashed with crimson, and thickly covered with large whitish dots. Stalk very short, inserted in a rather large cavity. Calyx closed, set in a round open basin. Flesh white, tender, juicy, with a rich, mild, subacid flavor. Very good. September.

JEFFERSON COUNTY.

Origin, Jefferson Co., N. Y. Tree vigorous, hardy, spreading, an early and great bearer. Young wood dull grayish brown.

Fruit medium, roundish oblate, slightly conic, yellow, splashed and shaded with fine red, minute light dots and some blotches of russet. Flesh whitish yellow, juicy, tender, pleasant subacid. Good to very good. Core small. October, November.

JENKINS.

Originated with John M. Jenkins, Montgomery Co., Pa.

Fruit small, roundish ovate, red, interspersed with numerous large white dots on yellowish ground. Flesh white, tender, fine texture, juicy, agreeably saccharine. Good. January to March.

There is another *Jenkins* apple which ripens in summer. It is small, roundish, yellow, striped with red.

JENNINGS SWEET.

Originated at Marietta, Ohio. Tree vigorous, productive.

Fruit large, roundish oblate, yellow, striped with bright red. Flesh whitish, sweet, fine for baking or stock. Good. October, November.

JERSEY PIPPIN.

Foreign.

Fruit medium, round oblong conical, yellowish green, stripes of red in the sun. Flesh greenish yellow, juicy, vinous, subacid. Good. November, February. (Elliott.)

JERSEY SWEETING.

Origin unknown. Tree moderately vigorous, forming a handsome round head, productive. Young wood dark reddish brown, downy.

A very popular Apple in the Middle States, where it is not only highly valued for the dessert, but, owing to its saccharine quality, it is also planted largely for the fattening of swine.

Fruit medium size, roundish ovate, tapering to the eye. The calyx is small, closed, very slightly sunk, in a small plaited basin. Stalk half an inch long, in a rather narrow cavity. Skin thin, greenish yellow, washed and streaked, and often entirely covered with stripes of pale and dull red. Flesh white; fine-grained, and exceedingly juicy, tender, sweet, and sprightly. Good to very good. Young wood stout, and short-jointed. This apple commences maturing about the last of August, and continues ripening till frost.

JEWETT'S BEST.

Origin, farm of S. W. Jewett, Weybridge, Vt. Same habit as Rhode Island Greening.

Fruit large, oblate or nearly globular, yellowish green, mostly shaded with deep red. Stalk short, inserted in a large cavity. Calyx closed, set in a very small basin. Flesh yellowish white, juicy, almost melting, pleasant, rich subacid. Very good. December to February.

JEWETT'S FINE RED.

Nodhead.

Origin, Hollins, New Hampshire. Tree of moderate growth, and productive, requires high culture to produce fair fruit.

Fruit medium, roundish oblate, greenish white, striped, splashed, and shaded with crimson, having a dull grayish bloom. Stalk short, inserted in a broad, deep cavity. Calyx firmly closed, in an exceedingly small basin. Flesh tender, juicy, very pleasant, sprightly, almost sweet. Good to very good. November to February.

JOEL.

Of Pennsylvania origin.

Fruit small, oblate, greenish yellow with patches of russet and russet dots. Flesh greenish yellow, dry, and poor.

Jonathan.

JONATHAN.

King Philip.

Philip Rick.

The Jonathan is a very beautiful dessert Apple, and its great beauty, good flavor, and productiveness in all soils, unite to recommend it to

orchard planters. The original tree of this variety is growing on the farm of Mr. Philip Riek, of Kingston, New York. It was first described by the late Judge Buel, and named by him, in compliment to Jonathan Hasbrouck, Esq., of the same place, who made known the fruit to him. It succeeds wherever grown, and proves one of the best in quality, and most profitable either for table or market. The tree is hardy, moderately vigorous, forming an upright spreading, round head. Young shoots rather slender, slightly pendulous, grayish brown.

Fruit of medium size, regularly formed, roundish conical, or tapering to the eye. Skin thin and smooth, the ground clear light yellow, nearly covered by lively red stripes, and deepening into brilliant or dark red in the sun. Stalk three-fourths of an inch long, rather slender, inserted in a deep, regular cavity. Calyx set in a deep, rather broad basin. Flesh white, rarely a little pinkish, very tender and juicy, with a mild, sprightly, vinous flavor. This fruit evidently belongs to the Spitzenburgh class. Best. November to March.

JOHN CARTER.

Origin uncertain, grown in Connecticut. Tree vigorous and productive.

Fruit large, roundish conic, yellow, marbled, striped, and splashed with crimson. Flesh white, tender, juicy, with a mild subacid flavor. Good. September.

JOHNSON.

Origin, Brookfield, Conn. A strong, upright grower, and a good bearer.

Fruit above medium, roundish conic, smooth, striped with red on a yellow ground, dark red in the sun. Flesh remarkably tender, crisp, and juicy, with a brisk, sweet flavor, very soon becomes mealy after ripening. Good. Middle of August to middle of September.

There is another *Johnson Apple* which is said to have originated in Massac Co., Ill., and described in the *Chicago Republican*. We have not seen it.

Fruit medium to large, roundish flattened, greenish yellow, almost entirely covered with rich dark red. Flesh yellow, subacid. December to March.

JOHNSON RUSSET.

Origin unknown. Tree a crooked grower, moderate bearer.

Fruit medium, oblong roundish conical, light golden russet, few light and gray dots. Flesh white, tender, dry, poor, mealy. December, February.

JOHN'S SWEET.

Origin, Lyndsboro, New Hampshire. Tree a good grower, somewhat straggling, a prolific bearer. Young shoots, reddish brown.

Fruit medium, roundish conic, whitish yellow, sprinkled, striped, and splashed with red. Stalk short, inserted in a narrow cavity, surrounded by russet. Calyx closed, set in an abrupt basin. Flesh juicy, tender, sweet. Good. January to May.

JOLLY BEGGAR.

Hogg describes this as a first-rate early cooking Apple. Tree a prodigious and early bearer.

Fruit medium, roundish, pale yellow, becoming orange in the sun. Flesh white, tender, brisk subacid. August to October.

JUBILEE PIPPIN.

From Norwich, England.

Fruit medium, roundish, yellowish, with gray and brownish specks. Flesh white, crisp, mild, almost sweet. Core large, open. October, December. (Lindley.)

JUDGE ANDREWS.

Origin unknown.

Fruit medium, roundish, pale yellow. Flesh tender, aromatic. Good. August.

JUICY BITE.

Origin, Pennsylvania.

Fruit medium, roundish, inclining to conic, pale yellow, mostly over-spread, shaded and splashed with red. Flesh white, crisp, tender, lively subacid. Good. September.

JULIAN.

Juling.

Julien.

An Apple of Southern origin. Tree moderately vigorous, very productive. Young shoots light reddish brown, somewhat grayish, many white dots.

Julian.

Fruit above medium, roundish, inclining to conic. Sides unequal. Color waxen whitish, striped, splashed, and mottled with rich red,

moderately sprinkled with light dots, some having dark centres. Stalk short, small. Cavity deep, sometimes russeted. Calyx small, closed. Segments long, slender, slightly recurved. Basin deep, slightly corrugated. Flesh yellowish white, tender, juicy, pleasant subacid. Good to very good. July and August.

JUNALUSKEE.

Junaliska.

Journalaskia.

Origin, North Carolina. Tree moderately vigorous, spreading. Young shoots dark brownish, slightly downy.

Fruit medium to large, roundish oblate, yellow, lightly shaded on the sunny side, and sprinkled with brown and gray dots. Stalk short. Cavity large, a little green russet. Calyx small, closed. Basin abrupt, nearly smooth. Flesh yellowish, rather compact, moderately juicy, rich subacid. Good to very good. Core small. November to March.

KAIGHN'S SPITZENBURGH.

Red Pearmain.

Long John.

Red Spitzenburg.

Red Pippin.

Red Winter Pearmain, erroneously.

Red Phoenix.

Long Pearmain.

Sheepnose of some.

Lady Finger, erroneously.

Russam.

Scarlet Pearmain, erroneously.

Hudson Red Streak.

Origin, Gloucester Co., N. J. Tree vigorous, spreading or straggling habit, productive, and valued only because of its showy fruit.

Fruit rather large, oblong oval, approaching conic, whitish yellow, mostly shaded and striped with red, and thickly sprinkled with minute dots. Flesh yellowish, coarse, crisp, juicy, pleasant subacid. Good. November to January.

KANE.

Cane.

Cain.

Origin, Kent Co., Delaware. Tree moderately vigorous, upright. A beautiful little Apple, of pleasant flavor.

Fruit small, oblate, slightly conical, regular, whitish yellow, waxen, beautifully shaded and lightly striped with fine crimson. Flesh whitish, juicy, crisp, with a pleasant flavor. Good. October, November.

KEDDLESTON PIPPIN.

An English dessert Apple, described by Ronalds.

Fruit small, conical, straw color, slightly russeted. Flesh yellowish, juicy, sugary, aromatic. October to January.

KEEPING RED STREAK.

An English culinary sort.

Fruit medium, roundish oblate, yellowish, mostly striped with two shades of red, some russet and gray dots. Flesh greenish yellow, firm, brisk subacid. December, February. (Hogg.)

KEEPING RUSSET.

This is a dessert Apple described by Hogg as of first quality.

Fruit medium, roundish, pale yellowish brown russet, with a red cheek in the sun. Flesh yellow, firm, juicy, rich mellow flavor. October, January.

KEIM.

Origin, Berks Co., Pa. Tree moderately vigorous. Young shoots reddish brown.

Fruit small to medium, oblate. Color light waxen yellow, thickly sprinkled with light russet dots. Stalk long, slender, in a broad, shallow cavity. Calyx closed. Basin shallow and uneven. Flesh white, tender, crisp, fine, brisk, delicate aromatic subacid. Very good. December to March.

KEISER.

Red Seek-no-Further.

An old variety, much grown in Jefferson Co., Ohio, and highly prized; growth of tree like Rambo.

Fruit medium, roundish oblate, slightly oblique, angular. Skin pale yellow, shaded with red, indistinctly striped and thickly sprinkled with large, grayish dots. Stalk short, inserted in a large cavity. Calyx small, closed, in a broad, shallow, corrugated basin. Flesh yellowish, not very juicy, but mild subacid. Good. November to February.

KELSEY.

Origin, Berks Co., Pa., on the premises of John Kelsey.

Fruit medium, roundish oblate, sometimes inclining to conical, greenish yellow, with occasionally a faint blush, and numerous gray dots. Flesh tender, fine texture, greenish white, mild subacid. Good. March.

KELSEY SWEET.

Origin, Connecticut. Tree moderately vigorous, upright.

Fruit medium, roundish, greenish yellow, with a tinge of brown in the sun, green and gray dots. Flesh greenish white, moderately tender, juicy, sweet. Good. October, November.

KENNEBEC RUSSET.

From Maine. Tree vigorous, upright.

Fruit medium, roundish conical, yellow, partially netted with russet, and sprinkled with brown dots. Stalk long, slender. Calyx small, closed. Flesh moderately tender, juicy, brisk subacid. Good. November, December.

KENNEDY'S RED WINTER.

Originated in Pennsylvania. Tree an upright grower and regular bearer.

Fruit large, roundish conical yellow, shaded, splashed, and striped

with light and dark red, large light dots. Stalk short. Calyx closed. Flesh whitish, moderately juicy, a little coarse, pleasant subacid. Good. December, February.

KENNEY.

From Connecticut.

Fruit medium or below, roundish oblate, greenish yellow, shaded and splashed with red, large light dots. Flesh white, rather tender, moderately juicy, mild subacid. Good. Core small. December to March.

KENRICK.

Kenrick's Autumn.

Kenrick's Red Autumn.

Origin, on the farm of Mr. Kenrick, Newton, Mass. Tree moderately vigorous, compact, very productive.

Fruit large, roundish, pale yellowish green, striped and stained with bright red. Flesh white, a little stained with red, tender, juicy, sprightly acid. Good. September.

KENTISH BROADING.

A fine showy old English Apple. Tree a free grower and good bearer.

Fruit large, roundish oblate, yellow, with broken stripes or splashes of clear red. Flesh white, tender, a little coarse, subacid. Good. November, December.

KENT.

Originated on the premises of Walker Kent, near Plymouth, Mich. Tree a strong grower, and very productive.

Fruit large, roundish, pale greenish yellow, sometimes a slight blush cheek, few greenish dots. Stalk short. Calyx closed. Flesh white, tender, juicy, sprightly, subacid. Core rather large. Good to very good. October.

KENTISH FILL-BASKET.

Potter's Large Seedling.

Lady de Grey's.

An immense English fruit, properly named, and much admired by those who like great size and beauty of appearance. The flavor is tolerable, and it is an excellent cooking Apple. The tree grows strongly, and bears well.

Fruit very large—frequently four and a half inches in diameter—roundish, slightly ribbed or irregular. Color yellowish green in the shade, but pale yellow in the sun, with a brownish red blush on the sunny side, slightly streaked or spotted with darker red. Flesh tender, juicy, with a subacid, sprightly flavor. Good. October to January.

KENTISH PIPPIN.

Red Kentish Pippin.

Vaun's Pippin.

An old English Apple esteemed abroad for cooking, but is here quite good for dessert. Tree hardy, vigorous, and a good bearer.

Fruit medium, roundish oblate, sides often unequal, greenish yellow, with a slight blush next the sun, small gray dots. Stalk short, small. Cavity deep, large, and with thin russet extending out upon the fruit. Calyx partly open. Flesh yellowish white, crisp, tender, juicy, rich, brisk subacid. Good. Core small. December to May. Valuable as a late keeper.

KENTUCKY.

Of unknown origin, and probably a local name. An early and abundant bearer.

Fruit large and very uniform, roundish, slightly conical. Color yellowish, marbled and mottled, with dull red in the sun, with irregular greenish splashes or specks. Cavity narrow, acuminate. Calyx large, in a narrow abrupt basin. Flesh not very fine, but juicy, very tender, agreeable subacid. Good. October.

KENTUCKY CREAM.

Originated in Todd Co., Ky. Tree moderately vigorous, upright, an early and abundant bearer.

Fruit medium to large, roundish, largest at the crown or apex, and tapering slightly toward the stalk, yellowish mostly overspread with rich clear red, thickly sprinkled with large areole dots, and some grayish marblings next the stalk. Stalk slender. Cavity narrow, acute. Calyx large. Segments partially closed, divided. Basin broad, deep, somewhat corrugated. Flesh yellowish, breaking, not very juicy, rich, mild subacid. Good to very good. December to March.

KENTUCKY KING.

From Kentucky.

Fruit above medium, oblate, yellow, mixed and striped with carmine. Flesh yellow, breaking, fine-grained, juicy, subacid, aromatic. Good to very good. December, February. (Warder.)

KENTUCKY RED STREAK.

Winter Red Streak ?

Bradford's Best.

Selma ?

Origin obscure, supposed Tennessee. Tree upright, vigorous, and productive annually.

Fruit medium, roundish, slightly inclining to conic, greenish yellow, shaded with dull purplish red, and indistinctly splashed and striped, thickly sprinkled with large light dots, having gray centres, sometimes the number of dots give appearance almost as if mottled. Stalk medium. Calyx closed. Flesh whitish, tender, juicy, mild subacid. Core small. Good to very good. December to March.

KENTUCKY SWEET.

A Southern Apple of unknown origin.

Fruit medium, conic, regular, deep red, stripes obscured and scarcely visible. Dots scattered, large, yellow. Flesh yellow, tender, fine-grained, juicy, very sweet, rich, slightly perfumed. November, January (Warder.)

KERRY PIPPIN.

Edmonton's Aromatic Pippin.

An Irish dessert Apple.

Fruit middle size, oval, a little flattened at the eye, pale yellow. Flesh yellow, tender, crisp, with a sugary flavor. Good. Ripens in September and October.

KESWICK CODLIN.

A noted English cooking Apple, which may be gathered for tarts as early as the month of August, and continues in use till November. It is an early and a great bearer and a vigorous tree, and is one of the most profitable of orchard sorts for cooking or market. Tree very hardy, forming a large, regular, upright, spreading, round head.

Keswick Codlin.

Fruit a little above the middle size, rather conical, with a few obscure ribs. Stalk short and deeply set. Calyx rather large. Skin greenish yellow, washed with a faint blush on one side. Flesh yellowish white, juicy, with a pleasant acid flavor.

KETCHUM'S FAVORITE.

Origin, farm of Mr. Ketchum, in Sudbury, Vt. Tree vigorous and productive.

Fruit medium, roundish oblate, light waxen yellow, slightly shaded

with rosy blush, irregularly sprinkled with carmine dots. Flesh white, mild, tender, juicy, subacid. Good. September to January

KIKITA.

Origin unknown. Tree moderately vigorous, spreading.

Fruit medium, roundish, slightly oblate, greenish yellow, shaded with dull red in the sun. Flesh whitish, tender, moderately juicy, mild sweet. Good. November, December.

KILHAM HILL.

A native of Essex Co., Mass., raised by Daniel Kilham.

Fruit pretty large, roundish, ribbed, narrowing to the eye, pale yellow, slightly splashed with red in the shade, deep red in the sun. Flesh of sprightly, rather high flavor, but is apt to become dry and mealy. Good. September.

KINELLAN.

From Ross-shire, Scotland.

Fruit medium, roundish conic, yellowish green, some red in the sun. Flesh white, firm, juicy, pleasant. Good. December, January.

King of Tompkins County.

KING OF THE PIPPINS.

Hampshire Yellow.

An English fruit of poor quality, medium size, roundish oblate, pale yellow, washed and striped with red. Flesh very firm, sharp subacid. Good. October, November.

KING OF TOMPKINS COUNTY.

King Apple.

Toms Red.

Tommy Red.

Origin uncertain; said to have originated with Thomas Thacher, Warren Co., N. J. A valuable market fruit. Tree very vigorous, spreading, an abundant bearer annually. Young shoots very dark reddish brown, quite downy, especially toward the ends.

Fruit large, globular, inclining to conic, sometimes oblate, angular. Color yellowish, mostly shaded with red, striped and splashed with crimson. Stalk rather stout and short, inserted in a large, somewhat irregular cavity. Calyx small and closed, set in a medium, slightly corrugated basin. Flesh yellowish, rather coarse, juicy, tender, with an exceedingly agreeable, rich, vinous flavor, delightfully aromatic. Very good to best. December to March.

KINGSLEY.

Origin, Monroe Co., N. Y. Tree an erect moderate grower, an early bearer.

Fruit medium, roundish, yellowish, striped and splashed with red. Flesh fine-grained, juicy, melting, subacid. Very good. November, February.

KINGSTON BLACK.

A small English cider fruit of little value.

Fruit roundish, pale yellow, striped with red. Flesh white, stained with red, tender, juicy, sweet. November, December.

KING TOM.

From North Carolina. Origin unknown. Tree a crooked, twisting, tangled grower, forming a low head, with stout, distinct, blunt shoots.

Fruit medium, roundish, orange yellow. Flesh yellow, rather tough, spicy. August. (Ga. Hort. S. Rep.)

KINNEY.

A Southern variety, little known.

Fruit medium, roundish conic, greenish yellow, thickly sprinkled with gray dots and some russet. Stalk long, slender. Calyx closed. Flesh yellowish, rather firm, moderately juicy, subacid. Good. November, December.

KIRKBRIDGE WHITE.

Tree of rather slow upright growth, an early and abundant bearer.

Fruit below medium, oblong ovate, very irregular, ribbed, yellowish white. Stalk short and small, in a narrow cavity. Calyx small and closed. Segments long, reflexed. Basin narrow. Flesh white, tender, juicy, subacid. Core rather large. Good. August and September.

KIRTLAND.

Kirtland's Seedling.

Tree vigorous, and a good bearer.

Fruit large, oblong, deep rich yellow at maturity. Flesh yellowish, tender, spicy, subacid. Mid autumn. (Am. Hort. An.)

KIRK'S LORD NELSON.

English.

Fruit large, roundish, light yellow, striped and mottled with bright red. Flesh firm, juicy, but not rich. October, November.

KITTAGESKEE.

A Southern Apple of unknown origin. Tree moderately vigorous, spreading. Young shoots short-jointed, grayish.

Fruit below medium, oblate, sides unequal, fine yellow, with a tinge of brown in the sun, few dark or brown gray dots. Stalk rather short and slender. Cavity broad, sometimes a little russeted. Calyx partially closed. Basin broad, shallow, furrowed. Flesh yellow, crisp, tender, brisk, mild subacid, slightly aromatic. Core small. Good to very good. November to March.

KLAPROTH.

This beautiful Apple, a native of Lancaster Co., Pa. (on the farm of Mr. Brenneman), was brought into notice by Dr. J. K. Eshleman, of Downington, Pa., and promises to be an excellent fruit, especially for market purposes. It bears carriage remarkably well, a most prolific

Klaproth.

bearer and vigorous grower. We give the Dr.'s description. Young wood very grayish dull reddish brown. Size medium, form oblate. Skin greenish yellow, streaked and stained with red, deepened on the sunny side, dotted all over with light specks, and occasional russet spots near the stalk, which is short and inserted in a smooth deep cavity. Calyx small and closed. Segments reflexed, set in a wide, regular, and well-formed basin. Flesh white, very crisp, juicy, tender, and pleasant subacid flavor, and until quite ripe acid predominates. Very good. August to October.

KNICKERBOCKER.

Origin unknown.

Fruit medium or above, roundish oblate, greenish yellow, sprinkled with brown dots. Stalk medium. Cavity large, deep, uneven. Calyx closed. Basin broad, shallow, uneven. Flesh whitish, juicy, crisp, brisk subacid, pleasant aromatic. Good to very good. September, October.

KNOBBY RusSET.

Knobbed Russet.

Old Maid's.

Winter Russet.

A dessert Apple from Sussex, England, which Lindley describes as of medium size, roundish oval, yellow, nearly covered with russety knobs or warts. Flesh yellowish, crisp, not juicy, but sweet and high flavored. December to March.

KNOWLES' EARLY.

Oat Harvest ?

Introduced by John Knowles, near Philadelphia. Tree of moderate growth, forming a round head, an early, annual, and abundant bearer, and the fruit continues in use a long time.

Fruit small, roundish oblate, smooth, pale greenish yellow, partially striped and splashed with dull crimson. Stalk long, slender. Calyx closed. Flesh whitish, very tender, moderately juicy, mild subacid. Good to very good. August.

KNOX RusSET.

Found in the orchard of J. Knox, Pittsburgh, Pa. Origin unknown. Tree spreading, productive, shoots slender.

Fruit small to medium, globular, somewhat conic, yellow green, blushed, covered with light russet. Flesh yellow, fine-grained, mild subacid, aromatic. Good to very good. December, January.

KOHLE.

From Germany. Tree thrifty, forming a regular top, a good and regular bearer.

Fruit small, roundish, crisp, juicy. Good keeper. (A. Pom. Rep.)

KÖNIG'S REINETTE.

Reinette Dorée.
Royale.

Reinette du Roi.
Winter Citronenapfel.

This is said to be a beautiful long-keeping dessert Apple, of German origin.

Fruit above medium, roundish oblate, ribbed, lemon yellow, with a rich red cheek. Flesh yellowish white, very fine, firm, and juicy, rich subacid. December to March. (Diel.)

KRAUSER.

Krowser.

Krouser.

Origin, Berks Co., Pa. Tree vigorous, a handsome grower and an abundant and regular bearer. Young wood dark reddish brown.

Fruit medium, roundish conic. Color whitish yellow, striped and splashed with bright red. Stalk rather short, inserted in a medium cavity. Calyx closed. Basin small and corrugated. Flesh white, tender, mild subacid. Good to very good. December, March.

KRAUTER REINETTE.

A German Apple, highly praised in its own home.

Fruit medium, roundish oblate, greenish yellow. Stalk long. Cavity russeted. Flesh white, very fine, juicy, highly aromatic. December to March.

LABUTE.

Of French origin. Tree vigorous, upright.

Fruit large, roundish conical, sides unequal, yellow, mostly shaded, and somewhat splashed with rich red. Stalk rather short. Cavity deep. Calyx closed. Basin small, corrugated. Flesh white, crisp, rather firm, juicy, pleasant subacid. Good. Core large. October.

LACKER.

Laquier.

Origin, Lancaster Co., Pa.

Fruit medium, oblate, sides sometimes unequal, pale red, striped and splashed with crimson. Stalk short, slender, inserted in a narrow russeted cavity. Calyx closed. Basin wide, deep, corrugated. Flesh white, tender, crisp, juicy, pleasant subacid. Good. November to March.

LADY APPLE.

Api.

Pomme d'Api Rouge.

Api Petit.

Petit Api Rouge.

Pomme Rose.

Gros Api Rouge.

An exquisite little dessert fruit, the pretty size and beautiful color of which render it a universal favorite; as it is a great bearer, it is also a profitable sort for the orchardist, bringing the highest price of any

Lady Apple.

fancy apple in the market. It is an old French variety, and is nearly always known abroad by the name of *Api*; but the name of Lady Apple has become too universal here to change it now. No amateur's collection should be without it.

Fruit quite small, but regularly formed and flat. Skin smooth and glossy, with a brilliant deep red cheek, contrasting with a lively lemon yellow ground. Stalk of medium length, and deeply inserted. Calyx small, sunk in a basin with small plaits. Flesh white, crisp, tender, and juicy, with a pleasant flavor. The tree has upright, almost black shoots, with small leaves; forms a very upright, small head, and bears its fruit in bunches. The latter is very hardy, and may be left on the tree till severe frosts. The Lady Apple is in use from December to May.

The Api Noir, or *Black Lady Apple*, differs from the foregoing sort only in the color, which is nearly black. In shape, size, season, and flavor, it is nearly the same. It is, from its unusually dark hue, a singular and interesting fruit—poor flavor.

The true Api Étoile, or *Star Lady Apple*, figured and described by Poiteau, in the *Pomologie française*, is another very distinct variety; the fruit is of the same general character, but having five prominent angles, which give it the form of a star. This variety is rather scarce, the common Lady Apple being frequently sent out for it by French nurserymen. It keeps until quite late in the spring, when its flavor becomes excellent, though in winter it is rather dry. The growth of the tree resembles that of the other Apis.

The Api Gros, or Large Lady Apple, is of a similar habit in growth of the tree to the true Lady Apple, the fruit a trifle larger, more roundish, less brightly colored, and quite inferior in quality.

The Api Gros Pomme de Rose, or Rose-colored Lady Apple, is also another variety, with fruit of medium size, roundish, pale yellow, washed with bright rosy red. Flesh yellowish white, fine-grained, juicy, crisp, aromatic.

LADY BLUSH.

Received from Pennsylvania.

Fruit rather large, roundish, whitish yellow, shaded in the sun with bright red, many light and gray dots. Stalk medium. Cavity deep. Calyx closed. Flesh yellowish, rather firm, moderately juicy, pleasant subacid, slightly aromatic. Good. November, December.

Elliott describes a Lady or Lady's Blush as medium, yellow, with red blush. Flesh dry.

LADY FINGER.

Under this name Hogg describes an Apple as:

Fruit below medium, pyramidal, rounded at base, dull greenish yellow, with minute gray russety dots, dull blush and spots of lively red in the sun. Flesh yellow, tender, juicy, pleasantly acid. November to March.

Coxe describes an apple as Lady Finger or Long Pippin, as remarkably long, greenish yellow. Flesh pleasant, early winter, but does not keep well.

Elliott describes under name of Lady Finger, synonym Sheep Nose, an apple as medium size, oblong, pale yellow, faint blush. Flesh firm, watery. November, December.

We have also received an apple from Maryland under this name which is of medium size, roundish conical, yellowish, shaded over the whole surface with deep crimson, thinly sprinkled with light dots. Stalk

short. Cavity rather deep. Calyx closed. Basin large, deep, corrugated. Flesh white, tender, moderately juicy, pleasant subacid. Good to very good. Core small. August.

LADY HALEY'S NONSUCH.

An Eastern variety, of unknown origin. Tree vigorous, productive.

Fruit medium, roundish oblate, ribbed, light waxen yellow, shade of red in the sun. Stalk short and stout. Cavity large. Calyx closed. Basin medium, corrugated. Flesh rather firm, pleasant, slightly aromatic. Good. Cooking. September.

LADY OF THE WEMYSS.

A large and handsome Scotch Apple.

Fruit roundish, pale green, red next the sun. Flesh white, juicy, subacid. October, December.

LADY'S DELIGHT.

An English culinary Apple, the habit of the tree like that of the Weeping Willow.

Fruit medium, roundish oblate, ribbed, greenish yellow, with red next the sun. Flesh white, crisp, juicy, brisk, aromatic. October, December. (Hogg.)

LADY'S FANCY.

King of some.

Origin unknown. Much grown in Vermont, Northern New York, and Canada.

Fruit above medium, oblong conical, whitish yellow, splashed, shaded, and mottled with light and dark red, light dots. Stalk short. Cavity narrow. Calyx closed. Flesh white, crisp, tender, juicy, agreeable, subacid. Core large. Good. November to February.

LADY'S SEEDLING.

Origin, Delaware Co., Pa. Tree moderately vigorous, upright, spreading.

Fruit medium, oblate, greenish yellow, with a blush cheek. Flesh whitish, juicy, pleasant subacid. October.

LADY'S SWEET.

Pommeroy. Lady's Sweeting. Roa Yon. Ladies' Sweet.

We consider this one of the finest winter sweet Apples for the desert yet known or cultivated in this country.

Its handsome appearance, delightful perfume, sprightly flavor, and the long time which it remains in perfection, render it universally admired wherever it is known, and no garden should be without it. It is a native of this neighborhood. The wood is not very strong, but it grows thriftily, and bears very abundantly, making a round spreading head. Young shoots reddish brown, downy. Buds small.

Fruit large, roundish ovate, narrowing pretty rapidly to the eye. Skin very smooth, nearly covered with red in the sun, but pale yellowish green in the shade, with broken stripes of pale red. The red is sprinkled with well-marked yellowish gray dots, and covered, when first gathered, with a thin white bloom. There is also generally a faint marbling of cloudy white over the red, on the shady side of the fruit, and

Lady's Sweet.

rays of the same around the stalk. Calyx quite small, set in a narrow, shallow, plaited basin. Stalk half an inch long, in a shallow cavity. Flesh greenish white, exceedingly tender, juicy, and crisp, with a delicious, sprightly, agreeably perfumed flavor. Very good or best. Keeps without shrivelling, or losing its flavor, till May.

LADY'S WHITE.

Origin, Franklin Co., O. Tree a good grower and bearer.

Fruit medium or below, roundish, whitish, very smooth and fair. Flesh white, tender, juicy, subacid. December to February.

LAFAYETTE.

Originated in Chester, N. H., on the farm of William Jenney, and first fruited in 1824, the year of General Lafayette's visit to this country, hence its name. It is much esteemed in its native locality, but has been little disseminated. Tree a good grower and an annual bearer.

Fruit medium, roundish, whitish yellow, shaded, splashed, and marbled with crimson, moderately sprinkled with light dots. Stalk rather

long, slender. Cavity medium. Calyx closed. Segments rather short to a point. Basin abrupt, corrugated. Flesh white, juicy, tender, pleasant, mild subacid. Good to very good. December to February.

LAKE.

Origin, D. C. Richmond, Sandusky, O. Tree of strong upright growth, productive. Young shoots stout, short-jointed, dull reddish brown, slightly downy.

Fruit medium, roundish oblate conical, yellow, striped, splashed, and shaded with deep red. Flesh yellowish, tender, juicy, rich, pleasant subacid. Good to very good. Core small. Ripe September and October.

LAMB ABBEY PEARMAIN.

Laneb Abbey Pearmain.

An old variety, from Kent, England. Tree not healthy.

Fruit medium, roundish, yellow, shaded, splashed, and striped with two shades of red. Flesh whitish, compact, juicy, subacid. Good. November.

LANCASTER GREENING.

Lancaster Pippin.

Origin, Lancaster Co., Pa. Tree hardy, vigorous, spreading. Young wood smooth, reddish brown. Buds prominent, flattened.

Fruit medium, roundish oblate, approaching conic. Color greenish, but when fully mature quite yellow, occasionally a blush of crimson in the sun, and pretty thickly sprinkled with russet and crimson dots and patches of russet. Stalk slender. Cavity deep, sometimes russeted. Calyx small, closed. Basin very shallow, corrugated. Flesh yellowish, compact, moderately juicy, pleasant, mild subacid. Very good. December to May. Much valued as a long keeper.

LANCASTER SWEET.

Origin, probably Pennsylvania. Tree vigorous, productive.

Fruit medium, roundish conic, whitish, splashed and marbled with red. Flesh whitish, not very tender, juicy, sweet. Good. September, October.

LANDON.

Origin uncertain, found on the farm of Buel Landon, Grand Isle, Vt., and by him introduced to notice. Tree vigorous, with low spreading branches, and bears moderately every year.

Fruit medium, roundish, inclining to conic. Color yellow, mottled and shaded with red or deep crimson, and covered with numerous grayish dots. Stalk short. Cavity large, surrounded by russet. Calyx open, basin corrugated and shallow. Flesh yellowish, firm, crisp, juicy, with a rich, mild subacid flavor, aromatic. Very good. February to May.

LANE'S RED STREAK.

Origin, orchard of Mr. Lane, Edgar Co., Illinois. Tree of moderate growth.

Fruit large, round conical, regular. Color yellow, with very fine short stripes, and specks of bright red, beautiful. Flesh white, fine, tender, pleasant subacid, of fair quality. Good. October.

LANE'S SWEET.

Origin, Boylston, Mass. Tree a good grower and productive. Young shoots smooth, light reddish brown.

Fruit medium, roundish conical, yellow, shaded, splashed, and striped with red, moderately sprinkled with large light dots. Stalk medium, slender. Calyx closed. Basin corrugated. Flesh white, crisp, tender, juicy, pleasant sweet. Good to very good. September.

There is another Lane's Sweet which originated in Hingham, Mass. Tree vigorous and productive. Young shoots dark reddish brown, slightly downy.

Fruit medium, oblate, slightly conic. Color fine yellow, with a sunny cheek. Stalk short. Cavity large, russeted. Calyx closed, basin small, open. Flesh yellowish, not very tender, juicy, sweet, aromatic. November to March.

LANSINGBURGH.

Origin unknown. Tree upright, spreading, vigorous, moderately productive.

Fruit medium, roundish oblate, yellow, largely overspread with gray-

Large Yellow Bough.

ish red. Flesh firm, mild subacid. Good. Valuable mainly because of its long keeping qualities.

LARGE YELLOW BOUGH.

Early Sweet Bough.
August Sweet.

Sweet Harvest.
Washington, incorrectly.

Bough.
Sweet Bough.

A native Apple, ripening in harvest time, and one of the first quality, only second as a dessert fruit to the Early Harvest. It is not so much esteemed for the kitchen as the latter, as it is too sweet for pies and sauce, but it is generally much admired for the table, and is worthy of a place in every collection.

Fruit above the middle size, and oblong ovate in form. Skin smooth, pale greenish yellow. Stalk rather long, and the eye narrow and deep. Flesh white, very tender and crisp when fully ripe, and with a rich, sweet, sprightly flavor. Ripens from the middle of July to the tenth of August. Tree moderately vigorous, bears abundantly, and forms a round head. Young shoots grayish brown, very slightly downy.

LARUE'S BIG GREEN.

Origin, Hardin Co., Ky.

Fruit very large, yellow. Flesh vinous, sprightly subacid. February, March. Superior for cooking. (Ky. Hort. Soc. Trans.)

Late Strawberry.

LATE STRAWBERRY.

Autumn Strawberry.

Origin, Aurora, N. Y., on lands formerly owned by Judge Phelps. Tree vigorous, upright, spreading, hardy. Young wood smooth, reddish brown, a regular and early bearer.

Fruit medium, roundish, inclining to conic, sometimes obscurely ribbed. Color whitish, striped and splashed with light and dark red, and often covered with a thin bloom. Stalk rather long, slender, curved. Cavity large, deep, slightly russeted. Basin abrupt, corrugated. Flesh yellowish white, tender, juicy, pleasant vinous, subacid. Very good. October, December.

LATE SWEET.

A variety somewhat grown in Connecticut, origin unknown.

Fruit medium, roundish, yellow, mostly shaded, splashed, and marbled with red, light and gray dots. Flesh white, compact, not juicy, sweet. December, March. A long keeper and good for cooking.

LATE WINE.

A very excellent Apple, the origin of which we have been unable to trace, nor can we identify it with any known sort. Tree upright, vigorous, an early and abundant bearer. Young shoots smooth, light reddish brown, with buds large, round, and prominent.

Fruit rather below medium, roundish conical. Sides unequal. Color mostly shades of light and dark crimson, sometimes almost purple, a thin light bloom and light dots. Stalk short, slender. Cavity acute, slightly russeted, sometimes lines or traces of russet outwards. Calyx small, closed. Basin abrupt, furrowed. Flesh white, very tender, juicy, mild, pleasant subacid. Very good. October, November.

LATHAM.

Origin, Sag Harbor, Long Island, N. Y. Tree a good grower, very productive.

Fruit medium, oblate conic, sides unequal, yellow, almost entirely overspread with light and dark red, small light dots. Flesh white, tender, juicy, pleasant, mild subacid. Good. November, December.

LAUREN'S GREENING.

Origin, Laurens Co., Ga.

Fruit large or above medium, oblate, greenish, with tinge of red in the sun. Flesh white, crisp, acid, pleasant. Good. September.

LAWVER.

Origin uncertain. Introduced by George S. Park, of Parkville, Mo., and said to have been found in an old Indian orchard in Kansas. Tree vigorous, spreading, an early and annual bearer, a beautiful fruit, and a long keeper.

Fruit large, roundish oblate. Color dark bright red, covered with small dots. Stalk medium. Cavity deep, regular. Calyx small, closed. Basin medium, furrowed. Flesh white, firm, crisp, sprightly, aromatic, mild subacid. January to May. (Prairie Farmer.)

LEAVER.

Received from South Carolina. Tree remarkably vigorous and a good bearer.

Fruit medium, roundish, slightly conical, yellow, shaded and obscurely striped and splashed with red. Stalk slender. Calyx nearly closed. Flesh yellowish, firm, crisp, juicy, rich, slightly aromatic subacid. Good to very good. Core small. November to March.

LEDGE SWEET.

Portsmouth Sweet.

Origin, Portsmouth, N. H. Tree vigorous, productive, regular bearer.

Fruit medium, oblate, whitish yellow, thinly shaded with red, splashed and striped with dark red, thinly sprinkled with light and gray dots. Stalk very short, stout. Cavity broad, not deep. Calyx closed. Segments short. Basin medium, slightly corrugated. Flesh yellowish, a little coarse, tender, juicy, mild, half sweet, pleasant. Core small. Good or very good. December to March.

LEICESTER SWEET.

Potter Sweet.

Origin, Leicester, Mass. Tree vigorous, not very productive.

Fruit rather large, flattish, greenish yellow and dull red. Flesh tender, rich, excellent, fine for dessert or baking. Winter.

LEITHEMER STREIFLING.

Of German origin.

Fruit large, roundish conical, lemon yellow, overspread, shaded, and striped and splashed with varying shades of red. Calyx closed. Basin ribbed. Flesh white, tinged with red, firm, aromatic, sweet. December.

LELAND SPICE.

Leland Pippin.

New York Spice.

Origin, Sherburne, Mass. Tree vigorous, productive.

Fruit large, roundish. Color yellow, nearly covered with bright red. Stalk short, inserted in a narrow cavity. Calyx small, closed. Basin shallow. Flesh yellowish, rather tender, juicy, with a very rich aromatic subacid flavor, excellent for dessert or kitchen. Good to very good. September, October.

LEMON PIPPIN.

Kirke's Lemon Pippin.

Pepin Limon de Galles?

An English variety, of medium size, oval. Skin lemon yellow. Flesh firm, brisk subacid. Good. October.

LESHER.

Origin, Berks Co., Pa.

Fruit medium to large, oblate, sides unequal, whitish, shaded in the sun with light purplish crimson, few small gray and light dots. Flesh white, crisp, moderately tender, pleasant subacid. Good. December to February.

LEWIS.

Origin, Putnam Co., Ind. A good grower, and productive.

Fruit medium, oblate conic, yellowish, striped with crimson, and partially covered with thin cinnamon russet, and sprinkled with gray and brown dots. Stalk short, inserted in a deep cavity. Calyx closed or nearly so, in a moderate basin. Flesh yellow, compact, with a rich subacid flavor, not very juicy. Good. November, February.

It is claimed by some that there is another Lewis, but our experience in fruiting them does not enable us to so decide.

LEWIS'S INCOMPARABLE.

An English sort, mostly valued for cooking. Tree vigorous, productive.

Fruit medium to large, roundish oblate, yellow, with streaks and shades of red. Flesh yellowish white, firm, crisp, brisk subacid. December.

LIBERTY.

Originated in Delaware Co., O. Tree vigorous, spreading, and productive. Young shoots smooth, reddish brown.

Fruit medium, roundish oblong, oblate, oblique, conical, yellowish, shaded, splashed, and striped with shades of dull red. Flesh yellowish, rather firm, mild subacid. Core small. Good. Valued mainly for its keeping qualities. December to May.

LIGOZ.

Origin unknown.

Fruit large, roundish, yellow, shaded, splashed, and striped with shades of red. Flesh whitish, a little coarse, juicy, crisp, pleasant subacid. Good. Core small. December, January.

LIMBER TWIG.

James River. Red Limber Twig ?

An Apple much cultivated South and West. Origin, supposed North Carolina. Tree hardy and productive, roundish, spreading, somewhat drooping.

Fruit medium or above, roundish oblate, inclining to conic, greenish yellow, shaded and striped with dull crimson, and sprinkled with light dots. Stalk of medium length, inserted in a broad, deep cavity, surrounded by thin, green russet. Calyx closed, set in a small, uneven basin. Flesh whitish, not very tender, juicy, with a brisk, subacid flavor. Good. January, April.

LINCOLNSHIRE HOLLAND PIPPIN.

Striped Holland Pippin.

A second-rate cooking Apple.

Fruit above medium, roundish, slightly oblate, yellow, stripes of red in the sun. Flesh white, subacid. November, January.

LINDENWALD.

Origin, orchard of J. G. Sickles, Stuyvesant, N. Y. Tree moderately vigorous, upright.

Fruit medium, roundish oblate, surface oily, yellow, light shades of red in the sun, few indistinct dots. Stalk short. Cavity deep, often russeted. Calyx closed. Basin deep, slightly furrowed. Flesh yellowish, crisp, juicy, pleasant subacid. Good to very good. September.

LINDLEY'S NONPAREIL.

Origin, Chatham, N. C. Tree delicate, slender, poor grower, great bearer.

Fruit small, oblate, yellow, blush in the sun. Flesh yellowish, rich, crisp, aromatic, nearly sweet. Good to very good. August, September.

LIPPINCOTT SWEET.

Origin, New Jersey.

Fruit medium, roundish conical, pale yellow, thin shade of crimson in the sun, many brown and russet dots. Flesh white, tender, moderately juicy, pleasant mild sweet. Good. Core small. December to March.

LITCHFIELD PIPPIN.

Raised by Wm. Hutchins, of Litchfield, Me.

Fruit medium to large, oval, yellow, with red in sun. Flesh white, mild subacid. (Me. Rep.)

LITTLE BEAUTY.

This little Apple, says Ronalds, has the property of holding firmly to the branches, so as not easily to be dislodged. Tree upright, and a great bearer.

Fruit small, roundish oblate, yellow bronzed in the sun. Flesh yellowish, rich, but rather dry. December, February.

LOAN'S PEARMAIN.

An old variety. Tree a poor grower.

Fruit small, roundish oblong, greenish, with stripes of dark red. Flesh firm, juicy, crisp. Good. September to November.

LOCY.

Fruit globular, sometimes inclining to oblate, and sometimes oblong or conic, greenish, shaded and striped with dull red. Flesh greenish, crisp, tender, juicy, pleasant. Hardly good. November, February.

LODGEMORE NONPAREIL.

Clissold's Seedling.

An English dessert Apple.

Fruit medium, roundish, deep yellow, with blush in sun. Flesh yellowish, firm, crisp, juicy, aromatic. February, March. (Hogg.)

LONDON PIPPIN.

Five-Crowned Pippin. New London Pippin. Royal Somerset.

A very old English Apple, mostly valued for cooking or drying. Tree a moderate grower, productive.

Fruit large, roundish, slightly conical, flattened at base, yellow, with a tinge of red in the sun. Calyx small, closed. Flesh white, rather firm, subacid. Good. November to February.

LONDON SWEET.

Heicke's Winter Sweet.
Clark's Seedling.

Mrs. Weaver's Sweet?
London Winter Sweet.

Origin supposed near Dayton, O. Tree vigorous, productive, valuable in rich deep soils. Young wood, dull grayish brown.

Fruit medium or large, roundish oblate, pale yellow, with very slight indications of russet, a little green russet around the stalk, and sparsely covered with brown specks. Stalk short, in a large cavity. Calyx closed, set in an abrupt, open, slightly uneven basin. Flesh whitish, juicy, tender, fine, delicate, sweet, slightly aromatic. Good to very good. November to February.

LONG ISLAND PEARMAIN.

Hollow Crown Pearmain.

An old variety, described by Coxe, and while it is somewhat extensively grown, has been sometimes confounded with Winter Pearmain, which is an entirely different fruit.

Fruit large, roundish oblong, having a large hollow basin or crown, yellow, splashed and streaked with red, and some faint russet spots. Flesh coarse, tender, somewhat dry, aromatic. Good. October to February.

LONG ISLAND PIPPIN.

Origin unknown. Specimens from T. T. Lyon, Plymouth, Mich.

Fruit large, roundish, flattened, yellowish green. Flesh greenish yellow, breaking, fine-grained, juicy subacid. Almost best. January. (Warder.)

LONG ISLAND RUSSET.

An old Apple, much grown in New Jersey and Long Island, and valued highly for cider purposes. Tree vigorous, spreading, and productive.

Fruit below medium, roundish, yellow, mostly overspread with dull russet, black spots or blotches when fully ripe. Flesh yellowish, tough, rather dry, almost sweet. October to February.

LONG JOHN.

Of unknown origin.

Fruit large, conical, greenish yellow. Flesh yellowish white, rather dry, subacid, valuable only for its size and long keeping quality. March to May.

LONG'S RED WINTER.

H. R. Robey, of Fredericksburg, says this was found in the forest about fifteen miles from that place.

Fruit medium to large, roundish oblate, yellow, striped and splashed with bright red, sprinkled with a few brown dots. Flesh yellowish, tender, juicy, crisp, subacid. Good to very good. December to February.

LONG START.

Westmoreland Longstart.

An English culinary Apple.

Fruit medium, roundish, yellow, mostly overspread and streaked with red. Flesh white, crisp, tender, pleasant subacid. October, December.

LONG STEM.

There are four distinct Apples under this name, easily distinguished by the wood of the young shoots.

The Long Stem of Connecticut is, perhaps, the oldest variety. The young shoots are dull reddish brown, somewhat downy, with prominent rounded, flattened buds.

Fruit medium, roundish oblate, yellow, with greenish dots, and small patches of russet. Calyx small, in a small basin. Flesh yellow, fine-grained, somewhat spicy, sweet, and rich. Good. September to January.

The Long Stem of Massachusetts has rather slender young shoots of reddish brown, somewhat grayish, and slightly downy, with small clear red buds.

Fruit medium, roundish oblate, yellow, with a slight blush in the sun, moderately sprinkled with light and gray dots. Calyx medium, closed. Flesh yellowish, tender, juicy, sprightly subacid, aromatic. Good. October, February.

The Long Stem of Pennsylvania has young shoots, of a yellowish brown, with very small short buds.

Fruit medium or below, roundish, inclining to oblong, truncated, yellowish, shaded, splashed, and striped with red mostly over the whole surface, many small light and gray dots. Stalk long, slender, curved, with bracts. Calyx closed. Segments a little recurved. Basin corrugated. Flesh whitish, crisp, tender, mild subacid, slightly aromatic. Good to very good. November to February.

The Long Stem of Kentucky has reddish grayish brown young wood, slightly downy, with short, round, flattened buds.

Fruit medium, roundish oblate, greenish, shaded, mottled, and rather indistinctly splashed and striped over all with dull dark red, and with many large light gray dots. Flesh greenish white, rather compact, mild, almost sweet, subacid. Core small. Good to very good. December to March.

LONGVILLE'S KERNEL.

Sam's Crab.

English. Fruit rather below medium size, oval, rather flattened,

greenish yellow, streaked with pale brownish red, with a few streaks of bright red. Flesh firm, yellow, slightly perfumed, subacid. Good August and September.

LORD BURLEIGH.

Lord Burghley.

A new celebrated English dessert Apple, as yet untested here.

Fruit medium, roundish, slightly oblate, and ribbed, yellow, with a bright crimson cheek, and many russet specks. Flesh yellowish, tender, juicy, sweet pine-apple flavor. January to May. (Hogg.)

LORD SUFFIELD.

A valuable English kitchen Apple, described as an improvement on Keswick Codlin. The tree hardy, and a great bearer.

Fruit above medium, conical, greenish yellow, with a tinge of red in the sun. Flesh white, firm, tender, brisk subacid. August and September.

LORICK CLUSTER.

Said to have originated in Georgia. Tree a poor grower, but a great bearer and keeper.

Fruit small, roundish conical, pale green, with a brown tinge in the sun. Flesh greenish white, pleasant, mild subacid. Good. Core small. January to April.

LORING SWEET.

Fruit medium, oblate, greenish yellow, shaded with red, and sprinkled with brown specks. Flesh tender, juicy, sweet, and rich. Good. November to June.

LOUDON PIPPIN.

White's Loudon Pippin.

Lady Washington?

Origin, farm of Mr. White, Loudon Co., Va., and much cultivated and valued in that section. Tree very vigorous, upright spreading.

Fruit large, oblate, approaching conic, light yellow, sometimes blush of red in the sun, sprinkled with a few grayish dots. Stalk short, inserted in a large cavity, surrounded by russet. Calyx large, open. Basin smooth and even, rather deep. Flesh yellowish, compact, tender, juicy, subacid. Good to very good. December to February.

LOUISE RENARD.

Originated in Belgium.

Fruit medium, roundish oblate, conical, yellow, shaded with bright red in the sun, small reddish gray spots. Stalk short. Cavity deep, irregular. Calyx open. Flesh very white, tender, subacid, aromatic. (An. Pom.)

LOVETT'S SWEET.

Origin, Beverly, Mass.

Fruit medium, roundish oblate conic. Skin yellow. Flesh yellow, moderately juicy, sweet and pleasant. Good. October to February.

LOWELL.

Queen Anne.
Orange.

Michigan Golden.
Tallow Apple.

Greasy Pippin.
Golden Pippin of some.

Origin unknown. Tree hardy, vigorous, spreading, productive. Young wood reddish brown.

Fruit large, roundish oval or conic, bright waxen yellow, oily. Stalk of medium length. Cavity deep, uneven. Basin deep, abrupt, and furrowed. Calyx closed. Flesh yellowish white, with a brisk, rich, rather acid flavor. Good to very good. September, October.

Lowell.

LOWRE QUEEN.

Loure Queen.

Origin unknown, somewhat extensively grown in Central Ohio. Trees upright, early bearers.

Fruit medium, roundish, flattened, yellow, striped and splashed with dull red. Flesh yellowish white, tender, juicy. Very good. November, February. (Elliott.)

LUCE'S EARLY JOE.

Early Joe, incorrectly.

Origin unknown.

Fruit medium, roundish oblate, whitish, with a blush in the sun, few brown dots. Flesh yellowish, tender, crisp, juicy, mild, pleasant subacid. Good. September.

LUCOMBE'S PINE-APPLE.

Pine-Apple.

Pine-Apple Pippin.

An English Apple, rather below medium size, ovate conical, obscurely ribbed, pale yellow, bronzed in the sun. Flesh yellowish white, tender, juicy, subacid, aromatic. Good. October, December.

LUCOMBE'S SEEDLING.

English. Fruit large, roundish, angular, whitish, striped and splashed with red. Flesh firm, juicy, good for cooking. October, November.

LUDWIG.

Haas.

Originated on the land of ——— Ludwig, Bucks Co., Pa., and considerably grown in its native locality.

Fruit large, roundish, slightly conical, whitish, splashed, mottled, and shaded with light red, many dots, with dark centres. Stalk short, slender. Cavity rather large, a little greenish russet. Calyx closed. Basin slightly corrugated. Flesh white, sometimes a little stained next the skin, fine-grained, juicy, mild subacid. Core rather small. Good to very good. November to March.

LYMAN'S LARGE SUMMER.

Large Yellow Summer.

A large and handsome American fruit, introduced to notice by Mr. S. Lyman, of Manchester, Conn. The bearing trees are easily recognized by their long and drooping branches, which are almost wholly without fruit-spurs, but bear in clusters at their extremities. They bear poorly until the tree attains considerable size, when it yields excellent crops.

Fruit quite large, roundish, flattened at the ends. Skin smooth, pale yellow. Flesh yellow, tender, subacid, and good for the table or for cooking. Last of August.

LYON'S SWEET.

Originated in Connecticut. Tree a good grower and great bearer.

Fruit medium, roundish, inclining to conic, yellow, shaded, striped, and splashed with red, light and gray dots. Stalk short. Calyx closed. Flesh whitish, rather compact, juicy, tender, sweet. Good. December.

LYSCOM.

Osgood's Favorite.

Matthew Stripe.

Origin, Massachusetts. Tree vigorous, upright, spreading. Young shoots dark brown, downy

Fruit large, roundish, greenish yellow, with a few broken stripes or splashes of red. Stalk short, planted in a deep, round, even cavity.

Calyx large, in a broad, plaited basin. Flesh fine-grained, and exceedingly mild and agreeable in flavor. Good to very good. September to November.

McAFEE'S NONSUCH.

McAfee's Red.

Originated at McAfee's old Fort in Kentucky. Good grower, very productive. Young shoots smooth reddish brown.

Fruit large, globular, inclining to oblate. Skin yellowish green, shaded and striped with crimson and covered with a thin bloom. Stalk short, inserted in a large cavity. Calyx closed, set in a small basin. Flesh whitish, solid, crisp, subacid. Good to very good. December to March.

McCoy's PIPPIN.

Origin, Loudon, Mercer Co., Pa. Tree of medium upright growth, productive, valued as a showy market sort, and also for cooking.

Fruit large, oblate, a little oblique, greenish white, a shade of dull red in the sun, brown dots. Flesh white, crisp, tender, moderately juicy, pleasant, mild subacid. Good. Core small. October, December.

McDANIEL.

Origin, Green Co., Ohio.

Fruit full medium, regular, oblate, yellow, covered with rich crimson, indistinct stripes. Dots light gray. Flesh yellow, solid, juicy, subacid, rich, piquant. October, November. (Warder.)

McDOWELL'S SWEET.

Origin, North Carolina.

Fruit medium or above, roundish oblate, fine yellow, mostly overspread, shaded, and splashed with light and dark red, almost purplish in the sun. Stalk short. Calyx small, closed. Basin narrow, corrugated. Flesh whitish, tender, juicy, mild, refreshing, sweet. Good to very good. October, December.

McHENRY.

Origin, Elizabethtown, Indiana. Growth upright and free, moderately productive. Color and quality similar to American Summer Pearmain. September to December.

MACKAY SWEET.

Origin, Massachusetts. Tree a good grower and productive.

Fruit medium, roundish oblate conic, yellow, slight tinge of red in the sun. Stalk short. Cavity large, slightly russeted. Calyx small, closed. Flesh whitish, tender, juicy, mild, sweet, pleasant. Good. Core small. December to March.

McKIM'S VANDERVERE.

Origin, on the grounds of Robert McKim, Centre Co., Pa. Tree vigorous, upright.

Fruit medium, roundish oblate, deep yellow, splashed, striped, and mottled with shades of red, light and brown dots. Flesh white, tender, not very juicy, acid. Good. September, November.

McKINLEY.

Fruit medium, roundish flattened, slightly conic, dull red on greenish yellow. Stripes indistinct. Flesh breaking, fine-grained, juicy, subacid. Good. December, January.

MACLEAN'S FAVORITE.

An English Apple of little value.

Fruit medium, roundish, yellow. Flesh crisp, acid. November to February.

McLELLAN.

Martin.

Origin, Woodstock, Conn. Tree thrifty, upright, very productive, annual bearer, and handsome. Young shoots, dull grayish red dish brown, slightly downy.

McLellan.

Fruit medium or above, roundish oblate, slightly conic, very regular, and fair. Color yellow, mostly striped, marbled, and splashed with red. Stalk short, inserted in a rather deep cavity. Calyx small, nearly closed. Basin moderate, slightly uneven. Flesh white, very tender, juicy, with a fine vinous flavor, almost saccharine. Very good. December to March.

MACOMBER.

Origin, Guilford, Maine. Tree a good annual bearer.

Fruit full medium, oblate, angular, yellowish, shaded and striped with red. Stalk short. Cavity large. Calyx closed. Basin large and regular. Flesh white, fine-grained, tender, subacid. Good. Core small. December, January.

MAGNOLIA.

Origin, Bolton, Mass. Growth moderate, productive.

Fruit medium, roundish oblate conic, yellow, beautifully striped and mottled with crimson. Stalk short, in a broad, uneven cavity. Calyx closed. Basin small. Flesh white, tender, juicy, brisk, aromatic, subacid. Good to very good. October.

We have also received from J. W. Dodge, Tennessee, an apple under this name, the origin of which cannot be well traced. It is large, roundish oblate, inclining to conic, irregular, yellow, striped, mottled, and splashed with red. Flesh yellow, a little coarse, tender, juicy, pleasant, slightly aromatic. Very good. December, January.

MAIDEN'S BLUSH.

A remarkably beautiful Apple, a native of New Jersey, and first described by Cox. It begins to ripen about the 20th of August, and continues until the last of October. It has all the beauty of color of the pretty little Lady Apple, and is much cultivated and admired, both for the table and for cooking. It is also very highly esteemed for drying.

Maiden's Blush.

This variety forms a handsome, rapid-growing tree, with a fine spreading head, and bears large crops. It is very valuable as a profitable market sort.

Fruit of medium size, very regularly shaped, and a little narrower towards the eye. Skin smooth, with a delicate waxen appearance, pale lemon yellow in the shade, with a brilliant crimson cheek next the sun, the two colors often joining in brilliant red. Stalk short, planted in a rather wide deep hollow. Basin moderately depressed. Calyx closed. Flesh white, tender, sprightly, pleasant subacid. Good.

MAIDEN'S FAVORITE.

Maiden's Apple.

Origin, farm of J. G. Sickles, Stuyvesant, N. Y. Its delicacy and beauty will make it desirable for the amateur. Tree of rather slow growth, upright slender branches, an annual and good bearer. Young shoots smooth, clear reddish brown.

Fruit medium or below, roundish, sometimes slightly conic, generally cylindric, but often very obscurely ribbed, whitish or pale waxen yellow, shaded and sometimes slightly mottled with crimson, and sparsely sprinkled with minute dots. Stalk short, small, surrounded by thin russet, in a deep, uniform cavity. Calyx firmly closed. Basin slightly corrugated, deep, open. Flesh whitish, tender, crisp, with a pleasant, very delicate, vinous subacid. Good to very good. Core small. October to January.

MAJOR.

Originated with Major Samuel McMahon, Northumberland Co., Pa. This is a showy market Apple of really excellent quality. The tree is a rapid and vigorous grower, with rather irregular, upright, spreading shoots, reddish brown, slightly grayish.

Fruit large. Form roundish, often oblate, slightly inclining to conic. Sides sometimes unequal. Color greenish, shaded and rather obscurely striped and splashed with deep red, many light russet gray dots. Stalk short. Cavity deep. Calyx large, with stiff, short segments. Basin large, broad, and furrowed. Flesh yellowish, rather firm, crisp, juicy, rich subacid. Core small. Very good. November to April.

MALA CARLE.

Pomme Finale.

Charles Apple.

Mela di Carlo.

Mela Carla.

Pomme de Charles.

The Male Carle is the most celebrated of all Apples in Italy and the South of Europe, whence it comes. Here or in New England it does not always attain perfection, but south of New York it becomes beautiful and fine, as it needs a warm and dry soil.

Fruit of medium size, very regularly shaped, a little narrow towards the eye. Skin smooth, with a delicate waxen appearance, pale lemon yellow in the shade, with a brilliant crimson cheek next the sun, the two colors often joining in strong contrast. Flesh white, not very juicy, but tender, and with a delicate, slightly rose-perfumed flavor. Good. September to January.

MAMMA.

A Southern Apple of unknown origin. Tree a very thrifty, compact grower. Young wood reddish.

Fruit above medium, oblate, crimson red. Flesh yellowish, rich, aromatic subacid. October, November.

MAMMOTH JUNE.

Origin, Christian Co., Ky. Tree an upright, moderate grower; not an early bearer.

Fruit medium, roundish oblate conic, whitish yellow, striped and splashed with shades of red, light dots. Flesh very white, tender, not very juicy, mild subacid. Good. July, August.

MANAEN.

This variety was grown from seed of the Talman Sweet, by F. R. Miller, Sugar Grove, Warren Co., Pa., and first fruited in 1867. The tree is said to be a thrifty, upright grower. Young wood dark reddish brown, with a few white raised dots, and slightly downy. Leaf broad, roundish oval, coarsely serrated.

Fruit medium size, roundish oblate conical, irregular, or partially ribbed, pale whitish yellow, with deep carmine dots and marblings in sun, russet lines radiating from the stalk, scattering minute, raised, gray, or russet dots in the shade. Stalk slender. Cavity deep, broad, open, russeted. Calyx partially closed, with erect recurved, divided segments. Basin rather deep, abrupt, generally irregular in form, usually clean and smooth, but occasionally with russeted broken lines. Flesh yellowish white, granulated, tender, moderately juicy, mild sweet, aromatic. Very

Mangum.

good. Core small. Seeds dark rich brown, oblong, pointed. Season, last of August and September. A new variety of fine promise as an amateur's fruit. (Rural New Yorker.)

MANGUM.

Fall Cheese of Va.	Cheese.	Seago.
Gully.	Carter of Ala.	Maxfield.
Carter's Winter.	Patton.	Johnston's Favorite.
Alabama Pearmain?	Sam Wingard.	Blakely.

A Southern variety of uncertain origin. It is extensively cultivated South, where it is counted as one of the most desirable and reliable apples. Tree a good, fair grower, with young shoots of a grayish brown, very productive.

Fruit medium, oblate, slightly conic, yellowish, striped and mostly shaded with red, thickly sprinkled with whitish and bronze dots. Stalk short and small, inserted in a broad cavity surrounded by russet. Calyx partially closed. Basin slightly corrugated. Flesh yellow, very tender, juicy, mild subacid. Very good to best. October, November.

MANK'S CODLIN.

Irish Pitcher.	Frith Pitcher.	Irish Codlin.
Eve of Scotland.	Frith Pippin.	

An old English culinary Apple, long cultivated and esteemed here as well as abroad for its productiveness, hardness of tree, and early bearing habit.

Fruit medium, roundish oblong conical, one side of apex end higher than the other, clear pale yellow, with a bronzed cheek in sun. Flesh yellowish white, fine crisp, brisk subacid. Good. August to November.

MANNINGTON'S PEARMAN.

Origin, Sussex, England. A dessert fruit of considerable esteem abroad, and here fully sustains its foreign character. Tree hardy, and early bearer.

Fruit below medium, roundish conical, truncated, yellow, partially russeted, shaded and splashed with red, prominent, rough, light gray dots. Flesh yellowish, crisp, tender, brisk subacid. Very Good. Core medium. October, December.

MANOMET.

Horse Block.	Manomet Sweet.
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Origin, Plymouth, Mass. Tree vigorous and productive. Young shoots dark reddish brown. This is one of the finest of sweet apples, esteemed highly wherever grown.

Fruit medium, roundish oblate, fine yellow, with a richly shaded cheek. Stalk rather slender, inserted in a shallow cavity, slightly surrounded by russet. Calyx closed. Basin shallow, corrugated. Flesh tender, juicy, sweet, and rich. Very good. Core small. August, September.

MANSFIELD RUSSET.

Brought into notice by Dr. Joseph Mansfield, of Groton, Mass. Tree vigorous, upright, and very productive.

Fruit small, roundish oblong, inclining to conic, cinnamon russet. Stalk long, inserted in a deep furrowed cavity. Calyx partially closed, set in an open basin. Flesh not very juicy, rich, aromatic, saccharine, vinous. Good to very good. Keeps till April or May.

Manomet.

MARBLE SWEET.

Virginia Sweet.

McIntire's Sweeting.

Fruit medium to large, roundish ovate, marbled dull red and yellow. Flesh sweet, dry. November, February. (Elliott.)

MARCH'S RED WINTER.

March's Red Seedling.

Origin, on the farm of George B. March, near Chillicothe, Ohio. Tree a moderate grower.

Fruit medium or below, roundish, yellow, overspread and shaded with rich bright red. Flesh yellowish, tender, moderately juicy, pleasant subacid. Good. November to January.

MARGIL.

Neverfail.

Munche's Pippin.

An old English dessert Apple, of slender growth.

Fruit small, roundish oblate, yellow, striped with red. Flesh yellow, firm, aromatic. Good. October, November.

MARIA BUSH.

Origin, Lancaster, Co., Pa. A healthy grower and good bearer.

Fruit large, roundish oblate, yellow, shaded, striped, and splashed with red, and thinly sprinkled with russet dots. Stem slender. Cavity large. Basin abrupt and open. Flesh white, very tender, juicy, subacid. Good. October, November.

Marks.

Origin, Berks Co., Pa., on the lands of Mr. Klinger. Tree vigorous, upright, productive.

Fruit medium size, roundish, tapering slightly to the crown, yellowish white, with a few russet dots, and nearly covered with a faint orange blush. Flesh whitish, tender, brisk subacid. Good. January to March. The fruit drops badly.

MARMALADE PIPPIN.

Althorp Pippin.

Welsh Pippin.

This is an English Apple, from Derbyshire. Tree hardy, and profuse bearer.

Fruit medium to large, roundish oblong, truncated, yellowish, bronzed in the sun, numerous dots and some pearly white specks. Flesh yellowish white, firm, juicy, sweet. October to February. There is another apple under this name, which is striped with red and ripens in August.

MARSHALL.

Largely grown in some parts of New Hampshire, as a profitable market Apple, on account of its productiveness and very late keeping.

Fruit above medium, roundish, a little flattened, deep green, mostly overlaid with a fine thick sprinkling of whitish green specks, a little blush and crimson specks next the sun. April, May. (Me. Rep.)

MARSHALL'S SWEET.

Originated with S. B. Marshall, Ohio. Tree a moderate stocky grower, forming a round head.

Fruit medium or below, roundish oblate conic, sides unequal, yellow, splashed and striped with light and dark red. Flesh white, a little stained next the skin, tender, moderately juicy, pleasant, sweet. Good. November, December.

MARSTON'S RED WINTER.

Origin, Greenland, N. H. Tree hardy, of moderate growth. Young shoots reddish brown, slightly downy. Great bearer, and keeps as well as Baldwin.

Fruit above medium size, roundish conic. Stalk rather slender, in a narrow, deep, compressed, slightly russeted cavity—sometimes with a lip. Calyx partially closed. Segments long, in a deep corrugated basin. Color whitish yellow, shaded and striped with bright red and crimson, thickly sprinkled with minute dots. Flesh whitish yellow, very juicy, tender, slightly subacid. Good to very good. December to March.

MARTIN.

Origin, supposed Ohio. Tree thrifty, vigorous, spreading, productive.

Fruit medium to large, roundish oblate, yellow mixed and striped red. Stalk short. Flesh light yellow, rather tender, juicy, subacid, agreeable. Almost good. August, September. (Am. Hort. An.)

MARTIN NONPAREIL.

An English Apple. The tree a vigorous grower, hardy, and a good bearer.

Fruit small, roundish or roundish oblate, yellow, with many traces and patches of russet, and small gray and brown dots. Flesh yellow, compact, juicy, brisk, rich subacid. Very good. Core small. November to March. Too small for profit.

MARY.

Origin unknown.

Fruit below medium, roundish, yellow, overspread with light red, striped and splashed with crimson, few light dots. Stalk short, small. Calyx small, closed. Flesh whitish, rather firm, crisp, tolerably juicy, mild subacid, almost sweet. Good to very good. Core small. January to March.

MARYLAND BEAUTY.

Origin unknown.

Fruit medium, oblate, whitish shaded, splashed and marbled with light and dark red, light dots. Flesh whitish, rather coarse, tender, juicy, brisk subacid. Good. Core large. October, November.

MASTEN.

Masten's Seedling.

Originated on the farm of R. C. Masten, Pleasant Valley, Dutchess Co., N. Y. Tree vigorous, with a broad, spreading, well-formed head, productive. Young shoots grayish brown.

Fruit rather below medium, roundish conical, oily, yellow, brownish or faint blush in the sun, brown and light dots. Stalk short, small. Cavity narrow. Calyx closed. Basin small, uneven. Flesh whitish, fine-grained, rather juicy, pleasant subacid. Good. December to March.

MASTER'S.

Master's Seedling.

An old Kentish, England, Apple. Tree hardy, vigorous, and productive.

Fruit medium, round, yellowish green, red cheek in the sun. Flesh white, firm, acid. November, January.

MATLOCK'S SUMMER.

Fruit large, oblate, white, sometimes with a blush or indistinct splashes and stripes. Flesh tender, juicy, almost sweet. Good August.

MATSON.

Fruit large, red streaked, showy, acid, cooking. (A. Pom. S.)

MATTAMUSKEET.

Origin, Eastern North Carolina. Tree vigorous, productive. Young wood dull reddish brown, slightly downy.

Fruit medium, roundish oblate conic, yellow, shaded and splashed with light and dark red. Flesh whitish yellow, crisp, brisk subacid. Good. December to March. Valued principally for its keeping qualities.

MAUCK.

A Pennsylvania Apple.

Fruit large, conical, greenish yellow, blush in the sun. Flesh tender, pleasant. Good. Core large, hollow. October, November.

Maverack's Sweet.

MAVERACK'S SWEET.

Raised by Dr. Maverack, Pendleton District, S. C. Tree vigorous upright, spreading, sometimes irregular, an early and good bearer. Young shoots reddish grayish brown, slightly downy.

Fruit large, roundish oblate, yellow, mostly shaded with rich deep red, and sprinkled with gray dots. Stalk short, inserted in an open cavity. Calyx open, set in a deep corrugated basin. Flesh yellowish, rather coarse-grained, breaking, tender, rich, sweet. Good to very good. Core small. November to February. A valuable sweet apple for market or cooking.

MAGEY.

This variety we received from A. L. Woodson, Hart Co., Ky., by whom the tree is described as a good grower, an annual but not early bearer, producing fair, even-sized fruit, that keeps well into May and June.

Fruit above medium, roundish, approaching conical, light greenish ground, with broken red stripes and splashes, from the stem end, of pinkish red, light dots and indistinct dark specks. Stalk medium length and size. Cavity regular, round, smooth, lightly russeted. Calyx large, open, with divided recurved segments. Basin shallow, broad, regular. Flesh whitish, not very juicy or tender, subacid. Good. Core small. May to July.

MAY.

May Apple.	Pillkin.	Plymouth Greening.
Rhenish May.	Winter May.	May of Myers.
May Seek-no-further of some.		

An old Apple, considerably grown at the West. Origin unknown. Its only value is because of its long keeping quality. Tree a poor grower, but a good bearer. Young shoots dark reddish brown, downy somewhat towards the end.

Fruit medium, roundish conical, pale greenish yellow, slight brownish in sun. Flesh whitish, fine-grained, compact, not very juicy, mild subacid. Core rather large, and open. Good. February to June.

MAY SEEK-NO-FARTHER.

Lop-sided Pearmain.	Pilliken.	May, erroneously.
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Origin unknown. Considerably grown in some parts of the West, and valued only because of its productiveness and long keeping.

Tree spreading, hardy, productive.

Fruit medium, oblate, oblique, dull greenish, mostly overspread and shaded with obscure stripes and marblings of dull dingy red. Flesh firm, dry, subacid. Good. February to May.

MEACH.

From J. M. Ketchum, Brandon, Vt.

Fruit large, roundish, slightly conic, greenish yellow, striped and mottled with light red, and sprinkled with brown dots. Flesh yellowish, rather fine, juicy, mild subacid. Good. October, November.

MEADOW SWEET.

Origin unknown.

Fruit medium, oblate or roundish oblate, pale yellow, gray and light dots. Flesh whitish, moderately tender and juicy, rather rich, sweet. Core small. Good. November, February.

MEAR'S SWEET.

Mear's Seedling.

Origin, near Cineinnati, Ohio.

Fruit below medium, roundish oblate, greenish yellow, brownish in the sun. Stalk long. Calyx closed. Flesh whitish, juicy, tender, mild, sweet subacid. Core small. Good. January to March.

MEISTER.

From Berks Co., Pa.

Size below medium, roundish conical, greenish yellow, striped with red, with numerous white spots, and russet dots. Flesh tender, pleasant subacid. Good. October.

MELON.

Norton's Melon.

Watermelon.

Origin, East Bloomfield, N. Y. Tree of rather slow growth while young, a good bearer. Young shoots dull grayish reddish brown. One of the best and most valuable sorts for the dessert; a little too tender for shipping long distances.

Fruit medium or above. Form roundish oblate, slightly conic, obscure ribs towards apex. Color pale yellow, nearly covered with light

Melon.

crimson, splashed, striped, and mottled with carmine, some traces of russet, and moderately sprinkled with light and brown dots. Stalk medium, slender. Cavity large, deep, regular, often considerably russeted. Calyx partially closed. Segments medium, erect, sometimes a little re-

curved. Basin rather abrupt, slightly corrugated. Flesh white, very tender, juicy, refreshing, lively vinous subacid. Core small. Best November to March.

MELROSE.

White Melrose.

An old Scotch Apple little known. Tree a strong, healthy grower and a free bearer.

Fruit large, roundish oblate conical, much ribbed toward the apex, pale yellow, becoming deeper in the sun, and at times many crimson spots. Flesh yellowish white, firm, sweet subacid. October, December.

MELT IN THE MOUTH.

Origin, Chester Co., Pa. Tree moderately vigorous, spreading. Young shoots long, slender, dark reddish brown, downy at ends.

Fruit medium or rather below, roundish, slightly conic, deep red, splashed and marbled on a yellow ground, with a few small white dots. Stalk long, very slender, curved, in a small cavity. Calyx closed, in a rather abrupt basin. Flesh yellowish white, tender, juicy, with a mild, rather rich, pleasant subacid, somewhat resembling Summer Pearmain. Very good. September to November.

MELVIN SWEET.

Origin, Concord, Mass. Tree vigorous and productive.

Fruit medium, roundish, yellowish green, striped with pale red. Flesh rich and sugary. November to February. (Hov. Mag.)

MENAGÈRE.

We received this fruit from Mr. Manning, who, we believe, had it from Germany; it is only fit for cooking.

Fruit very large, regularly formed, but very much flattened, pale yellow, with sometimes a little red in the sun. Flesh tolerably juicy. Good. September to January

MENONISTEN REINETTE.

Reinette des Menonites.

A German dessert Apple.

Fruit medium, roundish oblate, yellow, some russet, and a flush of red in the sun. Flesh fine, firm, juicy, aromatic, brisk subacid. November, February.

MENSFELD CALVILLE.

Calville d'Hiver de Mensfeld.

Mensfelder Gulderling.

Mensfelder Winter Calville.

Originated in Mensfeld, in the Duchy of Warsaw. Tree a strong, vigorous grower, with long jointed branches.

Fruit large, roundish oblong, slightly ribbed, yellowish green, with distinct small brown dots. Calyx large. Stalk short. Flesh half firm, rather tender, sugary, vinous. Good for table or cooking. December to February. (Ver.)

MERCER.

Origin unknown. Specimens received from Western New York.

Fruit medium, roundish oblate, pale yellow, sprinkled with a few gray dots. Stalk rather short. Calyx closed. Flesh white, tender, juicy, crisp, pleasant subacid. Good. Core small. October.

MÈRE DE MÉNAGE.

Fruit very large, conical, yellow, overspread, shaded, and striped with red. Flesh firm, crisp, brisk, juicy, subacid. October, December. A very showy market Apple, and good for cooking.

MERRILL'S.

Merrill's Apple.

Origin, Smyrna, N. Y.

Fruit medium, roundish, yellow, with a bright red cheek. Flesh yellow, rather firm, rich, spicy, subacid. Good. December to March.

MERRITT'S SWEET.

Fruit medium, oblate, yellow, sometimes with a blush. Flesh compact, very sweet, good for culinary use and stock feeding. Good. Last of August. Productive.

MERWIN.

Fruit medium to large, roundish oblate, pale yellow, faintly striped, splashed, and shaded with red. Flesh yellowish, rather compact, moderately juicy, pleasant subacid. Good. December to March.

METHODIST.

From Connecticut. Tree vigorous and productive, medium size, oblong oval, greenish, marbled and striped with red. Flesh white, tender, mild subacid, not rich. Good. November

METOIRÉE.

French Crab.

An old variety, of little value. Tree of moderate growth, holding its fruit quite late in autumn.

Fruit medium, oblong, yellow, shaded over with red. Flesh juicy. Good flavor for baking.

MEXICO.

Origin, Canterbury, Conn. Tree of moderate growth, productive, hardy. Young shoots dull grayish brown, downy.

Fruit medium, roundish oblate, crimson, striped, splashed, and shaded with very dark red, a little yellow in the shade, with a few large light dots. Stalk medium length. Cavity broad, shallow, russeted. Calyx closed in a narrow basin. Flesh whitish, stained with red, tender, rather juicy, pleasant subacid. Good to very good. Core small. September, October.

Mexico.

MICHAEL HENRY PIPPIN.

Rariton Sweet.

A New Jersey fruit, a native of Monmouth County, first described by Coxe. The tree forms a very upright head, with pretty strong shoots. Very productive.

Fruit of medium size, roundish oblong ovate, narrowing to the eye, when ripe, of a lively yellowish green. Stalk short and rather thick. Calyx set in a narrow basin. Flesh greenish white, very tender, juicy, mild tame sweet. Good. November to March.

MIDDLE.

Mittel.

Origin, Herkimer, N. Y. A moderate grower, not very productive.

Fruit medium or below, roundish oblong, inclining to conic, greenish yellow. Flesh white, tender, juicy, brisk, mild subacid. Good. December, February.

MIDDLEBOURG REINETTE.

Reinette de Middlebourg.

A new variety, originating in Holland. Tree upright, productive.

Fruit medium, roundish oblong, greenish yellow, with many grayish spots. Calyx small, half closed. Stalk short. Flesh yellowish white, fine, firm, rather dry, subacid. December to March. (Ver.)

MIFFLIN KING.

Origin, farm of Mr. Koffinan, Mifflin Co., Pa.

Fruit small, oblate, whitish with a slight blush and a few gray dots. Stalk short, small. Calyx small, closed. Flesh white, crisp, tender, juicy, pleasant, lively subacid. Good. November and December.

MIGNONNE D'HIVER.

A new variety, probably of French origin.

Fruit medium or below, oblate depressed, slightly conic, greenish yellow, with shade of rich bright red in the sun, few light and gray dots. Stalk short. Calyx nearly closed. Flesh whitish, rather firm, moderately juicy, mild, pleasant, almost sweet. December, February.

MILAM.

Harrigan.
Thomas.

Winter Pearmain of some.
Rusty Coat Milam?

Blair.

Origin uncertain, much grown in some sections at the West, very productive, and keeps well.

Fruit medium or below, roundish, greenish, shaded and striped with red. Flesh rather firm, pleasant, subacid, **not** rich. Good. December, March.

MILCH.

Braunschweiger Milch.

Milch Apfel.

An extremely beautiful German Apple, recently introduced.

Fruit medium to large, roundish, waxy white, with crimson stripes and dots on the sunny side. Flesh white, tender, crisp, subacid. August.

MILLER.

Origin, Berks Co., Pa. Tree moderately vigorous, very productive. Young shoots grayish dull reddish brown, downy.

Fruit below medium, roundish oblate, whitish yellow, shaded, splashed, and striped with shades of red. Flesh white, sometimes stained with red next the skin, juicy, tender, mild subacid. Good. Core large. September, November.

MILLER.

Introduced by James O. Miller, Montgomery, Orange Co., N. Y. Tree vigorous and productive. Young wood smooth, light reddish brown.

Fruit rather large, roundish oblate, inclining to conic, yellow, shaded, striped, and splashed with rich red, large light or areole dots. Stalk short.

Cavity deep. Calyx large, partially closed. Basin deep, furrowed. Flesh yellowish, tender, crisp, pleasant subacid. Good to very good October, November.

MINCHALL CRAB.

Minshul Crab.	Mincham's Crab.
Lancashire Crab.	Lancaster Crab.

An English Apple, valued mainly for cooking. Tree hardy, and abundant bearer.

Fruit above medium, roundish oblate, yellowish, with traces of russet, and shades of red in the sun. Flesh white, crisp, juicy, brisk acid. November, February. (Ron.)

MINIER'S DUMPLING.

An English cooking Apple. Tree a strong grower and good bearer.

Fruit large, roundish, slightly ribbed, greenish, with dull red in the sun. Flesh firm, juicy, subacid. November, February. (Lind.)

MINISTER.

A New England variety, introduced to notice by the late R. Manning. It originated on the farm of Mr. Saunders, Rowley, Mass. Tree moderately vigorous, upright spreading, very productive. Young shoots dark reddish brown.

Fruit large, oblong, tapering to the eye, around which are a few furrows—and resembling the Yellow Belle-Fleur in outline. Skin striped and splashed near the stalk, with bright red on a greenish yellow ground. Stalk an inch long, slender, curved to one side, and pretty deeply inserted. Calyx small, closed, inserted in a very narrow plaited or furrowed basin. Flesh yellowish white, very tender, with a somewhat acid, but very agreeable flavor. Good to very good. Core large and open. October to February.

MINKLER.

Brandywine?

This is an old variety which was first exhibited before the Illinois Horticultural Society, and because it could not be identified, received, for the time being, the name of its exhibitor. At some future time it will probably be found identical with some variety long since named and described. Tree an irregular grower, good bearer and keeper.

Fruit medium, roundish oblate, slightly conic, pale greenish yellow, striped and splashed with two shades of red. Flesh yellowish, compact, moderately juicy, mild, pleasant subacid. Good. Core small. January to March.

MISHLER'S SWEET.

From Pennsylvania. Origin unknown. Tree vigorous and productive. Young shoots light reddish brown, somewhat downy.

Fruit large, roundish oblong ovate, greenish yellow few gray dots.

Flesh white, tender, juicy, mild, pleasant sweet. Good. Core large. October.

MITCHELSON.

Mitchelson's Seedling.

An English Apple, described by Hogg as beautiful, and suitable for dessert or cooking.

Fruit above medium, roundish conical, deep yellow, slight patches and traces of russet, with a reddish cheek in the sun. Flesh yellowish, firm, crisp, brisk rich subacid. December, February.

MOLASSES.

Origin unknown. Tree upright, vigorous, and hardy.

Fruit medium, oblate. Skin thick, rough, greenish yellow, shaded with dull red, thickly covered with large crimson or lilac dots, and dull lilac bloom. Flesh yellow and exceedingly sweet. January to April.

There are, besides the above, three or four distinct apples under this name. One is claimed to have originated in Pennsylvania.

Fruit medium, roundish, pale yellow, tinge of crimson in the sun. Flesh yellow, compact, not very juicy, sweet. Tree a slow grower. October, November.

Elliott describes a Molasses, giving as synonyms, *Priest's Sweet*, *Butter*, *Blue Sweet*.

Fruit small, roundish, red. Flesh dry, sweet. October.

Another we have met is roundish conical, yellow, mostly shaded, splashed, and marbled with dark red. Flesh rich, sweet. Fine for cooking. None of this class are valued, except for the purpose of cooking and feeding stock.

MONARCH.

Monarch Sweet.

Origin unknown. Tree vigorous, a good and early bearer.

Fruit medium, roundish oblate, regular. Skin light red, splashed and striped with dark red, and numerous light dots. Flesh juicy, not very tender, but rich, pleasant subacid. Good. September, October.

MONKLAND PIPPIN.

Fruit small, roundish, greenish yellow. Flesh greenish white, soft, coarse. Poor. November.

MONK'S FAVORITE.

Origin, Indiana. Tree vigorous, upright spreading.

Fruit large, roundish, yellowish, striped and splashed with red. Flesh yellowish white, tender, juicy, subacid. Good. November, December.

MONKTON.

A cider Apple from Somersetshire, England.

Fruit below medium, oblate, slightly ribbed, clear red, with stripes of crimson. Flesh yellow, juicy, brisk acid. (Hogg.)

MONMOUTH PIPPIN.

Red Cheek Pippin.

A native of Monmouth Co., N. J., of moderate upright growth, and productive. Young shoots dark olive.

Monmouth Pippin.

Fruit large, oblate, a little inclining to conic, obscurely five-angled, slightly flattened at base and crown. Color pale yellow, with a beautiful warm cheek, and numerous russet dots. Stalk rather short, inserted in a large, slightly russeted cavity. Calyx partially closed. Basin deep, abrupt, and corrugated. Flesh juicy, fine, brisk, aromatic subacid. Very good to best. November to March.

MONSTROUS BELLFLOWER.

An old variety, little grown. Tree a strong, irregular, vigorous grower, not profitable.

Fruit large, roundish oblong, ribbed, pale yellow bluish in the sun. Flesh whitish, brisk, juicy, subacid. Good. Core large. October, November.

MONTALIVET.

Of French origin. Tree vigorous, upright spreading.

Fruit medium or below, roundish, deep yellow, with small russet dots. Flesh yellow, firm, juicy, pleasant subacid. Good. January, February. Core small.

MOORE.

Moore's Seedling

A good culinary Apple.

Fruit large, roundish oblate conical, greenish yellow, with broken streaks of red. Flesh yellowish, tender, pleasantly sweet. October, December. (Hogg.)

MOORE'S EXTRA.

Origin, Ohio. Tree vigorous, not an early but a good bearer.

Fruit medium to large, roundish, slightly conical, flattened at base. Color yellow, shaded, splashed, and striped with light and dark red, large light dots. Stalk short, small. Cavity narrow, deep. Calyx open. Segments short, erect, separated. Basin large, deep, irregular. Flesh yellow, fine-grained, juicy, tender, mild subacid. Core small. Very good. December, March.

MOORE'S GREENING.

Raised by R. Moore, of Southington, Conn. Very productive.

Fruit medium, globular, inclining to oblong or conic, greenish yellow, sometimes with a slight blush. Flesh white, juicy, tender, with a brisk, vinous flavor. Good. December, March.

MOORE'S SWEET.

Sweet Pippin.

Polhemus.

Red Sweet Pippin.

Pound Sweet of some.

Tree moderately vigorous, very productive. Although not a first-class Apple, it is a very profitable and valuable one for all cooking or stock-feeding purposes.

Fruit medium, roundish oblate, dark dull red, with a slight bloom, small light-colored dots. Flesh yellowish, rich, pleasant sweet. Good. Core small. November to May.

MOORHEN PIPPIN.

An English dessert Apple, below medium size, roundish oblate, greenish, with splashes of red and russet in sun. Flesh firm, rich, pleasant. January to April. (Ron.)

MORELAND.

Origin, Montgomery Co., Pa. Tree very productive.

Fruit medium, yellow, with a red cheek, pleasant acid. Good for cooking. October.

MORGAN WHITE.

Origin unknown.

Fruit large, globular, somewhat flattened, irregularly ribbed, uneven, greenish, marked with gray stripes, rarely a faint blush. Dots white, large. Flesh greenish white, breaking, tender, juicy, acid to subacid. Good. September to January. (Warder.)

MORRISON'S RED.

Origin, supposed to be a native of Medfield, Mass., on the farm of Mr. Fisher. Tree vigorous and productive. Young shoots dull grayish brownish red, slightly downy.

Fruit medium, roundish conic, light yellow, shaded and obscurely striped with deep red. Stalk very short, stout. Cavity small. Calyx closed, in a very small basin. Flesh tender, crisp, with a very mild, pleasant subacid. Very good. November to March.

MORRISON SWEET.

Origin, Clinton Co., N. Y. Tree small, hardy, round regular head, good bearer.

Fruit medium, roundish oblate, greenish, with slight blush in sun. Flesh white, rather dry, sweet. Poor. October, November.

MORRIS'S COURT OF WICK.

A variety esteemed in England, too small for Americans.

Fruit small, oblate, greenish, with light red in the sun. Flesh firm, tender, juicy, rich, vinous. October, January.

MORRIS'S RUSSET.

Origin, Brentford, England.

Fruit below medium, roundish, brownish russet, becoming ruddy in the sun. Flesh firm, tender, juicy, brisk, aromatic, subacid. October, February. (Hogg.)

MORTON.

Morton's Seedling.

Origin, supposed Clermont Co., Ohio. Tree vigorous, upright spreading, productive.

Fruit large, roundish, slightly oblate, greenish yellow, with a reddish blush in the sun. Flesh whitish, tender, juicy, mild, sweet subacid. Good. November, December.

MOSES WOOD.

Origin, Winthrop, Maine. Tree vigorous and productive.

Fruit medium, roundish, yellow, striped with red. Cavity and basin shallow. Flesh white, tender, juicy, pleasant subacid. Good. September, October.

MOSS'S INCOMPARABLE.

Originated in England. Tree vigorous, productive.

Fruit large, roundish conical, golden yellow, washed with pale red, and splashed with bright red in the sun, many small dark brown specks.

Stalk slender. Cavity large. Flesh yellowish white, tender, soft, aromatic subacid. January to February.

An apple of good promise. (An. Pom.)

MOTE'S SWEET.

Originated on the property of L. S. Mote, Miami Co., Ohio. A valuable, but as yet comparatively new Apple. Tree vigorous, upright spreading, productive. Young shoots light reddish brown, downy.

Fruit large. Form roundish, somewhat roundish oblate conic. Color pale whitish yellow, with a tinge of red in the sun, and moderately sprinkled with gray dots. Stalk medium, slender. Cavity large, deep. Calyx closed or partially open. Segments short, erect. Basin medium, uneven. Flesh yellowish, tender, moderately juicy, rich honeyed sweet. Very good. Core small. September, October.

MOTHER.

Queen Anne.

Gardener's Apple.

Origin, Bolton, Mass. Tree moderately vigorous, upright, and productive. Young shoots grayish brown, downy. One of the best of Apples for the dessert, rather too tender for shipment.

Mother.

Fruit medium. Form roundish, slightly conical. Color yellow, almost entirely overspread with light, clear, rich red, splashed and marbled with many deeper shades, many minute light dots. Stalk short, small. Cavity acute, often a little russeted. Calyx closed. Basin small, corrugated. Flesh yellow, tender, juicy, rich, aromatic subacid. Best. November, February.

MOTHER DAVIS.

From Pennsylvania.

Fruit medium, roundish conical, whitish yellow, shaded and obscurely splashed with light red, many small and large light dots. Stalk short. Calyx small, closed. Flesh fine, yellowish, tender, juicy, sprightly, pleasant subacid. Good to very good. Core rather small. November, December.

MOUNTAIN BELLE.

A native of Habersham Co., Ga.

Fruit medium to large, oblate conical, orange ground, shaded and striped with red. Stalk short. Cavity deep. Calyx medium. Flesh white, hard, juicy, tough, subacid. Good. November to May. (White.)

MOUNTAIN SWEET.

Mountaineer.

From Pennsylvania.

Fruit large, oblate, light yellow. Dots minute. Calyx small, closed. Stalk short, slender. Flesh white, breaking, very tender, fine-grained, juicy, sweet. Good to very good. December. (Warder.)

MOUSE APPLE.

Moose Apple.

Origin, Ulster Co., N. Y. Tree vigorous and productive.

Fruit, in weight, light; in size, large, roundish, slightly conical, pale greenish yellow, with a brownish blush on one side, and a few scattered, russety gray dots. Flesh very white and fine-grained, moderately juicy, delicate, faintly perfumed, mild subacid. Good. October, November.

MUNSON SWEET.

Orange Sweet.

Ray Apple.

Meachem Sweet.

Origin uncertain, probably Massachusetts. Tree vigorous, spreading, an annual and abundant bearer.

Fruit medium, oblate, pale yellow, sometimes with a blush. Stem short. Cavity large. Calyx closed. Basin small. Flesh yellowish, juicy, sweet. Good. September to February.

MURPHY.

Raised by Mr. D. Murphy, of Salem, Mass. Tree moderate grower, spreading, tolerably productive.

Fruit pretty large, roundish, pale red, streaked with darker red, and marked with blotches of the same color. Flesh white, tender, with an agreeable flavor. Good. November to February.

MUSCAT REINETTE.

Reinette Musquée.

A new German Apple, said to be superior.

Fruit medium, roundish conical, yellow, much striped with red. Flesh yellowish white, juicy, rich, aromatic, subacid. November to March. (Hogg.)

MUSTER.

Origin unknown.

Fruit oblate, yellow, mostly covered with mixed red and splashes of crimson. Flesh yellow, fine-grained, tender, juicy, subacid, aromatic. Best. Core small. August and September. (Warder.)

NAIGLE'S WINTER.

Origin, Missouri. Tree upright while young, becoming drooping when in fruit; very productive.

Fruit medium, roundish, flattened at ends. Color a bright yellow, covered with two shades of red, many large yellow gray dots, light blue bloom. Calyx closed. Stalk short. Flesh white, crisp, tender, juicy, mild subacid. Core small. Very good. December, February. (Hort.)

NANNY.

An English Apple, which Hogg describes as of excellent quality. Tree a moderate grower and good bearer.

Fruit medium, roundish, yellow, striped and splashed with shades of deep red, russet dots. Flesh yellow, rather soft, juicy, subacid. October.

NANTAHALEE.

Maiden's Bosom.

Originated in Macon Co., Ala. Tree a rapid grower, of rather a straggling, drooping habit. Young shoots dull grayish reddish brown.

Fruit medium, broad oblate conic, often contracted near the apex, ribbed, pale yellowish green, sprinkled with a few gray dots. Stalk medium. Cavity large, uneven. Calyx closed. Segments rather long, a little recurved. Basin small, corrugated. Flesh white, tender, juicy, sprightly acid. Good. Core large. July, August.

NECTAR.

Origin, near Raleigh, N. C.

Fruit medium, oblate, green. Calyx closed. Stalk short. Flesh yellowish, juicy, rich, saccharine. August. (Gar. Mon.)

NED.

Saylor. Libhart.

Originated at Marietta, Pa. Tree vigorous, rather straggling, with slender shoots, dark reddish brown, slightly grayish, very productive.

Fruit medium, roundish oblate, slightly conic, yellow, shaded, striped, and splashed with two shades of dark rich red, and sprinkled with large light conspicuous dots. Stalk short, slender. Calyx large. Flesh white, tender, juicy, mild, pleasant subacid. Core small. Good to very good. December to February.

NEEDLE.

Supposed an old English Apple, not yet identified.

Fruit below medium, roundish oblate, greenish yellow, with small brown dots. Stalk short. Calyx closed. Flesh white, juicy, mild, pleasant subacid. Core small. Good. December, January.

NEISLEY BELLFLOWER.

Neasley Bellflower.

From Salem, Columbiana Co., O. Tree rather upright, vigorous.

Fruit medium to large, roundish oblate, pale whitish yellow, shaded, splashed, and striped with light and dark red, few light and gray dots. Stalk short. Calyx open. Flesh yellowish, moderately juicy, mild subacid. Good. Core small and close. December to March.

NELSON.

Origin unknown.

Fruit medium to large. Form roundish oblate, regular. Color dull green, becoming yellow, sometimes bronzed with dull brown. Stalk rather long, slender. Cavity medium, acute, regular, green. Calyx medium, closed. Segments reflexed. Basin small, uneven. Flesh greenish yellow, firm, fine-grained, juicy, sweet. Core medium. Good. May to July. (Am. Jour. of Hort.)

NELSON'S CODLIN.

Backhouse's Lord Nelson.

A culinary English Apple.

Fruit large, roundish oblate, light yellow, deepening in the sun and with russet specks and traces. Flesh yellowish white, tender, brisk, sharp subacid. Good. October, November.

NEQUASSA.

Nequassa Sweet.

Origin, Franklin, Macon Co., N. C. Tree vigorous, upright.

Fruit large, oblate. Color yellow, striped with red. Stalk of moderate length, inserted in a large, open cavity. Basin smooth and open. Flesh white and very sweet. Good. November to January.

NEVERSINK.

Origin, Berks Co., Pa. Tree vigorous, upright spreading.

Fruit large, roundish, inclining to conic, beautiful waxen orange-yellow color, with a few russet dots, and a delicately striped and richly mottled carmine cheek. Stalk short. Cavity narrow, acuminate, shallow. Calyx large. Basin deep, rather wide, furrowed. Flesh yellowish, somewhat tough, moderately juicy, subacid, quince-like. Good. December to March.

NEWARK KING.

Hinckman.

Origin, New Jersey. The tree is spreading, and bears well.

Fruit medium, roundish conical, smooth, red, with a few yellow streaks and dots on a greenish ground. Calyx set in a narrow basin. Flesh tender, with a rather rich, pleasant flavor. Good. November to February.

NEWARK PIPPIN.

French Pippin. Yellow Pippin.

A handsome and excellent early winter variety, easily known by the crooked, irregular growth of the tree, and the drooping habit of the branches. Not profitable. Young shoots slender, dull brownish red, smooth.

Fruit rather large, roundish oblong, regularly formed, greenish yellow, becoming a fine yellow when fully ripe, with clusters of small black dots, and rarely a very faint blush. Calyx in a regular and rather deep basin. Stalk moderately long, and deeply inserted. Flesh yellow, tender, very rich, juicy, and high flavored. Very good. November to February.

NEWBURY.

Cat's Head.

Origin uncertain.

Fruit large, oblong conic, greenish, with a brownish cheek in the sun. Stalk short. Calyx small. Flesh greenish, coarse. Core large. Poor. December, February.

NEW LATE REINETTE.

Reinette Tardive Nouvelle.

Fruit medium, roundish oblate, yellow, striped, splashed, and veined with reddish brown and shaded with gray. Calyx half closed. Flesh yellowish, fine, tender, juicy, agreeable, aromatic, subacid. April to June. (Alb. Pom.)

NEW ROCK PIPPIN.

From England.

Fruit below medium, dull green, becoming brownish in the sun, slight tinge of red and considerable russet. Flesh yellow, firm, rich, sweet. Good. November to February.

NEW SMALL LEMON PIPPIN.

An old English Apple, described by Ronalds. Tree hardy and productive.

Fruit below medium, roundish oblong, clear yellow, with many small red dots. Flesh whitish, firm, juicy, pleasant subacid. Good. November, December.

NEWTOWN SPITZENBURGH.

Vandevere of New York.

Ox Eye.

Matchless.

Joe Berry.

Spiced Ox Eye.

Spitzenburgh.

Burlington.

Kountz.

Barrett's Spitzenburgh.

Wine, erroneously.

This old and valuable Apple has been long known in New York as the Vandevere, but as it was first described by Coxe as Newtown Spit-

zenburgh, we continue that name. It had its origin in Newtown, Long Island. Tree moderate, vigorous, spreading, and productive in rich, light soil, of most excellent fruit, which is suited to more tastes than any other Apple of its season.

Newtown Spitzenburgh.

Fruit medium, oblate, slightly conic, fine yellow, washed with light red, striped and splashed with deeper red, and richly shaded with carmine on the sunny side, covered with a light bloom, and sprinkled with peculiar gray specks. Stalk short, inserted in a wide cavity. Calyx small, closed, set in a regular basin of moderate depth. Flesh yellow, crisp, tender, with a rich, slightly, vinous flavor, scarcely subacid. Best. October to February.

NICHOLS SWEET.

Origin unknown.

Fruit medium, roundish, slightly conic, yellow, shaded and faintly splashed with red, few light dots. Flesh whitish, compact, moderately juicy, sweet. Good cooking. Core small. December, January.

NICKAJACK.

Caroline.	Aberdeen.	Alleghany.
Berry.	Trenham	Chaltram Pippin.
Summerour.	Big Hill.	Gowden.
Accidental.	Carolina Spice.	Graham's Red Warrior.
Red Pippin.	Cheatan Pippin.	Walb.
Howard.	Chatham Pippin.	Winter Horse.
Hubbard.	Winter Rose.	Missouri Pippin.
Mobbs.	Red Hazel.	Missouri Red.
Cheataw.	Wander.	Leanham.
Edward Shantee.	Red Warrior, erroneously.	Winter Horse.
Pound.	Forsythe's Seedling.	Jackson Red.
Wall.	Ruckman's Red.	World's Wonder.

This Apple is very widely disseminated in sections of the South and

Southwest, it having as it were the habit of reproducing itself from seed, or at least so nearly identical as to be impossible to distinguish the seedling from the parent, hence one cause of so many synonyms. The first dissemination of it known was by a Colonel Summerour, of Lincoln County, N. C., under the name of Winter Rose; but as it was found on Nickajack Creek, it soon took that name, and is now best known thereby. The habit of the tree is upright spreading, forming a very large head. On branches two, three, or four years old, there are woody knobs or warts of various sizes, which, when cut from the branch, are found to contain kernels entirely detached from the regular grain of the wood. The great value of the variety consists in the hardihood and productiveness of the tree rather than the character of the fruit, which is not more than good in quality. Young shoots bright clear dark reddish.

Nickajack.

Fruit large. Form roundish to roundish oblate, slightly conic, sometimes oblique. Color yellowish, striped, shaded, and splashed with two shades of red, and with a grayish appearance, as if covered with a thin bloom, many large areole dots. Stalk short. Cavity large, medium depth. Calyx partially open. Basin medium, slightly corrugated. Flesh yellowish, compact, moderately tender and juicy, negative subacid. Good. Core small, closed. December to April.

NIEMAN'S RED REINETTE.

Nieman's Rothe Reinette.

Reinette Rouge de Nieman.

Originated at Hanover, Germany. Tree a strong, vigorous grower.

Fruit medium, roundish conical, yellow, mostly overspread and splashed with red. Stalk short. Calyx open. Flesh white, tender, juicy, vinous, subacid. November, February. (Verg.)

NIX GREEN.

Queen Apple, erroneously.

Origin, Habersham Co., Ga. Tree profuse bearer.

Fruit medium, oblate roundish, greenish yellow, with many light dots. Stalk short. Calyx small, closed. Flesh white, firm, tender, pleasant subacid. Good. November, February.

NOBLESSE DE GAND.

An English sauce Apple, described by Ronald as large, roundish, slightly conical, straw-colored. Flesh firm, heavy, brisk subacid. January, February.

NONPAREIL.

English Nonpareil.
Hunt's Nonpareil.
Nonpareil d'Angleterre.

Old Nonpareil.
Loveden's Pippin.
Duc d'Arzel.

Original Nonpareil.
Reinette Nonpareil.
Grune Reinette.

An old English variety. Tree free upright grower, productive.

Fruit medium, roundish conical, yellowish green, with patches of dull russet, and red in the sun. Flesh crisp, juicy, vinous, aromatic, mild acid. Good. December, March.

NONPAREIL RUSSET.

Of English origin. Tree vigorous, spreading, productive.

Fruit small, roundish oblate, conical, greenish yellow, covered with thin dull russet. Flesh white, crisp, juicy, sprightly subacid. Good. January to May.

NONSUCH.

Nonsuch.

An old English sort, valuable as a sauce Apple; productive.

Fruit of medium size, regular form, flat, greenish yellow, striped and spotted with dull brick red. Flesh white, soft, with a plentiful subacid juice. Good. September, November.

NORFOLK.

From Massachusetts.

Fruit small, flat, yellow, pleasant. August. (Cole.)

NORFOLK BEAUFIN.

Read's Baker.

Catshead Beaufin.

Norfolk Beefing.

A large English fruit, only fit for cooking purposes, dull red, on greenish ground. Flesh firm, subacid. Good. January to May.

NORFOLK PARADISE.

An English dessert Apple.

Fruit medium, oblong, greenish yellow, brownish red in sun, with

stripes. Flesh white, firm, juicy, rich subacid. October to February (Lindley.)

NORFOLK STONE PIPPIN.

Stone Pippin.

White Stone Pippin.

White Pippin.

A valuable long-keeping cooking fruit. Tree a free grower and abundant bearer.

Fruit below medium, roundish, yellowish green, slight tinge of red in the sun. Flesh white, firm, brisk, rich, sweet. November to March.

NORFOLK STORING.

An English Apple, valuable for market or cooking.

Fruit large, roundish oblate, yellowish green, with yellow red cheek in the sun. Flesh white, tender, juicy, crisp, brisk subacid. November, January.

Northern Spy.

NORTHERN SPY.

This beautiful American fruit is one of the most delicious, fragrant, and sprightly of all late dessert apples. It ripens in January, keeps till June, and always commands the highest market price. The tree is of rapid, upright growth, and bears moderate crops. It originated on the

farm of Heman Chapin, of East Bloomfield, near Rochester, N. Y. The trees require high culture, and open heads to let in the sun, otherwise the fruit is wanting in flavor, and apt to be imperfect and knotty. Young shoots dark reddish brown. The tree blooms late, often escaping vernal frosts.

Fruit large, roundish oblate conical. Skin thin, smooth, in the shade greenish or pale yellow, in the sun covered with light and dark stripes of purplish red, marked with a few pale dots, and a thin white bloom. Stalk three-fourths of an inch long, rather slender, planted in a very wide, deep cavity, sometimes marked with russet. Calyx small, closed. Basin narrow, abrupt, furrowed. Flesh white, fine-grained, tender, slightly subacid, with a peculiarly fresh and delicious flavor. Core large and open. Very good to best. December to June.

NORTHERN SWEET.

Northern Golden Sweet.

Golden Sweet.

Origin, on the farm of the late Nathan Lockwood, of St. George, Chittenden Co., Vt. Tree healthy, spreading, and productive, but needs high culture for the perfect development of the whole crop. Young wood reddish, smooth.

Fruit medium, roundish oblate, yellow, sometimes with a blush. Stalk rather long, in a moderate cavity. Calyx small and closed, in a narrow, abrupt, corrugated basin. Flesh white, tender, juicy, sweet, rich, and excellent. Core medium. September, October. Not profitable.

NORTHFIELD BEAUTY.

Origin unknown. Tree a vigorous grower. Young shoots rich reddish brown, with few prominent dots.

Fruit large, roundish oblate. Sides unequal, whitish yellow, with stripes, shades, and splashes in the sun. Flesh white, crisp, brisk subacid. Core small. Good for cooking. August, September.

NOTTINGHAM PIPPIN.

Tree vigorous, productive.

Fruit medium, roundish oblate, yellow, with slight markings of russet. Flesh white, marrowy, sugary, vinous. November to February. (Hogg.)

NURSERY.

Origin unknown.

Fruit below medium, roundish, inclining to conic, greenish yellow, slight blush or brown in the sun, gray dots. Stalk short, slender. Calyx closed. Basin slightly corrugated. Flesh yellowish, compact, moderately juicy, mild subacid, almost sweet. Core small. Good. December to February.

OAKES.

From Danvers, Mass. Origin unknown. Tree a strong, vigorous grower, and fair bearer. Young shoots clear reddish, smooth.

Fruit medium, roundish oblate, greenish yellow, with a shade of red in the sun, few gray dots. Stalk short, slender. Calyx closed. Flesh yellow, juicy, tender, pleasant subacid. Core small. Good to very good. November, January.

There is an English culinary Apple of this name described by Lindley, which is medium, roundish, with ribs, pale green, with broken streaks of pale brown, and russety specks. Flesh soft, greenish white, slightly sweet. November, December.

OCONEE GREENING.

Origin, banks of the Oconee river, a little below Athens, Ga. Tree vigorous and abundant bearer.

Fruit large, roundish flattened, yellow, a little brownish in the sun, russet about the stem, with a few scattered russet dots. Calyx open, in a shallow, slightly furrowed basin. Stalk very short, in a rather regular, deep cavity. Flesh yellowish, fine-grained, crisp, abounding in a delightful aromatic, lively, subacid juice. Good to very good. October, November.

OFINE.

Of English origin. Tree vigorous, productive.

Fruit large, roundish oblate conical. Skin oily. Color lemon yellow, washed and splashed with red in the sun, many large reddish gray spots. Stalk large, short. Calyx open. Flesh white, firm, tender, sweet subacid, aromatic. November. (An Pom.)

OGDENSBURGH.

Originated with A. B. James, Ogdensburgh, N. Y.

Fruit medium, roundish oblate conic, whitish yellow, brownish red in sun, few light and brown dots. Flesh white, juicy, tender, very mild subacid. Very good. Core medium. New. November, December. (Elliott's Notes.)

OGLEBY.

From Spottsylvania Co., Va. Tree a rapid grower.

Fruit below medium, roundish oblate, yellow, sometimes a slight blush in sun, with gray and green dots. Flesh yellowish, compact, crisp, juicy subacid. Good. October, November.

OHIO NONPAREIL.

Myer's Nonpareil.
Western Beauty, erroneously.

Cattell Apple.
Rusty Core.

This is one of the most valuable of autumn Apples, whether for market or table use. Its origin is in doubt, the first known trees of it being in the orchard of — Bowman, Massillon, Ohio. The young trees are very vigorous, with stout, straight shoots, while the orchard trees are very wide, regular, open, spreading, requiring little or no thinning, and bearing the fruit evenly over the whole tree, and all fair sized, smooth fruit. Young shoots smooth, rich, dark reddish brown.

Fruit medium to large. Form roundish oblate. Color yellow, shaded, marbled, and splashed with two shades of rich red, thinly sprinkled with light and gray dots. Stalk medium, rather slender. Cavity large, deep, regular. Calyx rather large, partially open. Segments rather short. Basin medium. Flesh yellowish white, fine-grained, tender, juicy, rich, slightly aromatic subacid. Core small. Very good. October, November.

Ohio Nonpareil.

OHIO PIPPIN.

Ernst's Pippin.

Shannon.

Origin in doubt. Supposed Dayton, Ohio. It was first disseminated by the late A. H. Ernst, of Cincinnati. Tree healthy, vigorous, spreading, moderately productive. Young shoots strong, dull reddish brown, quite downy.

Fruit large, roundish oblate, yellow, with mottled red in the sun. Flesh yellowish, moderately juicy, pleasant, sharp subacid. Good. Core small. November, January.

OHIO RED STREAK.

Originated with James Mansfield, Jefferson Co., O. Growth vigorous, upright.

Fruit medium, oblate, yellow, shaded, splashed, and striped with red. Stalk short. Cavity large, russeted. Calyx large, closed. Basin shallow, uneven. Flesh rather compact, juicy, rich subacid. Good. January to April.

OHLINGER.

Origin, Pennsylvania, Berks County.

Fruit below medium, yellow, with a brownish check, with many areole specks. Flesh yellowish white, tender, subacid. Good. October.

OLD ENGLISH CODLIN.

English Codlin.

Trenton Early?

The trees are very vigorous and fruitful. A large and fair cooking Apple, in use from July to November.

Fruit generally above medium size, oblong or conical, and a little irregular, clear lemon yellow, with a faint blush next the sun. Stalk stout and short. Flesh white, tender, and of a rather pleasant subacid. Much esteemed for cooking, ripens gradually upon the tree.

OLD FIELD.

Origin, Connecticut. A good grower, bears well, an old variety.

Fruit medium, oblate conic, yellow, with a slight blush. Flesh yellowish, tender, pleasant, mild subacid. Good. January to April.

OLD HOUSE.

Origin, Bucks Co., Pa. Tree vigorous, upright.

Fruit medium, oblate, inclining to ob.-conic, yellow, with a blush. Flesh tender, fine texture, juicy, flavor agreeable, aromatic. Good. December.

OLD HUNDRED.

Origin unknown. Specimens received from J. W. Manning, Reading, Mass. Tree upright grower and good bearer.

Fruit medium, roundish oblate conic, yellowish, striped, splashed, and marbled with shades of red. Flesh whitish, crisp, tender, juicy, slightly subacid. Good. November to February.

OLD ROYAL RUSSET.

Leather Coat Russet.

Fruit medium, roundish, gray russet on green. Flesh greenish white, sharp subacid. November, February. (Elliott.)

OLD TOWN CRAB.

Spice Apple of some

Fruit small, greenish yellow, with brown specks. Flesh crisp, juicy, sweet. December, March.

OLD TOWN PIPPIN.

Of unknown origin.

Fruit above medium, roundish oblate, light yellow, shaded and splashed with red, few brown dots. Flesh yellowish, firm, not very juicy, pleasant subacid. Good. Cooking. January to March.

OLINE.

Tree vigorous, productive.

Fruit very large, roundish, yellow, washed with red. Flesh tender, fine, subacid. Very good. November, December. (Soc. V. M.)

OLIVE.

Origin, Wake Co., N. C. Tree vigorous, upright grower.

Fruit medium, slightly conical, crimson, with gray dots. Calyx open. Stalk long, stout. Flesh crisp, juicy, subacid. October, November.

There is another Olive Apple, from Vermont, which is medium, oblate, inclining to conic, yellowish, shaded, splashed, and striped with shades of red, few areole dots. Stalk short. Calyx closed. Flesh white, tender, juicy, mild subacid. November to January. (Gar. Mon.)

OMAR PASHA.

An English cooking Apple.

Fruit above medium, roundish oblate, deep yellow, dotted with russet. Calyx open. Stalk short. Flesh white, firm, crisp, juicy, pleasant acid. December to March.

ORANGE.

There are several Apples under this name; but as it is almost impossible to decide which has prior right to the name, we enumerate and describe in the order they are known to us.

THE ORANGE of New Jersey origin is a vigorous grower, and moderately productive. Young shoots clear, reddish brown, buds reddish, prominent.

Fruit above medium, roundish oblate. Skin orange yellow, with a few gray dots, and sometimes patches of russet. Stalk short, in a large cavity. Calyx closed. Basin moderate. Flesh yellow, juicy, subacid, pleasant. Very good. September, October.

THE ORANGE of Reading, Pa., has fruit roundish, slightly oblate, faintly ribbed, of a warm yellow orange color. Flesh yellowish, sprightly. Good.

THE ORANGE of France, received from A. Leroy, Angers, is of medium size, roundish, fine yellow, shaded with crimson in the sun, moderately sprinkled with gray and light dots. Stalk short. Calyx small, closed. Flesh white, tender, juicy, mild, pleasant subacid. Good. October, November.

ORANGE PIPPIN.

Marigold Pippin.

Isle of Wight Orange.

An old Apple, originated in Normandy, and valued mainly as a cider fruit.

Fruit medium, roundish, rich orange yellow. Flesh firm, crisp, pleasant acid. October to January.

There is also an Orange Pippin grown in New Jersey differing from this, but we have been unable to obtain its history or description.

ORANGE SWEET.

There are several varieties under this name, but we have been unable to examine and compare them closely. The one we have most known came from Ohio, and has young shoots of a light reddish brown, smooth, the fruit large, roundish, greenish yellow, sometimes traces of russet, few gray and green dots. Calyx small, closed. Flesh whitish, tender, juicy, pleasant, sweet. Good. Valuable for baking. October, November.

Another we have from Massachusetts, is a good grower and bearer. Young shoots smooth, very dark reddish brown. Buds very small.

Fruit medium, oblate, greenish yellow. Calyx small. Flesh yellowish white, rather coarse, but rich, sweet. Good for cooking. August and September.

Another Orange Sweeting, grown in Maine, is described as a tree of upright habit, healthy, thrifty, and productive. Young shoots dark brownish red.

Fruit medium, roundish ovate, bright yellow, with a blush cheek in the sun, small greenish dots in shade, and crimson dots in the sun. Flesh yellowish, tender, sweet, and rich. September, October.

Warder, in his American Pomology, describes an *Orange Sweet* or *Russet* as large, round, greenish yellow, bronzy orange russet. Flesh green, rather tough, fine-grained, sweet. Good for baking. December.

ORD.

Ord's Apple.

Simpson's Pippin.

Simpson's Seedling.

An English Apple, grown from a seed of the Newtown Pippin.

Fruit medium, oblong conical, somewhat ribbed, dull green, washed and splashed with dull red, and many star-like russet specks. Flesh greenish white, tender, crisp, brisk subacid. December to April.

ORLEANS REINETTE.

Reinette d'Orleans.

Fruit large, roundish oblong, deep yellow, with stripes of bright red in the sun. Flesh yellowish, fine, juicy, brisk acid. December.

ORNDORF.

Origin, Muskingum Co., O. Tree a vigorous, spreading, upright grower, productive.

Fruit medium, roundish oblate, yellow, shaded, striped, and splashed with two shades of red. Stalk short. Calyx small, closed. Flesh whitish, tender, mild subacid. Good. Core small. October, November.

ORNE'S EARLY.

Origin unknown, supposed foreign. Tree vigorous, upright spreading.

Fruit medium, roundish. Color whitish, thickly sprinkled with gray and light dots. Stalk long and slender. Calyx small, closed. Flesh white, tender, fine-grained, moderately juicy, pleasant, sprightly subacid. Good. Core small. August, September.

ORTLEY.

Ortley Pippin.	White Bellflower.	Ohio Favorite.
Woolman's Long.	White Detroit.	Willow Leaf Pippin.
Greasy Pippin.	Hollow Cored Pippin.	White Pippin.
White Bellefleur.	Green Bellflower.	Detroit.
Van Dyne.	Jersey Greening.	Davis.
Melting Pippin.	Crane's Pippin.	Warren Pippin.
Yellow Pippin.	Inman.	Golden Pippin.
Woodward's Pippin.	Tom Woodward Pippin.	White Seek-no-Further.
Davis White Bellflower.	Marrow Pippin.	Tod's Golden Pippin.

Origin, orchard of Michael Ortley, South Jersey. It grows pretty strongly, with upright slender shoots, and bears abundantly.

Fruit medium to large, roundish oblong conic, greenish yellow, becoming fine yellow at maturity, sometimes with a sunny cheek. Stalk slender, of medium length, inserted in a deep, acute cavity, surrounded by russet. Calyx closed, set in an abrupt, somewhat corrugated basin. Flesh white, fine-grained, tender, juicy subacid, very pleasant. Good to very good. Core large. November to February.

OSCEOLA.

Origin, Putnam Co., Ind. Tree vigorous, upright spreading. Young shoots dark reddish brown, grayish.

Fruit medium, roundish oblate conic, sides unequal, pale yellow, shaded, splashed, and striped with red, large light dots. Stalk short. Cavity slightly russeted. Calyx closed. Basin deep, uneven. Flesh whitish, firm, juicy, pleasant, mild subacid. Good to very good. January to March.

OSKALOOSA.

Jack Apple.

Origin unknown. Tree a moderate grower, forming a handsome head, an early but not an abundant bearer.

Fruit medium, round, somewhat flattened, yellow. Flesh juicy, mild subacid. November. (Gard. Month.)

OSLIN.

White Oslin.

Arbroath Pippin.

An excellent Scotch Apple. Tree vigorous and productive.

Fruit below medium size. Form oblate. Skin rather tough, clear lemon yellow when quite ripe, and sprinkled with a few grayish green dots. Flesh yellowish, firm, crisp, juicy, spicy aromatic. Good. September.

OSNABRUCKER REINETTE.

Reinette d'Osnabruck.

Grua Osnabrucker Reinette.

A foreign variety, not apparently of much value.

Fruit small, roundish, rich yellow ground, somewhat russeted, with a red cheek in sun. Stalk long, slender. Calyx large. Flesh white, fine, juicy, perfumed. Very good. December, February. (Ver.)

OSTERLEY.

Osterley Pippin.

A seedling of the Ribston Pippin, from Middlesex, England, described by Ronalds as a free grower and good bearer.

Fruit below medium, roundish oblate, dull green, with thin russet and red in the sun. Flesh greenish yellow, firm, crisp, juicy, brisk, aromatic, sharp subacid. November to February.

OSTOGATE.

Supposed French origin. Tree vigorous and productive.

Fruit medium, roundish oblate, yellow, with many gray russet dots. Stalk slender. Cavity narrow, deep. Calyx open. Flesh whitish yellow, fine, aromatic, sweet subacid. November. (An. Pom.)

OVERMAN'S SWEET.

Origin, Illinois. Tree hardy, spreading, productive.

Fruit medium, roundish oblate conical, yellowish, shaded, mottled, and splashed with red, many light and gray dots. Stalk short. Calyx closed. Flesh whitish, not very tender, moderately juicy, mild, sweet. Core small. Good. November, March.

OVIATT.

Origin, Warren Co., O.

Fruit large, roundish oblate conic, greenish yellow, shaded with red in the sun, few brown dots. Stalk short. Calyx closed. Flesh whitish, a little coarse, tender, pleasant subacid. Good. September.

OX.

From Pennsylvania.

Fruit large roundish conical, whitish, slightly bronzed in the sun, few gray dots. Stalk long, slender. Calyx closed. Flesh white, crisp, tender, juicy, sprightly subacid. Good. Core small. November to January.

OXNEAD PEARMAN.

Earl of Yarmouth's Pearmain.

From England. Tree hardy, with slender drooping branches, productive.

Fruit small, conical, greenish, with a thin russet, brownish in the sun. Flesh greenish white, firm, crisp, rich, acid. November, February.

OX SWEET.

From Massachusetts. Tree very vigorous, upright spreading.

Fruit above medium, roundish oblate, greenish, sometimes a little bronzed in the sun, many light and gray dots. Stalk short. Calyx closed. Flesh yellowish white, juicy, tender, sweet, and pleasant. Good. Core rather large. October, November.

PADLEY'S PIPPIN.

Compote. Padley's Royal George Pippin.

An old English Apple, of moderate growth, but quite productive. Young shoots grayish chestnut red.

Fruit medium, or small, roundish oblate, dull greenish yellow, yellow in the sun, with some russet. Flesh yellowish, juicy, rich, brisk acid. December, January.

PANDEN SWEET.

Origin unknown.

Fruit medium, oblate, yellow, with a tinge of red in the sun, some gray and red dots. Stalk short. Calyx small, closed. Flesh white, compact, crisp, sweet. Good. Cooking. November.

PARK SPICE.

Park Apple.

Origin, Westchester Co., N. Y. Tree thrifty, upright spreading, very productive. Young shoots pretty smooth, dark reddish brown.

Fruit medium, roundish oblique, whitish yellow, shaded with red, obscurely splashed and striped, moderately sprinkled with light and brown dots. Stalk short, slender. Calyx small, closed. Flesh yellowish, rather firm, moderately juicy, mild subacid, slightly aromatic. Core medium. Very good. December to March.

PARMENTIER REINETTE.

Of French origin. Tree vigorous, upright spreading.

Fruit large, roundish, golden yellow, dotted with reddish gray, and striped with bright red in the sun. Flesh yellowish white, firm, sharp subacid, aromatic. March to May. (S. V. M.)

PARROT REINETTE.

Supposed of German origin.

Fruit above medium, roundish oblate, pale yellow, lightly splashed, shaded, and marbled with light red, few brown dots. Stalk medium, rather slender. Cavity broad, deep. Calyx closed, or partially open. Flesh whitish, tender, juicy, brisk subacid. Good. Core large and open. New, promises valuable for market or cooking.

PARRY'S PEARMAIN.

An English dessert Apple.

Fruit small, roundish oblong, truncated, greenish yellow, shaded and striped with red in the sun. Flesh firm, juicy, rich, and sweet. Good to very good. January to March.

PASSE POMME D'AUTOMNE.

Passe Pomme Rouge d'Automne.

Pomme d'Outre Passe.

Herbststrich Apfel.

Generale.

Passe Pomme Cotellee.

Rother Herbststrichapfel.

Of German origin. Tree vigorous, productive.

Fruit medium, roundish, slightly oblate, ribbed, yellowish, shaded

and striped with rich red in the sun. Flesh very white, tinged with red, tender, juicy, vinous, excellent for cooking. September. (Hogg.)

PASSE POMME ROUGE.

Rother August Apfel.

Rothe Sommerpasspomm.

Tree slender grower, hardy, productive.

Fruit small, roundish oblate, yellow, entirely overspread and shaded with red. Flesh white, tinged with red next the skin, crisp, juicy, soon decays. Poor. August.

PATCH'S RusSET.

Of English origin.

Fruit below medium, roundish oblate, greenish yellow, with thin gray russet. Calyx small. Stalk long. Flesh yellowish white, crisp, brisk aromatic. Good. November, December. (Lind.)

PATERSON'S SWEET.

Origin unknown. Considerably grown in Western New York, and esteemed valuable for its season. Tree upright, thrifty, productive.

Fruit medium, roundish oblate, yellow, mostly covered and indistinctly splashed and striped with dark rich red, many conspicuous light dots. Flesh white, tender, juicy, pleasant, sweet. Good to very good. September, October.

PAWPAW.

Western Baldwin.

Rubicon.

Ball Apple.

Origin, Pawpaw, Mich. Tree hardy, a good and regular bearer. Young shoots dull grayish reddish brown.

A new Apple, esteemed in its place of origin for its productiveness and beauty of appearance.

Fruit medium, roundish oblong, slightly oblique, yellow, shaded and mostly overspread with bright rich red, faintly splashed and mottled, moderately sprinkled with areole dots. Stalk medium. Cavity deep, narrow. Calyx partially open. Segments a little recurved. Flesh yellowish, juicy, firm, rich, brisk subacid. Very good. December to June.

PAWSAN.

An English cider Apple.

Fruit medium, roundish, dull green, with network of russet. Flesh firm, juicy, acid. October.

PEACH.

Origin unknown. Tree moderate grower.

Fruit below medium, oblate, inclining to conic, pale yellow, with blush of red in the sun, and thickly sprinkled with gray dots. Stalk short. Calyx closed. Flesh white, crisp, tender, juicy, lively brisk subacid. Good to very good. Core small. December to April. A good keeper.

PEACH-POND SWEET.

This is a most excellent autumn variety, from a small village of this name in Dutchess Co., N. Y. It appears well worthy of a more general dissemination. Tree vigorous, spreading. Young shoots dull grayish brown.

Peach-Pond Sweet.

Fruit of medium size, rather flat, striped light red. Stalk long and slender. Flesh tender or very mellow, moderately juicy, very rich, sweet, and agreeable. Very good. September to November.

PEAR.

Pear-Apple.

From Pennsylvania.

Fruit medium or below, roundish oblong, pale yellow, with a blush in the sun, few gray dots. Flesh white, crisp, juicy, pleasant subacid. Good. Core small. December, February.

PEARSALL'S SWEET.

Supposed to have originated in Queens Co., Long Island. Tree upright spreading, quite productive.

Fruit rather large, roundish, sometimes oblique, yellow, shaded, splashed, and mottled with light red. Stalk short. Calyx closed. Flesh yellowish, a little coarse, moderately juicy, sweet. Good. Core large and open. November, January. A good keeper, and valuable for baking.

PEARSON'S EARLY.

Fruit medium or above, roundish, pale yellow. Flesh yellowish white, sharp subacid. August, September. (Elliott.)

PEARSON'S PLATE.

A variety from England, which has a very high reputation.

Fruit small, about two and a half inches in diameter, regularly formed, flat, greenish yellow, becoming yellow, with a little red in the sun. Flesh white, crisp, tender, sprightly subacid. Good. February, March. Core small.

PECK'S PLEASANT.

Waltz Apple.

A first-rate fruit in all respects, belonging to the Newtown Pippin class. It has long been cultivated in Rhode Island, where, we think, it originated, and in the northern part of Connecticut, and deserves extensive dissemination. It considerably resembles the Yellow Newtown Pippin, with more tender flesh, and is scarcely inferior to it in flavor.

Peck's Pleasant.

The tree is a moderate, upright spreading grower, but bears regularly and well, and the fruit commands a high price in the market. The apples on the lower branches of old trees are flat, while those on the upper branches are nearly conical. Young shoots reddish brown, slightly downy.

Fruit above medium size, roundish, a little ribbed, and slightly flattened, with an indistinct furrow on one side. Skin smooth, and when first gathered, green, with a little dark red; but when ripe a beautiful clear yellow, with bright blush on the sunny side and near the stalk, marked with scattered gray dots. The stalk is peculiarly fleshy and flattened, short, and sunk in a wide, rather wavy cavity. Calyx woolly, sunk in a narrow, abruptly, and pretty deeply sunk basin. Flesh yellowish, fine-grained, juicy, crisp and tender, with a delicious, high aromatic sprightly subacid. Very good or best. November to March.

PELIHAM SWEET.

Green Sweet.

From Massachusetts. Tree a fair grower and good bearer.

Fruit below medium, roundish oblate conic, greenish, sometimes shaded with red in sun, splashes and patches of russet. Stalk short. Calyx closed. Flesh yellowish, moderately tender, sweet. Good. Core small. December to March.

PENNINGTON'S SEEDLING.

An English fruit of medium size, nearly flat, a little angular, mostly covered with rough yellow russet, with a little pale brown in the sun. Flesh yellowish, firm, crisp, with a brisk acid juice. Hardly good. November to March.

PENNOCK.

Pomme Roye.	Big Romanite.	Red Pennock
Large Romanite.	Neisley's Winter Penick.	Pennock's Red Winter.
Prolific Beauty.	Pelican	Gay's Romanite.
Roman Knight.	Red Ox.	

Origin, Pennsylvania. Tree a strong, vigorous, upright spreading grower, and very productive.

Fruit quite large, oblique, generally flat, but occasionally roundish oblong, fine deep red, with faint, indistinct streaks of yellow. Flesh yellow, tender, and juicy, with a pleasant half sweet flavor. Good. November to March.

PENNSYLVANIA SWEET.

Pennsylvania Sweeting.

Origin unknown.

Fruit large, oblong, greenish yellow. Flesh tender, fine-grained, very sweet. Good. Early winter. (Warder.)

PENNSYLVANIA WINE SAP.

Origin unknown.

Fruit large, conical oblate, truncated, yellow, blushed, very little splashed. Flesh yellowish white, tender, juicy, subacid. Good. December, January. (Warder.)

PEOPLE'S CHOICE.

Melt-in-the-Mouth of some.

A Pennsylvania fruit. Tree moderately vigorous, upright. Young shoots grayish reddish brown.

Fruit medium, oblate, inclining to conic. Color red, sometimes obscurely striped, thickly sprinkled with large whitish dots of peculiar appearance. Flesh yellowish, firm, juicy, brisk, rich subacid. Good. December to March.

PEPIN RusSE.

Fruit medium, roundish oblate, yellow, with reddish gray dots, bright red in the sun. Flesh fine, half firm, yellowish white, subacid. December, January. (S. V. M.)

PERRY RusSET.

Golden Russet.

The origin of this is in obscurity. It was, many years since, carried from Perry, Wyoming Co., N. Y., to the West, under the name of Golden Russet, but as it was entirely distinct from the true Golden Russet, it soon became known as the Perry Russet, which name we continue. It is of "good" quality for table or kitchen, but does not keep late, and sometimes drops its fruit from the tree early. Tree a moderate, upright spreading grower, hardy, an early and abundant bearer. Young shoots light brownish red.

Fruit medium, roundish conical, sometimes a little oblique, pale yellow, netted with russet on the sunny side, and sometimes brownish. Stalk short, cavity narrow, sometimes with a lip. Calyx closed. Basin abrupt. Flesh yellowish, rather firm, juicy, brisk subacid. Good. November, December.

PETIT JEAN.

From Jersey, England. Tree an abundant bearer.

Fruit small, roundish oval oblate, pale yellow, shaded and striped with red. Flesh white, tender. Good. November, February.

PETWORTH NONPAREIL.

Green Nonpareil.

Ronalds describes this English fruit as larger than the old Nonpareil, of the same shape, green. Flesh crisp, juicy. February, March.

PHILLIPPI.

Origin, supposed Berks Co., Pa. Tree vigorous. Young shoots reddish brown, slightly downy.

Fruit medium, oblate conical, greenish yellow, with numerous blotches and gray dots, and a blush on the exposed side. Stalk short and slender, inserted in a wide, deep cavity. Calyx small, closed, set in a narrow superficial basin. Flesh tender, fine texture, juicy. Good to very good. October to January.

PHILLIPS' SWEET.

Originated on the farm of George Phillips, Coshocton Co., Ohio. Tree thrifty, upright, very productive. Young wood smooth, light, clear reddish brown.

Fruit medium or above, roundish oblate, inclining to conic, whitish yellow, shaded with light red, and striped and splashed with dark,

large light dots. Stalk long, slender. Cavity deep. Calyx closed. Segments short. Basin abrupt, deep. Flesh white, crisp, tender, juicy, rich, pleasant, sweet. Good to very good. Core small. December, March.

PHENIX.

From Illinois. Origin unknown.

Fruit medium, roundish, slightly oblate, light yellow, faintly shaded, splashed, and striped with rich red, few brown and light dots. Flesh yellowish, coarse, moderately juicy, subacid. Good. December, March.

PICKARD'S RESERVE.

Origin, Parke Co., Ind. Tree hardy and productive.

Fruit rather large, oblate, sides unequal, yellow, shaded with red in the sun, few gray dots. Stalk short. Cavity large. Calyx closed. Basin large, deep, corrugated. Flesh yellowish, crisp, rather tender, juicy, slightly aromatic subacid. Good to very good. Core small. December, January.

PICKMAN.

Pickman Pippin.

Origin, Massachusetts. Tree vigorous. Young shoots dull brown, downy. Buds knobby at base.

Fruit medium, roundish oblate, yellow, with scattered shades of russet, and small russet dots. Stalk short. Cavity medium. Calyx closed. Flesh yellowish white, crisp, pleasant subacid. Good to very good. January, April.

PIFER.

Pfeifer.

Origin, Bucks Co., Pa. Tree rapid grower, upright spreading.

Fruit below medium, roundish, sparsely streaked with red on a yellowish green ground, fawn-colored next the sun. Flesh white, tender, subacid. Good. January to July.

PIGEON.

Jerusalem.	Cœur de Pigeon.	Pigeon Rouge.
Gros Cœur de Pigeon.	Passe Pomme.	Duif Apfel.
Rother Taubenapfel.	Arabian Apple.	

This old Apple is described by Ronalds as a free but not robust grower.

Fruit medium, oblong conical, straw color, flushed with red in the sun. Flesh white, delicate, crisp, pleasant subacid. December to February.

PIGEONETTE.

Pigeonet Blanc.	Pigeonette Blanc d'Été.
Pigeonette Gros de Rouen.	Museau de Levre.
American Peach.	Taubenfarbig Apfel.

This is described by Hogg as of only second quality, and here probably of little value.

Fruit below medium, oblate roundish, yellow, striped and rayed with red. Flesh white, delicate, agreeable acid. August, September.

PIGEONETTE DE ROUEN.

This is described in the *Annals of Pomology*, by M. Bivort, as tree very productive.

Fruit large, oblong conical, truncated, pale yellow, spotted with gray, washed and blotched with bright red. Flesh white, tender, subacid. Good. December to March.

PIKETON RUSSET.

Origin, near Piketon, Ohio.

Fruit large, conical, reddish green, and russety. February to April. (O. P. S. Rep.)

PILES RUSSET.

Pyles Russet.

An old English Apple. Tree vigorous, productive.

Fruit medium, roundish oblate, dull green, covered with russet, becoming dull brown or orange in the sun. Flesh greenish, breaking, brisk, slightly aromatic subacid. November to April. (Lindley.)

PINE APPLE RUSSET.

Hardingham's Russet.

Tree of moderate growth, fruit not fair or very valuable.

Fruit medium, conic, angular. Skin whitish yellow, faintly striped. Stalk rather long and slender. Cavity uneven, and slightly russeted. Calyx closed. Basin shallow, corrugated. Flesh whitish, juicy, tender, subacid, slightly aromatic. Very good. Last of September and October.

PINE CREEK SWEET.

Hamilton.

Origin, Pine Creek, Clinton Co., Pa. Tree very vigorous, upright spreading.

Fruit large, roundish conical, pale whitish yellow, sprinkled with a few brown dots. Stalk short. Cavity deep, large, uneven. Calyx small, closed. Basin abrupt, deep, slightly corrugated. Flesh white, crisp, tender, juicy, rich honeyed sweet. Very good. Core small. October.

PINE STRAWBERRY.

Tree healthy, vigorous, upright.

Fruit medium to large, conical, pale yellow, blushed and splashed, light carmine. Dots large, yellow. Calyx open. Stalk short. Flesh yellow, tough, juicy, sweet. Good. Winter. (Am. Hort. An.)

PINK SWEETING.

Originated with William Keller, Cumberland Co., Pa. Tree vigorous, spreading, producing enormous crops.

Fruit small, greenish, nearly covered with bright red, perfect in form, rich, pleasant, sweet. Good. September, October.

PINNER.

Carrell's Seedling.

Pinner Seedling.

Origin, Middlesex, England.

Fruit medium, roundish, ribbed slightly, yellowish brown russet, becoming reddish brown in the sun. Flesh yellowish, crisp, tender, brisk subacid. December, February.

PIONEER.

From Pennsylvania.

Fruit medium, roundish oblate conic, yellow, shaded with light red, and splashed and striped with dark red, many small light and gray dots. Stalk rather short. Calyx closed. Flesh whitish yellow, tender, juicy, pleasant subacid, slightly aromatic. Good. Core small. October, November.

PITMASTON GOLDEN PIPPIN.

Fruit small, round, rough, pale yellowish brown russet. Flesh deep yellow, crisp, tender, juicy, sweet. December. (Hogg.)

PITMASTON NONPAREIL.

St. John's Nonpareil.

Pitmaston.

Russet Nonpareil.

Origin, near Worcester, England.

Fruit medium, roundish oblate, dull green, with russet and faint red in the sun. Flesh greenish yellow, firm, rich, aromatic subacid. November, December. (Lind.)

PITMASTON PINE-APPLE.

Fruit small, conical, yellowish brown russet. Flesh yellowish, firm, crisp, sugary. December, January. (Hogg.)

PITTSBURGH PIPPIN.

Flat Pippin.
Father Apple.
Greasy Back.

Swiss Pippin.
William Tell.
Pippin.

Swiss Apple.
Schwitzer Apple.
Wythe.

Origin, supposed to be Pittsburgh, Pa. An irregular grower, somewhat drooping in habit, and generally a good bearer. Young shoots dull reddish brown, downy.

Fruit large, oblate, obscurely ribbed, pale yellow, rarely with a blush, sparsely sprinkled with brown dots. Stalk short and small, in a large cavity, sometimes a little russeted. Calyx nearly closed. Basin broad and corrugated. Flesh whitish, juicy, tender, sprightly subacid. Good to very good. November to April.

PLATT'S SWEET.

Origin, Addison Co., Vt. Tree a strong grower, and productive.

Fruit medium, roundish conical, sides unequal, greenish yellow, shaded and striped with dull red. Flesh yellowish, juicy, peculiar, sweet. Good. Core small. January to March.

PLEASANT VALLEY PIPPIN.

Of unknown origin. Received from New Jersey. Tree moderately vigorous, upright spreading.

Fruit medium, roundish, inclining to conic, greenish yellow, with brown or gray dots. Calyx small, closed. Flesh yellowish, tender, juicy, mild, pleasant subacid. Good to very good. October, November

PLUM.

Origin unknown. Tree upright, moderately vigorous.

Fruit medium, roundish oblate, greenish yellow, with a tinge of red in the sun. Flesh white, fine, tender, juicy, mild, pleasant subacid. Very good. Core small. August.

POLISH.

Red Polish.

Originated in the neighborhood of Boston, Mass. Tree very productive, moderately vigorous, upright spreading.

Fruit medium, roundish conical, yellow, shaded, splashed, and striped with dark rich red, light gray dots. Stalk rather short, slender. Calyx closed. Flesh whitish, sometimes stained next the skin, juicy, pleasant subacid. Good to very good. October, November.

POLLY BRIGHT.

Origin supposed to be Virginia. Tree vigorous, upright spreading.

Fruit elongated conic. Skin light yellow, shaded with carmine, obscurely striped. Stalk of medium length, in an acute cavity, russeted. Calyx in a small furrowed basin. Flesh tender, juicy, with a pleasant subacid flavor. Good. September, October.

POMEROY.

Taunton.

There are two Pomeroy Apples from England—one from Somersetshire and one from Lancashire; neither of them proves of much value here. The first is medium, roundish conical, greenish yellow, with stripes of red and russet in the sun. Flesh yellow, firm, juicy, sugary. October, December.

The second is medium, roundish oblate, ribbed at apex, pale yellow, shaded cheek of red in the sun, russet dots. Flesh whitish, tender, brisk subacid. September, October.

There is another Pomeroy from Massachusetts, which is of medium size, roundish oblate, yellow, shaded, splashed, and marbled in sun with light and dark red. Stalk short. Calyx closed. Flesh white, tender, moderately juicy, pleasant subacid. Good or very good. October, November.

POMME GRISE.

Pomme de Cuir.
Gray Apple.

Grise.
Leather Apple of Turic.

A small gray Apple, from Canada, probably of Swiss or French origin, and undoubtedly one of the finest dessert Apples for a northern climate. It is not a strong grower, but is a good early bearer, and has an excellent flavor. Young wood reddish brown.

Pomme Grise.

Fruit below medium size, oblate roundish. Skin greenish gray or cinnamon russet, with a little red towards the sun. Calyx small, set in a round basin. Flesh tender, rich, and high-flavored. Very good to best. December to February.

There is an Apple under name of Pomme Gris d'Or which is claimed as of more upright growth. The fruit more oblong and quite distinct. We have been unable to so decide.

POMME WATER.

Pomme Water Sweet.

An old Apple, described in Kenrick, Hogg, and others. It has travelled considerably, but is not generally known, nor very highly appreciated. Tree vigorous, spreading, moderately productive.

Fruit medium to large, roundish, slightly conical, greenish yellow, shaded and splashed with red or crimson in the sun. Stalk rather short. Calyx closed. Flesh yellowish white, breaking, juicy, pleasant, sweet. Good to very good. Fine for baking. October, December.

PONTO PIPPIN.

An English variety, described by Hogg as of medium size, roundish, slightly conical, greenish yellow, red in the sun, with spots of dark russet. Flesh greenish white, crisp, tender, brisk subacid. November to February.

POORHOUSE.

A new variety, received from A. L. Woodson, of Kentucky, by him obtained from Tennessee.

Fruit large, roundish oblate, pale yellowish green, with russet dots. Stalk short. Flesh yellowish, compact, moderately juicy, mild subacid. Very good. December. Promises a good keeper.

POPE.

Pope's Apple.

This is described by Hogg as originating in Kent, England, and there highly esteemed. The tree an early and abundant bearer.

Fruit large, roundish oblate conical, clear yellow, with patches of green, dark dots and streaks of red in the sun. Flesh yellowish, sugary, juicy, rich, and excellent. November to March.

PORTER.

A first-rate New England fruit, raised by the Rev. S. Porter, of Sherburne, Mass., and wherever grown a decided favorite. The tree is hardy, a moderately vigorous grower, forming a low, round, spreading head, and

Porter.

producing abundantly, if in good soil, a fruit uniformly fair and even in size and form. It is a valuable market fruit, and continues a long time in use.

Fruit rather large, regular, oblong, narrowing to the eye. Color clear glossy bright yellow, and, when exposed, with a dull blush next the sun. Calyx closed. Segments irregular, set in a narrow and deep basin. Stalk rather slender, not three-fourths of an inch long. Flesh fine-grained, and abounding with juice, sprightly, agreeable aromatic subacid. Very good to best. Ripens in September, and deserves general cultivation.

PORTER SPITZENBURGH.

Origin uncertain. A free grower and very productive. Tree moderately vigorous, upright spreading.

Fruit large, globular, slightly inclining to conic, red, shaded with deep crimson. Stalk very short, inserted in a large cavity, surrounded by thin russet. Calyx small, closed, set in an open basin. Flesh white, much stained, very compact, crisp, juicy, pleasant, brisk subacid. Good to very good. November to March.

PORTUGAL GRAY REINETTE.

Reinette Grise de Portugal.

Graue Portugiesische Reinette.

Origin unknown. A very singular-colored fruit, small to medium, green, covered with a peculiar dirty reddish brown. Calyx large, closed. Flesh greenish white, tender, pleasant subacid. January, February.

POSEY'S RED.

Posey's Red Winter Sweet.

Origin unknown.

Fruit medium or below, roundish oblate, yellowish, shaded, splashed, and striped with red. Flesh whitish, tender, mild subacid, almost sweet. Good. Core small. November to April.

POSTELEY.

Posteley's Seedling.

Origin unknown. Tree a fair grower and good bearer.

Fruit medium, roundish, inclining to conic, greenish yellow, shaded in the sun with dull red, many gray dots. Stalk short. Cavity large. Calyx closed. Flesh yellowish, compact, juicy, brisk subacid. Good to very good. Core medium. December to March.

POTTER'S LARGE.

Potter's Large Apple.

Potter's Large Seedling.

A very large English sauce Apple, roundish oblong conical, obscurely ribbed, greenish yellow, with a blush red in the sun, and many red and gray dots. Flesh white, subacid. October to December.

POTTINGER.

Big Red.

Origin and distinctiveness uncertain. Tree vigorous, large. Branches upright. Shoots purple, warty. Buds long, pointed.

Fruit large, regular, oblate, dull red, shaded and striped, covering the yellow ground. Dots small, prominent, with some roughness. Flesh yellow, breaking, granular, juicy, subacid, aromatic. Only good for kitchen and drying. December, January. (Warder.)

POUND CAKE.

Royal Pearmain?

A Southern Apple, not much known.

Fruit large, roundish oblate, inclining to conic, golden yellow, mottled and shaded with red, netted and patched with russet. Flesh yellowish, rather crisp, tender, a little granular, vinous, pleasant. Good to very good. November, December.

POUND ROYAL.

Winter Pound Royal.

Probably of French origin. Fruit apt to be unfair, unless with high culture. Tree spreading, with long slender branches. Young shoots light brown.

Fruit large, roundish oblong conical, with a slightly uneven surface, pale yellowish white, rarely with a faint blush, and marked when ripe with a few large ruddy or dark specks. Flesh very tender, breaking, fine-grained, with a mild, agreeable, aromatic subacid. Good. In use from December to April.

POUND'S JULY.

Origin, Kentucky. Tree vigorous, upright spreading. Young shoots light reddish brown.

Fruit large, roundish conic, sides unequal, greenish white, with a dull blush, and thinly sprinkled with brown dots. Stalk very short. Cavity deep, russeted. Calyx closed. Basin small, narrow. Flesh white, fine-grained, tender, not very juicy, rich, pleasant, sweet. Good to very good. July, August.

POUND SWEET.

There are several sorts under this popular name, as applied to any large sweet apple. One is large, roundish conical, greenish yellow, with slight red in sun. Flesh yellowish, tender, moderately juicy, sweet. September, October. Another is large, roundish, red. Flesh whitish, moderately juicy, aromatic, sweet.

POVESHON.

An old New Jersey Apple, valued mainly for making early cider.

Fruit small, oblate, deep red. Flesh yellow, dry, sweet. Good. September, October.

POWELL'S RUSSET.

A little English Apple, described by Ronalds as roundish oblate, light brown russet. Flesh white, firm, brisk subacid. December, January.

POWERS.

Miller's Apple.

Origin, Perrysburgh, Ohio.

Fruit large, roundish oblate, waxy yellow ground, shaded with red, and splashed with carmine. Stalk short. Cavity deep, acute. Calyx closed. Basin abrupt, somewhat corrugated. Flesh white, fine-grained, juicy, mild, aromatic subacid. Very good. October, November. (O. P. S. Trans.)

There is another Powers, or Powers Seedling, which originated on the farm of C. W. Powers, Amenia, Dutchess Co., N. Y.

Fruit medium, roundish, inclining to conic, whitish, shaded, splashed, and striped with red, light dots. Flesh white, a little stained next the skin, crisp, juicy subacid. Good. November.

POWNAL SPITZENBURGH.

Origin, Vermont. An old variety, not much esteemed. Tree a rapid grower, but late coming into bearing.

Fruit above medium, roundish oblate, sometimes inclining to conic, yellow, marbled and striped with red. Flesh yellowish, not very tender, pleasant subacid. Good. December to March.

PRAIRIE CALVILLE.

Calville des Prairies.

Renetten.

Wilden Apfel.

Fruit medium, roundish oblate, light yellow, overspread and blotched with red. Flesh white, tender, juicy, subacid. November, December. (An. Pom.)

PRATT'S SWEET.

Origin, on the farm of Daniel Pratt, Richland, Oswego Co., N. Y. Tree vigorous, with an open spreading head, an annual bearer, and productive. Young shoots dark reddish brown.

Fruit large, roundish conical, with broad yet slight ribs. Color rich pale yellow ground, marbled, striped, and shaded over two-thirds the surface, with two shades of clear bright pinkish red, and dotted with inconspicuous light dots. Stalk rather short, slender. Cavity deep, broad, and open. Calyx closed. Basin abrupt, moderately deep, round, and slightly corrugated. Flesh yellowish white, crisp, breaking, tender, rather fine-grained and juicy, mild, pleasant, rich, sweet. Very good. Core medium. December to March.

PRESIDENT.

Origin, farm of Capt. John White, Salem, N. H. Tree vigorous, productive.

Fruit large, roundish oblate, pale yellow, with a tinge of red in the sun, few gray dots. Flesh yellow, firm, juicy, subacid. Good. September, October.

The original tree of the President is said to have been in bearing at the inauguration of Washington as President, and to be yet in a healthy condition.

PRESIDENT DE FAY'S DUMONCEAU.

Origin, Belgium. Tree vigorous and productive. A new variety, of good promise.

Fruit very large, oblate, broadly ribbed, rich yellow, splashed and marbled with bright red in the sun. Stalk slender. Calyx small, closed. Flesh yellowish white, tender, sugary, acid. November, February. (An. Pom.)

PRESS.

Origin, Bucks Co., Pa. Tree upright, vigorous.

Fruit rather large, oblate. Skin whitish yellow, striped and splashed with red. Flesh juicy, tender, pleasant, mild subacid. Good. March.

PRESS EWING.

Originated in Christian Co., Ky., and introduced to notice by J. S. Downer. Tree hardy, vigorous, irregular, spreading. Young shoots dark brown, productive.

Fruit medium, oblate, yellow, shaded and obscurely splashed with crimson, and thickly covered with dots, having a dark centre. Stalk medium, inserted in a broad, deep cavity. Calyx closed, set in an uneven, deep, abrupt basin. Flesh yellowish, firm, juicy, crisp, tender, mild, agreeable subacid. Good to very good. February till April.

PRIESTLY.

Priestley's American.

Origin, Pennsylvania. Tree vigorous, upright, and productive.

Fruit large, roundish oblong, smooth, dull red, with small streaks of yellowish green. Flesh white, moderately juicy, with a spicy, agreeable flavor. Hardly good. December to March.

PRIEST'S SWEET.

Blue Sweet.

Molasses Sweet.

Origin, Leominster, Mass. Tree vigorous and very productive.

Fruit medium, globular inclining to conic, yellow, chiefly covered with dull red stripes and numerous red dots. Stalk short, set in a rather deep cavity. Calyx closed. Basin small. Flesh white, fine, tender, and pleasant, not very juicy, a late keeper. Good. January to May.

PRIMATE.

Rough and Ready.
Sour Harvest.
July Apple.
Scott.

Early Tart Harvest.
Zour Bough.
Powers.
North American Best.

The true origin of this delicious amateur's Apple is unknown. It appears to have been long known and grown in various sections of our States under different names. The tree is hardy, a strong and stocky

grower, and forms a beautiful head, very productive. Young shoots short-jointed, reddish brown, quite downy. Buds rather prominent.

Primate.

Fruit medium, roundish oblate conic, greenish white, with a crimson blush on the exposed side. Stalk of medium length, inserted in a rather large, deep, irregular cavity. Calyx closed in an abrupt, open, somewhat corrugated basin. Flesh white, very tender, sprightly, refreshing, mild subacid. Very good or best. An excellent dessert Apple, ripening the last of August, and continuing in use till October.

PRINCELY.

Origin, Bucks Co., Pa. Tree a good grower and good bearer.

Fruit medium, oblate, sometimes inclining to conic, yellow, shaded, marbled, and indistinctly splashed with red, small light dots. Stalk short. Calyx open. Flesh yellowish, tender, juicy, pleasant, mild almost sweet subacid. Core small. Good to very good. October, January.

PRINCE OF ORANGE.

Tree vigorous, very productive.

Fruit medium to large, roundish oblong, ribbed, pale yellow, with blotches of red. Flesh yellowish white, tender, soft, subacid. Good. October, November. (An. Pom.)

PRINCESSE NOBLE.

Grosser Edler Prinzessinapfel.

An excellent Dutch Apple. Tree a good grower, an early and good bearer.

Fruit medium, roundish, somewhat conical, yellowish, with many broken stripes of red. Flesh yellowish white, firm, juicy, pleasant, vinous. November. (Hogg.)

PRINCESSE NOBLE DES CHARTREUX.

Origin unknown.

Fruit medium to large, bright green, with many indistinct spots, greenish brown around the stalk. Stalk short. Calyx small. Flesh yellowish white, firm, sugary, agreeable acid. January, February. (Verg.)

PRINZ.

Of German origin. New. Tree vigorous, upright, a good grower, and productive. Young shoots reddish brown, downy.

Fruit large, roundish conical, obscurely ribbed, yellow, shaded with pale red in the sun, few brown dots. Stalk short. Calyx closed. Flesh yellowish, juicy, tender, breaking, mild, pleasant subacid. Good to very good. October, November.

PROGRESS.

“Esquire Miller’s Best Sort.”

A native of Middlefield, Conn. Tree a moderate grower, and forms a handsome head, bears early, and very productive. The original tree stands on the land of Enoch Coe, formerly of Isaac Miller Esq., and for some time was called “Esquire Miller’s best Sort.”

Fruit medium, roundish oblate. Stalk short, inserted in a round cavity, surrounded by russet. Calyx large, partially closed, set in an open basin. Skin smooth, yellow, with a sunny cheek, sometimes with a few scattered gray dots. Flesh solid, tender, crisp, juicy, refreshing, subacid. Good to very good. Core small. Ripe, October to April.

PROLIFEROUS REINETTE.

An English Apple, described by Hogg as :

Fruit medium, roundish, obscurely ribbed, dull yellow with broken stripes of crimson, small russety specks. Flesh yellowish white, juicy, rich brisk flavor. October, December.

PROLIFIC BEAUTY.

Origin unknown.

Fruit large, roundish oblate, yellowish, with dull stripes of red. Flesh whitish yellow, tender, acid. Poor. September, December.

PROLIFIC SWEET.

From Connecticut. Tree a good grower, very productive, fine for cooking.

Fruit roundish conic. Skin greenish. Flesh whitish, tender, with a pleasant, sweet, spicy flavor. November to February.

PROP.

From Pennsylvania.

Fruit medium, oblate oblique, pale yellow, with a few large splashes and stripes of light red, few large brown dots. Stalk short. Calyx large, open. Flesh whitish, tender, juicy, mild, pleasant subacid. Good. Core small. December.

PRYOR'S RED.

Pitzer Hill.

Big Hill.

Prior's Red.

Origin unknown. Tree upright, spreading, not very vigorous, nor an early bearer, requires a deep, rich soil, and a warm season or a southern climate for the full development of its excellence. Young wood and buds clear reddish brown, many large conspicuous gray dots.

Pryor's Red.

Fruit medium, somewhat globular oblate, obliquely depressed. Color greenish yellow, shaded with red, striped with dark crimson, and thickly sprinkled with greenish gray dots, and some seasons much covered with russet. Stalk short and thick, inserted in a small acute cavity, surrounded by traces of russet, which sometimes considerably overspread the fruit. Calyx firmly closed, set in a small basin. Flesh yellowish, tender, juicy, very rich, pleasant subacid. Very good. January to March.

There is an apple under name of Pryor's Blue, which may be distinct from the above, and may prove identical.

PUCKER END.

From Long Island. Tree thrifty and productive. Fruit large, roundish, inclining to conic, pale yellow, often shaded with crimson in

the sun, few dark gray dots. Stalk short, stout. Calyx closed. Flesh yellowish, crisp, juicy, subacid. Good. Core large. October.

PUMPKIN RUSSET.

Sweet Russet.

Pumpkin Sweet.
York Russet.

Flint Russet.

Origin unknown. Trees large and spreading.

Fruit large, round. Flesh pale yellowish green, slightly covered with russet. Stalk long, set in a wide, shallow cavity. Eye narrow, slightly sunk. Flesh exceedingly rich and sweet. Good. September to January.

PUMPKIN SWEET.

Vermont Pumpkin Sweet.

Lyman's Pumpkin Sweet.

Pound Sweet.

A very large sweet Apple, which we received from Mr. S. Lyman, of Manchester, Conn. It is, perhaps, inferior to the Jersey Sweet or the Summer Sweet Paradise for the table, but is a very valuable apple for baking, and deserves a place on this account in every orchard. Tree upright, spreading. Young wood brown.

Fruit very large, roundish, more or less furrowed or ribbed, especially near the stalk. Color pale green, with obscure whitish streaks near the stalk, and numerous white dots near the eye, sometimes becoming a little yellow next the sun. Flesh white, very sweet, but not very juicy. Good. September to December.

There is also in Connecticut and Massachusetts another *Pumpkin Sweet*, the tree of which is a strong, upright grower, and very productive. Young wood reddish brown, slightly downy.

Fruit large, roundish oblate, rich yellow, frequently with considerable russet. Flesh yellowish white, breaking, rich, sugary, sweet, ripening in September and October. Very valuable for baking or stock feeding.

There are also several other Apples under the name of Pumpkin Sweet, but we consider the two above described as the best we have known.

PUSHMATAHA.

Sloan's Seedling.

Originated near Tuscaloosa, Ala. Tree stout, upright, moderately spreading head, early and abundant bearer. Young shoots grayish, downy at end.

Fruit medium or below, roundish oblate, inclining to conic, pale yellow, shaded, splashed, and striped with rich red, few brown dots. Stalk medium, slender. Calyx closed. Flesh yellowish white, juicy, mild, pleasant subacid. Good. Core small. November to January.

PUTNAM HARVEY.

Origin unknown.

Fruit medium to large, roundish oblate, greenish, with patches of russet. Flesh white, crisp, tender, juicy, subacid. August, September. (Elliott.)

PUTNAM KEEPER.

From Kentucky. Tree vigorous, upright spreading.

Fruit large, oblate, yellowish, shaded and splashed with red. Stalk rather long. Calyx closed. Flesh yellowish, crisp, juicy, pleasant subacid. Good. Core small. December to March.

PUTNAM SWEET.

Originated near Marietta, Ohio.

Fruit large, flat, regular, surface smooth, mixed, splashed, and striped deep red. Dots numerous, large. Calyx small, closed. Stalk short. Flesh tender, sweet, very good. Kitchen, stock. August, September. (Warder.)

PUTNEYITE.

Fruit medium, roundish, light yellow, coarse, dry, acid. December, January. (Elliott.)

QUAKER.

An old Apple. Origin unknown. Tree vigorous, spreading, an early and great bearer, regarded by some as a valuable market sort.

Fruit medium, roundish, inclining to conic, yellow, splashed and striped with rich red, light dots. Stalk medium, slender. Cavity large. Calyx closed. Flesh whitish, crisp, juicy, pleasant, slightly aromatic subacid. Good. November, February.

QUAKER PIPPIN.

Fruit medium, greenish yellow. Very acid. Poor. October. (Elliott.)

QUEEN CHARLOTTE.

An old German Apple, described by Ronalds as :

Fruit small, conical, greenish, with a facing of brown in sun. Flesh brisk, pleasant. March, April.

QUEEN OF SAUCE.

A culinary Apple, described by Hogg as :

Fruit large, oblate, greenish yellow, striped and flushed with red, patches and specks of russet. Calyx open. Flesh yellowish, firm, crisp, juicy, sugary, brisk, pleasant. Good. November, January.

QUEEN OF THE PIPPINS.

Reine des Reinettes.

Origin unknown. Foreign.

Fruit medium, roundish conical, truncated, fine yellow, shaded, splashed, and marbled with red, few gray dots. Stalk slender. Calyx open. Basin large. Flesh yellowish white, firm, crisp, slightly aromatic. Good to very good. November, December.

QUEEN OF THE VALLEY.

Origin unknown. Received from Connecticut. Tree vigorous, upright spreading. Young shoots brownish, slightly grayish.

Fruit rather large, roundish conical, yellow, mostly shaded, striped, and splashed with rich red, many whitish dots. Stalk short. Calyx closed. Flesh whitish, juicy, tender, pleasant subacid. Good to very good. November, December.

QUINCE.

Seneca Spice ?

Pear Apple.

Origin uncertain ; first described by Cox. In appearance this Apple is much like a large yellow Newtown Pippin ; grown at the West it is larger than in New England, of a rich high flavor, and by some esteemed very highly. Tree hardy, vigorous, upright spreading, and productive. Young shoots dull reddish brown. Buds small, reddish, pointed.

Fruit medium to large, roundish oblate, yellow, rarely with a blush, somewhat broadly ribbed. Stalk short. Cavity broad, open, deep. Calyx closed. Basin large, rather deep, furrowed or uneven. Flesh yellowish white, crisp, tender, a little coarse, with a brisk, pleasant subacid quince aroma. Core rather large. Very good. October, December.

There is another *Quince*, or *Coles Quince*, which is claimed to have originated in Cornish, Maine. The fruit of the two is very similar, and we have at times questioned its identity. The young wood is, however, different in shade of color, being clear rich reddish brown, with buds short, abrupt, prominent.

RABINE.

This English Apple is described by Hogg as valuable for culinary or dessert purposes.

Fruit above medium, roundish oblate, ribbed, greenish yellow, mottled, splashed, and striped with red in the sun. Flesh yellowish, tender, crisp, sugary, brisk, pleasant acid. October, December.

RAGAN.

Ragan's Red.

Originated with Reuben Ragan, Putnam Co., Ind. Tree hardy, vigorous, and fruitful. Young wood dull reddish brown, grayish.

Fruit medium to large, roundish conic. Color marbled and striped with red on a green ground. Stalk medium length, inserted in a very deep, narrow cavity. Calyx small, closed, set in a deep, abrupt basin. Flesh yellowish white, juicy, pleasant, rather rich, spicy, subacid. Good to very good. October to November.

RAMBO.

Fall Romanite.

Gray Romanite.

Striped Rambo.

Delaware.

Romanite.

Seek-no-Further.

Bread-and-Cheese Apple.

Rambouillet.

Trumpington ?

Large Rambo ?

Terry's Redstreak.

The Rambo is one of the most popular autumn or early winter

fruits. It is a highly valuable Apple for the table or kitchen, and the tree thrives well on light sandy soil, being a native of the banks of the Delaware. The tree is of a vigorous, rather spreading habit, quite productive.

Rambo.

Fruit of medium size, flat, smooth, yellowish white in the shade, streaked and marbled with pale yellow and red in the sun, and speckled with large rough dots. Stalk long, rather slender, curved to one side, and deeply planted in a smooth funnel-like cavity. Calyx closed, set in a broad basin, which is slightly plaited around it. Flesh greenish white, very tender, rich, mild subacid. Very good. October to December.

There is claimed to be a distinct or sub-variety of this, called *Red Rambo*, the fruit of which is more red, otherwise there is no perceptible difference.

RAMBOUR GROS.

An old Apple, described by Ronalds as :

Fruit large, roundish oblate conical, slight projecting ribs, yellow, marbled and faintly striped with rich warm red. Flesh white, crisp, juicy, sharp subacid. Good. December, January.

RAMBOUR PAPELEU.

Rambourg Papeleu.

Of Russian origin. Tree vigorous, productive.

Fruit large, roundish oblate conical, deep rich yellow, spotted, striped, and splashed with shades of rich red, small light russet dots. Stalk medium. Calyx closed. Flesh yellowish white, rather coarse, breaking, sharp subacid. Good. November, January. An Apple of good promise for market.

RAMBOUR ROSE.

Rambour Rouge.

La Mère des Pommes.

Kool-appel.

Tree moderately vigorous, with large strong branches. Very productive.

Fruit large, roundish conical, truncated, rich yellow, mostly overspread, splashed, and shaded with rich red, traces of fawn russet. Stalk large, short. Flesh greenish white, half crisp, sugary acid, agreeable. Good for cooking. October, November. (An. Pom.)

RAM'S HORNS.

A large dark red Apple, imperfectly described by Cole. Poor. Out of use.

RANDEL'S BEST.

Randel Best.

Origin unknown.

Fruit medium, roundish, slightly flattened, greenish yellow, mostly striped and overspread with dark red. Stalk short. Calyx small. Flesh white, tender, sweet. November, February. (Elliott.)

RASCHE.

Originated with W. Rasche, near Hermann, Mo. A new variety, of good promise. Tree a strong grower, productive, and hardy. Young wood dark brown red, with prominent buds.

Fruit medium, roundish oblate, obscure ribs. Color greenish yellow, with small irregularly scattered gray dots, a shade of deeper green suffused, faint traces of russet at the stem end. Stalk short. Calyx closed. Flesh yellowish, crisp, juicy, mild subacid. Very good. December to March.

RATTLE-BOX.

Hollow Core.

Origin unknown.

Fruit below medium, roundish, greenish yellow, thinly striped and splashed with red. Flesh white, tender, juicy, mild subacid. Good. Core large. August.

RAVELSTON PIPPIN.

Revelstone Pippin.

An Apple from Scotland.

Fruit medium, roundish oblate, irregularly ribbed, greenish yellow, with stripes of red, and many russet dots. Stalk short. Calyx closed. Flesh yellow, firm, sweet, pleasant. Good. August.

RAWLE'S JANET.

Missouri Janet?

Rock Remain.

Jennett.

Red Neverfail?

Rock Rimmon.

Neverfail.

Rawle's Jannet.

Yellow Janett.

Indiana Jannetting.

Raule's Jannetting.

Winter Jannetting.

Raul's Gennetting.

Rawle's Genet.

Jeniton.

Originated in Amherst Co., Va., on the farm of Caleb Rawle. Tree

hardy, vigorous, spreading; it puts forth its leaves and blossoms much later than other varieties in the spring, and consequently avoids injury by late frost; it is, therefore, particularly valuable for the South and Southwest, where it is much cultivated. Young wood clear reddish brown.

Fruit rather large, oblate conic, yellowish, shaded with red and striped with crimson. Stalk short and thick, inserted in a broad open

Rawle's Janet.

cavity. Calyx partially open, set in a rather shallow basin. Flesh whitish yellow, tender, juicy, pleasant subacid. Good to very good. February to June. So far has not succeeded well at the North.

RAWLING'S RED STREAK.

Rawling's Fine Red Streak.

Red Streaked Rawling.

An old English sauce Apple, described in Ronalds.

Fruit large, roundish, yellow, striped with red. Flesh yellowish, tender, juicy, sweet. Good for cooking. December to March.

REBECCA.

Daddy.

An old variety, originating with a family by name of Stidham, in Delaware. Tree upright spreading. Young shoots dull grayish brown. Terminal bud large, blunt. Productive.

Fruit medium, oblate, whitish yellow, sometimes with a crimson cheek. Stalk short, inserted in a deep, narrow cavity. Calyx closed. Basin broad and deep. Flesh tender, juicy, pleasant subacid. Good to very good. August, September.

RED AND GREEN SWEET.

Red Pound Sweet.	Bedford Sweet.
Wheelock Sweet.	Large Early Red.
Prince's Large Red and Green Sweet.	

Origin unknown. Tree a good grower, upright spreading, a moderate annual bearer.

Fruit very large, oblong conic, ribbed, greenish white, with stripes of red. Flesh white, tender, sweet; a good fruit for baking and stock feeding. Middle of August to middle of September.

RED APPLE.

Origin, Berks Co., Pa.

Fruit below medium, roundish oblate, striped and marbled with bright red. Stalk long, slender. Calyx large. Flesh whitish, slightly stained with red, tender. Good. January to March. (Am. P. S. Rep.)

RED ASTRACHAN.

Deterding's Early.	Vermillon d'Été.
Astrachan Rouge.	Abe Lincoln.
Rother Astrakan.	

A fruit of extraordinary beauty, first imported into England, with the White Astrachan, from Sweden, in 1816. It bears abundantly with us, and its singular richness of color is heightened by an exquisite bloom on the surface of the fruit, like that of a plum. It is one of the

Red Astrachan.

handsomest dessert fruits, and its quality is good, but if not taken from the tree as soon as ripe it is liable to become mealy. Tree a vigorous

grower, upright spreading. An early and abundant bearer. Young shoots clear reddish brown.

Fruit pretty large, rather above the middle size, and very smooth and fair, roundish, a little narrowed towards the eye. Skin almost entirely covered with deep crimson, with sometimes a little greenish yellow in the shade, and occasionally a little russet near the stalk, and covered with a pale white bloom. Stalk rather short and deeply inserted. Calyx partially closed, set in a slight basin, which is sometimes a little irregular. Flesh quite white, crisp, moderately juicy, with an agreeable, rich, acid flavor. Good to very good. Ripens from last of July to middle of August.

RED AUTUMN CALVILLE.

Calville Rouge d'Automne.

Calville Rouge.

Calville d'Automne.

Pomme Violette.

Erd Beere, or Strawberry of Switzerland. Rosseau, incorrectly.

An old French Apple of unknown origin. Tree vigorous, productive. Young wood dark reddish brown.

Fruit large, roundish conical, deeply ribbed, pale yellowish, washed and overspread with shades of rich dark, or very dark red. Flesh white, tender, juicy, often stained with red, sprightly aromatic, subacid. Good. September to December. An unprofitable variety.

RED BELLE-FLEUR.

Belle-Fleur. Striped Belle-Fleur. Belle-Fleur Rouge. Wigwam.

A French variety, scarcely worth cultivation.

Fruit large, regular, oblong conical, pale greenish yellow, but nearly covered with red, striped with dark red. Flesh white, tender, of tolerably mild flavor, apt to become mealy. Poor. November to January.

RED CANADA.

Old Nonsuch, of Mass.

Poland.

Richfield Nonsuch.

Steele's Red Winter.

An old fruit, formerly much grown in Connecticut and Massachusetts, but is not now much planted, on account of its small size and poor fruit; succeeds well in Western New York, Ohio, and Michigan. Tree thrifty, but of slender growth; very productive. Young wood brownish olive.

Fruit medium, oblate, inclining to conic. Skin yellow, mostly shaded with deep red or crimson, somewhat striped or splashed on the sunny side, and thickly sprinkled with gray, and sometimes greenish dots. Stalk short, inserted in a broad, deep cavity. Calyx closed. Segments long, in a small, narrow, somewhat irregular basin. Core small, close. Flesh white, tender, crisp, abounding with a brisk, refreshing juice, and retaining its fine, delicate flavor to the last. Very good to best. January to May.

RED CATHEAD.

Cathead of some.

Tree upright, vigorous, and productive, extensively grown in the

eastern and southwestern counties of Virginia. Young wood dull reddish brown, downy.

Fruit large, roundish conic, yellow, partially shaded with dull red, and sometimes deeper red in the shade, and thickly sprinkled with whitish dots. Stalk short, inserted in a deep cavity. Calyx open, set in a large basin. Flesh yellowish, tender, juicy, pleasant subacid. Good to very good. October, November.

Red Canada.

RED CEDAR.

Origin unknown. Tree moderately vigorous, upright spreading.

Fruit medium, dark rich red. Flesh yellow, mild subacid. Valued for its long keeping quality.

RED CHEEK.

There are claimed to be three distinct Apples under this name. One is said to have originated on the farm of ——— Hull, Sharon, Conn.; the tree forming a small branching head, a great bearer, and the fruit a long keeper.

Fruit medium, roundish oblate conic, whitish, shaded in the sun with light red. Calyx small, closed. Flesh white, tender, juicy, pleasant mild subacid. Core medium. December to February.

Another RED CHEEK is said to have originated near Dracut, Mass.

Fruit medium, roundish conical, whitish, shaded with crimson in the sun, few gray dots. Calyx closed. Flesh white, tender, juicy, pleasant subacid. Core rather large. November, December.

Another comes from New Jersey.

Fruit medium, roundish oblong oval, inclining to conic, whitish yellow, shaded with crimson in the sun, gray and light dots. Stalk short. Calyx partially closed. Flesh white, tender, juicy, subacid. Core rather small. December, January.

RED FAVORITE.

Origin near Carlisle, Pa.

Fruit medium, oblate, juicy, subacid. (A. Pom. S. Rep.)

RED GILLIFLOWER.

Red Seek-no-Farther.

Harkness New Favorite.

Fruit medium, oblong conical, fine red. Flesh white, mild, rich subacid. November to January. Tree a poor bearer. (Elliott.)

RED HORSE.

Received from Kentucky. Tree of upright growth.

Fruit medium, oblate, with broad ribs, mostly covered with dark red, and obscure splashes and stripes, and pretty thickly sprinkled with light gray dots, and nettings of russet. Stalk short. Cavity large, irregular. Calyx open. Flesh yellowish, crisp, tender, juicy, mild subacid, aromatic. Very good. October, January.

We have had but little opportunity of comparing this with other varieties, and it may prove a variety known by another name.

REDICK.

An old Connecticut Apple. Tree moderately vigorous, productive.

Fruit below medium, roundish oblate, yellow, shaded, splashed, and striped with dark red. Flesh yellowish, tender, juicy, pleasant. Good. Core small. November, December.

RED INGESTRIE.

Raised by Mr. Knight. This is greatly admired as a dessert Apple in England, but not here.

Fruit small, oblong or ovate, with a wide basin at the eye, and a short and slender stalk. Bright yellow, tinged and mottled with red on the sunny side. Flesh very firm, juicy, and high flavored. Good. Ripens in September and October.

RED JEWELL.

Originated in Todd Co., Ky. Tree a good and handsome grower, an early bearer, and uniformly productive. A new promising sort.

Fruit small, roundish oblate. Sides often unequal. Color very dark crimson red, with many white conspicuous dots. Stalk slender. Calyx closed, or partially open. Flesh yellowish, firm, compact, juicy, mild, pleasant subacid. Good to very good. December to February.

RED JUNE SWEET.

June Sweeting.

Origin unknown. Received from Pennsylvania. Tree a fine grower and abundant bearer, continuing a long time in use.

Fruit medium, roundish inclining to oblate, greenish yellow, striped, splashed, and shaded with dull red. Stalk short. Calyx closed. Flesh

white, tender, moderately juicy, rich, pleasant, sweet. Very Good. July, August.

RED MORMON.

From Pennsylvania. Tree vigorous, upright spreading, productive.

Fruit medium, oblate, yellowish, shaded and indistinctly splashed with red, small dots. Stalk long, slender. Calyx closed. Flesh yellowish, tender, juicy, slightly aromatic subacid. Good to very good. Core small. January to March.

RED MUST.

An old Herefordshire (England) cider fruit, of large size, roundish oblate, yellow, with red cheek in the sun. Flesh rich. October, November.

RED RANCE.

Origin unknown. Tree a vigorous, upright spreading grower, productive.

Fruit medium or below, roundish, slightly conic. Color fine yellow, shaded with red and thickly covered with whitish dots. Stalk short, inserted in a small cavity. Calyx closed, set in a broad, shallow basin. Flesh yellowish, firm, juicy, rich, with a mild Spitzenburgh flavor. Good to very good. December, February.

RED REPUBLICAN.

Origin, Lycoming Co., Pa. Tree vigorous, spreading, moderately productive.

Fruit large, roundish oblate. Skin yellowish, striped and shaded with red, and sprinkled with large whitish dots. Stalk short, in a large cavity. Calyx closed. Basin broad, deep, and furrowed. Good. Flesh coarse, tender, juicy, subacid. December, January.

RED ROMARIN.

Pomme Romarin Rouge.

Mela di Rosmarino rossa.

An Italian fruit.

Fruit large, oblate oblong conic, bright yellow, shaded with red, and dotted with small brown spots. Stalk slender. Calyx closed. Flesh white, fine-grained, crisp, sugary acid, perfumed. Core small. December to March. (An. Pom.)

RED RUSSET.

Origin, farm of Mr. Sanborn, Hampton Falls, N. H. Tree very vigorous, upright spreading, and productive. Young wood clear reddish brown.

Fruit large, roundish conic, yellow, shaded with dull red and deep carmine in the sun, and thickly covered with gray dots, with a slight appearance of rough russet on most of the surface. Stalk rather short and thick, inserted in a medium cavity, surrounded with thin russet. Calyx nearly closed. Segments long, recurved, in a narrow, uneven basin. Flesh yellow, solid, crisp, tender, with an excellent rich, subacid flavor, somewhat resembling Baldwin. Very good. January to April.

RED SEEK-NO-FARTHER.

Origin unknown. From Pennsylvania. Tree open, spreading, good bearer.

Fruit medium, oblate, greenish yellow, splashed, striped, and shaded with red. Flesh whitish green, crisp, tender, juicy, pleasant, mild subacid. Core small. Good. December, January.

RED STREAK.

Herefordshire Red Streak. Scudamore's Crab. Johnson.

A capital English cider Apple, which thrives admirably in this country, and is very highly esteemed, as it makes a rich, high flavored, strong liquor. It is a handsome grower, and a great bearer.

Fruit of medium size, roundish. Calyx small, set in a rather deep basin. Stalk rather slender and short. Skin richly streaked with red, with a few yellow streaks and spots. Flesh yellow, rich, firm, and dry. Good.

RED STRIPE.

English Red Stripe. Carolina Red Stripe. Rockhill's Summer Queen.

Origin unknown. Comes to us from Indiana. Tree hardy and productive. Valuable fruit for market or cooking.

Fruit medium, oblong conical, almost ribbed, whitish, considerably striped, splashed, and mottled with crimson. Stalk short and slender. Calyx closed. Flesh white, tender, juicy, pleasant subacid. Good. August. Core large and open.

RED SWEET.

Origin, on the farm of D. C. Richmond, Sandusky, O. Tree upright, vigorous, and productive.

Fruit medium, roundish oval, yellowish, striped and shaded with light red, and sprinkled with greenish dots. Flesh whitish, very tender, juicy, sweet, and excellent. Good. November to February.

RED WARRIOR.

Origin, North Carolina. Distinct from Nickajack, which is sometimes grown under this name. Tree upright, with young shoots dark reddish.

Fruit large, roundish oblate, yellow, striped and marbled with two shades of red. Flesh yellowish, crisp, juicy. Good. November to March.

RED WINTER CALVILLE.

Calville Royale d'Hiver.	Calville Rouge d'Hiver.	Calville Rouge Normande.
Calville Rouge d'Anjou.	Calville Rouge.	Sanguinole.
Caillot Rosat.	Red Calville.	Calville vraie des Allemands.
	Cushman's Black?	

An old French variety, quite superseded.

Fruit medium, roundish conic, ribbed, pale and dark red. Flesh tender, mild subacid. Poor. November to February.

RED WINTER PEARMAIN.

Red Lady Finger.

Buncombe.

Red Fall Pippin.

Bunkum.

Red Vandevere.

Meig's.

Robertson's Pearmain.

Batchelor.

Tinson's Red.

Jackson's Red.

Southern Fall Pippin. Powers.

Origin unknown. An old variety. Tree of moderate upright growth; a regular bearer. Young shoots clear rich reddish brown, slightly downy.

Red Winter Pearmain.

Fruit medium size, roundish oblong conic, yellowish white, mostly shaded with maroon and thickly sprinkled with large light dots. Stalk very short, in an acute deep cavity, slightly russeted. Calyx closed, set in a small, round, open basin. Flesh whitish yellow, tender, juicy, mild subacid, or nearly sweet, slightly aromatic. Good to very good. January to March.

RED WINTER SWEET.

Origin unknown. Specimens from Kentucky, although the fruit is there stated to have come from Virginia or Maryland.

Fruit medium, roundish conic, deep crimson on yellow, with indistinct splashes and stripes, large and small light dots. Stalk short. Cavity small. Calyx small, closed. Flesh yellow, a little coarse, rich, honeyed sweet. Fine for cooking. December, February.

REED.

Originated on the premises of George Reed, Leedsville, Dutchess Co., N. Y.

Fruit medium, roundish, whitish, shaded, splashed, and mottled with light and dark red. Stalk medium. Calyx small, closed. Basin shallow. Flesh white, a little stained next the skin, tender, juicy, pleasant subacid. Good. November.

REINETTE CALVILLE.

Fruit medium, roundish, inclining to oblong, rich yellow, with broad stripes of dull red in the sun. Flesh yellowish, tender, juicy, perfumed. November January. (Diel.)

REINETTE COULON.

A new Apple, originating with M. L. Coulon, Liege, in 1856. Tree vigorous, with dark reddish gray young shoots.

Fruit very large, roundish oblate, slightly conic, golden yellow, washed and splashed with rich bright red, many prominent reddish gray dots. Stalk stout, short. Cavity deep. Calyx closed. Basin rather deep. Flesh creamy white, semi-crisp, brisk subacid, agreeable. Core open, large. November, January. (An. Pom.)

REINETTE DANIEL.

Origin unknown. Tree vigorous, spreading.

Fruit above medium, roundish oblate. Sides unequal, whitish yellow, nearly covered with thin dull russet. Stalk short. Calyx small, closed. Flesh whitish, moderately tender, juicy, brisk, sharp subacid. Good. November to February.

REINETTE D'ANJOU.

Of French origin. New. Tree vigorous, upright spreading.

Fruit medium or above, roundish, slightly oblate, yellow, shaded and indistinctly splashed with rich red, few light or areole dots. Stalk rather slender. Cavity slightly russeted. Calyx large, open. Basin shallow. Flesh yellow, crisp, tender, juicy, brisk, rather rich subacid. Very good. Core medium, hollow. December, February.

REINETTE DE BAYEUX.

A Belgian Apple of unknown origin. Tree vigorous and productive.

Fruit large, roundish, slightly conical, golden yellow, shaded with red around the stalk, and with scattered red dots. Stalk short. Cavity large. Calyx half closed. Flesh white, half tender, sharp subacid. December to January. (An. Pom.)

REINETTE DE BREDÀ.

Fruit medium, roundish oblate, rich yellow, with russet and red in the sun. Flesh yellowish white, firm, crisp, juicy, vinous, aromatic. December to March. (Diel.)

REINETTE DE CAUX.

Of French origin. Tree vigorous, productive.

Fruit large, roundish, slightly oblate, yellow, splashed and mottled with bright red in the sun, many gray dots. Stalk slender. Calyx half closed. Flesh yellowish white, tender, juicy, agreeable aromatic, subacid. January, February. (Alb. Pom.)

REINETTE DE CLAREVAL.

Of French origin.

Fruit medium, roundish oblate, clear lemon yellow, with a slight tinge of red in the sun. Flesh fine, white, firm, juicy, aromatic, vinous. December, March. (Diel.)

REINETTE DE HONGRIE.

An old Apple, described by Lindley as :

Fruit medium, roundish oblate, rough gray russet, with faint orange in the sun, numerous warty specks. Flesh greenish white, firm, crisp, aromatic. November to April.

REINETTE DE THORN.

Supposed to have originated in Holland. It is described in the *Annals of Pomology* as a vigorous, upright, productive tree.

Fruit medium to large, roundish truncated, yellowish, washed, shaded, and mottled with bright red, gray dots. Stalk long, slender. Calyx with long segments. Flesh creamy white, tender, juicy, rich subacid. December.

REINETTE DORÉ.

Reinette Jaune Sardive.

Reinette Rousse.

Of French origin.

Fruit medium, roundish, pale yellow, with a tinge of red in the sun, nettings of russet, and large brown dots. Stalk short. Calyx closed. Flesh whitish, not very juicy, firm, subacid. Good. Core small. October, November.

REINETTE DU VIGAN.

Of foreign unknown origin. Tree vigorous, hardy, and productive.

Fruit medium, roundish conical, rich yellow, with many red and gray dots, faint blush of red in the sun. Stalk slender. Calyx small, closed. Flesh yellow, tinted with rose, fine-grained, firm, juicy, rich subacid. December to March. (An. Pom.)

REINETTE GRAIN D'OR.

Tree vigorous, productive.

Fruit large, roundish oblate, yellowish, with gray spots and dots, bronzed in the sun. Stalk slender. Calyx closed. Flesh yellowish, firm, juicy, brisk subacid. December, January. (Alb. Pom.)

REINETTE PIPPIN.

Origin, supposed France.

Fruit medium, oblate, inclining to conic, pale yellow, with light and gray dots. Stalk short. Cavity large. Calyx small, closed. Basin medium or small, corrugated. Flesh white, crisp, moderately juicy, brisk subacid. Good. Core rather large. December, January.

REINETTE QUARRENDON.

French origin.

Fruit medium to large, roundish oblate, golden yellow, washed and splashed with two shades of red, small black dots. Stalk slender. Calyx closed. Flesh white, half crisp, sugary acid. December. (Alb. Pom.)

REINETTE ST. LAMBERT.

Supposed to have originated in Liege.

Fruit medium to large, roundish oblate, yellow, mostly overspread with brilliant rich red or crimson, with a tinge of purple. Stalk short. Calyx in a deep basin. Flesh yellowish white, fine, juicy, delicate, perfumed. September. Of good promise. (An. Pom.)

REINETTE TRIOMPHANTE.

Victorious Reinette.

A German early winter Apple.

Fruit large, oblong, pale yellow, thickly dotted with white specks and rough, projecting warts. Flesh yellow, firm, juicy, pleasant aromatic. Good. The tree is of thrifty growth, and is said to bear well.

REINETTE VERVAENE.

Originated at Ledeberg-les-Gand. Tree spreading. Young wood brownish, downy.

Fruit medium, oblate, yellowish, mottled and shaded with brick red. Flesh greenish white, fine-grained, sharp subacid. Good. November.

REPUBLICAN PIPPIN.

Origin, Lycoming Co., Pa. First discovered by George Webb, who gave it the name. Tree of strong, but crooked growth, only moderately productive.

Fruit large, irregularly oblate, dull yellow, mostly shaded with red, somewhat striped and marbled, and thinly sprinkled with large gray dots. Stalk long, slender. Calyx small, closed. Flesh whitish, tender, juicy, pleasant subacid. Good. Cooking and drying. September, October.

RHODE ISLAND GREENING.

Burlington Greening.
Jersey Greening.

Russine.
Grünling von Rhode Island.

Bell Dubois.

The Rhode Island Greening is such a universal favorite, and is so generally known, that it seems almost superfluous to give a description

of it. It succeeds well in almost all of the northern sections of the States, and on a great variety of soils, and where it does succeed is one of the most esteemed and profitable among early winter fruits. In Southern Ohio, Indiana, and farther south it drops too early. Tree a very vigorous, strong, spreading grower. Young shoots reddish brown. Very productive.

Rhode Island Greening.

Fruit large, roundish, a little flattened, pretty regular, but often obscurely ribbed, dark green, becoming greenish yellow when ripe, when it sometimes shows a dull blush near the stalk. Calyx small, woolly, closed, in a slightly sunk scarcely plaited basin. Stalk three-fourths of an inch long, curved, thickest at the bottom. Flesh yellow, fine-grained, tender, crisp, with an abundance of rich, slightly aromatic, lively, acid juice. Very good. November to February.

RHODE'S ORANGE.

Raised by Col. Mercer Rhodes, Newton Co., Ga. Tree a slow grower, spreading, productive.

Fruit medium, roundish oblate, yellowish, washed, striped, and mottled with light red, many light and gray dots. Stalk rather long. Calyx small, closed. Flesh whitish, tender, juicy, pleasant subacid. Good. Core small. August.

RIBSTON PIPPIN.

Glory of York. Travers'. Formosa Pippin. Rockhill's Russet

The Ribston Pippin, a Yorkshire Apple, stands as high in Great Britain as the Bank of England, and to say that an Apple has a Ribston

flavor is there the highest praise that can be bestowed. But it is scarcely so much esteemed here, and must be content to give place with us to the Newtown Pippin, the Swaar, the Spitzenburgh, or the Baldwin. In Maine, and parts of Canada, it is very fine and productive.

Ribston Pippin.

Fruit of medium size, roundish, greenish yellow, mixed with a little russet near the stalk, and clouded with dull red on the sunny side. Stalk short, slender, planted in a rather wide cavity. Calyx small, closed, and set in an angular basin. Flesh deep yellow, firm, crisp, with a sharp, rich, aromatic flavor. Very good. The tree forms a spreading top. November to April.

RICHARD'S GRAFT.

Derrick's Graft.
Strawberry.

Red Spitzenburgh.
Wine.
Uncle Richard's Graft.

Derrikinan.
Dirck's Graft.

Originated at Greenport, Columbia Co., N. Y. An excellent fall Apple, worthy of extended cultivation. Tree a free, upright spreading grower, productive. Young shoots very dark reddish brown, downy.

Fruit medium, roundish oblate. Color yellow, nearly covered with splashes, marblings, and shades of rich red. Stalk medium length, slender. Cavity large. Calyx small, closed. Segments sometimes recurved. Basin medium, slightly uneven. Flesh yellowish, tender, juicy, pleasant, rich, aromatic subacid. Very good. September, October.

RICHARDSON.

Origin, farm of Ebenezer Richardson, Massachusetts.

Fruit large, roundish conic, mostly covered with red, bright in the

sun, with numerous large, light specks. Stem rather stout, in a large cavity. Calyx large, open, in a deep narrow basin. Flesh greenish white, remarkably tender, juicy, with a fine, rich, almost saccharine flavor. Good. Last of August and September. (Cole.)

Richard's Graft.

RICHMOND.

Origin, farm of D. C. Richmond, Sandusky, O. Tree a free grower, and a profuse bearer.

Fruit large, oblate, light yellow, striped, splashed, and marbled with crimson, and thickly sprinkled with light brown dots. Stalk short. Calyx open. Flesh white, tender, juicy, vinous, sweet, and rich. Good. October to February.

RIDGE PIPPIN.

Origin unknown, supposed Pennsylvania. Tree a good grower and bearer.

Fruit rather large, roundish conical, very much ribbed. Yellow, very slightly shaded, sprinkled with russet and crimson dots. Stalk rather short, inserted generally in a large cavity. Calyx closed, set in an abrupt uneven basin. Flesh yellowish, juicy, crisp, with a mild, almost saccharine, slightly aromatic flavor. Good. March, April.

Valued mainly as a long keeper and salable in market.

RIEST.

From Simon S. Riest, Lancaster, Pa.

Fruit large, roundish, ribbed at apex, fair yellow. Flesh fine, pleasant. Good. August.

RIGLEY.

From Pennsylvania. Tree moderately vigorous, upright.

Fruit medium, roundish conical, pale yellow, shaded and splashed with shades of red. Stalk medium. Calyx closed. Flesh whitish, moderately juicy, subacid. Good. Core small. December to March.

RITTER.

Origin, Berks Co., Pa. Tree moderately vigorous, upright spreading.

Fruit medium, roundish oblate, yellow, striped and splashed with two shades of red. Stalk short. Calyx closed. Flesh white, tender, juicy, mild, pleasant subacid, almost sweet. Good. September.

RIVER.

Origin, Massachusetts. Tree of slow growth, but productive.

Fruit medium to large, oblate, slightly conic, ribbed, yellow, striped and shaded with dark red, with a slight bloom. Stalk medium, deeply planted. Calyx open, set in a basin of moderate depth. Flesh juicy, tender, pleasant subacid. Good. August, September.

ROADSTOWN PIPPIN.

Introduced to notice by James McLean, of Roadstown, N. J., and originated in that town. A strong, erect grower, and makes a large tree; a good bearer, and a profitable market fruit, large and uniformly fair, excellent for cooking and drying. Size large, oblate oblique. Calyx small, and closed. Skin greenish yellow, sparsely sprinkled with green dots. Flesh white, tender, sprightly subacid. Good to very good. Middle of April to the middle of September.

ROANE'S WHITE CRAB.

An old Virginia cider Apple; valuable only for that purpose.

Fruit small, round, yellow. September, October.

ROBERSON'S WHITE.

Origin said to be Culpepper Co., Va., where it is popular. Tree upright, of rapid growth, and bears regular crops.

Fruit medium, roundish oblate. Color greenish yellow, with many dark dots. Flesh yellowish, fine-grained, crisp, juicy, subacid. Good. October to December.

ROBERT BRUCE.

Origin, Wake Co., N. C. Tree of vigorous, upright growth, and good bearer.

Fruit rather above medium, oblate, crimson shaded. Calyx open. Stalk short. Flesh white, rather coarse, juicy, pleasant. August. (Gar. Mon.)

ROBERTS.

Roberts Seedling.

Origin, Muskingum Co., O.

Fruit medium, roundish oblate, pale yellow, with blush cheek in sun. Flesh white, tender, juicy, pleasant subacid. Very good. November, December.

ROBEY.

Robey's Seedling.

Raised by H. R. Robey, Fredericksburgh, Va. Tree vigorous and productive.

Fruit large, round, tapering to the eye. Color lively red, faintly striped, on a scarcely perceptible yellow ground, thickly covered with creamy spots. Flesh yellow, juicy, pleasant subacid. Good. November, December.

ROBIN.

This is a new Apple, originated in the garden of M. Robin, at Corbeil, and described in the Annals of Pomology.

Fruit medium to large, oblate conic, yellowish, mottled and veined with vermilion red in the sun. Stalk short. Calyx large. Flesh white, firm, juicy, perfumed subacid. April to May.

ROBINSON'S PIPPIN.

An old English Apple of little value.

Fruit small, roundish oblate, greenish yellow, bronzed in the sun. Flesh greenish, tender, juicy, sharp subacid or acid. December, February.

ROBINSON'S SUPERB.

Farrar's Summer.

An Apple from Virginia. Tree upright, productive.

Fruit large. Flesh crisp, juicy. September, October.

ROBINSON'S SWEET.

Origin, Vermont. Tree upright, vigorous, productive.

Fruit medium, round, light red, striped. Flesh fine-grained, juicy, sweet. Too much of the fruit imperfect to make it desirable.

ROCHELLE REINETTE.

Reinette de la Rochelle.

Tree vigorous, productive.

Fruit large, roundish oblong conical, pale yellow, brownish blush in sun, many large gray and red spots or dots. Flesh whitish, rather coarse, tender, juicy, mild subacid. January. (Am. Pom.)

ROCK.

Origin, Peterborough, N. H., recommended by Robert Wilson, of Keene, as an excellent fruit. Tree vigorous, with long, slender branches, very productive.

Fruit large, roundish, slightly flattened, striped and splashed with dark and bright red on a yellowish ground. Flesh white, tender, juicy, flavor subacid. Good. September, October.

Another Rock Apple comes from Pennsylvania.

Fruit medium, oblate, inclining to conic, whitish, sprinkled with a few indistinct gray and light dots. Flesh white, tender, juicy, lively subacid. Good. Core small. August.

ROCK PIPPIN.

Lemon.

Walnut Stem.

From Ohio.

Fruit medium, oblong conical, yellow, bronzed in sun. Flesh firm, and a good keeper, and in spring profitable market fruit. (O. P. S.)

ROCKPORT SWEET.

Origin, Massachusetts. Tree a strong grower and productive. Young shoots reddish brown, smooth.

Fruit medium, roundish oblate, greenish, becoming waxen yellow, with a dull red cheek. Stalk rather long, inserted in a cavity somewhat ribbed, surrounded by russet. Calyx large, nearly closed, set in a broad, open basin. Flesh whitish, juicy, brisk, sweet. Good to very good. January to April. Core small.

There is claimed to be another Rockport Sweet, originating in Ohio, but we fail to discover the distinction by means of the fruit.

ROCK SWEET.

Origin, farm of Elihu Pearson, Newbury, Mass. Tree hardy, vigorous, and a constant bearer. Young shoots reddish olive.

Fruit medium or below, roundish oblate, slightly conic, reddish, shaded, striped, and splashed with darker red, and sprinkled with large whitish dots. Stalk short, set in a broad, deep, russeted cavity. Calyx closed. Basin shallow, corrugated. Flesh white, tender, juicy, rich, sweet, and pleasant. Good to very good. September.

ROLEN'S KEEPER.

Rowland.

Fruit medium, round, regular, splashed red on russet. Dots scattered, small, white. Calyx small, closed. Flesh greenish yellow, fine-grained acid, rich. Good to very good. March, April. (Warder.)

ROLLIN.

Rolla ?

Origin, Franklin Co., N. C. Tree of moderate growth, bears abundantly.

Fruit medium, roundish oblate, yellow, stained and striped with dull red. Stalk long. Cavity wide and deep. Basin shallow. Flesh compact, fine-grained, subacid. Good to very good. October to January.

ROMANITE.

Broad River.

Southern Romanite.

The origin of this Apple is unknown. It has been sometimes confounded or placed as identical with Shockley in North Carolina, where it is much grown, but it is quite distinct. It is also distinct from Gil-

Romanite.

pin, sometimes known as Romanite. Tree vigorous, spreading, very productive. Branches slender. Wood short-jointed, dull grayish brown.

Fruit small, roundish conical, truncated, yellow ground, mostly overspread with clear, light, handsome red, indistinct light dots. Stalk slender. Calyx in an abrupt basin. Flesh yellowish, fine-grained, juicy, mild, pleasant subacid. Good to very good. February, April. Valuable as a keeper, and for the evenness of its fruit.

ROMAN STEM.

Originated at Burlington, in New Jersey, and is much esteemed in that neighborhood. Tree very productive, moderately vigorous, spreading, irregular.

Fruit scarcely of medium size, roundish, whitish yellow, with a faint brownish blush, sprinkled with patches of dark russet, and, when ripe, having a few reddish specks, unless the fruit is very fair. Stalk

three-fourths of an inch long, inserted in a shallow cavity under a fleshy protuberance. Calyx set in a rather narrow basin, with a few plaits. Core hollow. Flesh tender, juicy, with a rich, pleasant, musky flavor. Very good. November to March.

ROME BEAUTY.

Gillett's Seedling.

Origin, Southern Ohio. Tree a moderate grower, succeeds well at the Southwest. Young wood clear reddish brown, slightly downy or gray. A late bloomer.

Fruit large, roundish, approaching conic, yellow, shaded and striped with bright red, and sprinkled with light dots. Stalk an inch long, inserted in a large, deep cavity, surrounded by greenish russet. Calyx partially closed, set in a narrow, deep basin. Flesh yellowish, tender, juicy, sprightly subacid. Good. Core rather large. October to December.

ROSA.

An old French Apple. Tree moderately vigorous.

Fruit large, roundish, light yellow, shaded and splashed with red in the sun, reddish gray dots. Flesh white, fine, tender, juicy, subacid. December, January. (Alb. Pom.)

ROSE.

Coxe calls this the Rose Apple of China, and says he imported it from England. Tree vigorous, upright, abundant bearer.

Fruit large, rather oblong, striped red and green. Flesh pleasant, juicy. October.

ROSEAU.

Foreign. Tree poor grower and unprofitable.

Fruit large, dark red, irregular in size and form. Flesh crisp, juicy, rich. Good. November, February.

ROSEAU D'AUTOMNE.

Tree large, vigorous grower, spreading.

Fruit medium, roundish ovate, flat at base, yellow, russet at stem, bluish red cheek. Flesh yellow, juicy, tender, rich, firm. September. (Coxe.)

ROSE CALVILLE.

From France.

Fruit medium, roundish inclining to conic, yellowish, shaded and rather indistinctly splashed with crimson. Stalk short. Calyx closed, or partially open. Flesh whitish, tender, juicy, subacid. Good. November, January.

ROSE DE HOLLANDE.

Rose de la Benauge.

Rose Tendre.

Pomme de Codillac

Tree vigorous.

Fruit medium to large, oblate conical, golden yellow, spotted and veined with rosy carmine. Stalk small, short. Calyx half open. Flesh yellowish white, tender, sugary, acid. Winter. (An. Pom.)

ROSEMARY.

Rosemary Russet.

An old Apple described by Ronalds as of medium size, roundish conical, greenish, with a little red russet. Flesh firm, yellowish, rich, and good for table or kitchen use. December, February.

ROSS NONPAREIL.

An Irish fruit, rather below medium size, roundish, narrowing a little to the eye, covered with a thin mellow russet, and faintly stained with red on the sunny side. Flesh greenish white, tender, with a rich aromatic flavor. Very good. A profuse bearer. Very subject to rot before ripening. Unprofitable. October.

ROSTOCKER.

Stetting Rouge.
Rothe Stettiner

Annaberger.
Rothe Hernapfel.
Berliner Glossapfel.

Matapfel.
Bodickheimer ?

A large and favorite German Apple, says Hogg, valuable for culinary purposes.

Fruit oblate, ribbed, yellowish, deep red next the sun. November to May.

ROSY RED.

An old variety, origin unknown. It is grown in Michigan, where it is claimed as a seedling of Western New York, and in Indiana, and there claimed as a seedling of Cambridge, Ia.

Fruit medium, roundish oblate, slightly conical, yellow, shaded, splashed, and marbled with light and dark red, light dots. Stalk medium, slender. Cavity deep, acute. Calyx closed, medium, irregular. Flesh yellowish, breaking, sometimes a little stained, mild subacid. Good. November, January.

ROUND WINTER NONESUCH.

A variety described by Hogg as an excellent bearer, and valuable for market.

Fruit large, roundish oblate, obscurely ribbed, greenish yellow, with broken stripes and spots of red, some russet dots. Calyx large, closed. Stalk short. Flesh greenish white, tender, juicy, sweet. November to March.

ROWE.

Rowe's Seedling.

An old Devonshire sauce Apple, described by Ronalds as:

Fruit large, roundish conical, light green. Flesh greenish white, juicy, pleasant. August, September.

ROXBURY RUSSET.

Reinette Rousse de Boston.

Howe's Russet.

Marietta Russet.

Belpre Russet.

Boston Russet.

Putnam Russet.

Warner Russet.

Sylvan Russet.

This Russet, a native of Massachusetts, is one of the most popular market fruits in the country, as it is excellent, a prodigious bearer, and keeps till late in the spring wherever the soil and climate suit it. South and West it drops its fruit too early, and is therefore not valuable. The tree is healthy, moderately vigorous, spreading, with young shoots of a reddish brown, downy.

Roxbury Russet.

Fruit of medium size, often large, roundish, a little flattened, and slightly angular. Skin at first dull green, covered with brownish yellow russet when ripe, with, rarely, a faint blush on one side. Stalk nearly three-fourths of an inch long, rather slender, not deeply inserted. Calyx closed, set in a round basin of moderate depth. Flesh greenish white, moderately juicy, with a rather rich subacid flavor. Good to very good. Ripens in January, and may be brought to market in June.

ROYAL PEARMAN.

Merritt's Pearmain.

An old Apple described by Cox and Ronalds. It is to be found

in the old orchards of New Jersey, Pennsylvania, and Ohio. The tree a moderately vigorous grower, very productive, the fruit keeping well.

Fruit medium, roundish conical truncated, yellow, mostly overspread and indistinctly striped with red, warm rough russet at the apex. Stalk slender. Cavity russeted. Calyx with short divided segments. Basin irregular or broadly furrowed. Flesh yellowish, firm, rich, mild subacid, when fully ripe almost sweet. Very good. November to March.

ROYAL REINETTE.

Royal Grise Reinette.

From Sussex, England. Described by Lindley as: tree an abundant bearer.

Fruit rather small, conical, yellow, striped with red, many gray spots. Flesh pale yellow, firm, juicy, brisk subacid. November to May.

ROYAL RUSSET.

Leathercoat Russet.

Reinette de Canada Platte.

Reinette de Canada Grise.

Passe Pomme de Canada.

An old variety. Tree hardy, vigorous, and productive.

Fruit medium, roundish oblate conical, yellowish green, mostly covered with brownish russet, which is bronzed in the sun. Flesh greenish white, firm, rich acid. Good. November, February.

ROYAL SHEPHERD.

A culinary Apple, described in Hogg as:

Fruit above medium, roundish oblate, greenish yellow, dull red in the sun. Flesh greenish white, crisp, brisk, pleasant acid. November.

ROYAL SOMERSET.

Fruit medium, roundish oblate, pale yellow, with broken streaks of red in the sun. Flesh yellowish, tender, juicy, pleasant subacid. November to March. Cooking: (Hogg.)

RULES SUMMER SWEET.

Origin, Cumberland Co., Pa.

Fruit medium, oblong, yellow. August. Poor. (A. Pom. S. Rep.)

RUM APPLE.

Origin, Pawlet, Vt., on the farm of Brownley Rum. Tree upright, vigorous, an early and profuse bearer.

Fruit medium, oblate, yellow, slightly shaded with crimson. Stalk short. Cavity moderate. Calyx partially closed. Basin broad and shallow. Flesh whitish, juicy, tender, sprightly subacid. Good. November to March.

RUNNELLS.

Origin, Maine. Profitable as a market fruit from its great productiveness and long keeping.

Fruit medium, roundish, deep green in the shade, mostly covered with purplish brown. Flesh firm. Moderately good. April to June (Me. Rep.)

RUSHOCK PEARMAIN.

Charles Pearmain.

An English Apple.

Fruit below medium, roundish, yellow, with cinnamon russet, becoming brownish in the sun. Flesh yellowish, firm, crisp, juicy, brisk subacid. December, April. (Hogg.)

RUSSET PEARMAIN.

An old variety from Connecticut. Tree moderately vigorous, productive.

Fruit medium, roundish conical, yellow, mostly covered with russet, and a brownish red cheek. Flesh yellowish, breaking, rich, brisk subacid. Good. December to March.

RUSSET TABLE PEARMAIN.

A little dessert Apple, from England. Tree of slender growth, productive.

Fruit small, roundish conical, yellowish green, slightly russeted, with a bright red cheek in sun. Flesh yellowish, firm, rich, aromatic, subacid. Very good. November to February. (Ron.)

RUSSIAN TRANSPARENT.

Ronalds describes this as forming a large broad tree, but a poor bearer.

Fruit large, roundish conical, ribbed at apex, golden yellow, faced with a flush of rose, and speckled with dark points. Flesh sweet, peculiar. Good for cooking. November, December.

RYMER.

Caldwell.
Cordwall.

Green Cossings. Newbold's Duke of York.
Newbold's Admiral Duncan.

Of foreign origin. Tree vigorous, productive.

Fruit medium, roundish oblate, pale yellow, shaded with deep red, light dots. Flesh yellowish, rather firm, tender, subacid. Good. December to April.

SABLE SWEET.

Origin, Vermont. Tree good grower, spreading, productive.

Fruit medium, roundish oblate conic, whitish yellow, partially splashed and mottled with red. Flesh whitish, tender, juicy, mild sweet, subacid. Good. August.

SACK AND SUGAR.

Morris's Sack and Sugar.

A little, old, early English Apple. Tree a fine grower, and good bearer.

Fruit small, roundish conical, pale yellow. Flesh white, soft, juicy sweet. Good. August.

SAILLY AUTUMN.

Salle ?

Origin, Plattsburgh, N. Y., on the farm of J. H. Sanborn. Tree upright, vigorous, and productive.

Fruit medium, roundish oblate conic, greenish yellow, the exposed side frequently deep red. Stalk short, in a medium cavity. Calyx small, closed. Basin small, narrow. Flesh very tender. Subacid. Good. September.

SAINT JULIEN

Saint Julian.

Seigneur d'Orsay.

Concombre des Chartreux.

Heilige Julian's Apfel.

De Saint Julien.

Pomme de Saint Julien.

An old variety, probably of French origin. Tree a strong, vigorous grower, productive.

Fruit medium, roundish conical, obtusely ribbed, yellowish russet green, slight tinge of red in sun. Flesh yellowish white, firm, rich, sweet. December. (Lind.)

ST. LAWRENCE.

Origin uncertain. Tree vigorous, upright, productive. Young shoots smooth, reddish brown.

Fruit large, oblate, tapering towards the eye, yellowish, striped and splashed with carmine. Stalk of medium length, inserted in a large cavity. Calyx firmly closed. Basin small and deep. Flesh white, lightly stained, crisp, juicy, tender, and vinous. Good to very good. September, October.

SAINT SAUVEUR.

Calville Saint Sauveur.

Pomme Saint Sauveur.

Originated in France.

Fruit large, roundish oblong conical, pale yellowish, faint blush in the sun, many light dots. Stalk short. Flesh milk white, tender, juicy, aromatic, acid. Good. November. (An. Pom.)

SALEM.

Salem Sweet.

An old Massachusetts Apple, somewhat grown in Ohio and westward. Tree a good grower and productive.

Fruit medium or above, roundish oblate conic, rough, yellow, with brown and green dots, sometimes a blush in sun. Flesh yellowish, crisp, tender, mild, almost sweet. Good. Core small. October, December.

SALOPIAN PIPPIN.

A Shropshire Apple, described by Ronalds. Tree a compact grower, constant bearer.

Fruit medium, oblate, yellowish green, faint bronzed cheek in sun, many small brown specks. Flesh white, juicy. Valued for cooking. October, December.

SAM YOUNG.

Irish Russet.

Origin, Ireland.

Fruit small, slightly flattened and regularly formed, bright yellow, a good deal covered with gray russet. Flesh greenish, quite juicy and tender. Good. November to January.

SANTOUCHEE.

Panther.

Wildcat.

Origin, North Carolina. Tree vigorous, upright grower, productive. Young shoots grayish brown, with prominent buds.

Fruit large, roundish conical, oblique, waxen white, with brown dots. Stalk medium, slender. Cavity large, furrowed. Calyx partially closed, small. Basin narrow. Flesh white, crisp, tender, juicy, subacid. Good. November to February.

SAPSON.

Sapsonvine.

An old but very nice little dessert Apple. Tree an abundant bearer.

Fruit small, roundish, crimson red, stained and striped with purplish crimson. Flesh white, stained with pink, crisp, juicy, pleasant subacid. Good. August to October.

SARTHA'S YELLOW.

Pomme de Jaune.

Pomme d'Argent.

Pomme de Jaune de la Sartha.

Of French origin. Tree vigorous, productive.

Fruit small or medium, roundish, yellow, spotted with brown spots. Stalk short. Calyx small, closed. Basin furrowed. Flesh yellowish white, firm, crisp, juicy, subacid. (An. Pom.)

SAVAGE'S CHEESE.

Origin, Columbia Co., Ga. Tree moderately vigorous, spreading, a good bearer.

Fruit medium, oblate, yellow, marked and striped with red. Flesh white, juicy. October. Good bearer.

SAVEWELL.

Putnam's Savewell.

Cornell's Savewell.

Origin, Westchester Co., N. Y. Tree vigorous, spreading, productive.

Fruit medium, roundish oblate, inclining to conic, pale yellow, often shaded with dull red. Stalk short. Calyx closed. Flesh yellowish, crisp, tender, juicy, pleasant subacid. Good. February, March. Valuable keeper.

SAWYER.

Origin, Amos Sawyer, Hillsborough, Ill. Tree vigorous, upright, early bearer.

Fruit medium. Form conic truncated, regular. Color waxy yellow, with faint blush of crimson, thinly sprinkled with small gray dots. Stalk medium, slender. Cavity medium, acute. Calyx rather large, somewhat open. Segments reflexed. Basin deep, abrupt, regular. Flesh yellow, breaking, tender, juicy, subacid. Core small. Quality good. April to July. (*Am. Jour. of Hort.*)

SAWYER SWEET.

Origin unknown. Tree a strong, healthy grower, upright spreading. Young wood reddish brown, grayish, slightly downy.

Fruit large, greenish, with blush in the sun. Flesh white, sweet. Good. October, November.

SCARLET CROFTON.

Red Crofton.

An Irish Apple.

Fruit medium, oblate, yellowish russet, red in the sun. Flesh firm, crisp, rich, sugary. October, December. (*Lindley.*)

SCARLET LEADINGTON.

Of Scottish origin.

Fruit above medium, roundish conical, four-sided, yellow and red striped. Flesh yellowish, veined with pink or lilac, firm, crisp, juicy, brisk, sugary. November, February. (*Hogg.*)

SCARLET NONPAREIL.

New Scarlet Nonpareil.

Foreign; medium size, roundish oblate conical, whitish, striped and shaded with red. Flesh yellowish white, firm, juicy, subacid. Very good. November, December.

SCARLET PEARMAIN.

Bell's Scarlet Pearmain.

Sigler's Red?

Oxford Peach.

A showy dessert Apple, of English origin.

Fruit medium sized, pearmain or conical shaped. Skin light crimson or yellow in the shade, rich crimson on the sunny side. Stalk nearly an inch long, deeply set. Flesh white, stained with a tinge of pink, crisp, juicy, subacid. Very good. In eating from the last of August to the tenth of October. A plentiful bearer.

SCARLET SWEET.

Origin, Ohio. Tree vigorous, productive. Young wood dark brownish red, downy.

Fruit medium, roundish oblate, inclining to conic, yellow, shaded

and indistinctly striped and splashed with light scarlet, many light dots. Stalk varying. Cavity open, deep. Calyx small, open. Flesh yellowish white, tender, juicy, mild pleasant sweet. Core small. Good to very good. October to February.

SCARLET TIFFING

A culinary Apple, from Lancaster, England.

Fruit above medium, roundish, inclining to oblate, pale yellow, mostly overspread with deep scarlet in the sun. Flesh pure white, tender, crisp, juicy, pleasant acid. November, December. (Hogg.)

SCHAFFER'S EARLY.

Schaffer's Early Red.

Schaffer's Garden.

Origin, Lehigh Co., Pa. Tree an upright thrifty grower, and a good bearer.

Fruit medium, oblate, slightly conic, pale yellow, striped, splashed, and marbled with red, sometimes only a red cheek. Stalk short. Calyx closed. Flesh whitish, juicy, tender, pleasant subacid. Good, or very good. Core small. August, September.

SCHOONMAKER.

Schoolmocker.

An old Apple. Origin unknown. Tree moderately vigorous, upright spreading.

Fruit large, roundish oblate, yellow, bronzed blush in the sun. Flesh yellowish white, crisp, brisk subacid. Good to very good. January to March.

SCHREYETON GOLDEN PIPPIN.

From Nottinghamshire, England.

Fruit small, roundish, yellowish, marked with russet. Flesh yellowish, tender, crisp. Good. December, April.

SCIOTA BEAUTY.

Origin, Ohio. Tree moderately vigorous, upright spreading.

Fruit below medium, roundish ovate, whitish yellow, shaded, splashed, and striped with two shades of red. Flesh white, tender, juicy, pleasant subacid. Good. Core small. January to April.

SCOLLOP GILLIFLOWER.

Scolloped Gilliflower.

Striped Gilliflower ?

This, according to Elliott, is an entirely distinct variety from Red Gilliflower. Origin unknown.

Fruit medium to large, roundish conical, flattened at base, tapering towards the eye, always much ribbed or scolloped, light yellow, striped and splashed with shades of light and dark red. Stalk short, slender. Cavity deep, russeted. Calyx with long segments. Basin abrupt, deep, ribbed. Flesh yellowish, firm, tender, juicy, slight tinge of sweet. Core large, hollow. Good. November to February.

SCOTCH BRIDGET.

A cooking fruit, Lancaster, England.

Fruit medium, roundish oblate, ribbed or knobbed at apex. Flesh white, tender, soft, juicy. October, January. (Hogg.)

SCOTT'S BEST.

Origin, farm of Luther Scott, Hinsdale, Cattaraugus Co., N. Y. Tree moderately vigorous, spreading.

Fruit medium to large, roundish oblate, yellowish, shaded and mottled with light red, striped and splashed with crimson. Stalk variable, slender. Cavity slightly russeted. Calyx nearly closed. Flesh whitish, fine-grained, tender, juicy, agreeable, slightly aromatic, subacid. Good to very good. November, December.

SCRIVENER'S RED.

An admired cider fruit in some parts of Maryland and Delaware.

Fruit medium, roundish oblong conical, bright red, with dark stripes. Flesh juicy, breaking, rich. October.

SEACONK SWEET.

An old Connecticut Apple. Tree strong grower, very productive.

Fruit medium, roundish oblong conic, red, with stripes of darker red, few small white dots. Flesh white, compact, sweet. Good. January to April.

SEAMAN'S SWEET.

From Long Island.

Fruit medium, roundish oblate, whitish, splashed, striped, and shaded with red. Calyx closed. Stalk very short. Flesh white, not tender, juicy, sweet. Good. Baking. October.

SEEVER SWEET.

Grafton Sweet.

Origin unknown. Tree vigorous, productive, spreading. Young wood light reddish brown, slightly downy.

Fruit medium, roundish oblong conical, pale yellow, blush of red in the sun, few gray dots. Stalk medium, slender. Calyx closed. Flesh yellowish, moderately tender, juicy, sweet. Good. Core small. January to April.

SEEDLESS.

Origin in the grounds of Alfred Smith, Addison, Vt. Tree drooping habit, healthy and productive.

Fruit below medium, oblate roundish, light greenish yellow, with dark carmine cheek in sun. Stalk slender. Cavity open, deep. Calyx small, closed. Flesh white, dry, very mild subacid. Only good. Core without seeds. November, December.

SEEVER.

Seever's Red Streak.

From Coshocton Co., O.

Fruit medium, globular, lemon yellow, striped with bright clear red. Stalk short, slender. Calyx with long segments. Basin deep, open. Flesh yellowish, juicy, subacid. October to November. (Elliott.)

SELBY BELLFLOWER.

A seedling from the Yellow Bellflower. Tree hardy and productive.

Fruit large, roundish, approaching conic, pale yellow on rather a greenish ground. Stalk medium, slender. Calyx medium. Basin shallow. Flesh yellowish white, tender, juicy, mild, spicy, subacid. November to March. (Gar. Mon.)

SELMA.

From Clark Co., O.

Fruit medium to large, roundish flattened, yellow, with pale russet patches, especially around the stem, dull faint red in sun. Flesh yellowish white, breaking, mild subacid. Very good. November, December. (Elliott.)

SELWOOD'S REINETTE.

From Lancaster, England. Tree a healthy grower and a good bearer.

Fruit large, roundish oblate, greenish, mostly covered and striped with red. Flesh greenish white, tender, brisk, pleasant. Cooking. December, March. (Hogg.)

SEPTEMBER.

Pride of September.

Origin, Centre Co., Pa., received from W. G. Waring. Tree hardy and vigorous, a good and regular bearer. Young wood smooth, reddish brown. Buds prominent.

Fruit large, globular, somewhat depressed, very slightly conic, yellow, slightly shaded and thinly sprinkled with brown dots. Stalk short, inserted in a deep, abrupt cavity, surrounded by thin russet. Calyx partially closed, set in an open basin. Flesh yellowish, tender, juicy, very agreeable subacid. Very good. October.

SERGEANT'S SWEET.

Origin, Massachusetts.

Fruit medium, round, straw color, with a blush next the sun. Flesh tender, very sweet, superior for baking. October. (Kenrick.)

SHAKER GREENING.

Hampshire Greening?

Shaker Pippin.

Origin, Enfield, N. H. Tree vigorous, upright spreading, very productive.

Fruit medium, oblate conic, greenish yellow. Flesh yellowish, tender, crisp, juicy, brisk subacid. Good. March, November.

SHAKESPEARE.

An English dessert Apple, described by Hogg as of medium size, roundish oblate conic, greenish, with brownish red next the sun, few broken stripes of darker red, many russety dots. Flesh greenish yellow firm, crisp, juicy, brisk, vinous. December to April.

SHARPE'S GREENING.

Origin, North Carolina. Tree thrifty, and upright grower.

Fruit medium, oblate, greenish yellow, with a blush cheek. Flesh juicy, subacid. Good. January to March.

SHEEPNOSE.

There are several Apples to which this name has been applied : some are proved identical with well-known varieties ; others, of which no origin can be traced, may yet prove only synonyms of well-known kinds.

Warder describes a *Sheepnose* as :

Fruit medium, round, slightly conic, irregular, greenish yellow, white striæ about the base. Dots minute. Flesh yellowish white, breaking, tender, juicy, subacid. Good. December, February.

Another Sheepnose is grown in New Jersey and Pennsylvania, which is medium size, roundish conical, yellow, sometimes a blush in sun. Calyx closed. Flesh yellow, rather firm, juicy, subacid. Good. November, December.

SHELL.

Supposed origin, Virginia.

Fruit large, roundish, greenish yellow, becoming clear yellow in the sun. Flesh yellowish, juicy, rich. August. New.

SHEPHERD'S FAME.

Fruit large, roundish oblate, ribbed, pale yellow, streaked with a deeper shade and rich red. Flesh yellowish, soft, tender, sweet. October, March. (Hogg.)

SHEPPARD'S SWEET.

Origin, Windham Co., Conn. Tree thrifty, upright, and a great bearer.

Fruit medium, roundish, approaching conic, yellow, striped with red. Stalk long, slender, inserted in an acute cavity. Calyx firmly closed, set in a small basin. Flesh white, tender, sweet and pleasant. Good. October, November.

SHIAWASSEE BEAUTY.

Michigan Beauty.

Originated in Shiawassee Co., Mich. Tree a strong upright grower, until in full bearing, when it becomes partially pendent, very productive. Young wood dull reddish brown, slightly downy. This variety resembles Fameuse, but its wood shows its distinctiveness.

Fruit medium, oblate, whitish, shaded, marbled, splashed, and striped with rich red, few light dots. Stalk rather short. Cavity large. Calyx small, closed. Basin large, open, slightly corrugated. Flesh firm, very white, tender, juicy, brisk, refreshing subacid. Very good. October, January.

SHIPLEY GREEN.

Origin, Maryland.

Fruit medium, oblong, red, and very acid. Good for cooking and keeping only.

SHIPPEN'S RUSSET.

Originated in Philadelphia. It is often found at the West, and as a market sort profitable, but inferior in quality to the Roxbury Russet. The tree is very vigorous, forming a large round spreading head, productive.

Fruit large, oblate, irregular, yellowish green, somewhat russeted. Flesh greenish, rather dry, soft, mild subacid. Good. November, February.

SHOCKLEY.

Origin, Georgia. Tree moderately vigorous, upright, very productive, bearing young and regularly. Young wood reddish, grayish on under side.

Shockley.

Fruit below medium, roundish conical, pale yellow overspread with red, inconspicuous minute dots. Stalk long, slender, inserted in a deep

acute cavity. Calyx partially closed, set in a shallow corrugated basin. Flesh crisp, juicy, rich, saccharine, slightly vinous, and pleasant. Good. April, May.

This is one of the most profitable varieties at the South, where it not only bears abundantly, but keeps and sells remarkably well.

SIMPSON SWEET.

Origin, Mercer Co., Pa. Tree vigorous, upright.

Fruit medium, roundish oblong, flattened at base and crown, greenish yellow, with a tinge of brown in the sun. Calyx small, closed. Flesh white, moderately juicy, sweet, and pleasant. Good. Core small. December.

SINE-QUA-NON.

A native of Long Island, named by the late Wm. Prince.

Fruit roundish conical, about medium size, smooth, pale greenish yellow. Stalk slender. Flesh white, very tender, juicy, and of a delicate and very sprightly flavor. Good. The young trees are rather slow and crooked in growth. August.

SINK.

Origin, Boalsburg, Centre Co., Pa. Tree vigorous, upright spreading, productive.

Fruit medium, roundish, inclining to conic, whitish, splashed and marbled with red. Flesh very white, stained next the skin, tender, juicy, brisk subacid. Good. September.

SIR WILLIAM GIBBONS.

An English cooking Apple.

Fruit large, roundish oblate, ribbed, yellow, streaked with light and dark red. Flesh yellowish white, crisp, juicy, slightly acid. November, January.

SKUNK.

An old New Jersey Apple.

Fruit large, yellow, resembling Newtown Pippin, with red spots and blotches. Flesh yellowish, juicy, pleasant. Good. November, December. (Coxe.)

SLEEPING BEAUTY.

Winter Sleeping Beauty.

Sleeper.

Tree an excellent bearer.

Fruit medium, roundish, somewhat flattened, straw-color, washed with lively red. Flesh yellowish white, crisp, tender, juicy, acid. November, February. (Hogg.)

SLEIGHT'S LADY APPLE.

This valuable Apple was raised by Edgar Sleight, Dutchess Co., N. Y. It is almost a perfect fac-simile of Lady Apple, except being nearly twice as large. Tree somewhat more vigorous and spreading than the Lady Apple, and very productive. The fruit a little earlier in ripening.

SLINGERLAND PIPPIN.

Raised by Mr. Slingerland, of Albany Co., N. Y. Tree vigorous, spreading.

Fruit medium to large, roundish, often oblique, yellow, shaded with red and sprinkled with minute dots. Stalk short. Calyx small, partially closed. Flesh white, tender, juicy, brisk, rather rich subacid. Good to very good. December, February.

SMALLEY.

Spice.

From Kensington, Conn. Tree vigorous, spreading, a good bearer.

Fruit medium size, oblate conic, yellow, with a slight blush. Stalk short. Calyx closed. Flesh tender, juicy, brisk, pleasant aromatic. Good. September, October.

SMALL'S ADMIRABLE.

This is described by Hogg as an immense bearer, and adapted for dwarf culture.

Fruit above medium, roundish ovate, flattened, lemon yellow. Flesh firm, yellowish, crisp, subacid. November, December.

Smith's Cider.

SMITH'S CIDER.

Smith's.
Fuller.

Pennsylvania Cider.
Fowler.

Popular Bluff.

Origin, Bucks Co., Pa. This Apple is widely grown, and much esteemed as a profitable market sort. The tree is a very vigorous, stragg-

gling, spreading grower, and productive. Young wood a rich dark brown.

Fruit medium to large, roundish oblate conic, yellow, shaded and striped with red, sparsely covered with gray dots. Stalk slender, of medium length, inserted in a deep, rather narrow cavity. Calyx closed, set in a broad, rather shallow basin. Flesh whitish, tender, juicy, crisp, pleasant, mild subacid. Good. December, March.

SMOKEHOUSE.

Millcreek Vandevere.

Red Vandevere.

English Vandevere.

Origin, Lancaster Co., Pa., near Millcreek, grew on the farm of — Gibbons, near his smokehouse, hence its name. An old variety and popular in Pennsylvania. It somewhat resembles the old Pennsylvania Vandevere, and is supposed to be a seedling of it.

Tree moderately vigorous, with a spreading head, a good bearer. Young wood dull dark reddish brown.

Smokehouse.

Fruit rather above medium, roundish oblate, skin yellow, shaded and splashed with crimson, and thinly sprinkled with large gray and brown dots. Stalk rather long, curved, inserted in a broad cavity. Calyx closed, set in a wide basin, of moderate depth, slightly corrugated. Flesh yellowish, somewhat firm, juicy, crisp, rather rich subacid. Good. September to February. Valued for culinary uses.

SNEDIKER.

Origin unknown. Tree an upright vigorous grower, productive.

Fruit large, roundish conical, sides unequal, yellow, marbled with large red dots, few gray dots. Stalk very short. Calyx closed or partially open. Basin slightly corrugated. Flesh yellowish, crisp, juicy, tender, brisk subacid. Core rather small. Good. December, February

SNEPPS'.

Jno. Snepps'.

Supposed origin, Edinburgh, Ia. Tree vigorous and sufficiently productive.

Fruit above medium, almost large, flat, dull green, becoming pale yellow, with many dark dots that often give it a gray appearance. Calyx large, closed. Stalk stout. Flesh yellowish, breaking, fine-grained, juicy, agreeably sweet. December, March. (Warder.)

SOMERSET.

Origin, Somerset Co., Me. Tree very vigorous, upright spreading.

Fruit large, roundish, somewhat flattened, bright yellow, mostly covered with splashes and stripes of bright red. Flesh yellowish, sometimes a little stained with red, tender, juicy, agreeable subacid. September. (Mc. Rep.)

There is another SOMERSET grown in Western New York, the fruit of which is medium or below, roundish conical, whitish yellow, partially netted with russet. Flesh yellow, tender. Good. August, September. The wood as well as fruit of these is quite distinct, the former being reddish brown, the latter dull grayish reddish brown, downy.

SOMMERSET LASTING.

A fine showy English Apple, described by Ronalds as large, roundish oblate, clear yellow, with a blush red cheek. Flesh white, tender, brisk, sharp subacid. Valuable for cooking or market. December to March.

SOPS OF WINE.

Red Shropsavine?
Bell's Early?

Worden's Pie Apple.
Washington.
Bennington.

Hominy.
Dodge's Early Red.

An old European variety. Tree vigorous, upright, an early and productive variety.

Fruit medium, roundish, yellow and red, splashed and shaded with deep red, and sprinkled with white and gray dots, and a thin bloom. Stalk slender, in a narrow cavity. Calyx closed. Basin rather shallow, uneven. Flesh white, often stained, not very juicy, mild, pleasant subacid. Good. August, September.

SOUISSON RUSSET.

Origin unknown.

Fruit medium, roundish conic, yellow, shaded with rich red or crimson in the sun, and splashes and blotches of russet in the shade, and sometimes russet mixed with the red. Flesh whitish, tender, juicy, rich, brisk subacid. Very good. Core small. February, March.

SOUR BOUGH.

An old variety, grown in Westchester Co., N. Y. Tree thrifty, upright.

Fruit medium, roundish conic, yellow, moderately sprinkled with gray and light dots. Flesh whitish, brisk subacid. Good for cooking. September. Often knotty and unprofitable.

SOUTHERN LADY.

From North Carolina.

Fruit small, oblate, whitish, much shaded with bright crimson, many light dots. Stalk short and small. Calyx closed. Flesh yellowish, tender, juicy, very mild subacid, aromatic. Very good. September, October.

SOVEREIGN.

A little Apple from England, described by Ronalds as :

Fruit small, oblong oblate, light yellowish brown, with a small flush of red. Flesh firm, rich, and sweet. February, April.

SPAFFORD RUSSET.

Origin, Ohio.

Fruit medium, roundish conical, flattened at ends, yellowish, slightly russeted. Flesh greenish white, soft, moderately juicy, mild subacid. Hardly good. December, February.

SPARK'S LATE.

Spark's.

A variety somewhat grown in Southern Illinois, its origin unknown. Tree an upright grower, hardy, and good bearer.

Fruit large, roundish oblong conic, greenish yellow, rarely with a shade of crimson in the sun, brown dots. Stalk slender. Calyx closed. Flesh whitish, half tender, pleasant, mild subacid. Good. Valuable for cooking.

SPECKLED.

Westbrook.

Origin uncertain. Tree a rapid grower and annual bearer.

Fruit large, roundish oblong, yellowish white, red in the sun, small russet dots. Flesh white, tender, subacid. Good. October, January.

SPECKLED OLEY.

From Berks Co., Pa.

Fruit medium, roundish, greenish yellow, striped and mottled with red, large white dots. Flesh white, moderately juicy. Hardly good.

SPECTATOR.

Originated by J. W. Bailey, Plattsburgh, N. Y. Tree spreading, very productive.

Fruit medium, roundish oblong oval, ribbed, yellow, shaded with red in the sun. Flesh white, tender, juicy, subacid. Hardly good September.

SPICE RUSSET.

Sweet Russet of some, erroneously.

Origin unknown. Tree a good grower and productive.

Fruit below medium, roundish flattened, light yellow russet, with numerous small fine dots, exposed to the sun carmine and yellow bronzed. Stalk slender. Calyx closed. Flesh whitish, fine-grained, juicy, almost sweet, aromatic subacid. December to March. (Elliott.)

SPICE SWEET.

Berry Bough.

Tree vigorous, productive, medium, oblate, smooth, pale yellow. Flesh rather firm, sweet, highly aromatic, apt to be knotty and unfair. August, September.

SPONGE.

There are two varieties under this name, neither of which is at all valuable.

One is: Fruit large, roundish oblate. Skin greenish, striped with dull red, dotted with whitish spots. Flesh white, coarse, subacid. A kitchen fruit. October and November.

The other is: Fruit medium, oblong conic, green, splashed with red. Flesh white, moderately juicy. Poor. November.

SPRAGUE.

Fruit rather small, oblong oval, slightly conic, yellow. Flesh yellow, juicy, tender, sprightly subacid. Scarcely good. October.

SPRINGER.

Springer's Seedling.

Origin, Ohio.

Fruit small, roundish oblong, yellowish green, with faint stripes of red. Flesh firm, negative character. January to May. (Elliott.)

SPRING GROVE CODLIN.

An old English cooking Apple.

Fruit medium, roundish conical, greenish yellow, deeper in the sun. Flesh greenish yellow, crisp, juicy, brisk, sharp subacid. October.

SPRING PIPPIN.

Springport Pippin.

Origin, Springport, Cayuga Co., N. Y. Tree upright, thrifty, unproductive.

Fruit above medium, roundish oblong, yellowish green. Flesh yellowish white, crisp, sprightly subacid. December to May. (Elliott.)

SQUIRE'S GREENING.

An English culinary Apple.

Fruit described by Hogg as above medium, roundish, flattened, green, with dull brownish red in the sun. Flesh yellowish white, firm, brisk subacid. December to April.

STAATS' SWEET.

Originated in Somerset Co., N. J. Tree a strong, upright, vigorous grower, with curved erect branches, forming a beautiful head, productive.

Fruit medium, roundish, slightly conical, greenish yellow, shaded, splashed, and overspread mostly with light and dark red. Stalk short. Calyx large, open. Flesh yellowish white, breaking, juicy, mild, pleasant, sweet. Good to very good. December to February.

STACK.

Origin, Indiana.

Fruit medium to large, roundish conical, red, striped with deep red. Dots minute and few. Stalk long, slender. Calyx medium, closed. Basin medium. Flesh light yellow, fine-grained, juicy. Good. Core large, open. December to January. (Ind. Trans.)

STACKYARD.

Originated in Montgomery Co., Pa. An old variety.

Fruit medium, oblate, greenish yellow, covered and marbled with yellow and red, and speckled with small spots and patches of russet. Flesh white, crisp, tender, juicy. Good. November, December.

STAMFORD PIPPIN.

An English Apple, described by Hogg as first-rate for dessert.

Fruit above medium, roundish, yellow, tinge of orange in sun. Flesh yellowish, firm, tender, crisp, sweet, brisk, pleasant aroma. December to March.

STANARD.

Stanard's Seedling.

An Apple extensively disseminated in Illinois and West, from Colonel B. Hodge, through "The Grove" nurseries. The tree is extremely hardy, enduring uninjured the most severe changes of the prairies. It is a crooked, spreading, irregular, but rapid grower; a young, abundant, and annual bearer. Young wood reddish brown, downy.

Fruit medium to large, roundish oblate, slightly conical, dull green, changing to yellow at maturity, splashed and striped with red, large russet specks. Stalk in a deep cavity. Calyx closed. Flesh yellowish white, rather coarse, very juicy, rather rich subacid. Very good. December to March. Superior for cooking.

STANLEY.

Stanley's Seedling.

Originated in Alabama. Tree moderately vigorous, upright.

Fruit large, roundish conical, greenish yellow. Flesh whitish, tender, moderately juicy, subacid. Good. October, November.

STANLEY'S WINTER SWEET.

Origin, Winthrop, Me. Tree productive.

Fruit large, oblate, red, streaked and specked with purple. Flesh juicy, sweet. December to March. (Me. Rep.)

STANSILL.

Origin, North Carolina. Tree a good grower and early bearer.

Fruit medium, roundish oblate, yellowish green, sometimes a blush in sun, and occasionally indistinctly striped. Flesh yellow, subacid. Good to very good. January.

STAR.

An old variety, grown in Dutchess Co., N. Y.

Fruit medium, roundish oblate, yellowish, shaded and indistinctly splashed with crimson, large light dots. Stalk short. Calyx closed. Flesh white, pleasant, mild subacid. Good. November.

STARK.

Origin unknown, grown in some parts of Ohio, and valued as a long keeper and profitable market fruit. Tree vigorous, upright, spreading. Young shoots dark brownish red.

Fruit large, roundish, inclining to conic, sometimes a little elongated, and sometimes slightly oblique. Skin greenish yellow, shaded, splashed, and striped with light and dark red nearly over the whole surface, and thickly sprinkled with light and brown dots, a portion of them areole dots. Stalk short, rather stout, inserted in a medium cavity. Calyx closed. Basin rather large, slightly corrugated. Flesh yellowish, a little coarse, moderately juicy, mild subacid. Good. Core small. January to May.

STARR.

From New Jersey.

Fruit medium to large, roundish oblate, greenish white. Stalk slender. Flesh whitish, pleasant subacid. July to September. Cooking only.

STAR REINETTE.

Reinette Etoile.

Calville Etoile.

A Belgian Apple. Tree vigorous, productive.

Fruit medium, roundish, ribbed at apex end, washed and shaded with red, distinct white dots. Flesh white, tender, subacid. November. (Alb. Pom.)

STEEL'S SWEET.

Origin, Connecticut; productive, keeps well, but not always fair.

Fruit medium, globular, yellowish, slight blush. Flesh white, compact, juicy, with a peculiar saccharine flavor. December to March.

STEPHENSON'S WINTER.

Origin, Marshall Co., Miss. Tree a moderate grower and a good bearer. Young shoots smooth, reddish brown, slightly grayish.

Fruit medium, roundish oblate, greenish yellow, shaded and sometimes striped with red. Stalk long, slender. Calyx open. Flesh whitish, rather firm, juicy, pleasant, brisk subacid. Core small. Good. January to April.

STEVENS' GILLIFLOWER.

Originated in Sweden, Me. Fruit large, roundish conical, dull whitish ground striped with red. Flesh white, tender, pleasant subacid. November to February. (Cole.)

STILLMAN'S EARLY.

Origin, Clinton, Oneida Co., N. Y. Tree of moderate upright growth, productive.

Fruit small, roundish conic, yellow, sometimes a slight blush, and a few brown dots. Stalk long. Calyx closed. Flesh yellow, tender, pleasant subacid. Good. Last of July and first of August.

STILLWATER SWEET.

Grandmother.

Originated by Caleb Mendenhall, near Dayton, O. Tree an upright grower, productive. Young shoots clear reddish brown, very slightly downy.

Fruit medium, roundish, slightly conical, faintly ribbed, greenish yellow, shaded, minute black dots, sometimes in the sun it has a pale red cheek. Flesh yellowish white, fine-grained, tender, sweet. Good to very good. September, October.

STIRZAKER'S EARLY SQUARE.

A Lancaster, England, variety, described by Hogg as:

Fruit below medium, roundish, ribbed, pale yellow, overspread and mottled with a dingy brown russet. Flesh white, tender, pleasant. August, September.

STOCKADE SWEET.

Origin, Marietta, Ohio. Tree thrifty, very upright, and productive.

Fruit below medium, roundish oblate, yellow, shaded, splashed, and striped with red. Stalk slender. Calyx closed. Flesh whitish, compact, moderately juicy, rich, sweet. Core small. Good. Valuable for baking and keeping. December to May.

STONE PIPPIN.

White Stone Pippin.

A Norfolk, England, Apple, described by Lindley as worthy of cultivation. Tree vigorous, hardy, and abundant bearer.

Fruit medium, oblong conic, pale green, becoming yellow. Flesh very firm, almost sweet. November to May.

STONEWALL JACKSON.

A new Southern Apple, mostly valued because of its long-keeping quality. Tree an upright, stout grower, productive.

Fruit medium, roundish conical, sides unequal, whitish yellow, shaded, and obscurely striped and splashed in the sun with light red. Stalk small. Flesh white, firm, not very juicy, brisk subacid. Good. A long keeper.

STONOR PARK.

An English dessert Apple, described by Ronalds as of medium size, conical, yellow, with faint stripes and shades of red. Flesh white, tender, brisk subacid. Good. November.

STRAUDT.

Origin, Berks Co., Pa.

Fruit large, roundish, inclining to conical, deep crimson, with stripes of paler red, and numerous light dots. Stalk short. Calyx small, closed. Flesh fine-grained, tender, white, subacid, pleasant. Good. November.

STRAWN.

Strawn's Seedling.

Raised by James Strawn, Virginia. Tree a thrifty grower and good bearer.

Fruit rather large, reddish stripes on a pale yellow ground, cream-colored spots. Flesh yellow, juicy, slightly acid. Good. December to April.

STREAKED PIPPIN.

Red Pippin.

Hempstead.

Quaker of some.

Skunk, erroneously.

Origin, Westbury, Long Island, N. Y. Tree thrifty, hardy, vigorous, spreading, and productive.

Fruit large, roundish oblong, pale yellow, shaded, splashed, and striped with rich red, few light and gray dots. Stalk short, small. Cavity narrow, sometimes russeted. Calyx closed. Basin slightly corrugated. Flesh yellow, a little coarse, tender, juicy, pleasant subacid, slightly aromatic. Good to very good. November to January.

STRIPED BEAUFIN.

An English Apple. Tree hardy, productive.

Fruit large, roundish oblate, broadly ribbed, greenish yellow, covered

and mottled with broken stripes and dashes of deep red. Flesh yellowish white, firm, juicy, pleasant acid. October to May. (Lindley.)

STRIPED BELLE ET BONNE.

An old Eastern Apple. Origin unknown. Tree vigorous, upright spreading, productive. Young shoots dull reddish brown, somewhat downy. A profitable market variety.

Fruit large, roundish oblate, whitish yellow, mostly covered, striped, splashed, and mottled with light and dark red, few light brown dots. Stalk short. Calyx closed. Flesh white, crisp, brisk subacid, moderately juicy. Good. Core rather small. August, September.

STRIPED HOLLAND PIPPIN.

An old Holland fruit. Tree a free grower, and productive; valued mainly for cooking.

Fruit large, roundish, obscurely ribbed, yellow, striped with red. Flesh white, subacid. October, December. (Lindley.)

STRIPED MOHAWK.

Fruit above medium, roundish, red striped on yellow. Flesh dry, poor. Late autumn. (Elliott.)

STRIPED MONSTROUS REINETTE.

An English cooking Apple. Tree a strong grower, productive.

Fruit large, roundish, with irregular ribs, terminating in strong wrinkles around the eye, greenish yellow, mostly covered, striped, and blotched with red. Stalk small. Flesh tender, juicy, agreeable acid. October, November. (Ronalds.)

STRIPED PORTER.

Fruit large, roundish oblong conical, yellow, with stripes and splashes of red, red and russet specks. Stalk slender. Cavity deep, russeted. Basin wrinkled. Flesh white, crisp, juicy, subacid. October. (N. E. Far.)

STRIPED SHROPSAVER.

Curtiss Early Stripe.

Fruit small, oblong conic, pale yellow, striped with bright red. Flesh crisp, pleasant. July, August. A poor grower.

STRIPED WINTER PEARMAN.

Striped Sweet Pippin.

Snorter.

Winter Pearmain of some.

Missourian?

Large Striped Winter Pearmain.

Striped Pearmain.

Missouri Keeper?

An old variety, which can only be traced to Kentucky. It is considerably grown now all through the West, and largely under the name of Striped Sweet Pippin. Tree hardy, vigorous, spreading, productive. Young shoots clear reddish brown, slight bloom on ends.

Fruit medium to large, roundish, inclining to oblate, yellow, striped, splashed, and shaded with shades of red, numerous gray dots, giving it somewhat appearance of bloom. Stalk medium or short, and small, in-

Striped Winter Pearmain.

serted in a large cavity surrounded by russet. Calyx small, closed, set in a broad, uneven basin. Flesh yellow, juicy, crisp, tender, very mild, rich, pleasant, scarcely subacid. Very good. October to January.

STROAT.

Straat.

An Apple formerly in high esteem among the descendants of the Dutch settlers on the North River. Not profitable.

Fruit above the middle size, roundish, and tapering a little to the eye, yellowish green. Flesh yellow, very tender, brisk, subacid. Good. September to December.

STRODE'S BIRMINGHAM.

Strode's.

Origin, Chester Co., Pa. A vigorous, upright grower, very productive.

Fruit rather below medium, oblong oval or conic, yellow, sprinkled with a few gray dots. Stalk slender, set in a deep, narrow cavity. Basin broad, shallow, corrugated. Flesh yellow, moderately juicy, subacid. Good to very good. September.

STRUBEL.

Origin, Pennsylvania. Tree a moderate grower, hardy, and productive.

Fruit medium to large, roundish oblong conic, yellowish, shaded, splashed, and marbled with rich red. Stalk short. Calyx closed. Flesh compact, yellowish, juicy, subacid, slightly aromatic. Good. Core small. November to March.

STUMP.

Supposed origin, Delaware. Tree spreading, productive.

Fruit medium, oblate, yellowish, shaded with light red nearly over the whole surface. Stalk short, small. Calyx closed or partially open. Flesh whitish, rather firm, crisp, juicy, tender, sprightly subacid. Good. Core small. September, October.

STURMER PIPPIN.

An English fruit. Below medium, oblate, approaching conic, yellow, with a bronzed or crimson cheek. Stalk of medium length, inserted in a large cavity. Calyx closed. Segments long. Basin shallow and uneven. Flesh compact, rich subacid. Good. January, May.

STYMUS.

This new and really excellent Apple originated on the farm of Jacob Stymus, Dobb's Ferry, N. Y. Tree moderately thrifty, upright, and productive. Young shoots dull reddish brown, slightly downy.

Fruit medium, oblate, inclining to conic, yellowish, shaded, splashed, and striped with light and dark crimson. Stalk short, small. Cavity large, deep. Calyx closed or partially open. Segments short, erect. Basin large, deep, uneven. Flesh whitish, fine, tender, juicy, mild, pleasant subacid, slightly aromatic. Core small. Very good. October, November.

STYRE.

Forest Styre.

A famous old English cider fruit, of medium size, roundish, pale yellow, with an orange cheek. Flesh firm, and makes a high-colored liquor. October, January.

SUDBURY SWEET.

Origin unknown. Tree vigorous, upright, a good bearer.

Fruit medium, roundish, inclining to conic, yellow, faintly splashed, marbled, and striped with dull red, many light and gray dots. Flesh whitish, rather tender, moderately juicy, rather rich, sweet. Good. December, January.

SUFFOLK BEAUTY.

A new variety from H. H. & E. L. Brown, Deer Park, Long Island. Tree a free grower and abundant bearer.

Fruit medium, roundish oblate, yellowish white, with a few dark green dots, and a little russet near the stalk. Stalk slender. Calyx

small. Flesh white, agreeable subacid. August, September. (Gar. Mon.)

SUGAR AND BRANDY.

A Lancashire, England, Apple.

Fruit medium, roundish, slightly conical, rib on one side, deep dull yellow, pale red in the shade, bright orange red in the sun. Flesh deep yellow, spongy, juicy, very sweet. August, September. (Hogg.)

SUGAR LOAF PIPPIN.

Hutching's Seedling.

A. foreign sort. Tree of good growth and productive.

Fruit of medium size, oblong or conical, smooth, clear pale yellow, becoming nearly white on one side when fully ripe. Flesh white, firm, very slightly acid, and moderately juicy. Good. Ripens the latter part of July, and is very showy on the tree.

SUGAR SWEET.

From Massachusetts. Tree vigorous, upright, a moderate bearer.

Fruit large, roundish oblate conic, yellow, mostly shaded with red, and a dark maroon cheek. Flesh white, fine-grained, not very tender, but with a rich, honeyed sweetness. Good. December to February.

SUISSE.

Pomme Suisse.

Pomme Rubanee.

Pomme de Perroquet.

An old variety, described in 1665.

Fruit medium to large, roundish, slightly conical, greenish, and striped in the shade with yellowish green, which in sun becomes dull reddish. Stalk slender. Calyx small. Flesh white, tender, moderately juicy, subacid. Good.

SUMMER BELLFLOWER.

Origin, farm of J. R. Comstock, Dutchess Co., N. Y. Tree vigorous, upright, productive. Young shoots clear reddish brown.

Fruit medium or above, oval, inclining to conic, clear yellow, with rarely a faint orange blush on the side of the sun. Stalk an inch long, in a shallow cavity. Calyx closed, with small reflexed segments, slightly five-sided basin. Flesh white, fine-grained, tender, excellent subacid. Good. Middle of August to middle of September.

SUMMER BELLFLOWER OF PENNSYLVANIA

is quite distinct from the above, and very much resembles Yellow Bellflower in shape and color, but has a very wide and deep cavity, and closed calyx. Flesh yellowish white, firm and fine texture, not very juicy, with a brisk, agreeable, pleasant subacid. Good. Last of August and first of September. Young shoots light reddish brown, downy.

SUMMER BROADEN.

Summer Colman.

Summer Broadend.

An old Norfolk, England, cooking Apple.

Fruit above medium, roundish oblate, dull greenish yellow, tinged on the sunny side with dull pale brown. Flesh greenish white, subacid. October, November. (Lindley.)

SUMMER CHEESE.

Cheese Apple.

Maryland Cheese.

Prather Apple.

Findlay Apple.

An old variety, of poor quality. Origin unknown. Tree a strong grower, spreading, not an early bearer, but moderately productive when old.

Fruit medium, oblate, sides sometimes unequal, yellow, occasionally with a tinge of red in the sun. Flesh whitish, tender, juicy, subacid. August, September.

SUMMER GOLDEN PIPPIN.

A nice little English dessert Apple, but inferior to many of our own.

Fruit small, ovate, flattened at the eye, bright yellow, with a little orange next the sun. Flesh yellow, firm, crisp, and rich. Good to very good. August.

SUMMER HAGLOE.

Hagloe.

An old sort. Tree vigorous, but slow in its growth while young, thick blunt shoots, productive. Young shoots clear light reddish brown.

Fruit large, roundish oblate, whitish yellow, striped and splashed with bright red, and covered with a thin bloom. Stalk short and thick, inserted in a broad, open cavity. Calyx closed, set in a small, round basin. Flesh white, rather coarse, tender, juicy, subacid. Good to very good. An excellent culinary and table variety. August, September.

SUMMER HARVEY.

Origin unknown. Tree thrifty, spreading, very productive, an early and abundant bearer.

Fruit large, roundish oblate, greenish yellow, sometimes nettings of russet and red cheek in the sun, thickly sprinkled with light and green dots. Flesh whitish, tender, juicy, brisk subacid. Good. August.

SUMMER JANET.

Fruit medium, round truncated, regular. Surface smooth, pale yellow, mixed red, striped darker red. Dots scattered, gray. Flesh yellow, tender, fine-grained, subacid, aromatic. Good. September. (Warder.)

SUMMER LIMBERTWIG.

A Southern fruit from Greensboro', N. C.

Fruit medium, flat, regular, pale yellow, mixed pink, striped dark red.

Flesh white, tender, fine-grained, juicy, subacid, aromatic. August, September. (Warder.)

SUMMER MARIGOLD.

An old English Apple. Tree a good grower and great bearer.

Fruit medium, roundish conical, yellow, striped with two shades of red. Flesh breaking, juicy, pleasant subacid. August.

SUMMER PIPPIN.

Sour Bough.

Walworth.

Haverstraw Pippin.

Paper Apple.

Calkin's Pippin.

Tart Bough.

Champlain.

Large Golden Pippin.

Underdunk.

Nyack Pippin.

Geneva Pearmain.

Origin unknown. An old fruit, much cultivated in Rockland and Westchester Counties, N. Y.; a valuable market fruit. Tree vigorous, forming a beautiful round head, a regular and good bearer. Young shoots dull reddish grayish brown, slightly downy.

Summer Pippin.

Fruit medium to large, variable in form, generally roundish oblong, inclining to conic, pale waxen yellow, shaded with a delicate crimson blush, and sprinkled with green and grayish dots. Stalk varies in length and thickness, inserted in a deep, abrupt cavity. Calyx closed, set in a deep, abrupt, corrugated basin. Flesh white, tender, moderately juicy, pleasant, refreshing, subacid, valuable for culinary uses, and

profitable for market. Ripens the middle of August, and continues a month or more.

There is another SUMMER PIPPIN which we have received from Iowa. Tree very vigorous, productive.

The fruit is medium, oblate, inclining to conic, yellowish, shaded, splashed, and striped with crimson in the sun, large light dots. Stalk rather long. Calyx closed. Flesh white, pleasant subacid. August, September.

SUMMER POUND ROYAL.

Pound Royale.

Summer R. I. Greening.

Pound Royal of the Putnam List.

Orange.

An old variety, the origin of which has not been traced. It is now pretty widely disseminated in some parts of Michigan, Ohio, and in the South and West. Tree a strong, vigorous, upright spreading grower, hardy and productive. Young shoots very dark brown.

Summer Pound Royal.

Fruit large, roundish conical, sometimes roundish oblate conical, greenish white, and moderately sprinkled with green and light dots. Stalk rather short. Cavity large, deep, slightly russeted. Calyx closed. Segments medium, erect. Basin abrupt, rather deep. Flesh white, fine-grained, tender, juicy, mild, sprightly subacid. Good to very good. Core small. August, September. A profitable orchard and market variety.

SUMMER QUEEN.

Sharpe's Early.

Lancaster Queen.

Polecat.

This variety forms a large tree with somewhat pendent boughs, and is a profitable sort for orchards and marketing over a large territory.

Summer Queen.

The fruit is large and broad at the crown, tapering towards the eye. The stalk is rather long, and is planted in a pretty deep cavity, sometimes partially closed. Calyx but little sunk, in a narrow plaited basin. Skin fine deep yellow in its ground, though well striped and clouded with red. Flesh aromatic, yellow, rich, and of good flavor. August and September.

SUMMER RAMBO.

Rambour Franc.
Summer Rambour.Rambour Gros.
Rambour d'Été.

Frank Rambour.

This is an old French Apple which was pretty freely distributed many years since, and the old trees of which everywhere prove hardy and profitable for early marketing. Tree vigorous, spreading, open round head.

Fruit a little above medium size, flat, generally evenly formed, but occasionally a little irregular, pale greenish yellow, stained and streaked with red on the sunny side. Flesh rather soft, sprightly subacid. Good. Ripeus early in September.

SUMMER RED CALVILLE.

Calville Rouge d'Été. Calville d'Été. Madeleine.
 Rother Sommercalville.

An old French Apple of medium size, roundish conical, ribbed, yellowish white, streaked and stained with red, becoming very bright in the sun. Flesh white, soft, tender, tinged with red, mild subacid. Good. July, August.

SUMMER RED STREAK.

Origin, Columbia Co., N. Y. Tree moderately vigorous, productive.

Fruit medium, roundish oblate conical, yellowish, shaded, splashed, and striped with rich red. Stalk small. Calyx closed. Flesh white, sometimes a little stained next the skin, juicy, brisk subacid. Good. Valued for cooking. September.

SUMMER REINETTE.

Weisse Wack's Reinette. Weisse Sommer Reinette. Reinette d'Été Blanche.

A beautiful German Apple.

Fruit very large, roundish oblate. Skin oily. Color clear yellow, faintly washed with clear bright red. Calyx half open. Stalk very short. Cavity russeted. Flesh white, fine, juicy, vinous, sweet, aromatic. September, October. (Diel.)

SUMMER ROSE.

Woolman's Harvest. Lippincott's Early.

A very pretty and very excellent Apple, highly esteemed as a desert fruit. Tree moderately vigorous, productive.

Summer Rose.

Fruit scarcely of medium size, roundish, smooth, rich waxen yellow, streaked and blotched with a little red on the sunny side. Stalk

rather short and slender. Calyx closed, set in an even basin. Flesh tender, abounding with sprightly juice. Very good or best. Ripens early in August.

SUMMER SWEET.

An old Connecticut Apple. Tree vigorous, very spreading, and productive.

Fruit medium, oblate, inclining to conic, yellowish, netted with russet. Stalk short and small. Calyx closed. Flesh whitish, crisp, tender, moderately juicy, rich, sweet. Excellent for baking. Core small. September.

SUMMER SWEET PARADISE.

Originated in Pennsylvania. Tree very vigorous, spreading, productive.

Fruit quite large, round and regular in its form, a little flattened at both ends. Skin rather thick, pale green, sometimes faintly tinged with yellow in the sun, and very distinctly marked with numerous large dark gray dots. Stalk strong, and set in an even, moderately deep hollow. Flesh tender, crisp, very juicy, sweet, rich, aromatic. Good to very good. Ripe in August and September.

SUMMER THORLE.

Thorle. Thorle Pippin. Whorle Pippin. Watson's New Nonsuch.

A favorite Scotch Apple. Tree a free grower, rather pendent, very productive, bearing in clusters.

Fruit small, oblate, rich yellow, with mottled stripes of rich red. Stalk short. Calyx half open. Flesh yellowish white, firm, crisp, juicy, brisk subacid. August, September. (Ron.)

SUMMER WHITE CALVILLE.

Calville Blanche d'Été.
Calville Blanc.

White Calville.
Wahrer Weiser Sommercalville.

An old variety. Tree a strong grower and productive.

Fruit medium, roundish oblate, with prominent ribs, pale straw color, with traces of delicate russet in the sun. Flesh white, tender, delicate, sweet, and pleasant. August, September. (Hogg.)

SUPERB.

Origin, Franklin Co., N. C. Tree tolerably vigorous, spreading, and a prodigious bearer.

Fruit medium or above, roundish oblate, regular. Skin green, rarely with a blush. Stalk of medium length, in a shallow cavity. Calyx large and open. Flesh yellow, solid, slightly coarse-grained, rich, subacid. Good to very good. November to March.

SUPERB SWEET.

Raised by Jacob Deane, Mansfield, Mass. Tree vigorous, productive.

Fruit rather large, roundish, inclining to conic, pale yellow, shaded, splashed and mottled with red. Stalk long, inserted in a deep cavity. Calyx large, open. Basin broad. Flesh white, very tender, juicy, sweet, rich. Core large. Good to very good. September, October.

SURPRISE.

A small, round, whitish yellow Apple, of little or no value, but admired by some for its singularity, the flesh being stained with red. November to January.

SURREY FLAT CAP.

Hogg describes this as a very excellent dessert Apple.

Fruit above medium, roundish oblate, pale bluish green, rough veiny russet, and deep red next the sun. Flesh yellow, firm, rich, and sugary. October, January.

SUSANNAH.

Large, oblong oval, greenish yellow. Flesh crisp, rich, aromatic. November to April. (Sumner MS.)

SUSAN'S SPICE.

Originated in Franklin Co., Pa. Tree moderately vigorous, upright.

Fruit medium, compressed, glossy light crimson, deeper in the sun, with fawn-colored dots. Stalk short. Flesh yellowish white, stained occasionally with red, juicy, pleasant, aromatic. October. (Gar. Mon.)

SUTTON BEAUTY.

Beauty.

Origin, Sutton, Mass. Tree upright, thrifty, and very productive.

Fruit medium or above, roundish oblate conic, waxen yellow, shaded, mottled, and obscurely striped with fine crimson, and thinly sprinkled with whitish dots. Stem rather short, inserted in a medium cavity, slightly surrounded by greenish russet. Calyx partially closed, set in a moderate, uneven basin. Flesh whitish, crisp, tender, juicy, sprightly subacid. Very good. November, February.

SWAAR.

Hardwick.

This is a truly noble American fruit, produced by the Dutch settlers on the Hudson, near Esopus, and so termed from its unusual weight, this word, in the Low Dutch, meaning *heavy*. It requires a deep, rich, sandy loam to bring it to perfection, and, in its native soils, we have seen it twelve inches in circumference, and of a deep golden yellow color. It is one of the finest flavored apples in America, and deserves extensive cultivation in all favorable positions, though it does not succeed well in damp or cold soils.

Fruit large, regularly formed, roundish or roundish oblate. Skin greenish yellow when first gathered, but when entirely ripe of a fine,

dead gold color, dotted with numerous distinct brown specks, and sometimes faintly marbled with gray russet on the side and round the stalk. Stalk slender, three-fourths of an inch long, inserted in a very round cavity. [Sometimes this cavity is partially closed.] Calyx small, greenish,

Swaar.

set in a shallow basin, scarcely plaited. Flesh yellowish, fine-grained, tender, with an exceedingly rich aromatic flavor and a spicy smell. Very good to best. Core small. The trees bear fair crops, and the fruit is in season from December to March.

SWASEY.

Supposed origin, Ohio. Tree hardy, but a poor grower.

Fruit small, oblate, yellow, with a red cheek in the sun. Flesh whitish, crisp, tender, subacid. Good. Core small. December, January.

SWEENEY NONPARCEL.

An English Apple. Tree a good grower and bearer.

Fruit above medium, roundish conical, greenish, with patches of russet and brilliant red cheek in sun. Flesh firm, crisp, juicy, acid. January to April. Cooking.

SWEET AND SOUR.

Origin unknown. Tree vigorous, spreading, productive.

Fruit large, oblate, ribbed, the ribs being green, and the intervening hollows light yellow; the ribs bearing the flavor of the fruit, which is acid, the intervening hollows being almost flavorless, but sweetish; this portion not having its juice well elaborated. December, February.

SWEET BALDWIN.

Origin unknown. Tree very vigorous, upright spreading, productive.

Fruit medium, roundish oblate, yellowish, shaded, splashed, and striped with light and dark red, thin bloom, light dots. Flesh yellowish, moderately juicy, mild, sweet. Good. October.

SWEET BELLE BONNE.

Belle et Bonne.

A very old Apple. Origin unknown. Tree a spreading, moderately upright grower, and an annual bearer. Young shoots reddish brown, somewhat grayish, slightly downy.

Fruit medium to large, roundish oblate conic, yellow, with nettings and patches of russet, few large brown dots. Calyx small, closed. Flesh yellow, moderately juicy, rich, sweet. Good. October, December.

SWEET BELLFLOWER.

Sweet Butter?

Butter of some.

Of unknown origin. Tree vigorous, spreading.

Fruit above medium, roundish oblate, slightly ribbed, greenish yellow, with a few brown dots, slight blush in the sun. Stalk rather long, slender. Calyx closed. Flesh yellowish white, tender, aromatic, sweet. Good. October, November.

SWEET BELLFLOWER OF WYANDOT COUNTY.

The origin of this Apple is unknown, but as Elliott has first described it as of Wyandot County, we follow him until its history is disclosed. The variety is a profitable market sort. Tree a good grower, somewhat drooping in fruit. Young wood reddish brown.

Fruit rather large, roundish oblong conic, rough greenish yellow netted and patched with russet. Stalk rather short. Calyx closed. Flesh yellowish, moderately juicy, half tender, sweet. Good. October, November.

SWEET DOCTOR.

From Pennsylvania. Tree vigorous, upright spreading.

Fruit medium, roundish oblate, yellowish, shaded, splashed, and striped with light and dark red. Stalk slender. Calyx closed. Flesh white, tender, juicy, rich, sweet. Good. Core small. October.

SWEET FALL PIPPIN.

Grown in Westchester Co., N. Y. Tree vigorous, productive.

Fruit large, oblate, greenish yellow, slightly sprinkled with brown dots. Stalk short, in a large cavity. Calyx closed, in a very shallow basin. Flesh juicy, sweet, and rich. Good. October, November.

SWEET GREENING.

Origin unknown. Tree vigorous, spreading, productive.

Fruit large, roundish oblate, greenish yellow, with dull bronzed red

in the sun, many irregular scattered rough dots and marblings of russet. Stalk medium. Cavity broad, acute, regular. Calyx in a broad, deep, slightly furrowed basin. Flesh white, loose-grained, mild, sweet, rather dry. Good. Core small. December to February.

SWEET JANET.

Origin, Indiana. Tree healthy, vigorous, spreading, annually productive.

Fruit large, round, somewhat conical, covered with rich red or crimson, mixed and striped. Stalk short. Calyx small, closed. Flesh yellow, breaking, not juicy, sweet. Good. December, January. Fine for baking, and the tree claimed to bloom late in season and thus escape frosts. (O. P. S.)

SWEET KING.

Origin, Oyster Bay, Long Island. Tree a stout, erect grower, an early and abundant bearer. Young wood reddish brown, slightly grayish.

Fruit medium, roundish conic, yellowish, shaded, striped, and splashed with red, few light gray dots. Stalk varying. Calyx large, open. Flesh white, tender, juicy, sweet. Good to very good. October to March.

SWEET MARY.

Originated with J. W. Dodge, Pomona, Tenn. Tree a vigorous, upright grower, and a great bearer. Young shoots dull grayish brown.

Fruit above medium, roundish conical, whitish yellow, very smooth, sprinkled with a few light brown dots. Stalk very short. Calyx closed. Flesh yellowish white, tender, juicy, sweet. August, September.

SWEET PEAR.

Origin unknown. Tree a vigorous, upright grower, very hardy and productive.

Fruit medium, roundish conical, pale yellow, with dull blush red in the sun. Stalk short. Calyx closed. Flesh white, tender, juicy, sweet, aromatic. Very good. September, October.

SWEET PEARMAIN.

An old variety, of unknown origin. Tree a strong, upright grower, and good bearer.

Fruit medium, roundish, slightly conic. Stalk short. Cavity broad, deep. Calyx small, closed. Basin shallow. Flesh whitish, juicy, tender, brisk, rich, sweet, aromatic. Very good. January to April.

SWEET PIPPIN.

An old variety. Tree productive.

Fruit medium, roundish oblate or oblate, yellowish, with red in the sun. Stalk short. Flesh firm, moderately juicy, sweet. Good. November, December.

SWEET QUEEN.

Dale's Sweet Fall Queen.

Origin, Pennsylvania. Tree a fair grower, and productive.

Fruit large, elongated conic, ribbed at apex, whitish, shaded, striped, and splashed with shades of red. Flesh white, tender, pleasant, sweet. Scarcely good. November.

SWEET RAMBO.

Origin, supposed Pennsylvania. Tree stout, upright, vigorous, not an early bearer.

Fruit medium, roundish oblate, yellow, mostly shaded with red, and thickly covered with large gray dots, a little elevated above the surface. Stalk slender, inserted in a deep cavity, surrounded by russet. Calyx closed, set in an open basin. Flesh whitish, juicy, pleasant sweet. Core small and close. Good to very good. October to December.

SWEET RIBBED GILLIFLOWER.

An old Connecticut variety.

Fruit large, roundish elongated conic, ribbed, mostly covered with light red, striped and splashed with dark. Stalk short. Calyx closed. Flesh white, rather compact, moderately juicy, half tender, sweet. Good. Core large. November, December.

SWEET ROMANITE.

Red Winter Sweet? Sweet Nonsuch.

Origin unknown. Tree a strong, upright grower, hardy, moderate bearer.

Fruit medium, roundish oblate, greenish yellow, shaded, splashed, and striped with red, light dots. Stalk short, slender. Calyx closed. Segments erect, slightly recurved. Basin corrugated. Flesh yellowish white, compact, tender, juicy, rich, sweet. Good to very good. Core small. November to March.

SWEET RUSSET.

Summer Russet.

Received from Parsons & Co., Flushing, Long Island. Origin unknown. A nice little Apple. Tree moderately vigorous, productive. Young wood reddish olive.

Fruit small, roundish, inclining to conic, sometimes oblate, yellow, mostly covered with light russet, and sprinkled with brown russet dots, tinge of red in the sun. Stalk slender. Calyx closed. Flesh whitish, crisp, very tender, juicy, rich, sweet, aromatic. Very good. September.

Another SWEET RUSSET is grown in Massachusetts, New York, and elsewhere. The tree an upright, spreading grower, productive. Good for cooking.

Fruit medium, oblate, yellow, mostly covered with nettings and patches of russet. Flesh whitish, half tender, rich, sweet. Good November, March.

Another SWEET RUSSET of Kentucky, is described by Warder as:

Fruit small, conical, truncated, rough, dark russet. Dots minute, white, prominent. Flesh yellowish white, fine-grained, not tender, sweet. Scarcely good. December, February.

SWEET SEEK-NO-FARTHER.

Origin, Hanover, N. H. Tree a good grower, an early and abundant bearer.

Fruit above medium, roundish conical, yellowish green, with a red cheek next the sun. Flesh firm, juicy, sweet. Good. A long keeper.

SWEET SPONGE.

Origin unknown.

Fruit medium, oblate, yellowish white. Flesh white, tender, sweet. July. (Warder.)

SWEET WILLIE.

Origin, Todd Co., Ky. Tree a good grower, and productive.

Fruit large, greenish, mostly covered with stripes of red. Flesh fine-grained, tender, juicy, rich, sweet. Good to very good. November, December.

SWEET WINESAP.

Henrick Sweet? Henry Sweet. Ladies Sweet, of some.
Sweet Pearmain, of some. Red Sweet Winesap.

From Pennsylvania. Tree of moderate, upright growth, productive.

Fruit medium, oblate, slightly approaching conic. Color red, splashed with deep crimson. Stalk long and slender, inserted in a deep cavity, surrounded with russet. Calyx partially open, set in a rather deep, open basin. Flesh tender, juicy, very sweet, rich. Good to very good. November to March.

SWEET VANDERVEERE.

Sweet Redstreak. Sweet Harvey.

Origin unknown. Tree of crooked growth, a profuse bearer.

Fruit medium, roundish oblate, yellow, shaded and striped with dull red. Stalk short, rather slender, inserted in a large, irregular cavity. Calyx partially closed, set in a broad, open basin. Flesh tender, juicy, mild, sweet, aromatic. Good. November, March.

SWEET WINTER PENNOCK.

From Ohio, supposed origin Belmont Co. Tree moderately vigorous, upright, rather slender, a moderate bearer.

Fruit medium, oblate, greenish yellow, shaded and striped with red. Flesh whitish, moderately juicy, mild sweet. Poor. December, January.

SWISS REINETTE.

Reinette Suisse.

Of foreign origin. Tree moderately vigorous, spreading.

Fruit medium or above, oblate, inclining to conic, fine yellow, moder-

ately sprinkled with gray and rather indistinct light dots. Stalk short. Cavity large, slightly russeted. Calyx closed. Basin abrupt, deep, slightly corrugated. Flesh yellowish, crisp, rather tender, juicy, pleasant subacid. Very good. December, February.

SYKE-HOUSE RUSSET.

A Yorkshire Apple. Tree spreading, productive.

Fruit medium, oblate, yellowish, mostly covered with light brown russet. Flesh yellowish, firm, crisp, sprightly, juicy, subacid. November, February. (Ron.)

SYLVESTER.

Originated on the farm of Dr. E. W. Sylvester, Lyons, N. Y. Tree vigorous, forming a beautiful open, round, spreading head, a profuse bearer. Young shoots dark reddish brown, slightly grayish or downy.

Fruit below medium, roundish oblate, regular, waxen white, beautifully shaded on the sunny side with bright crimson, thinly sprinkled with minute light and brown dots. Stalk small, short. Cavity regular. Calyx closed. Basin rather shallow. Flesh very white, tender, crisp, juicy, brisk subacid. Very good. September, October. Excellent for cooking and drying.

TABLE GREENING.

Origin, Cornish, Me. Tree vigorous, upright spreading, productive.

Fruit medium, roundish, dull green. Flesh juicy, mild, pleasant subacid. Good. December to March.

Talman's Sweet.

TALMAN'S SWEET.

Tolman's Sweeting. Tallman's Sweeting. Brown's Golden Sweet.

A native of Rhode Island. In quality the fruit is scarcely second rate as a table sort, but it is a very popular and profitable orchard sort,

from the hardihood of the trees, their great productiveness, and its value for stock feeding and various culinary uses. Tree an upright spreading grower, vigorous.

Form nearly globular. When fully ripe, whitish yellow, with a soft blush on one side, and generally a line running from stem to calyx. Stalk rather long and slender, inclining to one side, and inserted in a rather wide, shallow, but regular cavity. Calyx set in a small basin, slightly depressed. Flesh quite white, rather firm, fine-grained, with a rich sweet flavor. November to April.

TARDIVE DE JONCRET.

Originated in Belgium. Tree vigorous, very productive.

Fruit medium to large, roundish conical truncated, ribbed, golden yellow, with bright red on the sun side. Dots and splashes of gray. Stalk short. Calyx closed. Basin deep. Flesh white, tender, sweet subacid. December, February. (An. Pom.)

TART BOUGH.

Sour Bough of some.

An old variety, originally disseminated, so far as we can learn, by Judge Buel, of Albany, N. Y. It much resembles Early Harvest in the fruit, but the trees are more rapid in growth, and it ripens much later, is more acid, and not considered profitable.

There is another TART BOUGH, the fruit of which is small, roundish conical, whitish, thickly sprinkled with dots. Stalk long, slender. Calyx closed, with long segments. Basin shallow. Flesh white, firm-grained, tender, juicy, sprightly, pleasant subacid. Good. Core small. August.

TARVEY CODLIN.

Raised from seed of the Manks Codlin.

Fruit large, conical, dull olive green, with yellow and yellowish red, much spotted with broken rows of blood-red dot, next the sun. Flesh white, juicy. A good culinary apple. November, December. (Hogg.)

TAUNTON.

Origin unknown. Some claim it for Alabama, others Georgia. The tree is a vigorous but straggling grower, very productive. Young shoots reddish brown, slightly downy.

Fruit rather large, oblate conic, greenish yellow, striped and splashed with red, darkest on sun side, large light dots. Stalk slender. Cavity deep, russeted. Calyx closed. Segments long, slender. Basin slightly corrugated. Flesh whitish, tender, juicy, aromatic, acid. Good. September, October.

TAUNTON GOLDEN PIPPIN.

Tree hardy and productive.

Fruit below medium, roundish, rich yellow, markings and freckles of russet in shade, clouded red, and streaked in sun. Flesh yellow, firm, crisp, delicate, brisk, vinous. December to March. (Hogg.)

TENDERSKIN.

Of Southern origin. Tree very vigorous, healthy, and productive. Young wood reddish brown, downy, very short-jointed, with prominent buds.

Fruit below medium, roundish conical, yellow, striped and splashed somewhat with red, some bloom. Stalk long. Calyx closed. Flesh yellowish, tender, very juicy, pleasant subacid. Good to very good. November to January.

TEN SHILLINGS.

Fruit medium, roundish oblate, greenish yellow, covered with pale brown russet orange streaked with red in the sun. Flesh yellowish white, tender, sweet acid. November. (Hogg.)

TENTERDEN PARK.

Fruit medium, roundish, yellowish green, mostly covered with deep red, striped with a still deeper shade in the sun. Flesh greenish white, tender, crisp, brisk, juicy, not rich. October, February. (Hogg.)

TERRAL'S LATE.

A Southern Apple of unknown origin. Tree very productive.

Fruit large, oblong oblique, whitish, shaded with light red, striped and splashed with dark red, thickly sprinkled with light brown dots. Stalk very short. Cavity narrow, deep, partially russeted. Calyx small, closed. Segments small, erect. Basin abrupt, deep. Flesh white, tender, juicy, pleasant subacid. Good. Core small. October, November.

Tetofsky.

TETOFSKY.

The Tetofsky is a Russian Summer Apple, which proves profitable for market growing. The tree is an upright spreading grower, forming

an open head, comes early into bearing, and produces annually. Very hardy. Young shoots yellowish reddish brown, leaves very large.

Fruit of medium size, oblate conic, sometimes nearly round, smooth, with a yellow ground handsomely striped with red, and, like most apples of that country, covered with a whitish bloom, under which is a shining skin. The flesh is white and juicy, sprightly acid, fragrant, and agreeable. Good. August. Succeeds at the North.

TEUCHAT'S EGG.

Chucklet Egg.

Summer Teuchat Egg.

Fruit below medium, varying in shape from ovate to conical, irregularly ribbed, pale yellow, washed and streaked with red. Flesh tender, juicy, pleasant. September. (Hogg.)

TEWKESBURY WINTER BLUSH.

Tewkesbury Blush.

Coxe says this Apple was brought from Tewkesbury, Hunterdon Co., N. J.

It is a handsome, fair fruit, with more flavor and juiciness than is usual in long-keeping apples. They may be kept till August, without

Tewkesbury Winter Blush.

particular care, quite plump and sound. The tree grows rapidly and straight, and the fruit hangs till late in the autumn. Young shoots grayish reddish brown.

The size is small, rather flat. The skin smooth, yellow, with a red cheek. Flesh yellow, with more juice and flavor than any other long-keeping variety. Mild, pleasant subacid. January to July.

THEM'S RED STREAK.

Fruit medium, roundish, pale green, with red stripes. Flesh acid Winter. (Hov. Mag.)

THOMAS.

An old unknown variety, carried many years since from Maryland to Illinois, where it has received the name of Thomas. The tree is very hardy, moderately vigorous, forming a handsome-shaped top, annually productive.

Fruit large, roundish conical truncated, greenish, becoming yellow when fully matured. Skin thin. Flesh soft, tender, juicy, pleasant subacid. December to February. (N. Lyon: MS.)

TIFT'S SWEET.

Origin, New England. Tree vigorous, upright spreading.

Fruit medium, oblate, green, netted with russet, sometimes with a dull brown cheek. Flesh yellowish, exceedingly sweet and rich. A regular, but not profuse bearer. Unprofitable. September, October.

TILLAQUA.

Big Fruit.

Origin, North Carolina. Tree vigorous, upright spreading.

Fruit above medium, roundish oblate or oblate, yellowish ground, nearly covered, shaded, splashed, and striped with red, moderately sprinkled with large light dots. Stalk short. Calyx closed. Flesh whitish, moderately juicy, brisk subacid. Good to very good. November to March.

TINMOUTH.

Teignmouth. Vermont Pippin.

Origin, Tinmouth, Vt. This fine Apple is much esteemed in the region of its origin. The tree is a good grower, very productive, and a profitable sort. Young shoots dull brownish red, slightly downy.

Fruit above medium, oblate, whitish yellow, considerably shaded with carmine, and sprinkled with a few brown dots. Stalk short, inserted in a deep cavity. Calyx partially closed, set in a deep open basin. Flesh whitish, juicy, tender, pleasant, mild subacid, with a peculiar melon-like aroma. Good to very good. November to February.

TITUS PIPPIN.

Well Apple. Hang-On. Timothy.
Timothy Titus Sort.

Origin, near Hempstead, Long Island. Tree an upright, thrifty grower, productive, and profitable for market.

Fruit large, roundish oblong conic, somewhat ribbed, pale yellow, rarely with a blush. Stalk rather slender. Calyx open. Flesh whitish yellow, a little coarse, breaking, juicy, tender, brisk subacid. Good. Core large and open. December to February.

TOCCOA.

Muskmelon.

Originated in Habersham Co., Ga.

Fruit medium, roundish conical, yellow, with a light shade of crim-

son in the sun, few gray dots. Stalk slender. Calyx closed. Basin small, corrugated. Flesh yellowish, tender, mild subacid. Good. August, September.

TOKER'S INCOMPARABLE.

An English culinary sort.

Fruit large, roundish oblate, ribbed or five-sided, yellowish green, with traces and streaks of red in the sun. Flesh yellowish, firm, crisp, tender, juicy, brisk, pleasant acid. November, December. (Hogg.)

TOLBERT.

From Pennsylvania.

Fruit medium, roundish, deep red, with indistinct stripes, and light dots. Stalk short and small. Cavity narrow, a little russeted. Calyx closed. Flesh yellowish, moderately juicy and tender, mild subacid. Good. Core small. September.

TOM POTTER.

A Devonshire, England, Apple, described by Ronalds. Tree healthy, but uncertain bearer.

Fruit medium, roundish oblate conical, yellow, shaded and striped with red in the sun. Flesh juicy, high-flavored. September, October.

TOOLE'S INDIAN RARERIPE.

Origin unknown. Tree stout, upright, short-jointed, forming a dense round head, moderately productive. Young shoots smooth clear reddish.

Fruit large, roundish slightly conic, greenish yellow, with a tinge of red in the sun. Stalk very short. Calyx small, closed. Basin medium, uneven. Flesh greenish white, tender, brisk subacid, valuable for cooking. Core large. September, October.

TOWER OF GLAMMIS.

Glammis Castle.

Late Carse of Gowrie.

Carse of Gowrie.

A fine culinary Apple from the Clydesdale orchards, Scotland. Tree an excellent bearer.

Fruit large, roundish conical, sides sometimes unequal, pale yellow, shaded with crimson in the sun. Stalk rather slender. Calyx large, open. Basin slightly corrugated. Flesh white, tender, juicy, sharp subacid. Good. December, January.

TOWER'S GLORY.

A cooking Apple, described by Hogg as of medium size, roundish, with obtuse angles, yellow, covered in sun with red, and streaked with darker shades. Stalk very short. Calyx large, open. Flesh yellowish, tender, juicy, brisk, acid. October to April.

TOWNSEND.

Hocking.

Seager.

Originated in Bucks Co., Pa., found over one hundred years ago, in

an Indian clearing by Stephen Townsend, when he first settled in that then wild country. Tree healthy, vigorous, upright spreading, productive. Young wood reddish brown, slightly downy.

Fruit medium, oblate, slightly conic, pale yellow, striped and splashed with red, and covered with a thin bloom. Stalk rather long, slender, inserted in a medium cavity. Calyx closed, set in a basin of moderate depth. Flesh white, tender, very mild, agreeable, subacid. Good to very good. Ripe middle of August to middle of September.

TOWNSEND'S SMILING BEAUTY.

An excellent kitchen Apple.

Fruit large, roundish oblate, ribbed, yellow, with a brownish red cheek. Calyx closed. Flesh tender, fine-grained, juicy, agreeable acid. October to April. (Hogg.)

TRADER'S FANCY.

Originated in the nurseries of Solomon Phillips, Washington Co., Pa. Tree a vigorous grower, a good and regular bearer, and popular where known; valued as a late keeper and market fruit at the Southwest. Young wood dull reddish brown.

Fruit medium, roundish oblate, greenish yellow, striped and shaded with dull red, covered with a bloom. Stalk short, slender. Calyx closed. Basin broad and corrugated. Flesh whitish, crisp, tender, juicy, with a mild, pleasant, subacid flavor. Good to very good. January to May.

TRANSPARENT CODLIN.

Lindley describes this as a handsome Apple, forming a spreading tree, and an excellent bearer.

Fruit medium, roundish oblong conic, lemon yellow, tinged with salmon or red in the sun. Flesh tender, semi-transparent, juicy, sweet. September, November.

TRANSPARENT DE ZURICH.

Fruit small or medium, beautiful waxen white, clear, translucent. September. (Elliott.)

TRANSPORT.

Origin, Indiana. Tree poor in the nursery, good in the orchard, very productive.

Fruit large, globular, flattened, angular, pale yellow, blushed carmine. Dots scattered, green, with white bases; purple where exposed, bloom white. Flesh yellowish white, tender, melting, fine-grained, juicy, mild subacid. Good to very good. December to February. Not very profitable. (Warder.)

TRENTON EARLY ?

A variety somewhat grown in Ohio and the West, the origin or identi-

ty of which has not yet been discovered. The tree is a moderately vigorous grower, hardy, and quite productive. Young wood reddish brown.

Fruit above medium, irregular, ribbed. Color yellowish, with slight undulations over the surface, which are green. Skin smooth and oily. Cavity wide. Basin furrowed. Flesh not very fine-grained, very light and tender, with a pleasant, subacid flavor. Good. August.

TRESCOTT RUSSET.

Originated in Sharon, Conn. Tree a strong grower, good bearer; and the fruit keeps well, but inclines to shrivel.

Fruit roundish conic oblique, yellow russet, with a dull red cheek. Stalk short, thick. Calyx closed. Flesh tough, mild subacid, vinous, almost sweet. Good. February, April.

TRUMBULL SWEET.

Fenton Sweeting. Trumbull Sweeting.

Originated in the orchard of Aaron Fenton, Trumbull Co., Ohio. Tree a healthy, spreading, vigorous grower, an early and good bearer.

Fruit medium, roundish oblate, whitish yellow, with a blush in the sun, and a few brown and indistinct green or gray dots. Stalk rather short and slender. Cavity broad, uneven. Calyx closed. Flesh white, juicy, tender, mild, sweet. Very good. Core rather large. September, October.

TRUMPETER.

Treadle-Hole.

An Apple esteemed in the orchards of Lancaster, England.

Fruit large, oblong, ribbed, pale green, with a tinge of yellow in the sun. Flesh greenish white, crisp, juicy, sweet subacid. October, December.

TUCKER.

A cooking Apple, described by Cole as medium, flattish round, greenish yellow, crisp, juicy, acid. July, August.

TUEBNER'S CIDER.

Origin, Missouri. Valued only for cider.

Fruit below medium, roundish truncated, dull yellowish red. Flesh yellow, acid. October.

TUEBNER'S GOLDEN.

Originated in Missouri.

Fruit small, roundish, yellow. Flesh acid. Valued only for its productiveness. September.

TUFT'S.

Tuft's Baldwin.

Originated in Cambridge, Mass. The tree is vigorous, forming a handsome head, and bearing annually. Young wood dark brown.

Fruit large, roundish oblate, yellowish, much shaded and sometimes striped with red. Stalk in a large cavity. Calyx closed, in a plaited basin of moderate depth. Flesh crisp, rather juicy, with a flavor scarcely subacid, and slightly aromatic. Good. September, October.

TULIP.

Tulp. Tulpen. Dutch Tulip. Calville Tulipee. Tulipen Calville.

A Dutch Apple.

Fruit medium or below, roundish, yellow, nearly overspread with deep, almost purplish red. Stalk slender. Calyx open. Flesh yellowish white, juicy, tender, sweet subacid. Good. November, January.

TURKEY GREENING.

From Connecticut. Tree vigorous, very productive.

Fruit fair and very productive, large, oblate, slightly conic. Skin green, with a dull blush and many light dots. Flesh greenish, tender, juicy, subacid, not valuable. January, February.

TURK'S CAP.

A cooking Apple, described by Hogg as :

Fruit large, roundish oblate, ribbed, golden yellow, some russet and a brownish tinge of red in the sun. Calyx large, open. Stalk long. Flesh yellow, firm, crisp, juicy, pleasant subacid. November, December.

TURN OFF LANE.

Winter Strawberry.

Origin, Salem, N. J. Tree moderately vigorous, upright, a regular and good bearer.

Fruit medium or below, oblate, inclining to conic, yellow, striped and shaded with red. Flesh white, tender, brisk, sprightly subacid. Good. Prized in the neighborhood of its origin as a late keeper.

TUSCALOOSA.

Tuscaloosa Seedling.

A variety originated by Andrew Clements, of Tuscaloosa Co., Ala. A new seedling of good promise as a market sort for the South. Tree moderately vigorous, spreading, productive.

Fruit medium to large, roundish oblate, slightly conic, yellow, shaded, striped, and marbled with red russet near the stalk, few gray dots. Stalk slender. Cavity slightly russeted. Calyx closed. Basin corrugated. Flesh yellowish, firm, juicy, mild subacid. Good to very good. Core small. October to February.

TUSCALOOSA SWEET.

Supposed a native of Kentucky. Tree moderately vigorous, upright, spreading.

Fruit large to very large, oblate, slightly ribbed, yellowish green, becoming deep yellow in the sun, small white suffused specks surrounded with crimson red. Stalk medium. Cavity broad and russeted. Calyx

small, closed. Flesh yellowish white, crisp, tender, brisk, sparkling, sweet. Core medium, compact. Very good. October, December.

TUTTLE.

Origin unknown. A strong, vigorous, upright, spreading grower.

Fruit above medium, roundish, slightly conic, yellow, mostly shaded and splashed with dark and light red, few whitish dots. Stalk very short and stout. Cavity small, russeted. Calyx closed. Flesh whitish, rather firm, tender, juicy, pleasant, mild subacid. Good to very good. December, February.

TWENTY OUNCE.

Morgan's Favorite.
Twenty Ounce Apple.
Eighteen Ounce Apple.
Aurora.

Coleman.
Cayuga Red Streak.
Lima.
Wine of Connecticut.

A very large and showy Apple, well known in Cayuga Co., N. Y., but an old fruit from Connecticut. It is a good, sprightly fruit, though not very high flavored, but its remarkably handsome appearance and large size render it one of the most popular fruits in market. The tree is thrifty, and makes a compact, neat head, bears regular crops, and the fruit is always fair and handsome. Young wood rich brownish red.

Fruit very large, roundish, slightly uneven, greenish yellow, boldly splashed and marbled with stripes of purplish red. Stalk short, set in a wide, deep cavity. Calyx small. Basin moderately deep. Flesh coarse-grained, sprightly, brisk subacid. Good to very good. October to January.

TWIN.

A variety introduced and disseminated in Michigan by a nurseryman, who, having lost its true name, applied the above, because of its bearing its fruit in pairs. It has not yet been identified, but will probably prove some old variety.

Fruit above medium, oblate, yellowish white, nearly covered with bright red, shaded and striped with dark red, usually a patch of russet next the stalk. Flesh fine-grained, crisp, juicy, with occasional pink lines or threads through it, aromatic. October, November. Core small, close. (T. T. Lyon, MS.)

TWITCHELL'S SWEET.

Origin, Dublin, N. H.; a vigorous grower, with slender branches, and very productive.

Fruit medium, roundish conic, red, shaded with purple, and partially sprinkled with small gray dots. Stalk long and slender, inserted in a deep cavity. Calyx small and closed, set in an abrupt, plaited basin. Flesh very white, veined with red under the skin, and sometimes at the core, tender, very sweet and pleasant. Good. November, December.

TYRE BEAUTY.

A new variety, originated on the farm of Jason Smith, Tyre, Seneca

Co., N. Y. Tree a good grower, productive of fruit uniformly even in size, and valuable as a market sort.

Fruit medium size, roundish oblate, pale yellow, with broken lines and splashes of deep crimson, shaded and marbled intermediate, mouldy bloom, light gray dots. Stalk short. Cavity deep. Calyx with almost erect segments. Basin deep. Flesh white, crisp, tender, breaking, slightly acid, pleasant. Good. Core small. Seeds broad, pointed. Season, early September. (Rural New Yorker.)

TYROLER PIPPIN.

Reinette der Tyrol

A Swiss Apple.

Fruit small to medium, roundish, yellow, with dull red, broken stripes in the sun. Flesh white, veined with green, firm, sugary. Winter. (Verg.)

UNCLE JOHN.

Origin, Eastern Pennsylvania. Tree a strong, upright grower, productive.

Fruit medium, oblate oblique, whitish, shaded with light, and splashed and striped with dark red or lake, thickly sprinkled with large light dots. Stalk short and small. Calyx closed. Flesh quite white, tender, juicy, mild subacid. Good to very good. Core small. November, December.

UNIQUE.

A French Apple.

Fruit medium, oblong conic, ribbed, pale yellow, lightly shaded in the sun with red, and thickly sprinkled with small gray and light dots. Stalk short. Cavity medium. Calyx small, closed. Segments short to a point. Basin small, abrupt. Flesh white, firm, moderately juicy, subacid. Good. Core small. November, December.

UNION.

Originated in the County of Way, Ia. Tree a good bearer.

Fruit medium, roundish oblong conical, yellow, with pale red stripes. January. (Lewis Jones' MS.)

UPDEGRAFF.

From Pennsylvania. Tree vigorous, spreading.

Fruit medium, oblate or roundish oblate, inclining to conic, pale yellow, shaded, splashed, and striped with light and dark red, darkest in sun, few areole dots. Stalk slender. Calyx large, open, or partially closed. Basin corrugated. Flesh white, tender, juicy, pleasant subacid. Core small. Good. November.

UTTER.

A popular Apple in Wisconsin and some other Western sections. Tree a regular bearer, and hardy

Fruit medium to large, oblate, lemon yellow ground, mottled, shaded and striped with light red, small russet dots. Stalk short and slender. Calyx small, closed. Basin open, furrowed. Flesh white, tender, juicy, mild, pleasant subacid. Good. November, December.

VALE MASCAL PEARMAIN.

Fruit below medium, roundish, greenish yellow, with bright red in the sun, and many spots of russet. Flesh yellow, crisp, sugary. (Hogg.)

VAN BUREN.

A Southern variety.

Fruit medium to large, globular, a little conical, yellow, shaded with dark red, specks and patches of russet. Stalk short, fleshy. Cavity narrow. Calyx small, closed. Basin shallow. Flesh yellow, juicy, tender. Good keeper. October to April. (White.)

VANCE'S HARVEST.

Vance's Early.

Origin, Edgar Co., Ill. Tree vigorous, productive.

Fruit small, oblate, inclining to conic, yellow, shaded with orange red in the sun, few gray and light dots. Cavity russeted. Calyx closed. Flesh yellowish, tender, juicy, pleasant subacid. Good. August. Core small.

VANDENABEELE.

Originated in Flanders. Tree vigorous, productive.

Fruit large, oblong conical truncated, ribbed at apex, golden yellow, splashed and marbled with red in the sun, many gray dots and shades. Stalk short. Cavity deep. Calyx large, open. Flesh yellowish white, half tender, agreeable subacid. December to February. (An. Pom.)

VANDERFOOT.

One of Van Mons' seedlings.

Fruit large, roundish conical, clear yellow, splashed and clouded with deep rich red in the sun, greenish mould toward the apex. Stalk long. Cavity deep. Calyx open. Basin furrowed. Flesh white, tender, juicy, subacid. November, December. (Alb. Pom.)

VANDERSPIEGEL.

Seek-no-Further of some.

Origin, Bennington, Vt. Tree a good grower, and productive.

Fruit below medium, roundish conic truncated, yellowish, shaded and splashed with red, few light dots. Calyx partially closed. Flesh yellowish, crisp, juicy, pleasant subacid. Good. December, February.

VANDEVERE.

White Vandevere.	Vandevere of Pa.	Green Vandevere.
Little Vandevere of Indiana.	Stalchubs.	Vandiver.
Vanderveer.	Yellow Vandevere.	Striped Vandevere.
Pennsylvania Vandevere.	Lasting Vandevere ?	Fall Vandevere ?
	Red Vandevere.	

The Vandevere is an old fruit, a native of Wilmington, Del., and took its name from a family there by name of Vandiver, which should be by right the name of the Apple; but it has so long been known and grown under the spelling Vandevere, that we deem it best not to change it. There is much confusion existing respecting this Apple and its sub-varieties, which possibly some of those may be, grown under what we give as synonyms. Tree of moderate horizontal growth, not very productive. Young shoots smooth, dark grayish reddish brown, with bold, full, projecting, rounded conical buds.

Fruit of medium size, oblate. Stalk about an inch long, inserted in a deep cavity. Calyx small and closed, set in a round, moderate basin. Color waxen yellow, striped with red, and covered with numerous green dots. Flesh yellowish, compact, but tender, with a fine, rich, subacid flavor. Good. October to January. Valuable for culinary purposes.

There is a Vandevere which we have received from Virginia, the young wood of which is slender, with very small inconspicuous buds.

VANDEREVE PIPPIN.

Indiana Vandevere.	Watson's Vandevere.	Big Vandevere.
Mountain Vandevere.	Imperial Vandevere ?	

Origin unknown. Tree a strong, rapid grower, spreading, a moderate bearer. Young wood smooth, light reddish brown, medium sized, buds reddish.

Fruit large, oblate, approaching conic, yellow, flaked all over with red, striped on the sunny side, and covered with rough brown dots. Stalk short, inserted in a broad, deep cavity, often russeted. Calyx partially closed, set in a moderate basin. Flesh crisp, with a brisk subacid flavor. Good. September to February. Valuable for cooking and drying.

VANDYNE.

Origin unknown. Tree upright, vigorous grower, productive. Young wood smooth, brownish.

Fruit large, roundish, slightly conic, yellowish, with a tinge of red, and slightly sprinkled with brown and reddish dots. Stalk rather slender, in a large cavity. Calyx closed, in a deep, uneven basin. Flesh white, tender, juicy, subacid, agreeable. Good. September, October.

VAN MONS REINETTE.

Reinette Van Mons.

Origin unknown.

Fruit small, roundish oblate, slightly conic, rich yellow, with a rich red cheek in sun, considerable russet. Stalk rather short. Calyx closed. Flesh yellow, rich subacid. Very good. December, March. Not profitable.

VAUGHN'S WINTER.

Origin, Christian Co., Ky. Tree hardy, vigorous, and productive Introduced by J. S. Downer, of Elkton, Ky.

Fruit medium, oblate. Sides unequal, whitish, waxen yellow, shaded with crimson and lilac, and sometimes obscurely striped, and thickly covered with conspicuous light dots. Stalk small and short. Deep, uneven cavity. Calyx closed. Basin deep, abrupt, open, slightly corrugated. Flesh yellowish, tender, juicy, mild subacid. Good. January to March.

VAUGHN'S PIPPIN.

Colonel Vaughn's.

Fruit small, conical, waxen yellow, with bright crimson in the sun. Calyx small, closed. Stalk short. Flesh white, tinged with red under the skin on the side, crisp, juicy, sweet. September, October. (Hogg.)

VAUGOYEAU.

Cadeau du General.

Origin unknown. Tree vigorous.

Fruit large, roundish conical, flattened at base, dull yellow, shaded and splashed with red, spotted with gray. Stalk short. Cavity deep. Calyx half closed. Flesh white, tender, juicy, subacid. December to March. (An. Pom.)

VERMILLON ROYÉE.

A French Apple.

Fruit medium, roundish oblate, inclining to conic, yellow, mostly covered, shaded, splashed, and striped with red, few gray dots. Stalk short. Cavity russeted. Calyx large, open. Flesh yellow, crisp, juicy, brisk subacid. Very good. Core small. December, March.

VERSAILLAISE REINETTE.

Reinette Versailles.

Of French origin. Tree vigorous, upright spreading.

Fruit medium, roundish, slightly conic, yellow, mostly covered with dull russet, a slight tinge of red in the sun. Stalk rather short. Calyx closed. Basin corrugated. Flesh white, fine, tender, moderately juicy, brisk subacid. Good to very good. Core small. December, February.

VICTUALS AND DRINK.

Big Sweet.

Pompey.

An old Apple, which originated in the neighborhood of Newark, N. J., about 1750. Tree of vigorous, upright spreading habit, and a moderate bearer.

Fruit large, oblong, rather irregular, and varies a good deal in size. Skin thin, but rough, dull yellow, marbled with russet, with a faint

russet blush on the sunny side. Stalk moderately long and slender, deeply inserted in an irregular cavity. Calyx small, set in a rather shallow basin. Flesh yellowish, tender, breaking, rich, sprightly, sweet. Very good. In perfection from October to January, but will keep till April.

VIOLETTE.

A sauce or cooking Apple, described by Ronalds as of medium size, oblong conical, dark copper or purple color, covered with a fine bluish bloom. Flesh white, tinged with red under the skin, juicy, brisk acid. December to March.

VIRGINIA GREENING.

Ross Greening. Green Mountain Pippin. Virginia Pippin ?

Origin unknown, supposed Southern. Tree a vigorous grower and very productive.

Fruit large, oblate, greenish yellowish, thinly covered with large brown dots, and a slight blush. Stalk rather long, in a large cavity. Calyx open. Basin broad, corrugated. Flesh yellow, compact, a rather pleasant subacid. Esteemed at the South as a late keeper and a good market apple.

VIRGINIA QUAKER.

Origin not known. Tree vigorous, upright.

Fruit quite small, globular, slightly conic, greenish yellow. Dots scattered, minute, black. Calyx small, closed. Flesh yellowish white, firm, breaking, subacid. Good. Midsummer. (Warder.)

VIRGINIA SPICE.

Origin unknown. Tree an erect, slender, moderate grower.

Fruit medium, oblate conic, whitish, thinly sprinkled with brown dots. Stalk very short. Cavity russeted. Calyx small, closed. Basin small. Flesh yellowish, juicy, crisp, sprightly subacid. Good. September, October.

VOSS' WINTER.

Southern.

Fruit medium to large, globular, unequal, smooth white, with leather cracking, and a heavy bloom. Dots minute, brown. Calyx small, closed. Basin abrupt, deep, wavy. Stalk long. Cavity deep. Flesh whitish yellow, firm, juicy, subacid. Good. December. (Warder.)

WABASH.

Wabash Bellflower.

Origin, Pennsylvania.

Fruit large, roundish oblong, or somewhat conical, deep yellow, covered with clear orange red, brightest on the sunny side, and streaked with russet in the cavity around the stalk. Stalk short, slender. Calyx

rather large, open. Flesh white, firm, crisp, tender, subacid. Core large. November, December. (Hov. Mag.)

WADDELL HALL.

A Southern Apple of unknown origin. Tree moderately vigorous. Young wood brownish.

Fruit small, roundish conical, pale yellow, shaded, striped, and splashed with light red. Stalk long, slender. Calyx closed. Flesh whitish, juicy, tender, pleasant subacid. Good. December to March.

WADHURST PIPPIN.

Origin, Wadhurst, Sussex, England. A valuable cooking Apple.

Fruit large, roundish conical, ribbed at apex, yellow, splashed and marbled with red in sun, small gray dots. Stalk very short. Calyx closed, with long segments. Flesh yellowish, crisp, juicy, brisk acid. November, February.

WAGENER.

Origin, Penn Yan, Yates Co., N. Y. Tree thrifty, upright, hardy, and early bearer; requires thinning to produce good-flavored fruit; when grown in the shade is wanting in flavor. Young wood light reddish brown, slightly downy. Buds prominent.

Wagener.

Fruit medium or above, roundish oblate, yellow, mostly shaded with crimson, obscurely striped, and sprinkled with light dots. Stalk nearly an inch long, rather slender, inserted in a large, broad, irregular cavity. Calyx small and closed, set in a rather abrupt somewhat corrugated basin. Flesh yellowish, very tender, juicy, excellent, brisk, somewhat vinous. Very good to best. A very delicate apple. Ripe, November to February

WALKER'S YELLOW.

Walker's Winter.

This Apple is a native of Pulaski Co., Georgia, and introduced by George Walker. Tree upright, vigorous.

Fruit large, roundish conic, fine golden yellow, with a faint blush on the sunny side. Stalk of moderate length, in a deep, acute cavity. Basin small. Flesh yellowish white, juicy, hard, rather too acid for a dessert fruit. Good. November to April.

WALPOLE.

Origin, Walpole, Mass. Tree moderately vigorous. Young wood grayish.

Fruit medium, roundish, yellow, shaded and striped with bright red. Stalk short. Cavity large. Calyx closed. Basin shallow. Flesh yellowish, tender, juicy, sprightly subacid. Very good. Last of August and first of September.

WALTHAM ABBEY.

Waltham Abbey Seedling

Origin, Essex, England.

Fruit large, roundish, slightly conic, yellow, with dull red in the sun, many minute russet dots. Stalk short. Cavity russeted. Calyx large, open. Flesh yellowish, tender, juicy, sweet. October, January. (Lindley.)

WANSTALL.

Green Street Apple.

Originated in Kent, England.

Fruit medium, roundish, slightly conical, ribbed at apex, golden yellow, striped and mottled with dark red in the sun, patches and veins of russet, and russet dots. Calyx half open. Basin furrowed. Flesh yellow, firm, crisp, juicy, sugary, rich. December to May. (Hogg.)

WARD.

Origin, Westville, Champagne Co., Ohio. Tree healthy and productive.

Fruit large, oblong, flattened at ends, yellow, streaked and spotted with mottled red. Flesh yellowish white, subacid. (O. P. S.) Forsyth describes an apple under this name as of medium size, flat, green, with some red in sun, sharp acid, and keeps till June.

WARFIELD.

Originated in Muscatine, Ia. Tree hardy, thrifty, vigorous grower, an early and abundant bearer.

Fruit medium, roundish oblate, light waxen yellow, with a blush in the sun, moderately sprinkled with gray dots. Stalk slender. Cavity slightly russeted. Calyx large, open. Segments short. Flesh whitish, moderately juicy, mild subacid. Good. Core small. Valuable for cooking. September, October.

WARNER'S KING.

Tree a free and vigorous grower, and a good bearer; hardy, valuable for culinary use.

Fruit very large, roundish ovate, deep yellow, with russet dots and patches. Stalk short. Calyx small, closed. Flesh white, tender, crisp, brisk subacid. November to March. (Hogg.)

WARRASCHKE DE GUBEN.

A Russian variety, new.

Fruit medium to large, roundish oblate, slightly conical, greenish yellow, with considerable brownish red at apex end. Flesh white, fine, tender, mild, sweet, agreeable. Early Winter. (Ver.)

WASHINGTON ROYAL.

Palmer Greening.

Originated in Leominster, Mass. Tree vigorous and productive.

Fruit above medium size; roundish oblate, yellowish green, with numerous small gray dots, and a clear red in the skin. Calyx closed, in a broad basin. Stalk short. Flesh whitish, crisp, juicy, subacid, slightly aromatic. Core small. Good to very good. Keeping till July.

Washington Strawberry.

WASHINGTON STRAWBERRY.

Originated on the farm of Job Whipple, Union Springs, Washing-

ton Co., N. Y. Tree hardy, vigorous, upright spreading, an early and abundant bearer. Young wood reddish. Buds prominent, rounded.

Fruit large, roundish conical, flattened at base, yellow, shaded, splashed, and mottled with rich red, or crimson. Stalk short. Cavity thinly russeted. Calyx closed. Segments rather long, reflexed. Basin abrupt, deep, furrowed. Flesh yellow, a little coarse, crisp, tender, juicy, brisk subacid. Very good. September, October.

WASHINGTON SWEET.

Origin, Berlin, Mass. Tree a thrifty grower and annual bearer. Young wood reddish brown, slightly downy.

Fruit below medium, roundish, slightly oblong conic, flattened at ends, yellow occasionally with crimson check in the sun, few green dots. Stalk slender. Calyx closed. Flesh yellowish, crisp, juicy, pleasant sweet. Good. October, November.

WATER.

Originated in Durham Township, Bucks Co., Pa. Tree vigorous, erect, forming a round somewhat close head, blooms nearly two weeks later than other varieties, and produces abundantly every other year. Young wood very dark, blackish brown.

Water.

Fruit medium, roundish conical, sometimes oblong conic truncated, whitish yellow, shaded with rich purplish crimson in the sun, few brown dots. Stalk short, slender. Calyx closed. Basin small, abrupt, slightly corrugated. Flesh white, very tender, juicy, pleasant subacid. Very good. October, November.

WATERMAN'S SWEET.

Fruit medium, oblate inclining to conic, yellow, shaded, splashed, and mottled with crimson, few light gray dots. Stalk slender. Calyx small, closed. Flesh yellowish, crisp, tender, juicy, moderately sweet. Good. December to March.

WATSON'S DUMPLING.

A large English kitchen Apple, nearly round, yellowish green, faintly striped with dull red. Flesh juicy, pleasant, subacid. Good. October to January.

WATSON'S FAVORITE.

From Maine.

Fruit medium, roundish oblate, reddish blush on yellow. Flesh yellowish, juicy, pleasant subacid. Very good. (Cont. Gent.)

WAUGH'S CRAB.

Claimed to have originated in Culpepper Co., Va. Tree thrifty, very productive, valued mainly for cider and long keeping.

Fruit small, roundish conic truncated, shaded with light red, splashed and striped with deep red in the sun. Stalk long, slender. Calyx in an abrupt basin. Flesh whitish, very firm, moderately juicy, sweet subacid. Good. February to April.

WAX.

Fruit large, roundish oblate, yellowish green, slightly shaded with red. Stalk short. Calyx closed. Flesh white, a little coarse, sweet. Good. December, February.

WAXEN.

Origin, supposed to be Virginia. Tree thrifty. Young wood dark.

Fruit medium, roundish, slightly oblate, pale yellow, oily, sprinkled with a few dots. Stalk slender, in a deep cavity. Calyx closed. Basin shallow. Flesh whitish yellow, crisp, tender, juicy, sprightly, mild subacid. Good. November, December.

WEALTHY.

A new variety originated by Peter M. Gideon, near St. Paul, Minn., from seed gathered in Maine about 1860. So far the tree has proved hardy, vigorous, and healthy.

Fruit medium, oblate or roundish oblate, whitish yellow ground, shaded with deep rich crimson in the sun, obscure broken stripes and mottlings in the shade, sometimes entirely covered with crimson, many light dots. Stalk short to medium, slender. Cavity green, russet. Calyx partially closed. Basin deep, abrupt, uneven. Flesh white, fine-grained, stained with red, tender, juicy, lively, vinous, subacid. Very good. Core small. Season, December, February.

WEALTHY'S FAVORITE.

Winter Seedling.

Bradley's Winter.

Origin, Town of Plymouth, Mich.

Fruit medium, roundish oblate, pale waxen yellow, shaded in sun with crimson, and thinly sprinkled with brown and white dots. Stalk short. Cavity deep, acute. Calyx closed. Basin abrupt, uneven. Flesh whitish yellow, tender, juicy, mild subacid, pleasant. Very good. December to February. An amateur's fruit.

WEBB'S WINTER.

A Southern, probably Mississippi, variety. Tree slender, with drooping branches.

Fruit medium, roundish, yellow, shaded and rather faintly splashed and striped with red. Stalk long, slender. Calyx closed. Flesh whitish, fine-grained, moderately tender, juicy, pleasant, mild subacid. Good. Core small. December, February.

WELLFORD'S YELLOW.

Origin, Essex Co., Virginia. A rapid grower and a great bearer.

Fruit rather small, roundish flattened, pale yellow, with faint red streaks on one side. Flesh yellow, fine-grained, juicy, subacid, aromatic. Keeps well until June.

WELL'S SWEET.

Sweeting, Well's.

Origin unknown. Tree upright spreading, productive.

Fruit of medium size, roundish, broadest in the middle, and lessening each way, pale dull green, with a dull red or brownish cheek. Stalk rather slender and short. Calyx short, set in quite a shallow basin. Flesh very white, and very tender, abounding with a rich, agreeable, sprightly juice. Good to very good. November to January.

WESTERN SPY.

Origin, farm of John Mansfield, Jefferson Co., O. Tree a slender spreading, moderate grower, but very productive.

Fruit rather large, roundish oblate, yellow, often much shaded with crimson. Stalk short and stout, inserted in a large cavity. Calyx open, set in an abrupt basin. Flesh yellowish, tender, juicy, brisk subacid. Excellent for cooking. Good. October to June.

WESTFIELD SEEK-NO-FURTHER.

Connecticut Seek-no-Further.

Seek-no-Further.

The Westfield Seek-no-Further is the Seek-no-Further of Connecticut, and is an old and highly esteemed variety of that district. It has a pearmain flavor.

Fruit large, pretty regularly round conical, pale or dull red over a pale clouded green ground—the red sprinkled with obscure russeted yel

low dots. Stalk very slender, three-fourths of an inch long, inserted in an even cavity. Calyx closed, or with a few reflexed segments, and set

Westfield Seek-no-Further.

in an even basin of moderate depth. Flesh white, fine-grained, tender, with a rich pearmain flavor. Very good or best. A first-rate fruit. October to February.

WEST GRINSTEAD PIPPIN.

East Grinstead.

A Sussex, England, Apple, described by Ronalds as of great excellence.

Fruit medium, roundish conical, greenish, with broken stripes and splashes of red brown dots. Stalk short. Calyx open. Flesh greenish white, soft, tender, brisk subacid. November, February.

WESTON.

Origin, farm of Major Weston, Lincoln, Mass. Tree vigorous, spreading.

Fruit medium, roundish conical, light yellow, shaded, striped, and splashed with red. Flesh white, moderately juicy, mild pleasant flavor. Good. Core large. October.

WHEELER'S EXTREME.

Origin, Gloucester, England.

Fruit small, oblate, greenish yellow, shaded and mottled with red, and traced with russet. Flesh yellowish white, tender, sweet. November, February. (Hogg.)

WHEELER'S RUSSET.

An Apple originated in Gloucester, England, and described by Lindley, as:

Fruit medium, roundish oblate, yellowish, gray russet brown in the sun, and darker russety specks. Flesh firm, greenish white, brisk, saccharine. November to March.

WHEELER'S SWEET.

Origin, Harding Co., O.

Fruit medium, roundish conic, yellow, with a red cheek in the sun, minute brown and light dots. Stalk short. Cavity deep, furrowed. Calyx closed. Basin abrupt, deep. Flesh yellowish, rather firm, moderately juicy, pleasant, sweet. Good. Core rather small. October, November.

WHIG.

From Pennsylvania. Tree moderately vigorous, spreading.

Fruit below medium, oblate, inclining to conic, often oblique, yellow, shaded, splashed, and striped with light and dark red, sometimes very dark, large light dots, often with a brown centre. Stalk short, small. Cavity russeted. Calyx closed. Flesh white, tender, juicy, mild subacid, almost sweet. Good. Core small. December.

WHITE ASTRACHAN.

Pyrus Astracanica.	Transparent de Moscovie.
Glacé de Zélande.	Weisser Astrakan.
Astracanischer Sommerapfel.	

A nearly white, semi-transparent Russian Apple.

Fruit of medium size, roundish. Skin very smooth, nearly white, with a few faint streaks of red on one side, and covered with a white bloom. Flesh quite white, partially transparent, tender, and of delicate flavor, but rather dry. Poor. First of August.

WHITE BEAUTY.

Origin, Ashtabula Co., O. Tree a good grower, young shoots, reddish, with gray specks.

Fruit medium, roundish, smooth, dull greenish, with grayish specks. Flesh very white, tender, sprightly subacid. Good. September, December. (Elliott.)

WHITE CALVILLE.

White Winter Calville.	Calville Blanche d'Hiver.
Weisser Winter Calville.	

The White Calville is a celebrated old French sauce and cooking Apple; but, like most others of its class, is not worthy of cultivation.

Fruit medium, roundish conic, ribbed, yellow, faint blush. Flesh coarse, tender, pleasant. Hardly good. November, February.

WHITE DOCTOR.

Origin, Pennsylvania. A profitable market sort, and valuable for culinary uses. Tree vigorous and productive.

Fruit large, roundish oblate, greenish yellow. Stalk short, set in an acute cavity. Calyx closed. Basin shallow and furrowed. Flesh white, tender, brisk subacid. Good. September, October.

WHITE INCOMPARABLE.

Large White Incomparable Crab.

An Apple described by Ronalds as above medium size, clear creamy yellow. Stalk slender. Flesh crisp, juicy, acid. October, December. Valuable for culinary uses.

WHITE JUNEATING.

Joanneting.	Owen's Golden Beauty.	Juneating.
Juniting.	Jennetting.	Ginetting.
Gennetting.	Juneting.	Early Jennetting.
Primiting.	May Pippin.	Yellow May.
May of Virginia.	Caroline.	Carolina of some.
	Early May.	

This is an old variety, mentioned by Evelyn in 1660, and described by Ray in 1688, and is a very tolerable little Apple, ripening among the very earliest, during the last of June and the first of July. It is very distinct from the Early Harvest, sometimes called by this name. Tree a moderate grower, and forms a roundish upright spreading head. Productive.

Fruit small, round, a little flattened. Calyx closed. Stalk rather long and slender. Pale green at first, light yellow, with sometimes a faint blush on the sunny side. Flesh crisp and of a pleasant flavor, but soon becomes dry. Good.

WHITE NONPAREIL.

Tree vigorous and productive.

Fruit medium, roundish, depressed at the ends. Skin greenish yellow, almost entirely covered with reddish gray. Flesh white, half firm, sugary, acid. May. (Soc. V. Mon.)

WHITE PARADISE.

Paradise Pippin.	Lady's Finger.	Long May.
May.	Egg.	Eve.

A Scotch fruit of some beauty, but of little value except for culinary use. Tree a free grower, and productive.

Fruit medium, oblong roundish conical, broadest at base, clear yellow, splashed and mottled with red, brown russety dots. Flesh yellowish, tender, crisp, pleasant acid. October.

WHITE PIPPIN.

Canada Pippin.

This Apple is much cultivated at the West, but of unknown origin.

It is of the Newtown Pippin class, distinct from Canada Reinette. Tree thrifty, upright, a regular and good bearer. Young shoots dark clear reddish brown, downy.

Fruit large, form variable, roundish oblate, slightly oblique, greenish white, waxen, sprinkled with green dots, and becoming pale yellow at maturity, sometimes having a dull blush and a few brown dots. Stalk short, inserted in a large cavity, surrounded by green russet. Calyx

White Pippin.

small, nearly closed, set in an abrupt furrowed basin. Flesh white, tender, crisp, juicy, fine, rich subacid. Very good to best. Core small. January to March.

WHITE RAMBO.

Origin, Huntington Co., Pa. Tree of medium growth. Branches remarkably slender. Very productive.

Fruit medium, oblate, approaching conic, yellowish white. Stalk short, in a russeted cavity. Calyx closed. Basin shallow, surrounded by prominences. Flesh yellowish, fine, pleasant subacid. Good. Core small. November.

WHITE ROMARIN.

Romarin Blanche.

An Italian Apple.

Fruit medium, oblong conical, clear light yellow, faint red in the sun, large gray dots. Stalk slender. Calyx closed. Flesh yellowish white, fine, aromatic subacid. Core large, open. December to March. (An. Pom.)

WHITE RUSSET.

An Irish dessert Apple.

Fruit large, roundish oblate, yellowish russety green, intermixed with white, and having a little light red on the sunny side. Stalk short. Flesh firm, good. Apt to grow mealy. November. (Lindley.)

WHITE SPANISH REINETTE.

D'Espagne.	Reinette Blanche d'Espagne.
Fall Pippin, erroneously.	Reinette d'Espagne.
Large Fall Pippin.	Camnesar.
Cobbett's Fall Pippin.	Elgin Pippin?

A very celebrated old Spanish variety.

Fruit very large, roundish oblate, with broad ribs on its sides, terminating in an uneven crown, where it is nearly as broad as at the base. Calyx large, open, very deeply sunk in a broad-angled, oblique, irregular basin. Stalk half an inch long, set in a rather small, even cavity. Skin smooth, yellowish green on the shaded side, orange, tinged with brownish red next the sun, and sprinkled with grayish dots. Flesh yellowish white, crisp, tender, rich subacid. Very good. The tree has the same wood, foliage, and vigorous habit as our Fall Pippin, and the fruit keeps a month longer. This is quite distinct from Fall Pippin.

WHITE SPICE.

Origin, Cumberland Co., Pa.

Fruit large, roundish oblate. Flesh subacid, good. September. (A. Pom. S. Rep.)

WHITE SPITZENBERG.

Origin, Northampton Co., Pa. Tree an annual productive bearer.

Fruit medium, roundish oblong, yellow, interspersed with large gray dots, with a blush on the exposed sides. Stalk short, in a deep, open cavity. Calyx small, closed, narrow basin. Flesh breaking, sufficiently juicy, subacid, agreeable aroma. Good. December to March.

WHITE'S RED WINTER.

Southern.

Fruit large, oblong, shaded and striped with red. Flesh rich, juicy. Good keeper. (Cont. Gent.)

WHITE SUMMER PIPPIN.

An early dessert Apple, described in Ronalds as of medium size, roundish, straw color, mottled and variegated with some russet and purple spots. Flesh tender and delicious, if eaten off the tree in August.

WHITE SWEET.

Witherill's White Sweet.

Honey Sweet of some.

Origin, supposed New Jersey. Tree vigorous, productive.

Fruit medium, roundish oblate conic, whitish with a blush of crim-

son in the sun. Stalk slender. Calyx closed. Flesh white, not very tender, moderately juicy, mild sweet. Good. September, October. Valuable for stock, cider, and cooking.

WHITE VIRGIN.

Scotch Virgin.

A culinary Apple, described by Hogg as :

Fruit medium, oblate, pale yellow to rich orange, and streaked with red in the sun, a few dark dots and veins of russet. Stalk short. Calyx large, closed. Flesh white, soft, tender, juicy, brisk acid. October to February.

WHITE'S WINTER.

Origin, Guilford Co., N. C. Tree thrifty, a great and early bearer.

Fruit medium, roundish oblate, yellowish white, somewhat rich, juicy, and very good. Keeps well. (Count. Gent.)

WHITEWATER SWEET.

From Southern Ohio. Tree moderately vigorous, spreading.

Fruit small, roundish oblate, yellowish green, with a few gray and many indistinct light dots. Calyx closed. Flesh whitish, compact, juicy, crisp, mild sweet. Good. December to March.

WHITE WINE.

Fruit medium, roundish conical, yellowish, with rays, patches, and specks of russet. Stalk short and fleshy. Calyx open. Flesh white, firm, crisp, pleasantly acid. October, December.

WHITE WINTER.

Origin, farm of Mr. Cocklin, Cumberland Co., Penn. Tree moderately vigorous, very productive.

Fruit small, nearly globular, light yellow, with a dull crimson cheek. Stalk medium, in an acute cavity. Calyx firmly closed, a little sunk, in a very small basin. Flesh whitish, juicy, almost buttery, mild subacid. Good. January to May.

WHITE WINTER PEARMAIN.

Campbellite.

Origin unknown, by some thought to be an old Eastern variety, highly esteemed at the West. Tree spreading, hardy, and thrifty, a regular and good bearer. Young shoots very short-jointed, dull reddish brown, slightly grayish or downy at end.

Fruit medium or above, roundish oblong conic, somewhat oblique. Stalk short, in a deep cavity. Calyx nearly closed. Segments long. Basin uneven. Skin pale yellow, with a slight blush or warm cheek, thickly

sprinkled with minute brown dots. Flesh yellowish, tender, crisp, juicy, very pleasant subacid. Very good. January to April.

White Winter Pearmain.

WHITMAN.

From South Abington, Mass.

Fruit a little above medium, oblong, greenish yellow, with russet blotches. Stalk slender. Flesh sweet. December. (N. E. Farm.)

WHITMORE'S PIPPIN.

Fruit medium, conical, ribbed, yellowish green, dark green specks, and slight tinge of red in the sun. Flesh whitish green, breaking, brisk, slight aromatic. November, January. (Lindley.)

WHITNEY RUSSET.

Origin unknown. Supposed Canadian. Tree a vigorous grower, productive. Young shoots reddish brown, grayish.

Fruit small, oblate, slightly inclining to conic, yellow, mostly covered with thin light russet, sometimes a shade of crimson in the sun. Stalk long, often with bracts. Cavity large, deep. Calyx closed. Basin slightly corrugated. Flesh yellowish, tender, juicy, rich, mild subacid. Very good. Core small. December to April.

WICKHAM'S PEARMAN.

Wick Pearmain.

This variety, says Hogg, was grown at Wickham, near Winchester, Hampshire, England. It is an excellent dessert Apple.

Fruit small, roundish conical, flattened at base, yellow, tinged and shaded with red, patches and specks of russet. Flesh greenish yellow, tender, crisp, juicy, high flavored. October to December.

WIER SWEET.

Origin unknown. Tree moderately vigorous, forming a round, regular head, productive.

Fruit medium, oblate, greenish yellow or yellow, often with a shade of bronze in the sun, moderately sprinkled with brown dots. Stalk slender. Calyx closed. Flesh whitish, tender, juicy, mild, pleasant, rather rich sweet. Good. Core medium or rather small. December to March.

WILFONG.

From North Carolina. Tree vigorous, spreading.

Fruit below medium, oblate, depressed, greenish yellow, shaded with dark purplish red, indistinct splashes and stripes, light dots. Stalk short, stout. Calyx closed. Flesh whitish, rather firm, moderately juicy, tender, pleasant subacid. Good. Core small. December to March.

WILLIAM PENN.

From Columbia, Pa. Tree vigorous, upright spreading.

Fruit medium, roundish oblate, inclining to conic, yellow, shaded, splashed, striped, and mottled with bright red, many light dots. Stalk very short. Cavity considerably russeted. Calyx closed. Basin large, deep, slightly corrugated. Flesh yellowish, crisp, juicy, pleasant subacid, slightly aromatic. Good to very good. Core small. December to March.

WILLIAM'S FAVORITE.

William's Early.

William's Red.

A large and handsome dessert Apple. It originated at Roxbury, near Boston, Mass., bears abundantly, and ripens from the last of July to the first of September. An excellent market variety.

Fruit of medium size, roundish oblong conic, and a little one-sided. Stalk an inch long, slender, slightly sunk. Calyx closed, in a furrowed basin. Skin very smooth, of a light red ground, but nearly covered with a fine dark red. Flesh yellowish white, and of a very mild and agreeable flavor. Good. Requires a strong, rich soil.

WILLIAM'S PIPPIN.

Fruit below medium, somewhat conical, pale yellow, mottled with pale red in the sun. Flesh pale yellow, soft, pleasant subacid. Good to eat from the tree, and for baking and roasting. October, December. (Lindley.)

WILLIAM'S WHITE.

Origin, supposed Cumberland Co., Pa.

Fruit medium or below, oblate, slightly conic, whitish yellow, sprin-

kled with a few brown dots. Stalk short. Calyx small, closed. Flesh light yellow, tender, juicy, pleasant subacid. Good. August, September.

WILLIS'S RUSSET.

Origin, farm of Mr. Willis, Sudbury, Mass. Tree hardy, vigorous, and an abundant bearer.

Fruit small, oblate conic, russet on a yellow ground, and occasionally a sunny cheek. Stalk long, slender, curved, set in a large cavity. Calyx closed. Basin shallow. Flesh tender, juicy, with a rich pear-like flavor. Very good. December, January.

WILLIS SWEET.

Pear Lot.

Pear-Tree Lot.

Origin on the farm of Edward Willis, Oyster Bay, Long Island. Tree a vigorous, spreading grower, productive. Young shoots rich, warm brown, slightly grayish.

Willis Sweet.

Fruit rather large, roundish, whitish, somewhat shaded with a thin light red, and blotched with crimson, few brown dots. Stalk short and stout. Calyx small, closed. Basin abrupt, furrowed. Flesh whitish, crisp, juicy, tender, sweet, and rich. Very good. Core large. August, September. Valuable for table, market, and culinary purposes.

WILLOW TWIG.

Willow.

James River.

Of unknown origin. The tree is a poor grower in the nursery, but makes a good spreading, somewhat drooping, orchard tree, quite hardy, and very productive, and although of only *good* quality, its keeping qualities, productiveness, and hardihood make it a profitable market Apple for rich prairie and bottom lands in the West. Young shoots slender, reddish brown, downy. Buds inconspicuous.

Willow Twig.

Fruit medium size, roundish, slightly conic, somewhat oblate, light yellow, shaded and marbled with dull red, and sprinkled with numerous russet dots. Stalk rather short and slender. Cavity narrow, sometimes partially closed, with a lip. Calyx partially closed, in a somewhat corrugated abrupt basin. Flesh yellowish green, not very tender, pleasant subacid. Good. Valuable for late keeping.

WILLSBORO.

Supposed origin, Willsboro, Essex, Co., N. Y.

Fruit medium, roundish conic, yellow, shaded, mottled, and marbled mostly with dull red. Flesh yellowish white, juicy, crisp, tender, sprightly subacid. December, February. (J. W. Bailey.)

WILMOT.

Wilmot's Seedling.

A sauce or cooking Apple described by Ronalds. Tree an upright, strong grower, productive.

Fruit medium, conical, yellow, with marblings of gray, and splashes of red. Flesh white, tender, juicy, fragrant subacid. July, August.

WILSON.

Of Michigan.

Fruit large, round, slightly conic, regular. Surface smooth, golden yellow. Dots scattered, dark. Flesh yellow, breaking, fine-grained, juicy, subacid, rich. January, February. (Warder.)

The same author describes another Apple under this name as from Western Virginia.

Fruit small, roundish oblate or oblate, smooth, nearly covered with very deep red, in which the stripes are almost obscured. Dots minute, white. Flesh white, fine-grained, crisp, tender, juicy, mild subacid. January.

WILSON'S SUMMER.

Origin, Forsyth Co., N. C. Tree upright, productive.

Fruit medium, roundish, slightly conic, greenish yellow, thickly striped with clear red. Flesh rich, juicy, fine-flavored. August, September. (Count. Gent.)

WILSON'S VOLUNTEER.

Fruit large, globular truncated or flattened, regular, yellow, mostly covered with mixed red, striped darker. Dots large, gray, and yellow. Flesh greenish yellow, tender, juicy subacid. December, February. (Warder.)

WINCHELL SWEET.

Origin, Hartford Co., Conn.

Fruit medium to large, oblate, greenish yellow, with a brownish shade in the sun, moderately sprinkled with gray dots. Stalk short. Calyx closed. Flesh whitish, rather firm, moderately juicy, sweet, and rich. Good. Core small. February to May. Valuable for cooking.

WINDHAM RUSSET.

An Apple from Massachusetts. Tree vigorous, upright spreading.

Fruit medium, roundish, inclining to conic, yellow, mostly covered with dull rough russet, often mixed with red in the sun, gray rough or raised dots. Stalk medium. Cavity deep, large. Calyx partially open. Flesh yellowish, rather firm, moderately juicy, mild subacid. Good. Core small. December to April.

WINE.

Hay's Winter. Winter Wine. Pennsylvania Red Streak.
English Red Streak, incorrectly.

The Wine Apple is a very handsome, and an admirable winter fruit, a most abundant bearer, and a hardy tree. It is a native of Delaware. The tree has small leaves, grows thriftily, and makes a fine spreading head. Young shoots smooth grayish reddish brown.

Fruit rather above medium size—in rich soils large; form regular, nearly round, a little flattened at the ends. Skin smooth, of a lively deep red over a yellow ground, or more frequently with a few indistinct stripes of yellow. Stalk short, inserted in a round, smooth cavity, with a little russet around it. Flesh yellowish white, juicy, and crisp, with a rather vinous, rich, and pleasant flavor. Good to very good. Core small. October to March.

WINESAP.

Wine Sop?

Potpie Apple.

This is not only a good Apple for the table, but it is also one of the very finest cider fruits, and its fruitfulness renders it a great favorite with orchardists. The tree grows rather irregularly, and does not form a handsome head, but it bears early, and the apples have the good quality of hanging late upon the trees without injury, while the tree thrives well on sandy, light soils. The tree is very hardy, and one of the most profitable orchard varieties wherever grown. Young wood reddish brown, with smooth red buds.

Winesap.

Fruit of medium size, rather roundish oblong. Skin smooth, of a fine dark red, with a few streaks, and a little yellow ground, appearing on the shady side. Stalk nearly an inch long, slender, set in an irregular cavity. Calyx small, placed in a regular basin, with fine plaits. Flesh yellow, firm, crisp, with a rich, high flavor. Very good. November to May.

WING SWEET.

An old variety, of unknown origin, profitable for stock feeding and cooking. Tree a moderate grower, spreading, and productive.

Fruit medium or below, roundish oblate conical, yellow, mostly shaded, splashed, and striped with dark red. Stalk long, slender. Calyx closed. Basin slightly corrugated. Flesh yellowish, tender, moderately juicy, sweet, rich, and pleasant. Good to very good. September to December.

WINN'S RUSSET.

Origin, Sweden, Me. Tree of slow growth, hardy and productive.

Fruit large. Cavity deep. Basin broad and shallow. Color dark russet, with obscure stripes of red, covered with whitish spots. Flesh fine-grained, subacid. Good. Keeps till May.

WINSLOW.

From Virginia.

Fruit large, globular, flattened at base, dark and light red streaked, light brown specks and dark flakes. Stalk short, slender. Calyx open. Flesh yellowish white, tender, juicy, subacid. Fall and early winter. (Elliott.)

WINTER CODLIN.

An English culinary Apple. Tree vigorous, upright spreading.

Fruit medium, roundish conic, whitish yellow, partially splashed, striped, and marbled with light red, few gray dots. Calyx closed. Basin slightly furrowed. Flesh white, rather firm, moderately juicy, subacid. Good. October to March.

WINTER COLMAN.

Norfolk Colman.

Norfolk Storing.

A culinary Apple, described by Lindley as :

Fruit rather large, roundish oblate, pale yellow, deep red in the sun. Flesh firm, crisp, sharp subacid. November to March.

WINTER GRAY REINETTE.

Reinette Grise d'Hiver.
Prager.

Reinette Grise Extra.
Reinette Grise.

Belle Fille.
Grauwe Franse Rennett.
Reinette Grise Française.

Among the Reinettes there is a world of confusion, and we feel no confidence in correctness until such time as they may be gathered and grown all in the same grounds. The present description of this variety is taken from Hogg. Tree healthy, vigorous, productive.

Fruit medium, roundish, flattened on the sides, broadest at base, dull yellowish green in the shade, with a patch of thin dull brownish red in the sun, which side is so covered with brown russet that little color is visible. Stalk very short. Calyx closed. Flesh yellow, firm, crisp, rich, juicy, sugary. November to May.

We have received and fruited a Winter Gray Reinette from Rivers, which is small, oblate, depressed, dull yellowish gray russet, indistinct raised dots. Stalk long, slender. Calyx closed. Flesh whitish, firm, moderately juicy, rich, brisk subacid. Good. December to May.

The Album of Pomology also describes a Winter Gray Reinette as large, roundish, dull pale yellow, overlaid with dull greenish russet.

WINTER HARVEY.

Winter Pippin.

Autumn Pippin.

An old Eastern variety. Tree vigorous, upright, spreading, productive. Young shoots dark grayish reddish brown.

Fruit medium, roundish conic, slightly ribbed, greenish yellow, rarely with a shade of dull red in the sun. Stalk rather short. Calyx partially closed. Flesh white, tender, juicy, pleasant, mild subacid. Good. Core rather small. January to March.

WINTER HOG ISLAND SWEET.

Origin, Long Island. Tree moderately vigorous, productive.

Fruit medium or below, oblate inclining to conic, slightly ribbed, pale yellow, striped, splashed, and shaded with light and dark red, few light and brown dots. Stalk rather short. Calyx closed. Flesh yellowish, tender, moderately juicy, rather rich sweet. Good. Core small. November to February.

WINTER LADING.

A sauce Apple, from Sussex, England.

Fruit medium, roundish conical, green, with patches and dots of thin russet. Flesh greenish white, juicy, tender, sweet subacid. October, December. (Hogg.)

WINTER MAIDEN'S BLUSH.

From Bucks Co., Pennsylvania.

Fruit medium, oblong conic, yellow, covered with large, distinct, carmine dots. Stalk short. Calyx closed. Flesh white, crisp, tender, subacid. Very good. Core large. (Gar. Mon.)

WINTER MAJETTIN.

A Norfolk, England, Apple, described by Lindley as valuable for culinary uses.

Fruit medium, roundish ovate, ribbed at apex, yellowish green, with a dull brownish red in sun exposure. Flesh greenish white, firm, brisk, sharp subacid. December, February.

WINTER PEARMAIN.

Old Pearmain.

Parmain d'Hiver.

Pearmain.

Great Pearmain.

Pepin Parmain d'Hiver.

Pepin Parmain d'Angleterre.

Peremenes.

This is one of the oldest Apples on record. The tree a free and healthy grower, and productive.

Fruit medium, conical, greenish, with lively deep red in the sun, russety dots. Flesh yellowish, firm, crisp, juicy, slightly aromatic. November to March.

There is grown in Illinois, and other Western States, an Apple under the various names of WINTER PEARMAIN and RED PEARMAIN, entirely distinct from above. The tree is vigorous, spreading, with slender branches. Young shoots moderately slender, grayish reddish brown, with downy buds.

Fruit medium, oblate, a little inclining to conic, yellowish, shaded, splashed, and striped with light and dark red. Stalk short. Calyx closed. Flesh yellowish, rather firm, crisp, juicy, rich subacid. Good. Core small. November, February.

There is another WINTER PEARMAIN, grown in Pennsylvania, the fruit of which is below medium, oblate or roundish oblate, yellow, shaded and obscurely splashed with brownish red, few light dots. Stalk short. Calyx open. Flesh yellow, compact, moderately juicy, mild subacid. Good. Core small. January to May.

WINTER PIPPIN OF VERMONT.

Origin unknown, much cultivated in Vermont; a fair grower and productive.

Fruit large to very large, nearly globular, inclining to conic, obscurely ribbed, greenish yellow, sprinkled with star-like crimson dots, cheek shaded with dull crimson. Stalk short, inserted in a deep compressed cavity. Calyx small, nearly closed. Segments long, in a rather deep, uneven basin. Flesh white, tender, and agreeable. Good. November to March.

We have received a Winter Pippin from Michigan, where it was introduced from Western New York, but have not sufficiently tested it to decide as to its identity with the above.

WINTER REINETTE.

Weisse Antillische.

Winter Reinette.

A beautiful and excellent German dessert Apple.

Fruit large, oblong conical, lemon yellow, with blush red in the sun. Flesh yellowish, firm, juicy, sugary, vinous. December to March. (Diel.)

WINTER STRAWBERRY.

This variety is described by Ronalds as above medium size, roundish, yellow, splashed, shaded, and striped partially over with rich red. Flesh whitish, tender, juicy, subacid. December, January.

WINTER SWEET PARADISE.

Paradise Winter Sweet.

Grandmother.

From Pennsylvania. The Winter Sweet Paradise is a productive and excellent orchard fruit, always fair, and of fine appearance. Tree hardy, upright, vigorous, not an early bearer. Young shoots reddish gray.

Fruit rather large, regularly formed, roundish oblate. Color dull green when picked, with a brownish blush, becoming a little paler at

maturity. Stalk short, set in a round cavity, often russeted. Calyx closed, small. Basin rather deep, slightly corrugated. Flesh white,

Winter Sweet Paradise.

fine-grained, juicy, sweet, sprightly, and very good. Core rather small. November to March.

WINTHROP GREENING.

Lincoln Pippin.

Howe Apple.

Origin, Winthrop, Me. Tree vigorous, upright spreading.

Fruit large, oblate, slightly ribbed, greenish yellow, with nettings and patches of russet, thickly sprinkled with light and gray dots. Stalk rather short. Calyx large, open. Flesh white, tender, juicy, rather rich subacid. Good. Core small. September.

WINTHROP PEARMAN.

Origin, Winthrop, Me. Size large, roundish ovate. Skin yellow, striped with red, and deep red in the sun. Stem in a large cavity. Basin shallow. Flesh white, juicy. Flavor spicy and pleasant. September to January. (Me. P. S. R.)

WISNER.

Originated on the farm of — Wisner, Middletown, Orange Co., N. Y.

Fruit small, conical, greenish, shaded and striped with dull red. Flesh tender, juicy, pleasant subacid. Good. December, March.

WOODLAND.

A Southern variety.

Fruit full medium, oblate, yellowish green, sometimes striped red.

Dots few, minute. Calyx small, closed. Stalk medium to long. Flesh yellow, rather tough, but juicy, subacid. Good. Midwinter. (Am. Hort. An.)

WOODRING.

Originated in Fairfield Co., O. Tree a moderate grower, slender branches, early bearer.

Fruit below medium, roundish, yellow, mostly covered with red. Flesh white, juicy, subacid. Good. January to March.

WOOD'S GREENING.

Coate's Greening.

Onstine.

Cooke's Greening.

A native of New Jersey. Tree a moderate grower, hardy, somewhat spreading, productive.

Fruit medium, roundish oblate, yellowish green, with rough spots or patches. Stalk short. Calyx large. Flesh greenish white, fine-grained, tender, juicy, slightly subacid. Very good. Core small. January, February.

WOOD'S SWEET.

Hyde's Sweet.

Origin, Sudbury, Vt., and there considered the best fall sweet Apple in cultivation. Growth nearly equal to Baldwin, and productive.

Fruit large, irregularly oblate. Color whitish yellow, waxen or oily, shaded and striped with fine rich red. Stalk rather short, inserted in a broad, deep, furrowed cavity. Calyx small, closed, set in a rather deep open basin. Flesh white, tender, juicy, rich saccharine. Good to very good. September, November.

WOOLFOLKS.

Supposed Kentucky origin.

Fruit full medium, truncated, regular, yellow green, scattered gray dots. Flesh white, tender, breaking, juicy, subacid. Good. Table, kitchen. December to March. (Warder.)

WORMSLEY PIPPIN.

Knight's Codling.

An English fruit, middle-sized, roundish, tapering a little towards the eye, pale green or straw color, darker next the sun. Flesh white crisp, firm, with a sharp subacid juice. Good. September.

WRIGHT.

Origin, Hubbardton, Vt. Tree vigorous and productive. Young wood olive brown.

Fruit medium, roundish oblate, lemon yellow. Stalk short, inserted in a deep cavity. Calyx closed. Basin rather large and corrugated.

Flesh white, very tender, juicy, vinous, almost sweet, aromatic. Good to very good. Middle of September to middle of October.

WRIGHT'S JANET.

Supposed to have originated near St. Louis, Mo.

Fruit medium to large, round, sometimes flat, regular, waxen yellow, mixed, striped, splashed carmine. Dots minute, prominent, scattering. Flesh deep yellow, breaking, fine-grained, juicy, subacid. Good to very good. January to June. (Warder.)

WYKEN PIPPIN.

Warwickshire Pippin.

Girkin Pippin.

Arley.

An old variety, originated near Coventry, England. Tree upright, hardy, and productive.

Fruit below medium, oblate conical, greenish yellow, with dull orange blush in sun, mottled and marbled and dotted with light russet patches and dots. Flesh yellowish, tender, juicy, sweet subacid. - December, February. (Rou.)

YACHT.

Origin, Montgomery Co., Pa. Tree of moderate growth, a regular bearer.

Fruit medium, oblate, yellowish, shaded, splashed, and striped with two shades of red, large light dots. Stalk medium. Calyx partially closed. Flesh white, tender, pleasant, mild subacid. Good. Core small. November, January.

YADKIN.

Southern.

Fruit large, round, regular, red striped. Flesh white, dry, subacid. Only good. August. (Warder.)

YAHOOOLA.

Origin, Lumpkin Co., Ga. Tree with slender, wiry limbs, a good bearer.

Fruit medium, oblate, yellow green, specked and streaked with russet. Stalk long, slender. Calyx and basin medium. Flesh juicy. Good. September to January. (White.)

YANKEE SPY.

Seedsville Sweet?

Dutchess County Sweet.

Ox Sweet.

Of unknown origin. Tree vigorous, upright spreading, productive.

Fruit medium, oblate, sometimes a little conic, deep yellow, sometimes a tinge of red in the sun, large brown dots. Stalk medium. Calyx closed. Basin furrowed. Flesh yellowish, moderately juicy, rich, sweet. Good. Core small. October, November. A valuable culinary sort.

YATES.

Originated in Fayette Co., Ga. Tree very upright grower, great bearer and good keeper.

Fruit small, oblate or oblate conic, whitish yellow, overspread, shaded, splashed, and striped with shades of red, many light dots. Stalk slender. Cavity large, slightly russeted. Calyx small, closed. Flesh white, sometimes stained next the skin, tender, juicy, pleasant subacid. Good. March to May.

YELLOW BELLFLOWER.

Bellefleur Yellow.

Bishop's Pippin of Nova Scotia.

Reinette Musque.

Belle Fleur.

Lady Washington.

Warren Pippin.

The Yellow Belle Fleur is a large, handsome, and excellent winter Apple, everywhere highly esteemed in the United States. It is most abundantly seen in the markets of Philadelphia, as it thrives well in the sandy soils of New Jersey. Coxé first described this fruit; the original tree of which grew in Burlington, N. J. Tree a moderately vigorous grower, forming a spreading, roundish, rather drooping head. Young wood yellowish brown. A regular and excellent bearer.

Yellow Bellflower.

Fruit very large, oblong, a little irregular, tapering to the eye. Skin smooth, pale lemon yellow, often with a blush next the sun. Stalk long

and slender, in a deep cavity. Calyx closed and set in a rather narrow plaited basin. Seeds in a large hollow capsule or core. Flesh tender, juicy, crisp, with a sprightly subacid flavor; before fully ripe it is considerably acid. Very good. December, February.

YELLOW FOSTER.

Origin unknown. Received from Ohio. Tree very vigorous, spreading.

Fruit below medium, oblate, yellow, thinly sprinkled with brown and green dots. Stalk short. Calyx closed. Flesh yellowish, rather coarse, moderately juicy, mild subacid. Good. October, November.

YELLOW INGESTRIE.

Fruit small, roundish oblate, clear bright gold color, without red. Flesh tender and delicate, with a plentiful juice when freshly gathered from the tree. Good. October.

YELLOW JUNE.

White June.

Of unknown Southern origin. Tree vigorous, upright grower, and abundant bearer. Young wood light reddish brown, slightly downy, very small buds.

Fruit below medium, roundish oblate, pale yellow, thickly sprinkled with green and brown dots. Stalk long, slender. Cavity slightly russeted. Flesh white, tender, juicy, brisk, sprightly subacid. Good. Core small. June, July, South. August at North.

YELLOW MEADOW.

A Southern fruit.

Fruit large, oblate, greenish yellow. Stalk rather slender, in a deep, irregular cavity. Calyx large and open, in a shallow basin. Flesh yellow, compact, vinous. Good. November.

YELLOW NEWTOWN PIPPIN.

Albemarle Pippin.

The Yellow Newtown Pippin is handsomer in appearance, and has a higher perfume than the Green or Newtown Pippin, and its flesh is rather firmer, and equally high flavored; while the Green is more juicy, crisp, and tender. The Yellow Newtown Pippin is rather flatter, measuring only about two inches deep, and it is always quite oblique—projecting more on one side of the stalk than the other. When fully ripe it is yellow, sometimes with a rather lively red cheek, and a smooth skin, few or none of the spots on the Green variety, but with the same russet marks at the stalk. It is also more highly fragrant before and after it is cut than the Green. The flesh is firm, crisp, juicy, and with a very rich and high flavor. Both the Newtown Pippins grow alike, and they are both excellent bearers. This variety is rather hardier and succeeds best. February to May.

YELLOW SWEET.

A native Apple of unknown origin.

Fruit small, roundish, light yellow, with a few gray dots. Flesh white, rather tender, pleasant, sweet. Good. October, November.

Yellow Newtown Pippin.

YOPP'S FAVORITE.

From Georgia. Tree moderately vigorous, upright spreading.

Fruit large, roundish, slightly conic, greenish yellow, with a blush in the sun, sprinkled sparingly with russet dots, and a little russet about the stem. Calyx open, in a deep basin. Stalk short. Cavity deep. Flesh white, fine-grained, tender, juicy, subacid. Good. Core small. November.

YORK.

From Massachusetts. Valuable for culinary purposes.

Fruit medium, roundish conic, pale yellow, with a slight shade of red in the sun. Stalk short. Calyx closed. Flesh whitish, tender, juicy, sprightly subacid. Good to very good. Core small. October, November.

YORK IMPERIAL.

Johnson's Fine Winter.

Origin thought to be York Co., Pa. Tree moderately vigorous, productive. Young wood rich brown, downy.

Fruit medium, oblate oblique, whitish, shaded with crimson in the sun, thinly sprinkled with light and gray dots. Stalk short. Calyx closed or partially open. Basin large, deep. Flesh yellowish, firm, crisp, juicy, pleasant, mild subacid. Good to very good. Core compact, small. November, February.

YORKSHIRE GREENING.

Coate's.

Yorkshire Goose Sauce.

An English culinary Apple. Tree very vigorous and productive.

Fruit large, oblate, slightly ribbed, greenish, with shades and stripes of dull red, specks and traces of russet. Flesh greenish white, firm, crisp, brisk subacid. Good. October, November.

Yost.

A native of Berks Co., Pa. Tree large and spreading.

Fruit oblate, very much flattened, yellow, striped and shaded with crimson, thinly dotted with brown. Stalk short. Cavity slightly russeted. Calyx partially closed. Flesh yellowish, rather coarse, tender, juicy, pleasant subacid. Good. December, January.

ZANE.

Zane Greening.

Origin, Virginia.

Fruit large, roundish, dull greenish yellow. Flesh greenish white, tender, soft. Poor. February to June. (Elliott.)

ZIEBER.

Origin, Reading, Pa.

Fruit below medium, roundish, yellow, with a striped red cheek. Flesh dry, pleasant, hardly good.

ZOAR GREENING.

Origin, Ohio.

Fruit large, roundish conic, greenish, faintly shaded with dull red in the sun. Flesh white, tender, moderately juicy, pleasant subacid. Good. Core small. November, December.

SIBERIAN CRABS AND IMPROVED SIBERIAN APPLES.

THE varieties of Siberian Crab Apples (*Pyrus baccata*) have, heretofore, been mainly valued for their handsome flowers and the beautiful appearance of the tree when loaded with fruit.

Within the past year or two, however, considerable attention has been given to their cultivation by fruit-growers in our Western and Northwestern States, because of the superior hardihood of the trees. Large numbers of seedlings have been grown, some bearing full evidence of the paternity of the *Pyrus baccata*, others possessing more or less of the *Pyrus malus*, apparent more in the flesh and improved quality of the fruit, than in the habit of the trees. They are all valuable for cider, preserves, and cooking, and some of the improved varieties, more

truly, perhaps, Siberian Apples than Crabs, are quite pleasant and rich for the dessert. The great hardihood of the trees, and their productiveness, make them highly valuable for sections where the better varieties of the *Pyrus malus* do not succeed. In description of these varieties the terms "medium, large, or small," must be considered as applied in comparison with the Siberian Crab.

The common Siberian Crab is a beautiful little fruit, which is produced in rich clusters on the branches, and, at a distance, resembles large and handsome cherries. It is highly esteemed for preserving, and almost every large garden contains a tree of this variety. It forms a vigorous, neat tree, of rather small size, and its blossoms, which are white, are produced in beautiful profusion in spring, and a large crop of fruit regularly follows.

AKIN'S WINTER.

From Minnesota.

Fruit medium or small, roundish oblate, light, pale yellow, with a rich clear carmine red cheek in sun. Stalk long and slender, set in an open acute cavity, often russeted. Calyx closed. Basin deep, broad, and somewhat furrowed. Flesh yellowish white, juicy, crisp, somewhat too acid for a pleasant table apple, but not too much so for cooking. December.

ASTRACAN.

Evergreen Apple Crab.

Fruit medium, oblate, compressed, green, specked with white dots. Flesh greenish white, juicy. Inferior.

ASTRACHAN.

This is one of the very largest sized of the old varieties.

Fruit medium to large, roundish conical, bright rich clear red, with a fine light bloom. Calyx with long segments, prominent. Flesh whitish, crisp, juicy, sharp, brisk acid, tender. September.

CHASE'S WINTER SWEET.

Fruit medium size, roundish oblate, rich warm yellow ground, mostly overspread with dark rich red, minute dots. Stalk long, slender. Cavity broad, open, deep. Calyx half closed, with short, almost erect segments. Basin shallow, corrugated. Flesh yellowish, very firm, moderately juicy, mild, sweet. December.

CHERRY.

Fruit small, roundish ovate, pointed, light yellow, spotted and shaded with red. Flesh crisp, juicy, pleasant, hangs long, almost even to drying on the tree. September, October.

CHICAGO.

Origin near Marengo, Ill.

Fruit similar to Coral in general appearance—a little longer or more

completely oblong. Flesh not as deep colored as Coral, but quite crisp, sprightly subacid, and by many would be preferred to Coral, although it is not as rich. December to March.

CORAL.

This variety has the same origin as Chicago.

Fruit small, conical flattened at ends; rich warm yellow ground, with a vermilion cheek. Stalk long, slender, set in a narrow, acute cavity, slightly russeted. Calyx closed, surrounded with corrugated ridges, but with little or no basin. Flesh yellowish, crisp, sprightly, juicy, rich, mild subacid, almost tender. An early winter sort, keeping until about February.

CURRENT CRAB.

The fruits of this kind are of the size of currants, and are borne like them in clusters; they are round, a little compressed towards the ends. Color red, slightly striped with deep red. It is ornamental in its flowers as well as its fruits.

DOUBLE FLOWERING CHINESE CRAB.

Double Flowering Apple.

This very beautiful crab-tree from China, which produces a small green fruit, of no value, is highly admired for its showy blossoms. These are large, tipped with deep red in the bud, but when open are of a pale rose color, semi-double, large, and produced in fine clusters. It is an exceedingly ornamental, small tree, growing from ten to twenty feet in height.

DOUBLE WHITE SIBERIAN CRAB.

Fruit roundish, irregular, swollen on one side. Color red carmine on the sunny side, green on the shaded side, covered with a white bloom. Flowers large double white, very ornamental.

FOXLEY CRAB.

Raised by Thomas Andrew Knight, England, from seed of the Cherry Crab. Tree hardy. Fruit produced in clusters.

Fruit medium, roundish oblate, golden yellow. Stalk long. Flesh yellow, crisp, juicy, subacid.

FRAGRANT.

The flowers of this variety are very fragrant.

Fruit small, oblate, green, with whitish dots. Flesh inferior.

GENERAL GRANT.

Size large for a crab, round, oblate, warm yellow ground, with broken stripes of dark, becoming, on the sun-exposed side, entirely red, and very dark, almost black red, with a few minute light dots. Stalk slender. Cavity open, moderately deep. Calyx closed. Basin broad,

not deep, but conspicuously furrowed. Flesh white, moderately fine-grained, not juicy, very mild subacid. Core large for size of fruit. Late Autumn.

GOLDEN.

Fruit large, roundish oblate. Skin golden yellow. Stalk long, slender. Cavity medium. Calyx closed. Segments long, slender, recurved. Basin medium. Flesh white, moderately juicy, brisk acid. September.

HAMPTON'S SIBERIAN CRAB.

A beautiful variety, originated with Wm. C. Hampton, Hardin Co., O.

Fruit large for a Siberian Crab, ovate conical, deep rich crimson, blotched and indistinctly striped with clear orange and yellowish red. Blossoms large. This is one of the most beautiful of all the crabs, especially when in bloom.

HUTCHISON'S WINTER SWEET.

Fruit medium size, roundish oblate, light yellow ground, with a blush red cheek in the sun, and many minute dots. Stalk long, slender, in a deep open cavity. Calyx closed, with long pointed segments. Basin broad, deep, corrugated. Flesh yellowish white, dry, sweet. November.

HYSLOP.

This variety has been long and pretty extensively cultivated. The trees are hardy, the growth strong, rather spreading. Wood light colored, a little downy.

Fruit large, produced in clusters, roundish ovate, dark rich red, covered with a thick blue bloom. Stalk long, slender. Calyx closed. Flesh yellowish, subacid, good for culinary uses and for cider.

LADY CRAB.

This is a foreign variety, of great beauty, and the tree a vigorous, upright grower, much resembling the Lady Apple. Very productive. Young wood grayish reddish dark brown, with conspicuous white or gray dots.

Fruit small, roundish oblate, a little oblique, rich dark red, with traces of russet, and many apparently rough russet dots. Stalk medium length for a crab, quite slender. Cavity open, broad, deep russeted. Calyx almost closed, with connected half-recurved segments. Basin broad, shallow, distinctly corrugated next the calyx. Flesh yellowish, moderately juicy, mild subacid. November, December.

LARGE RED SIBERIAN CRAB.

This variety is about twice the size of the common Siberian Crab, roundish ovate, with a large and prominent calyx, and a pale red and yellow skin. It forms a larger tree, with rather coarser foliage than the common variety, and is esteemed for the same purposes. September and October.

LARGE YELLOW SIBERIAN CRAB.

Fruit similar in size to the foregoing, roundish oval, flattened at base and crown, light clear yellow often inclining to amber, with a warm check.

MAIDEN'S BLUSH.

Fruit small, flat, somewhat ribbed, pale clear yellow, with clear bright carmine red in sun. Calyx large, half closed. Basin broad, slightly furrowed. Flesh yellowish white, rather dry, almost sweet. Late Autumn.

MARENGO.

The discoverer of this variety, as well as its identity with the Siberian Crabs, *Pyrus baccata*, as a tree, is attributed to James F. Lester, Marengo, Ill. It is said to be a seedling found in the rows of an old seedling nursery of apple-stocks. The original tree is thought to be about eighteen years old. Young shoots vigorous, reddish brown, with the gray specks, bloom and scaly cuticle peculiar to the Siberian.

The fruit is large for its class; in form roundish, flattened at blossom end, bright warm red on yellow ground, smooth, with a few scattered gray or light russet dots. Flesh yellowish white, crisp, juicy, a little harsh until fully ripe, when it is a mild and pleasant subacid. Stalk long, slender, set in a narrow cavity. Calyx closed. Basin broad, open, corrugated. Early Winter to late in Spring.

MEADER'S WINTER.

Fruit medium size, roundish oblate; warm, light yellow ground, shaded with clear rich red, many large gray dots. Basin deep, broad, slightly ribbed or furrowed. Flesh yellowish, moderately juicy, crisp, tender, rich, sharp subacid. Season, Winter. A valuable cooking sort, and rich for cider.

MONTREAL BEAUTY.

This is one of the most beautiful of all Crabs, in appearance.

Fruit large, roundish oblate, bright yellow, mostly covered and shaded with rich red. Flesh yellowish, rich, firm, acid. September, October.

OBLONG-FRUITED SIBERIAN CRAB.

Fruit elongated conic, light yellow, almost white, washed, marbled, and striped with crimson and carmine, and covered with a thin bloom.

ORANGE.

Fruit medium, round, slightly flattened at ends; light, warm yellow, or light orange-colored. Stalk slender. Cavity open, deep. Calyx closed. Basin furrowed. Flesh yellowish white, mild subacid, pleasant, a little dry.

POWERS' LARGE.

Originated with Hiram Powers, Catskill, N. Y. Tree vigorous, hardy, and productive.

Fruit large, roundish oblate, waxen white, shaded and striped with carmine, crimson, and yellow, and covered with a lilac bloom. Flesh sharp, yet mild acid. Fine for cooking. Early October.

PURPLE SIBERIAN CRAB.

Fruit oblate. Color beautiful reddish purple on the sunny side, covered with a bloom, the shaded side less brilliant, and the whole surface speckled with some gray dots. Flesh, like all the crabs, coarse and harsh.

RED SIBERIAN CRAB.

Fruit about three-fourths of an inch in diameter, very regularly formed, and rather flat. Skin smooth, of a lively scarlet over a clear yellow ground, and, when the bloom is rubbed off, is highly polished. Stalk nearly two inches long, and very slender. Calyx small, slightly sunk. Fit for preserving in September and October.

ROUX TRANSPARENT CRAB.

Fruit small, oblate, bright carmine red on light yellow. Stalk slender, very long, set in a deep wide cavity. Flesh yellowish white, acid. September.

SHOWY CRAB.

Fruit small, roundish oval, yellow, dotted with red in sun. Stalk very long. Flesh dry. Not valuable.

SOULARD.

A sort of little value except in appearance. It is said to have originated near St. Louis, Mo.

Fruit medium, oblate, clear smooth greenish yellow, with many minute, suffused, dark green dots. Stalk short for a crab, slender, narrow cavity. Calyx small, closed. Basin medium, slightly corrugated. Flesh white, bitter, astringent, unfit for anything except cider.

STRIPED SIBERIAN CRAB.

Fruit medium size, roundish. Color rose yellowish, red striped all over, carmine on the sunny side, more yellow towards the stalk, covered with a fine white bloom.

TRANSCENDENT.

This is one of the best of early autumn varieties.

Fruit medium to large for its class, roundish oblong, flattened at its ends, slightly but regularly ribbed, golden yellow, with a rich crimson,

red cheek in the sun, covered with a delicate white bloom; when fully ripe the red nearly covers the whole surface. Stalk long and slender, set in an open, deep cavity. Calyx closed, with long reflexed segments. Flesh creamy yellow, crisp, subacid, a little astringent until fully mellow, when it is pleasant and agreeable. Early Autumn.

WARFEL CRAB.

Originated with John Warfel, Lancaster, Pa. Tree vigorous.

Fruit medium size, oblate, yellow, beautifully striped with red and crimson.

WHITE WINTER.

Fruit medium size, roundish oblate, light pale yellow, with a faint blush and a few scattering, irregular-sized, dark carmine dots in sun. Stem short. Cavity very broad, open, yet deep, slightly russeted. Calyx closed, with short segments. Basin shallow, with slight broad furrows. Flesh yellowish white, crisp, moderately juicy, sharp acid. December and January.

YELLOW SIBERIAN CRAB.

Amber Crab.

This scarcely differs from the common Siberian Crab except in its fruit, which is rather larger, and of a fine amber or golden yellow. Both this and the red are beautiful ornaments to the fruit garden in summer and autumn, and are equally esteemed for preserves and jellies. September.

SELECT LIST OF VARIETIES FOR TABLE USE, MARKETING, COOKING, AND KEEPING.

IN this list it is not assumed that all against which the word market is written are equally profitable, but that their size and appearance will generally command for them a ready sale. Again, some varieties are classed as market sorts mainly because of their long keeping, and therefore coming into use when there are but few sorts with which to compete. Soil and climate make so great a change in the growth, quality, and period of maturity of varieties, that it is impossible to make a list adapted to general cultivation; and so, kinds which, because of their good quality (like the American Golden Russet), which we mark as only for table use, in some localities are found also profitable for market. The planter, in selecting from this list, should be guided somewhat in adopting kinds by a record of the place of origin of the variety, which may be found on the page where the Apple is described in the book.

We have appended the words "South" and "North" to some varieties, to designate them as of most value in our Southern or Northern States.

American Golden Pippin. Table and market.
American Golden Russet. Table.
American Summer Pearmain. Table.
Baldwin. Table and market.
Baltimore. Table and market.
Belmont. Table.
Ben Davis. Market, South and Southwest.
Benoni. Table and market.
Bentley Sweet. Market and keeping.
Bethlehemite. Table and market.
Bonum. Table and market.
Broadwell. Table and market.
Buckingham. Table and market.
Campfield. Cider, market, and keeper.
Canada Reinette. Table and market.
Carolina Red June. Table and market.
Cogswell. Table and market.
Domine. Table and market.
Dutchess of Oldenburgh. Cooking and market.
Dyer. Table.
Early Harvest. Table and market.
Early Joe. Table.
Early Strawberry. Table and market.
English Russet. Market and keeper.
Esopus Spitzenburgh. Table and market.
Evening Party. Table and market.
Fallowater. Market and cooking.
Fall Pippin. Table and market.
Fall Wine. Table.
Fameuse. Table and market.
Garden Royal. Table.
Gilpin. Market and keeper.
Golden Sweet. Market and cooking.
Gravenstein. Market and cooking.
Green Cheese. Table and market, South.
Grimes' Golden Pippin. Table and market.
Hall. Table and market, South.
Haskell Sweet. Table.
Higby Sweet. Table.
High Top Sweet. Market, West.
Horse. Market and cooking, South.
Hubbardston Nonsuch. Table and market.
Hunt's Russet. Table.
Jersey Sweet. Table and market.
Jonathan. Table and market.
Keswick Codlin. Market and cooking.
King of Tompkins Co. Table and market.
Klaproth. Table and market.
Lady Apple. Table and market.
Lady's Sweet. Table and market.
Large Yellow Bough. Table and market.
Late Strawberry. Table and market.
Lowell. Market and cooking.

- McLellan. Table.
Maiden's Blush. Market and cooking.
Mangum. Table, South.
Maverack Sweet. Market and cooking, South.
Melon. Table.
Monmouth Pippin. Table and market.
Mother. Table.
Newtown Pippin. Table and market.
Newtown Spitzenburgh. Table and market.
Nickajack. Market and keeper, South.
Northern Spy. Table and market.
Ohio Nonpareil. Table and market.
Peach Pond Sweet. Table, market, and cooking.
Peck's Pleasant. Table and market.
Pomme Grise. Table and market, North.
Porter. Table and market.
Prrimate. Table.
Pryor's Red. Table and market, South and West.
Rambo. Table and market.
Rawles Janet. Table, market, and keeper, Southwest.
Red Astrachan. Market and cooking.
Red Canada. Table and market.
Rhode Island Greening. Market and cooking.
Ribston Pippin. Table and market, North.
Roxbury Russet. Market and keeper, North and West.
Shockley. Market and keeper, South.
Smith's Cider. Market.
Smokehouse. Market and cooking.
Striped Winter Pearmain. Table and market, South and Southwest.
Summer Pippin. Market and cooking.
Summer Queen. Market.
Summer Rose. Table.
Swaar. Table.
Tetofsky. Market and cooking.
Tewksbury Winter Blush. Table, market, and keeping.
Tolman's Sweet. Market and cooking.
Wagener. Table.
Washington Strawberry. Table and market.
Westfield Seek-no-Further. Table and market.
White Pippin. Table and market.
Willis Sweet. Cooking, table, and market.
Willow Twig. Market and keeper, West and South.
Winesap. Table, market, and keeper.
Winter Sweet Paradise. Table.
Yellow Bellflower. Table and market.
Yellow Newtown Pippin. Table and market.

CHAPTER X.

THE ALMOND.

Amygdalus communis, Dec. *Rosaceæ*, of botanists.
Amandier, of the French ; *Mandelbaum*, German ; *Mandorlo*, Italian ;
Almendo, Spanish.

THE Almond-tree, which is a native of the north of Africa and the mountains of Asia, has long been cultivated, and is mentioned in Scripture as one of the charms of the fertile land of Canaan. It so strongly resembles the peach-tree that it is difficult to distinguish it by the leaves and wood only ; indeed, several botanists are of opinion, from experiments made in raising the almond from seed, that this tree and the peach are originally the same species, and that the rich and luscious peach is the effect of accidental variation, produced by culture on the almond. The chief distinction between the two in our gardens lies in the fruit, which, in the almond, consists of little more than a stone covered with a thick, dry, woolly skin, while the peach has in addition a rich and luscious flesh. The blossoms of the almond resemble those of the peach, but are larger ; they are produced in great profusion, early in the season, before the leaves, and are very ornamental.

Uses. The kernel of the sweet almond is highly esteemed as an article of food, and is largely used as an ingredient in confectionery, cookery, and perfumery. It is raised in great quantities in the south of Europe, especially in Portugal, and is an important article of commerce. The bitter almond is used in cookery and confectionery, and in medicine ; it furnishes the prussic acid of the shops, one of the most powerful of poisons. From both species an oil is also obtained.

In France the almond is preferred as a stock on which to bud and graft the peach, which in a very dry climate or chalky soil, it is found, renders the latter more healthy and fruitful than its own bottom. The sweet hard-shelled variety (*Douce à coque dure*) is preferred for stocks by French nurserymen.

Cultivation. The almond thrives best in a warm dry soil, and its general cultivation in this country is precisely like that of the peach. The sweet almond is the only variety considered of value here, and it is usually propagated by budding it on Plum stock, or on the bitter almond seedlings. It is rather more hardy at the North when budded on the former, and as the buds of the sweet almond are rather slender and small, the plum stocks to be budded should be thrifty seedlings, not more than a fourth of an inch in diameter at the place where the bud is inserted.

The Common Almond, the Hard-Shell Sweet Almond, and the Bitter Almond, are hardy in the latitude of New York, and will bear tolerable crops without care. The Soft-shell Sweet Almond, or Ladies' Almond, will not thrive well in the open garden, as a standard, north of Philadelphia ; but they succeed well trained to a wall or on espalier rails in a warm situation, the branches being slightly protected in winter.

There is no apparent reason why the culture of the almond should not be pursued to a profitable extent in the warm and favorable climate

of some of the Southern States. Especially in the valley of the Ohio and Tennessee it would be likely to succeed admirably.

BITTER ALMOND.

The Bitter Almond has large pale blossoms, differing little from the common almond except in the kernel, which is bitter. There are two varieties, one with a hard, and the other with a brittle shell. The fruit, which is produced abundantly, ripens in September. The leaves are longer and of a darker green than those of most of the sweet-fruited varieties.

COMMON ALMOND.

A. c. dulcis.	Amande commune.
Amandier à Petit Fruit.	Common Sweet.
----- commun.	

This is the common Sweet Almond of France and the South of Europe, and is one of the most hardy and productive sorts here. Nuts hard, smooth, about an inch and a quarter long, compressed and pointed, of an agreeable flavor, but inferior to the following. Flowers expand before the leaves. Ripens last of September.

PEACH ALMOND.

Pêcher.	Peach Almond.
Amandier-Pêcher.	

A rather indifferent variety, nearly sweet, but often slightly bitter. It is a true cross between the peach and the almond, and in its leaves, flowers, and stone strongly resembles the peach; the fruit is also pulpy and of tolerable flavor, like an indifferent peach. The nut scarcely ever ripens well as far north as this.

PISTACHIA SWEET ALMOND.

Amande Pistache.	Amandier Pistache.
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A variety of Almond with a very small pointed fruit, about the size and shape of that of a Pistachia, enclosing a kernel of a delicate sweet flavor. The shell not quite so soft as the Soft-Shell Almond. This is scarcely known yet in this country, but is worth further trial at the South.

SOFT-SHELL SWEET ALMOND.

Doux à coque tendre.	Amandier des Dames,
Sultan à coque tendre.	Ou Amande Princesse.
Amandier à coque tendre.	Ladies' Thin Shell.
----- des Dames.	

The Soft-Shell or Ladies' Almond is the finest of all the Almonds. It is the very variety common in the shops of the confectioners, with a shell so thin as to be easily crushed between the fingers, and the kernel of which is so highly esteemed at the dessert. It ripens early in the season, and is also highly esteemed in a young or fresh state, being served on the table for this purpose about the middle of July in Paris. The

blossoms of this variety expand at the same time with the leaves, and are more deeply tinged with red than the foregoing. Several varieties are made of this in France, but they are (as quoted above) all essentially the same.

Fruit two inches long, oval, compressed. The nut is more than an inch long, oval, pointed, one-sided, with a light-colored, porous, very tender shell. The kernel sweet and rich.

On the plum stock, in a favorable aspect, this Almond succeeds, with a little care, in the Middle States.

SULTANA SWEET ALMOND.

Amande Sultane.
Sultan.

Amandier Sultane.

A tender-shelled Almond of excellent quality, with smaller fruit and narrower kernel than the Soft-Shell Almond, but of equally excellent flavor, and which is preferred by many. It is thought by Poiteau to be scarcely different from the Soft-Shell or Ladies' Almond.

THE LONG HARD-SHELL ALMOND.

Amandier à gros fruit.

Amandier à gros fruit dur.

A variety with handsome, large, pale rose-colored flowers, opening before the leaves, and large and long fruit, a third longer than other varieties. The stone is about as large as the soft-shell variety, but the kernel is larger and plumper. This is a good hardy sort, and it is very ornamental when in blossom. Ripens about the last of September.

ORNAMENTAL VARIETIES. The *Dwarf Double Flowering Almond* (*Amygdalus pumila*, Lin. *Prunus sinensis* of some) is a beautiful, well-known low shrub, extremely ornamental in spring, being covered with a profusion of small pink blossoms, very double. There is also a Double White, similar in habit of growth.

The Large Double Flowering Almond (*A. à grand fleur*, N. Duh.) (*A. communis pleno*) is a beautiful French variety, with large nearly white flowers, two inches in diameter. It also bears a good small hard-shell Almond.

CHAPTER XI.

THE APRICOT.

Armeniaca Vulgaris, Dec. *Rosaceæ*, of botanists.
Abricotier, of the French; *Aprikosenbaum*, German; *Albercoco*, Italian;
Albaricoque, Spanish.

The Apricot is one of the most beautiful of stone fruit-trees, easily known by its glossy *heart-shaped* foliage, large white blossoms, and smooth-skinned golden or ruddy fruit. In the fruit-garden it is a

highly attractive object in early spring, as its charming flowers are the first to expand. It forms a fine spreading tree of about twenty feet in height, and is hardy enough to bear as an open standard south of the 42d degree of latitude in this country.

The native countries of this tree are Armenia, Arabia, and the higher regions of Central Asia. It is largely cultivated in China and Japan; and, indeed, according to the accounts of Grosier, the mountains west of Peking are covered with a natural growth of apricots. The names by which it is known in various European countries all seem to be corruptions of the original Arabic term *Berkoche*.

USES. A very handsome and delicious dessert fruit, only inferior to the peach, ripening about midsummer, after cherries and before plums, at a season when it is peculiarly acceptable. For preserving in sugar or brandy, for jellies or pastries, it is highly esteemed, and, where it is abundant, an admirable liquor is made from the fruit; and it is also dried for winter use. In some parts of Germany, the free-bearing sorts—the Turkey, Orange, and Breda—are largely cultivated for this purpose.

CULTIVATION. This tree is almost always budded on the plum stock (on which in July it takes readily), as it is found more hardy and durable than upon its own root. Many nurserymen bud the apricot on the peach, but the trees so produced are of a very inferior quality—short lived, more liable to diseases, and the fruit of a second-rate flavor. Budded on the plum they are well adapted to strong soils, in which they always hold their fruit better than in light sandy soils.

Apricots generally grow very thriftily, and soon make fine heads, and produce an abundance of blossoms and young fruit; but the crop of the latter frequently falls off when half grown, from being stung by the plum-weevil or curculio, to which the smooth skin of this fruit seems highly attractive. To remedy this, the same course must be pursued as is directed for the plum. Seedling apricots are usually more hardy and productive here than the finer grafted sorts.

This is a favorite tree for training on walls or espaliers, and, in town gardens especially, we often see it trained against the sides of brick houses, and yielding most abundantly. As it bears its fruit in the same way as the peach, and requires the same management, we must refer our readers to the latter head for direction as to pruning and training. As the apricot, however, expands its blossoms very early, it should not be placed on an east wall, or in a situation where it is too much exposed to the full morning sun.

DISEASES. When budded on the Plum, this tree is but little liable to diseases, and may be considered a hardy fruit-tree. In order to render it fruitful, and keep it for a long time in a productive state, we cannot too strongly urge the advantages of the *shortening-in* system of pruning recommended for the peach.

ALBERGIER.

Alberge.

This is a variety very common in the interior of France, where it is constantly reproduced with but little variation from the seed—*Alberge* being the name of the apricot in some of the provinces. It is a free grower, and bears well, but is neither so large nor fine as many other

varieties. The leaves are small, and often have little wing-like ears at the base. The Albergiers are much used for stocks in France.

Fruit small, roundish, deep yellow. Flesh reddish, firm, with a brisk, vinous flavor. Stone compressed. Kernel bitter. Esteemed for preserving. Ripe middle of August.

ANGOUMOIS.

Anjou.

Rouge.

Violet.

Fruit small, oval, flattened at the apex. Skin clear deep yellow on the shaded side, but dark rusty brown on the side next the sun. Flesh deep orange, juicy, and melting, separating from the stone, rich, sugary, and briskly flavored, but when highly ripened charged with a fine aroma. Back of the stone impervious. Kernel sweet. End of July. (Hogg.)

BEAUGE.

A foreign variety very much resembling the Moorpark, but ripening a little later.

BLACK.

Amygdalus dasycarpa.
Violet.

Purple Apricot.
Du Pape.

Noir.

This remarkable little Apricot so strongly resembles a dark round plum, that at a little distance it might easily be mistaken for one. (It was indeed called *Prunus dasycarpa* by the old botanists.) It is pretty good, and very hardy, and its unique appearance renders it sought after by amateurs. The tree has a rough, somewhat crooked trunk, and small, *oval* foliage.

Fruit about an inch and a half in diameter, round. Skin pale red in the shade, but dull reddish purple in the sun, covered with a slight down. Flesh pale red next the skin, yellow near the stone, adhering somewhat to the stone, juicy, with a pleasant, slight astringent flavor. Kernel sweet. August.

BREDA.

De Hollande.
Hasselnussmandel.

Amande Aveline.
Ananas.

Persique.

This is a very excellent small Apricot, said to be originally from Africa, which bears well with common culture, and deserves a place in all gardens, as it is not only a high-flavored dessert sort, but it makes one of the richest preserves. The blossom buds are tinged with deep red before they expand.

Fruit rather small, about an inch and a half in diameter, roundish, sometimes rather four-sided. Suture well marked. Skin orange, becoming dark orange in the sun. Flesh deep orange, rich, high-flavored, and rather juicy—separating freely from the stone. The kernel, which is sweet, is eaten in France, whence the name *Amande Aveline*. First of August.

BROWN'S EARLY.

Origin, Chelsea, Mass.

Fruit large, short oval, yellow, bright red cheek. Flesh yellow, melting, rich, juicy, luscious flavor. Season, middle to last of July. (Cole.)

BRUSSELS.

The Brussels Apricot is not a fine fruit in this country, but it is a good bearer in light soils.

Fruit of medium size, rather oval, and flattened on its side. Skin pale yellow, dotted with white in the shade, but often marked with a little russety brown in the sun. Suture deep next the stalk. Flesh yellow, rather firm, with a lively but not rich flavor. Kernel bitter. Middle of August. The Brussels of some collections is the *Breda*.

BURLINGTON.

Raised by Mrs. Woolman, Burlington, N. J. Tree vigorous.

Fruit medium to large, oblong, somewhat compressed at the sides, with a distinct suture. Skin golden yellow, with numerous red spots and a ruddy tint on the side exposed to the sun. Flesh yellowish, sweet, and fine. Middle of July to the first of August. This variety is probably out of existence.

CANINO GROSSO.

A variety from the Papal States of Italy, introduced by Thomas Rivers, Sawbridgeworth, England. Tree hardy and a vigorous grower.

Fruit quite large. Skin orange, becoming red in the sun. Flesh rich reddish yellow, melting, high-flavored. Middle July.

CLAUDE BIDOT.

From France. Tree vigorous and productive.

Fruit medium, roundish ovate, deep suture, half round. Skin deep orange yellow, spotted and shaded with deep red. Flesh deep yellow, slightly colored with red on the side of the sun. Flesh fine, melting, sugary, aromatic. Stone medium, roundish ovate. Kernel very sweet. (An. Pom.)

COMICE DE TOULON.

Of French origin.

Fruit large, roundish ovate. Skin very downy, yellow, becoming orange in the sun, with deep carmine dots. Flesh orange yellow, fine, juicy, aromatic. Kernel sweet. Early July. (An. Pom.)

DES FARGES.

Originated near Lyons, France.

Fruit medium to large, roundish oval, golden yellow, covered with a short down. Flesh orange yellow, fine, juicy, musky perfumed. Stone large. Separates free from the flesh. Last of June. (Verg.)

EARLY GOLDEN.

Dubois' Early Golden.

Origin unknown. Introduced by Charles Dubois, Fishkill Landing, N. Y. Tree vigorous, with long, rather slender branches.

Fruit small, roundish oval, with the suture well marked, and extending half-way round. Skin smooth, pale orange. Flesh yellow, moderately juicy and sweet, with a very good flavor—separates from the stone. Middle of July.

EARLY MOORPARK.

A variety much resembling the Moorpark, but ripening some weeks earlier.

Fruit roundish, inclining to oval, deep suture on one side, extending from the base to the apex. Skin yellow, mottled and dotted with crimson on the exposed side. Flesh in all respects resembling that of the Moorpark. Stone oblong, with a covered channel along the back, which is pervious. Kernel bitter.

GOLDEN DROP.

This new Apricot is described by Rivers as having been raised from seed of the Musch-Musch, and is about the size of an Orleans Plum, bright orange and crimson. Flesh melting, with a delicious pine flavor. Ripe middle July.

HEMSKIRKE.

A large and beautiful English variety, of the finest quality. It strongly resembles the Moorpark, from which it is known by its stone not being perforated like that variety. It also ripens a little earlier.

Fruit large, roundish, but considerably compressed or flattened on its sides. Skin orange, with a red cheek. Flesh bright orange, tender, rather more juicy and sprightly than the Moorpark, with a rich and luscious plum-like flavor. Stone rather small, and kernel bitter. End of July.

JAQUES.

Origin unknown. Tree vigorous, hardy.

Fruit small, ovate. Skin with a fine short down or bloom, greenish yellow. Flesh orange yellow, melting, juicy, sugary, perfumed. Stone medium. July, August.

KAISHA.

A variety from Syria, of high reputation abroad, but we have found the tree tender and unhealthy.

Fruit medium, roundish, with a deep suture toward the stalk, pale yellow, mottled and tinged with red in the sun. Flesh tender, juicy, pale yellowish, parting freely from the stone, sugary, high-flavored. Stone small, roundish. Kernel sweet. July and first of August.

LAFAYETTE.

Origin, City of New York. Tree remarkably vigorous.

Fruit very large, oval. Skin light yellow, marbled with red next the sun. Flesh high-flavored and excellent. Ripens in August. (W. R. Prince.)

LARGE EARLY.

Gros Précoce.	De St. Jean.	Précoce d'Esperin.
Gros d'Alexandrie.	Gros Frühe.	——— d'Hongrie.
	De St. Jean Rouge.	

A fine, large, early variety from France, of vigorous growth, and one of the best of the early sorts.

Fruit of medium size, rather oblong, and compressed. Suture deep. Skin slightly downy, pale orange in the shade, fine bright orange with a few ruddy spots in the sun. Flesh separating readily from the stone, orange-colored, rich, and juicy. Kernel bitter. Middle of July.

LARGE RED.

Gros Rouge.	Gros Rouge Hâtif.
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This is a variety of the Peach Apricot, the tree hardier than the Moorpark.

Fruit large, deep orange red. Flesh rich, juicy, separating freely from the stone. Kernel bitter. Last July.

LIABAUD.

Origin, near Lyons, France.

Fruit large, ovate, depressed at ends. Skin dull yellow, shaded with orange in the sun. Flesh orange yellow, translucent, fine, melting, sugary. Stone ovate, obtuse at summit. July. (Verg.)

LUIZET.

Originated near Lyons, France. Tree vigorous.

Fruit large, ovate truncated at apex. Skin thick, orange yellow, washed and dotted with deep crimson. Flesh yellow, firm, sugary, perfumed. Stone large. Freestone. July. (Verg.)

MEXICO.

Originated near Lyons, France.

Fruit medium, ovate elongated. Skin thick, greenish yellow, washed with reddish brown. Flesh pale yellow, fine, tender, sugary, musky. Stone obtuse at apex end. July. (Verg.)

MONTGAMET.

Crotte.	Alberge de Montgamet.
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Fruit small, oval, somewhat compressed on the sides, and marked with a shallow suture. Skin pale yellow, with a slight tinge of red on the side next the sun. Flesh yellowish, firm, adhering to the stone, juicy, and agreeably acid. When well ripened, highly perfumed. Stone roundish. Kernel bitter. End of July. (Hogg.)

MOORPARK.

Anson's.	Oldaker's Moorpark.	Dunmore.
Walton Moorpark.	Dunmore's Breda.	Temple's.
Sudlow's Moorpark.	De Nancy.	Hunt's Moorpark.

This fine variety is the most popular and widely disseminated in this country, except the Breda. It has its name from Moorpark, the seat of Sir William Temple, in England, where it was cultivated more than one hundred and forty years ago. It is only a moderate bearer here, and especially requires the shortening-in mode of pruning, as recommended for the peach.

Fruit large, roundish, about two inches and a quarter in diameter each way, on a standard tree; rather large on one side of the suture than the other. Skin orange in the shade, but deep orange or brownish red in the sun, marked with numerous dark specks and dots. Flesh quite firm, bright orange, parting free from the stone, quite juicy, with a rich and luscious flavor. Stone peculiarly *perforated* along the back, where a pin may be pushed through nearly from one end to the other. Kernel bitter. Ripe early in August.

MUSCH-MUSCH.

D'Alexandrie.

This delicious little Apricot takes its name from the city of Musch, on the frontiers of Turkey in Asia; but it is also common about Alexandria, and in northern Egypt it is said to be raised in such abundance that the dried fruit is an article of commerce. The tree is rather delicate, and requires a sheltered position.

Fruit rather small, about an inch and a half in diameter, round. Skin deep yellow, with a little orange red on the sunny side. Flesh yellow, with a *translucent pulp*, tender, melting, and very sweet. Kernel sweet.

NEWHALL'S EARLY.

Origin, Lynn, Mass.

Fruit medium, short oval, bright orange, deep red cheek, tender, juicy, rich delicious flavor. Clingstone. Last July. Early August (Cole.)

ORANGE.

Early Orange.	Persian.	Royal George.
Royal Orange.	Royal Persian.	

An Apricot of only tolerable quality for the dessert, but it is much esteemed by many for preserving; and it makes delicious tarts, even before the fruit begins to acquire color.

Fruit of medium size, roundish, with a well-marked suture, deeply hollowed near the stalk. Skin firm, orange, sometimes tinged with a ruddy tint in the sun. Flesh dark orange, moderately juicy, but often rather dry and insipid (unless ripened in the house), not separating entirely from the flesh. Stone small, roundish. Kernel sweet. Middle of July.

OULLINS EARLY PEACH.

A variety of the Peach Apricot, differing only in time of ripening.

PEACH.

Anson's Imperial.
Abricot Pêche.
Pêche Grosse.

Royal Peach.
De Nancy.
Wurtemberg.

Pêche.
Du Luxembourg.
Pärsiche.

The Peach Apricot, originally from Piedmont, has long been considered the finest variety; and it is with us the largest and most excellent sort cultivated—being often as large as a Peach—of medium size, handsome, and of delicious flavor. It very strongly resembles the Moorpark, but the two are readily distinguished by the eye when standing near each other, and the fruit of the Peach is rather larger and finer, and a few days earlier.

Fruit of the largest size, about two and a half inches in diameter, roundish, rather flattened, and somewhat compressed on its sides, with a well-marked suture. Skin yellow in the shade, but deep orange, mottled with dark brown, on the sunny side. Flesh of a fine yellow saffron color, juicy, rich, and high-flavored. Stone with the same pervious passage as the Moorpark, and with a bitter kernel.

PINE APPLE.

Ananas.

Fruit large, roundish, flattened, and marked with a rather shallow suture. Skin thin and delicate, deep golden yellow in the shade, with a high-colored red cheek where exposed to sun, and speckled with large and small red specks. Flesh reddish yellow, somewhat firm, juicy, rich pine-apple flavor. Stone oval. Kernel bitter. Middle August. (Hogg.)

PORTUGAL.

Male.

Fruit small, resembling in shape and size the Red Masculine, round, divided on one side by a deep suture. Skin pale yellow on the shaded side, deep yellow tinged with red, and marked with brown and red russet spots next the sun. Flesh deep yellow, tender, melting, rich sugary, musky, adhering somewhat to the stone. Stone almost round. Kernel bitter. Middle of August. (Hogg.)

PROVENCE.

Abricot de Provence.

Fruit small, compressed on the sides, with a deep suture, higher on one side, yellow, with red in the sun. Flesh yellow, melting, rich, rather dry, pleasant. Kernel sweet. End of July.

RED MASCULINE.

Early Masculine.	Apricot Précoce.
Brown Masculine.	Apricot hâtif Musquée.
Abricotier.	Abricotier hâtif.
Frühe Muscateher.	

A small early sort, hardy, very productive, of tolerable flavor, but not rich, growth upright, slender.

Fruit small and nearly round, scarcely an inch and a half in diameter, with a well-marked suture on one side. Skin bright yellow, tinged with deep orange and spotted with dark red on the sunny side. Flesh yellow, juicy, with a slightly musky, pleasant flavor. Stone thick, obtuse at the ends. Flowers smaller than in most other sorts. Kernel bitter. Ripe about the 12th of July.

RINGOLD.

Originated in Athens, Ga.

Fruit large, roundish, a little oblong, suture slight. Skin light orange, darker in the sun, where it is beautifully dotted with carmine. Flesh deep yellow, juicy, and excellent. Ripens just after the orange, hardy and productive.

ROMAN.

Abricot Commun.	Germine.
Grosse Germine.	Transparent.

This is with us one of the largest growing and hardiest Apricot trees, and produces good crops every year in cold or unfavorable situations, where none of the other sorts except the Masculine succeed. It is therefore, though inferior in flavor, a valuable sort for northern situations. The blossoms will bear quite a severe frost without injury.

Fruit middle-sized, oblong, with the sides slightly compressed, with but little or no suture. Skin entirely pale yellow, or very rarely dotted with a few red spots on one side. Flesh dull yellow, soft, rather dry. When ripened by keeping a few days in the house, the flavor is tolerably good. Stone oblong, with a bitter kernel. Ripe the last of July and first of August.

There is a **BLOTCHED-LEAVED ROMAN** (*commun à feuilles panachés*, of the French), precisely like the foregoing in all respects, except the white or yellow stain in the leaf—but it is quite distinct from the blotched-leaved Turkey, cultivated here.

ROYAL.

A fine large French variety, raised a few years since at the Royal Luxembourg Gardens. It is nearly as large as the Moorpark, but with larger leaves borne on long footstalks, and without the pervious stone of that sort. It is quite as high flavored, and ripens a week or ten days earlier.

Fruit roundish, large oval, slightly compressed. Skin dull yellow, with an orange cheek, very faintly tinged with red, and a shallow suture. Flesh pale orange, firm and juicy, with a rich vinous flavor. Ripe the latter end of July.

ST. AMBROISE.

This is a large early Apricot, almost the size of and earlier than the Moorpark. It is compressed, of a deep yellow color, reddish next the sun. Flesh juicy, rich, and sugary. Middle August. (Hogg.)

SARDINIAN.

De Sardaigne.

Tree a great bearer, ripening its fruit as early as the Red Masculine.

Fruit small, with a deep suture on one side. Skin white, with a few crimson spots, and sometimes a flush of red. Flesh juicy, sprightly, sweet, pleasant. Stone small. Kernel bitter.

SHIPLEY'S.

Blenheim.

Shipley's Large.

A very good early variety, of small or medium size, of vigorous but rather slender growth.

Fruit medium, oval, orange, with a deep yellow, juicy, and tolerably rich flesh. Stone roundish, impervious, with a bitter kernel. Ripens here about the 25th of July.

SUKER PARA.

Green Gage.

From Syria.

Fruit medium, roundish, smooth skin, small stone, delicious, rather dry, very sweet flesh.

TEXAS.

Originated with Dr. M. A. Ward, Athens, Ga.

Fruit small, round. Color dark maroon, darker in the sun. Suture slight, a mere line. Flesh juicy and pleasant, except at the stone, where it is astringent. Adheres to the stone. (W. N. White, MS.)

TURKEY.

Large Turkey.

De Nancy of some.

The Turkey Apricot is a fine old variety, which is seldom seen in our gardens, the sort generally sold under this name being the Roman. It is quite a late sort, ripening after the Moorpark, from which it is easily known by its impervious stone and sweet kernel.

Fruit of middle size, nearly round, not compressed. Skin fine deep yellow in the shade, mottled with brownish orange in the sun. Flesh pale yellow, firm, quite juicy, with a flavor in which there is an excellent mingling of sweet and acid. Kernel nearly as sweet as that of an Almond, which, as well as the form and color, distinguishes this sort from the Roman. Ripe the middle of August.

The BLOTCHED-LEAVED TURKEY, or Gold Blotched (*Abricot maculé*), is a sub-variety, very well known here, resembling the common Turkey

in all respects, except that it has in the centre of each leaf a large yellowish spot. It is a thrifty tree and bears delicate fruit. Ours is not identical with the Turkey, as the last edition of the L. H. S.'s Catalogue arranges it, but is a globular fruit, and a true variation of the Turkey.

WHITE MASCULINE.

White Apricot.	Early White Masculine.
Abricot Blanc.	Blanc.
Abricotier Blanc.	White Algiers ?

This scarcely differs from the Red Masculine before described, except in color. It is four or five days later.

Fruit small and roundish. Skin nearly white, rarely with a little reddish brown on one side. Flesh white, delicate, a little fibrous, adheres a little to the stone, and has a delicate, pleasant juice. Kernel bitter.

Curious or ornamental varieties. The BRIANÇON APRICOT (*A. brigantia*, Dec.), a very distinct species, so much resembling a plum as to be called the Briançon Plum by many authors (*Prune de Briançon*, Poit.), is a small irregular tree or shrub, ten or twelve feet high, a native of the Alps. It bears a great abundance of small, round, yellow, plum-like fruit in clusters, which are scarcely eatable; but in France and Piedmont the kernels of this variety make the "huile de marmotte," which is worth double the price of the olive oil.

THE DOUBLE FLOWERING APRICOT is a pretty ornamental tree, yet rare with us.

Selection of Apricots for a small garden. Large Early, Breda, Peach, Moorpark.

Selection for a cold or northern climate. Red Masculine, Roman, Breda.

CHAPTER XII.

THE BERBERRY.

Barberis vulgaris, L. *Berberaceæ*, of botanists.

Epine-vinette, of the French; *Berberitzen*, German; *Berbera*, Italian; *Berberis*, Spanish.

THE Berberry (or barberry) is a common prickly shrub, from eight to ten feet high, which grows wild in both hemispheres, and is particularly abundant in many parts of New England. The flowers, the roots, and the inner wood are of the brightest yellow color, and the small crimson fruit is borne in clusters. It is a popular but fallacious notion, entertained both here and in England, that the vicinity of this plant, in any quantity, to grain fields, causes the rust.

The barberry is too acid to eat, but it makes an agreeable preserve

and jelly, and an ornamental pickle for garnishing some dishes. From the seedless sort is made in Rouen a celebrated sweetmeat, *confiture d'épine-vinette*. The inner bark is used in France for dyeing silk and cotton a bright yellow.

CULTURE. The culture is of the easiest description. A rich light soil gives the largest fruit. It is easily propagated by seed, layers, or suckers. When fine fruit of the barberry is desired, it should be kept trained to a single stem—as the suckers which it is liable to produce frequently render it barren or make the fruit small.

COMMON RED.

This is too well known to need description. In good soils it grows twelve or fifteen feet high, and its numerous clusters of bright oval berries are very ornamental in autumn. There is a Large Red variety of this, which is only a variation produced by cultivation in rich soil. There are also varieties of this in Europe with pale yellow, white, and purple fruit, which are not yet introduced into this country, and which scarcely differ in any other respect than the color. And there is a so-called *sweet* variety of the common Berberry from Austria (*B. v. dulcis*), but it is scarcely less acid than the common.

A variety with purple foliage differs but little in the fruit, which is perhaps not quite as fleshy, but the foliage is extremely ornamental.

THE BLACKBERRY.

THERE are several species of the Bramble indigenous to this country, which produce eatable fruit, but the best for the table, or for cooking, are the Low Blackberry, a trailing shrub, and the following varieties of the High Blackberry.

The fruit is larger than that of the Raspberry, with fewer and larger grains, and a brisker flavor. It ripens about the last of July or early in August, after the former is past, and is much used by all classes in this country. There is no doubt that varieties of much larger size, and greatly superior flavor, might be produced by sowing the seeds in rich garden soil, especially if repeated for two or three successive generations.

Their cultivation in gardens is similar to that of the Raspberry, except that they require to be planted at greater distances apart, say from six to eight feet. (See page 961.)

ADAIR'S CLARET.

Originated with D. L. Adair, Hawesville, Ky. The plant is not quite hardy.

Fruit medium size, claret color, soft, with a mild pleasant flavor.

ALBION.

A wildling found and introduced by John B. Orange, of Albion, Ill. Although described as large and productive, we have never been able to gather more than half a crop from our plants, and the fruit of only fair size, imperfect, and without flavor.

THE BLACKBERRY.

CAPE MAY.

Fruit large, black, sweet, quite soft, loses color soon after gathering, not valuable.

COLONEL WILDER.

Introduced by John B. Orange.

Fruit of medium size, oblong, light cream color, moderately firm, does not fill well.

CRYSTAL WHITE.

Orange's Crystal.

Introduced by John B. Orange, Albion, Ill. It is a vigorous grower, suckers freely, and not hardy. Does not set its fruit well.

Fruit medium, oblong oval, light creamy white, translucent, sweet. Good. Only desirable as a curiosity.

CUMBERLAND.

A New Jersey variety, productive, hardy.

Fruit medium, black, sweet, early.

CUT-LEAVED.

Parsley Leaved.

An old European variety, valued more for its curious foliage than for the amount of its fruit.

Fruit roundish, black, sweet, with a musky peculiar flavor.

CUTTER'S MULBERRY.

Introduced by G. B. Cutter, Newtown, Mass.

Fruit long, slender, remarkably sweet. (Hov. Mag.)

DOCTOR WARDER.

Introduced by John B. Orange.

Fruit rather shorter and thicker than the Albion, nearly as large. Color dark rosy red. (Hov. Mag.)

DORCHESTER.

Introduced to notice by the late Capt. Lovett, of Beverly, Mass. Nearly equal in size to New Rochelle, of a more elongated form, grains rather smaller, somewhat sweeter, and producing large crops of high-flavored fruit, a vigorous grower.

Fruit large, oblong conic, sometimes measuring an inch and a quarter in length, of a deep shining black. The berries should be fully matured before they are gathered; it bears carriage well. Ripens about the first of August.

DUNCAN'S FALLS.

Introduced by J. C. Neff, Duncan's Falls, O. An upright, very vigorous grower.

Fruit large, black, moderately firm, juicy, sweet. New, not fully tested.

FARLEY.

Origin unknown. New.

Fruit nearly as large as New Rochelle, black, sweet, and ripens two weeks earlier. (Hort.)

FELTON.

Introduced by Oscar Felton, of Camden, N. J.

Fruit large, long, slightly conical, sweet. Good. Ripens early, moderately productive.

HOLCOMB.

Introduced by E. A. Holcomb, of Granby, Conn. Canes hardy and productive.

Fruit large, roundish, black, moderately firm, well flavored. Ripens early.

KENTUCKY WHITE.

Introduced by D. L. Adair, Kentucky. Plant tender.

Fruit medium size, oblong oval, light dirty white. Imperfect.

KITTATINNY.

A native wildling from the Kittatinny Mountains, Warren Co., N. J. It has within a few years become widely disseminated, and everywhere proves of the highest value. Canes quite hardy, and very productive; ripening early, and continuing a long time.

Fruit large to very large, roundish conical, rich glossy black, moderately firm, juicy, rich, sweet, excellent.

LOW BLACKBERRY.

Trailing Blackberry.

Dewberry.

Rubus Canadensis.

A low trailing, prickly shrub, producing large white blossoms in May, and very large roundish oblong black fruit in midsummer. Leaflets from three to five in number. The fruit, when in good soil and fully exposed to the sun, is high-flavored, sweet, and excellent.

MASON'S MOUNTAIN.

A new variety. Canes hardy.

Fruit large, conical, black, sweet, rich.

MISSOURI MAMMOTH.

A variety recently disseminated from Missouri. It has not yet

fruited here, but is described as "bearing fruit of the very largest size, quite black, firm, rich, juicy, sweet, without any core. Ripens very early, and continues a long time in bearing."

NEWMAN'S THORNLESS.

A new variety, discovered by Jonas Newman, Ulster Co., N. Y. Promises to be valuable. Growth not so vigorous as New Rochelle and Dorchester, but produces good-sized oval berries of excellent flavor. The canes have but few spines or thorns in comparison to the others. Ripens about the first of August.

NEW ROCHELLE.

Seacor's Mammoth.

Lawton.

This remarkable variety was found by Lewis A. Seacor, in its native wildness by the roadside, in the town of New Rochelle, Westchester Co., N. Y. It is of very vigorous growth, with strong spines which belong to the bramble, is hardy and exceedingly productive.

Fruit very large, oval, and, when fully ripe, intensely black. When mature the fruit is very juicy, rather soft and tender, with a sweet, excellent flavor; when gathered too early it is acid and insipid. The granules are larger, consequently the fruit is less seedy than any other variety. Ripens about the first of August, and continues in use five or six weeks.

SABLE QUEEN.

Introduced by J. W. Manning, Reading, Mass., who describes it as in size, beauty, and fruitfulness, equal if not superior to Dorchester or New Rochelle. We have not seen it.

WACHUSETT.

Found growing wild on Monadnock Mountain. Canes hardy, nearly thornless.

Fruit medium, oblong oval, moderately firm, productive. (J. of H.)

WASHINGTON.

Raised by Prof. C. G. Page, Washington, D. C.

Fruit large, black, sweet. Good. New.

WILSON'S EARLY.

Introduced by John Wilson, Burlington, N. J. A hardy, productive, very early ripening market sort.

Fruit large, oblong oval, black. Flesh firm, sweet. Good.

Ornamental Varieties.—The "Double White Blossomed" and "Double Pink Blossomed Brambles" are beautiful climbing shrubs, of remarkably luxuriant growth, which may be trained for a great length

in a season, and are admirably adapted for covering walls and unsightly buildings. The flowers are like small double roses, and are produced in numerous clusters in June, having a very pretty effect. North of New York these climbers are rather tender in severe winters.

The ROSE FLOWERING BRAMBLE (*Rubus odoratus*) is a very pretty native shrub, with large broad leaves, and pleasing rose-colored flowers, and groups well with other shrubs in ornamental plantations.

CHAPTER XIII.

THE CHERRY.

Cerasus sylvestris, and *C. vulgaris*, Arb. Brit. *Rosaceæ*, of botanists.
Cerisier, of the French; *Kirschenbaum*, German; *Ciriego*, Italian; *Cerezo*, Spanish.

THE Cherry is a fine, luxuriant fruit-tree, with smooth, light-colored bark, and generally of rapid growth. The varieties of the black and heart-shaped cherries are always vigorous, and form fine large spreading heads, forty or fifty feet in height; but those of the acid or red cherry are of lower, more bushy, and tardy growth. In the spring the cherry-tree is profusely covered with clusters of snow-white blossoms, and earlier in summer than upon any other tree, these are followed by abundant crops of juicy, sweet, or acid fruit, hanging upon long stalks, and enclosing a smooth stone.

The Cherry comes originally from Asia, and the Roman general, Lucullus, after a victorious expedition into Pontus, has the reputation of having brought it to Italy from *Cerasus*, a town in that province, in the year 69 B.C. According to Pliny, the Romans, 100 years after this, had eight varieties in cultivation, and they were soon afterwards carried to all parts of Europe. The seeds of the cultivated cherry were brought to this country very early after its settlement, both from England and Holland.

USES. As a pleasant and refreshing dessert fruit, the cherry is everywhere highly esteemed. The early season at which it ripens, its juiciness, delicacy, and richness, render it always acceptable. While the large and fleshy varieties are exceedingly sweet and luscious, others which are more tender, and more or less acid, are very valuable for pies, tarts, and various kinds of cookery. The fruit of the Kentish or Early Richmond is excellent when stoned and dried, and the Mazzard, and our wild Virginia cherries, are used to give a flavor to brandy. When canned they retain their character and are very delicious. The Dukes or Morellos are best for the purpose.

The celebrated German *Kirschwasser* is made by distilling the liquor of the common black mazzard or gean (in which the stones are ground and broken, and fermented with the pulp), and the delicious *Ratafia* cordial of Grenoble is also made from this fruit. *Maraschino*, the most celebrated liqueur of Italy, is distilled from a small gean or mazzard with which, in fermenting, honey and the leaves and kernels of the fruit are mixed.

The gum of the Cherry is nearly identical with gum arabic, and there are some marvellous stories told of its nutritive properties. The wood of the cherry is hard and durable, and is therefore valuable for many purposes; but the best wood is afforded by our common wild or Virginia cherry, which is a very good substitute for mahogany, taking a fine polish.

The larger growing sorts of black cherry are the finest of all fruit-trees for shade, and are, therefore, generally chosen by farmers, who are always desirous of combining the useful and the ornamental. Indeed the Cherry, from its symmetrical form, its rapid growth, its fine shade, and beautiful blossoms, is exceedingly well suited for a roadside tree in agricultural districts. We wish we could induce the planting of avenues of this and other fine-growing fruit-trees in our country neighborhoods, as is the beautiful custom in Germany, affording ornament and a grateful shade and refreshment to the traveller at the same moment. Mr. Loudon, in his *Arboretum*, gives the following account of the cherry avenues in Germany, which we gladly lay before our readers:—

“On the Continent, and more especially in Germany and Switzerland, the cherry is much used as a roadside tree; particularly in the northern parts of Germany, where the apple and pear will not thrive. In some countries the road passes for many miles together through an avenue of cherry-trees. In Moravia, the road from Brunn to Olmutz passes through such an avenue, extending upwards of sixty miles in length; and in the autumn of 1828, we travelled for several days through almost one continuous avenue of cherry-trees, from Strasburg by a circuitous route to Munich. These avenues, in Germany, are planted by the desire of the respective governments, not only for shading the traveller, but in order that the poor pedestrian may obtain refreshment on his journey. All persons are allowed to partake of the cherries, on condition of not injuring the trees; but the main crop of the cherries, when ripe, is gathered by the respective proprietors of the land on which it grows; and when these are anxious to preserve the fruit of any particular tree, it is, as it were, tabooed; that is, a wisp of straw is tied in a conspicuous part to one of the branches, as vines by the roadsides in France, when the grapes are ripe, are protected by sprinkling a plant here and there with a mixture of lime and water, which marks the leaves with conspicuous white blotches. Every one who has travelled on the Continent in the fruit season, must have observed the respect that is paid to these appropriating marks; and there is something highly gratifying in this, and in the humane feeling displayed by the princes of the different countries in causing the trees to be planted. It would indeed be lamentable if kind treatment did not produce a corresponding return.”

SOIL AND SITUATION. A *dry* soil for the cherry is the universal maxim, and although it is so hardy a tree that it will thrive in a great variety of soils, yet a good sandy or gravelly loam is its favorite place. It will indeed grow in much thinner and dryer soils than most other fruit-trees, but to obtain the finest fruit a deep and mellow soil, of good quality, is desirable. When it is forced to grow in wet places, or where the roots are constantly damp, it soon decays and is very short lived. And we have seen this tree, when forced into too luxuriant a growth in our over-rich Western soils, become so gross in its wood as to bear little or no fruit, and split open in its trunk, and soon perish. It is a very

hardy tree, and will bear a great variety of exposures without injury. In deep warm valleys, liable to spring frosts, it is, however, well to plant it on the north sides of hills, in order to retard it in the spring.

PROPAGATION. The finer sorts are nearly always propagated by budding on seedlings of the common black mazzard, which is a very common kind, producing a great abundance of fruit, and very healthy, free growing stocks. To raise these stocks, the cherries should be gathered when fully ripe, and allowed to lie two or three days together, so that they may be partially or wholly freed from the pulp by washing them in water. They should then be planted immediately in drills in the seed plot, covering them about an inch deep. They will then vegetate in the following spring, and in good soil will be fit for planting out in the nursery rows in the autumn or following spring, at a distance of ten or twelve inches apart in the row. Many persons preserve their cherry stones in sand, either in the cellar or in the open air, until spring, but we have found this a more precarious mode; the cherry being one of the most delicate of seeds when it commences to vegetate, its vitality is frequently destroyed by leaving it in the sand twenty-four hours too long, or after it has commenced sprouting.

After planting in the nursery rows, the seedlings are generally fit for budding in the month of August following. And in order not to have weak stocks overpowered by vigorous ones, they should always be assorted before they are planted, placing those of the same size in rows together. Nearly all the cherries are grown with us as standards. The English nurserymen usually bud their standard cherries as high as they wish them to form heads, but we always prefer to bud them on quite young stocks, as near the ground as possible, as they then shoot up clean, straight, smooth stems, showing no clumsy joint where the bud and the stock are united. In good soils the buds will frequently make shoots, six or eight feet high, the first season after the stock is headed back. Grafting of the cherry may be performed the same as with the apple and pear, but the work, to be successful, should always be performed early in the season, before the frost is well out of the ground. If omitted until the buds begin to swell strongly the chances for success are less than those of failure.

When dwarf trees are required, the *Morello* seedlings are used as stocks, or the Perfumed Cherry (*Cerasus Mahaleb*) is employed; but as standards are almost universally preferred, these are seldom seen here. Dwarfs in the nursery must be headed back the second year, in order to form lateral shoots near the ground.

CULTIVATION. The cherry, as a standard tree, may be said to require little or no cultivation in the Middle States, further than occasionally supplying old trees with a little manure to keep up their vigor, pruning out a dead or crossing branch, and washing the stem with soft soap should it become hard and bark-bound. Pruning, the cherry very little needs, and as it is always likely to produce gum (and this decay), it should be avoided, except when really required. It should then be done in *midsummer*, as that is the only season when the gum is not more or less exuded. The cherry is not a very long-lived tree, but in favorable soil the finest varieties generally endure about thirty or forty years. In the County of Perry, Ohio, there is a tree of the Black Mazzard variety which is eighty feet in height, and four feet one inch in dia-

meter of main trunk, while the length of the largest limb or branch is forty-two feet.

A large cherry-tree at Walworth, N. Y., is recorded as measuring fourteen feet six inches in circumference, sixty feet in height, and having a spread of over four rods. It has produced forty bushels of fruit in one season.

Twenty feet apart for the strong, and eighteen feet for the slow-growing kinds is the proper distance for this tree.

TRAINING THE CHERRY is very little practised in the United States. The Heart and Bigarreau Cherries are usually trained in the horizontal manner, explained in *pages* 44, 45. When the wall or espalier is once filled, as there directed, with lateral branches, it is only necessary to cut off, twice every season—in the month of May and July—all additional shoots to within an inch or so of the branch from which they grew. As the trees grow older, these fruit-spurs will advance in length, but by cutting them out whenever they exceed four or five inches, new ones will be produced, and the tree will continue to keep its proper shape and yield excellent fruit. The Morello Cherries, being weaker growing sorts, are trained in the fan manner (*pages* 42, 43).

GATHERING THE FRUIT. This tender and juicy fruit is best when freshly gathered from the tree, and it should always be picked with the stalks attached. For the dessert, the flavor of many sorts in our climate is rendered more delicious by placing the fruit, for an hour or two previous, in an ice-house or refrigerator, and bringing them upon the table cool, with dew-drops standing upon them. For market or transportation long distances, they should be gathered only when perfectly dry.

VARIETIES. Since the first publication of this work was written, the number of varieties has greatly increased, and become so hybridized that no distinct line can now be drawn separating many of the Heart Cherries (tender and half tender) from the firm-fleshed or Bigarreau varieties, each class insensibly approaching and intermingling with the other. We have therefore made but one class of these, whose main characteristic is the large, vigorous growth of the trees. The Duke and Morello Cherries, also wanting a natural division, we make to constitute another class, and in these two have comprised all the cherries.

CLASS I.

BIGARREAU AND HEART CHERRIES.

ADAM'S CROWN.

Of English origin.

Fruit medium, round heart-shape, pale red. Flesh tender, juicy, agreeable. Middle of June.

AMBER.

Imperial English Amber?

A variety described by Coxe as large, round. Skin glossy cream color, faint blush. Flesh firm, luscious. Ripens late in June. Tree grows large, regular, spreading.

AMBER GEAN.

Geau Amber.

Of foreign origin, exceedingly productive, ripens late, and hangs till the middle of July.

Fruit small, oval or obtuse heart-shape. Skin very thin, color pale yellow, partially overspread with a very faint red. Stalk long and slender, very slightly inserted. Flesh white, juicy, melting, of a sweet and pleasant flavor.

AMBREE.

Cerise Ambrée.

An English variety, described in Lindley as of rather tender habit in tree.

Fruit large, round, flattened next the stalk. Skin thick, of a fine amber color, mottled with red and yellow. Flesh pale yellow, slightly tinged with red, juicy, excellent. Middle of July.

AMERICAN AMBER.

Bloodgood's Amber.

Bloodgood's Honey.

Bloodgood's New Honey.

Raised by the late Daniel Bloodgood, of Flushing, Long Island. A vigorous tree, productive.

Fruit of medium size, roundish heart-shaped, slightly indented at the apex. Skin thin, smooth, light amber, delicately mottled and overspread with bright red. Stalk long and slender, inserted in a slight narrow cavity. Flesh tender, abounding with a sprightly, though not high-flavored juice. Ripe about the 25th of June.

AMERICAN HEART.

Its origin is uncertain. The tree is quite luxuriant, with wide-spreading branches. Productive.

Fruit pretty large, heart-shaped, often nearly four-sided, and irregular in its outline—borne in clusters. Skin at first pale, not becoming covered with light red or pink, mixed with very little amber. Stalk rather long and slender, inserted in a small and shallow cavity. Flesh half tender and crackling, adhering to the skin, which is rather tough. Juice abundant, and in dry seasons sweet and excellent, but rather wanting in sweetness in cool or wet seasons. Ripens early in June.

ANNE.

A very productive early variety. Received from A. V. Bedford, Paris, Ky.

Fruit medium to small, bright red, tender, juicy, very sweet, and excellent, a good amateur's fruit, growth moderate. Ripe with Early White Heart, or soon after.

ARGENTAL'S LATE.

Bigarreau Tardive d'Argental.

A Cherry from France, of rather spreading habit, with irregular, rather slender branches, the fruit in form unlike any other cherry.

Fruit medium, elongated oval. Sides compressed, narrow suture. Stalk medium, slender, in a small cavity. Skin deep purplish black. Flesh half tender, juicy, sweet. Very good. Stone small, narrow, elongated oval. Ripens July 10.

BAUMANN'S MAY.

Bigarreau de Mai.

Wilder's Bigarreau de Mai.

Of foreign origin. A very productive, early variety, of vigorous growth, of good quality, but not equal to E. P. Guigne.

Fruit rather small, oval heart-shaped, and rather angular in outline. Skin deep rich red, becoming rather dark when fully ripe. Stalk an inch and three-fourths long, pretty stout at either end, and set in a very narrow and rather irregular cavity. Flesh purplish, tender, juicy, and when fully ripe, tolerably sweet and good. Ripens here the 20th of May.

BELLE AGATHE.

Autumn Bigarreau.

Belle Agathe de Novembre.

A variety from Belgium. Tree vigorous, hardy, good bearer.

Fruit small, roundish oval, depressed at ends, yellow, mostly covered with red. Flesh firm, hard, sweet, moderately juicy. Stone large. Valuable only because of its time of ripening, late in August.

Belle d'Orleans.

Bigarreau.

BELLE D'ORLEANS.

A foreign variety, ripening just after the Early Purple Guigne. Tree a vigorous grower, spreading habit, productive, and a valuable addition to the early kinds.

Fruit above medium size, roundish heart-shaped. Color whitish yellow, half covered with pale red. Flesh tender, very juicy, sweet, and excellent. Ripens early in June.

BIGARREAU.

Graffion.	Yellow Spanish.
White Bigarreau.	Amber. or Imperial.
Turkey Bigarreau?	Bigarreau Royal.
Italian Heart.	Bigarreau Gros?
West's White Heart.	Bigarreau Tardif.
Groote Princess.	Hollandische Grosse.
Prinzessin Kirsche.	Cerise Ambrée.

This noble fruit is unquestionably one of the largest, most beautiful, and delicious of Cherries. It was introduced into this country about the year 1800, by the late William Prince, of Flushing, and has been very extensively disseminated under the names of Yellow Spanish, Graffion, and Bigarreau. The tree is short, but thrifty in growth, making strong lateral shoots, and forming a large and handsome head with spreading branches.

Fruit very large, and of a beautiful waxen appearance, regularly formed, obtuse heart-shaped, the base a good deal flattened. Stalk stout, nearly two inches long, inserted in a wide hollow. Skin pale whitish yellow on the shaded side, bordered with minute carmine dots, and deepening into bright red, finely marbled on the sunny side. Flesh pale yellow, quite firm, juicy, with a rich, sweet, and delicious flavor if allowed fully to ripen. In perfection the last of June.

BIGARREAU GROS CŒURET.

Large Heart-shaped Bigarreau.	Bigarreau Gros Monstrueux.
Bigarreau Cœur de Pigeon.	Bigarreau Marcellin.
Gros Cœuret.	

This, the true Large Heart-shaped Bigarreau, is a French variety only rarely seen in the fruit gardens of this country.

Fruit large, roundish heart-shaped, with a suture line frequently raised, instead of being depressed. Skin at first yellowish red, marked with deeper red streaks, but becoming, when fully ripe, a dark shining red, almost black. Stalk inserted in a shallow hollow. Stone oval and rather large. Flesh firm, purplish, a little bitter at first, but of a sweet flavor when fully matured. Ripe first week in July.

BIGARREAU JABOULAY.

Bigarreau de Lyon.

This is a fine large, early Bigarreau. Skin covered with clear red. Stalk an inch and a half long. Flesh firm, juicy, richly flavored, and delicious. End of June. (Hogg.)

Some years since we received a Bigarreau de Lyon from Lewis B. Eaton, of Buffalo, N. Y., he having purchased it from a lot of imported French trees. The label being lost, the above name was given, and as it has been so disseminated, we continue it and give description to aid in its identity. The tree is a free grower, with long, spreading, somewhat pendulous branches.

Fruit large, heart-shaped, somewhat irregular compressed. Suture slight. Skin deep red, almost black at maturity. Stalk rather long, slender, curved, set in a round narrow cavity of moderate depth.

Flesh reddish purple, half tender, juicy, sweet, rich. Very good. Early July.

BIGARREAU OF MEZEL.

Great Bigarreau ? Large Red Prool ?
Great Bigarreau of Mezel. Monstrous de Mezel.
Bigarreau Gaubalais.

A foreign variety of the largest size, and, so far as we can judge, identical with Great Bigarreau and Large Red Prool. This is however doubted by some. The tree is a very vigorous grower, forming a wide-spreading open head, bearing its fruit on spurs along the limbs or branches.

Fruit very large, obtuse heart-shaped. Surface uneven, dark red, or quite black at maturity. Stalk long and slender. Flesh firm and juicy, but not high-flavored. Ripe last of June and beginning of July.

BIGARREAU RIVERCHON.

A late Cherry, described by Rivers as large, dark red, nearly black. Flesh rich. July.

BILL AND COO.

A variety that originated on the grounds of Prof. J. P. Kirtland, Cleveland, O., and took its name from the tree being the haunt of two young lovers. Tree vigorous and productive.

Fruit medium, regular, heart-shaped, flattened at apex. Stalk long, slender. Sides high. Color amber yellow ground, marbled with clear rich red. Suture half round, broad, opposite side knobby. Flesh rich, delicate, sweet. Early in June, but hangs a long time without decaying. (Elliott's Notes.)

Black Eagle.

BLACK BIGARREAU OF SAVOY.

New Large Black Bigarreau.
Bigarreau Noir de Savoi.
Bigarreau Noir.

An Italian variety, of very vigorous growth; hardy and productive. Young wood quite dark.

Fruit large, regularly heart-shaped, very slightly obtuse. Skin smooth and even on the surface, not very glossy, quite black at maturity. Stalk an inch and three-fourths long, rather stout, set in a narrow even hollow. Flesh purple, quite firm and solid, with a rich but not abundant juice. Stone rather large. Ripe middle of July.

BLACK EAGLE.

A very excellent English variety, raised by the daughter of Mr. Knight, at Downton Castle, in 1806, from the seed of the Bigarreau fertilized by the Mayduke. It ripens at the beginning of

July, or a few days later than the Black Tartarian.

Fruit rather above medium size, borne in pairs and threes, obtuse heart-shaped. Skin deep purple, or nearly black. Stalk of medium length, and rather slender. Flesh deep purple, tender, with a rich, high-flavored juice, superior to the Black Heart. Branches strong, with large leaves. Moderate bearer.

BLACK HAWK.

Originated with Dr. J. P. Kirtland, Cleveland, Ohio. The tree is of healthy, vigorous, spreading habit, with much of the general character of Yellow Spanish. As a table fruit, its high flavor will always commend it; while as a market fruit, its size and productive habit of tree place it among the very best.

Fruit large, heart-shape, often obtuse. Sides compressed. Surface uneven. Color dark purplish black, glossy. Flesh dark purple, half tender, almost firm, juicy, rich, sweet, fine flavor. Season from 20th June to 1st July.

BLACK HEART.

Early Black.	Black Caroon.
Ansell's Fine Black.	Guinier à fruit noir.
Spanish Black Heart.	Guigne grosse noir.
Black Russian.	Grosse Schwarze Hertz Kirsche.

The Black Heart, an old variety, is better known than almost any other Cherry in this country, and its great fruitfulness and good flavor, together with the hardiness and the large size to which the tree grows, render it everywhere esteemed.

Fruit above medium size, heart-shaped, a little irregular. Skin glossy, dark purple, becoming deep black when fully ripe. Stalk an inch and a half long, slender, set in a moderate hollow. Flesh, before fully ripe, half tender, but finally becoming tender and juicy, with a rich, sweet flavor. Ripens the last of June, about ten days after the Mayduke.

BLACK MAZZARD.

Mazzard.	Whitley Black.
Common English.	Merry Cherry.
Wild English Cherry.	Merisier à petit fruit.
Black Honey.	Merisier à petit fruit noir.
Bristol Cherry.	Corone.
Cerasus avium.	Caroon.
Wild Black Fruited.	Couronne.
Small Wild Black.	Large Wild Black.

This is the wild species of Europe, being common in the forests of France and some parts of England; and it has now become naturalized, and grows spontaneously throughout most portions of the settled States. It is the original species from which nearly all the fine Heart and other sweet cherries have sprung. It is small, and of little value for eating, retaining, unless very ripe, a certain bitterness; but it ripens and hangs on the tree until the middle or last of July, so that it then becomes somewhat acceptable.

Fruit small, roundish or oval heart-shaped, flattened a little on both sides. Stalk long and very slender, inserted in a small depression.

Skin thin, and when fully ripe, jet black. Flesh soft and melting, purple, with an abundant somewhat bitter juice.

The **WHITE MAZZARD** of Mr. Manning is a seedling raised by that pomologist, which differs little except in its color.

BLACK TARTARIAN.

Tartarian.	Fraser's Black Tartarian.	Ronald's Large Black Heart.
Black Circassian.	Superb Circassian.	Fraser's Black.
Ronald's Heart.	Fraser's Black Heart.	Black Russian.
Fraser's Tartarische.	Schwarze Herz Kirsche.	Double Heart.
Bishop's Large.	Circassian.	

This superb fruit has become a general favorite in all our gardens; and in size, flavor, and productiveness it has no superior among black cherries. It is a Russian and West Asian variety, introduced into England about 1796, and brought thence to this country. It is remarkable for its rapid, vigorous growth, large leaves, and the erect habit of its head. The fruit ripens about the middle of June, a few days after the Mayduke.

Fruit of the largest size, heart-shaped (sometimes rather obtuse), irregular and uneven on the surface. Skin glossy, bright purplish black. Flesh purplish, thick (the stone being quite small), half-tender, and juicy. Flesh very rich and delicious.

BOHEMIAN BLACK BIGARREAU.

Bigarreau Radowesnitzer.

Foreign.

Fruit very large, roundish heart-shape, very even and regular in outline. Skin shining jet black. Stalk short, stout, dark green. Flesh quite black, firm, juicy, richly flavored and delicious. Season early July. (Florist and Pomologist.)

BOWYER'S EARLY HEART.

Medium size, obtuse heart-shaped. Skin amber, mottled and shaded with red. Flesh tender, juicy, with a pleasant vinous flavor. Distinct from Early White Heart. Ripens immediately after.

BRANDYWINE.

Originated near Wilmington, Del. Tree vigorous, spreading, productive.

Fruit large, roundish obtuse heart-shape, almost without suture. Skin yellowish, beautifully mottled and marbled with light crimson and lake, small light dots. Stalk long, slender, in a moderate cavity. Flesh tender, juicy, sprightly acidulous. Fine for culinary uses. Stone rather large. Last of June.

Black Tartarian.

BRANT.

Origin, Cleveland, Ohio. Tree vigorous, with large foliage and spreading, of rather round, regular form.

Fruit large, rounded angular heart-shape. Sides slightly compressed. Color reddish black. Flesh dark purplish red, half tender, juicy, sweet, and rich. Very good. Season early or middle of June.

BROWN'S SEEDLING.

Origin, Connecticut. Tree vigorous, upright.

Fruit medium, obtuse heart-shaped, compressed with a line and slight suture. Stalk in a broad cavity. Skin whitish, shaded and mottled with red. Flesh half tender, juicy, sweet. Good. Early July.

BURR'S SEEDLING.

Origin, Perrinton, Monroe Co., N. Y. Tree a vigorous spreading grower, productive.

Fruit large, heart-shaped, whitish yellow shaded with light red, and sometimes mottled. Flesh nearly tender, with a sweet, rich, excellent flavor. Very good. Ripe the last of June.

'BÜTTNER'S BLACK HEART.

From Germany. Tree a vigorous grower.

Fruit large, heart-shaped, almost black. Flesh purplish, firm, juicy, not very rich. Good. Ripe middle of July.

BÜTTNER'S YELLOW.

Büttner's Wachs-Knorpel Kirsche.

Büttner's Gelbe-Knorpel Kirsche.

Raised by Büttner, of Halle, in Germany, and one of the few Cherries *entirely yellow*.

Fruit of medium size, roundish. Skin pale yellow. Flesh firm, yellowish, sweet, and not of much value. Ripe first week in July.

CARMINE STRIPE.

Raised by Prof. J. P. Kirtland. Tree vigorous, healthy, spreading. Very productive.

Fruit above medium, heart-shaped. Suture half round, followed by a line of carmine. Color amber yellow, shaded and mottled with bright, lively carmine. Flesh tender, juicy, sweet, sprightly, and agreeable. Very good. Stalk varies. Season, last of June.

CAROLINE.

One of Prof. J. P. Kirtland's originating. Tree a vigorous, somewhat upright spreading habit, very productive, and an exceedingly delicious fruit for the dessert.

Fruit above medium, round oblong, one side compressed slightly. Color pale amber, mottled with clear light red, and when fully exposed to the sun becomes rich red. Flesh very tender, juicy, sweet, and delicate. Very good or best. Season last of June.

BYRNSVILLE.

Origin, Dutchess Co., N. Y. Tree vigorous, spreading, productive.

Fruit medium to large, nearly globular, slight apex. Skin yellowish, shaded and mottled with light and dark red. Stalk medium or short. Flesh very tender, juicy, brisk subacid. Good. Last June.

CHAMPAGNE.

Originated at Newburgh, N. Y. Tree of moderate growth, and forms a round head.

Fruit of medium size, roundish heart-shaped. Color lively brick red, inclining to pink, a little paler on the shaded side. Stalk of moderate length and size, inserted in a rather flat shallow depression. Flesh amber-colored, of a lively rich flavor, a mingling of sugar and acid, something between Downer's Late and a Duke cherry, a good bearer, and ripens uniformly and hangs some time on the tree. Very good. Season last of June.

CHINA BIGARREAU.

Chinese Heart.

Fruit of medium size, roundish heart-shaped, light amber, mottled and shaded with bright red. Flesh firm, with a sweet, peculiar flavor. Good. Ripe last of June.

CLEVELAND.

Cleveland Bigarreau.

Raised by Professor J. P. Kirtland, a thrifty strong grower, spreading, productive, and a fine fruit.

Fruit large, round heart-shape. Suture pretty broad, nearly half-round. Color bright clear red on yellowish ground. Flesh fine, juicy, rich, sweet, and fine flavor. Ripe a few days before Black Tartarian. Very good.

COCKLIN'S FAVORITE.

Late Amber.

Origin unknown. Introduced by E. H. Cocklin, Shepherdstown, Pa. Tree upright, conical, vigorous, and exceedingly productive.

Fruit large, roundish, regular, a little compressed, somewhat flattened at base, almost without suture. Apex sunk. Skin yellowish shaded, and somewhat mottled in the sun with light crimson. Stalk long and slender, in a deep smooth cavity. Flesh tender, juicy, sweet, vinous. Very good. Stone very small. Ripens a little later than Downer's Red.

COE'S TRANSPARENT.

Originated with Curtis Coe, of Middletown, Conn. A productive and valuable addition to the amateur's collection, but rather too tender for carriage to market. Tree vigorous and hardy, with a round and somewhat spreading head.

Fruit of medium size, remarkably round and regular in form. Skin thin, wax-like, of a very delicate pale amber, nearly covered with pale cornelian red in the sun, and marked with delicate pale spots or blotches, which give it a unique appearance. Stalk set in a deep depression of moderate depth. Flesh very tender, melting, and juicy, with a delicate but sweet and excellent flavor. Best. Ripens just before Black Tartarian.

COLUMBIA.

Origin unknown. Tree vigorous, spreading, productive. Fruit medium, heart-shaped, inclining to a point. Surface angular and uneven. Sides compressed. Suture deep and narrow. Stalk long and slender, in a large deep cavity. Skin whitish yellow, shaded and mottled with light red. Flesh whitish, slightly stained with pink, tender, juicy, pleasant. Good. Last of June.

CONESTOGA.

Origin, Lancaster Co., Pa. Introduced by Caspar Hiller. Tree a very vigorous spreading grower, and abundant bearer.

Fruit medium, obtuse, heart-shaped, slightly compressed. Sutura shallow. Apex small. Stalk long. Cavity deep, large. Skin deep red or purplish, somewhat mottled. Flesh reddish, almost tender, juicy, brisk. Good. Early July.

CORNELIA.

Originated by Charles Pease, near Cleveland, O. Tree vigorous, upright spreading, very productive.

Fruit medium to large, heart-shaped, compressed. Suture slight. Skin whitish yellow, shaded with rich bright crimson when fully exposed to the sun. Stalk long, in a narrow deep cavity. Flesh light yellow, tender, juicy, sweet, and lively flavor. Very good. Stone small. Last of June.

DACOTAH.

A new variety, originated by Charles Pease, Sen., near Cleveland, O. The tree resembles Rockport in habit of growth, very productive.

Fruit medium to large, heart-shaped, compressed. Suture shallow, with projection and dark line on the opposite side. Stalk long, slender, pretty deep, rather narrow cavity. Skin rich dark red, almost black. Surface a little uneven. Flesh purplish, tender, juicy, sweet. Very good. Stone medium. Ripe just after Black Tartarian.

DAVENPORT.

Davenport's Early Black. Davenport's Early. New Mayduke.

Origin, Dorchester, Mass. Tree of moderate upright growth, distinct from Black Heart, an early and good bearer.

Coe's Transparent.

Fruit above medium size, roundish heart-shaped. Stem an inch and a half long, rather stout, in a medium cavity. Color dark purplish black. Flesh tender, juicy, and pleasant. Ripe about the time of Mayduke or just before. Very good.

DELICATE.

Raised by Prof. J. P. Kirtland, Cleveland, O. Tree thrifty, rather spreading habit, productive, and its beautiful appearance and delicate flavor will make it a favorite for family use.

Fruit rather above medium size, roundish, slightly depressed. Stem medium length, in a rather broad deep cavity. Color fine amber yellow in the shade, with a rich bright red on the sunny side. Flesh tender, juicy, sweet, with a delicate rich flavor. Best. Ripens the last of June.

DOCTOR.

The Doctor.

Tree a free grower, somewhat spreading, very productive, apt to be small unless well cultivated.

Fruit of medium size, roundish heart-shaped. Stalk of medium length, in a round regular cavity. Color light yellow, mostly shaded with bright red. Flesh tender, juicy, and pleasant. Very good.

Delicate.

Ripens early in June.

DOULIN BIGARREAU ?

A foreign variety, which may be distinct, but doubtful. Tree a rapid, spreading grower, an early bearer.

Fruit large, heart-shaped, compressed on one side. Suture slight. Stalk slender, curved. Cavity deep. Skin dark purplish red. Flesh pinkish, rather tender, juicy, sweet, pleasant. Good to very good. Early June.

DOWNER'S LATE.

Downer.

Downer's late Red

This valuable late Cherry was raised by Samuel Downer, Esq., an ardent cultivator, of Dorchester, near Boston. It is a very regular and great bearer, ripens about a week after the Cherry season, and hangs for a considerable time on the tree.

Fruit of medium size, roundish heart-shaped, inclining to oval. Skin very smooth, of a soft but lively red, mottled with a little amber in the

Downer's Late.

shade. Stalk inserted with a very slight depression. Fruit borne thickly, in clusters. Flesh tender, melting, with a sweet and luscious flavor. Ripens from the 4th to the 10th of July.

DOWNING'S RED CHEEK.

Originated at Newburgh, N. Y. Tree vigorous, upright spreading, productive.

Fruit rather large, regularly obtuse heart-shaped, with a pretty distinct suture. Skin thin, white, with a rich dark crimson cheek (somewhat mottled). Stalk an inch and a half long, set in an even hollow of moderate depth. Flesh yellowish, half tender, and of a very delicate sweet. Very good. Ripens about the 14th of June.

DOWNTON.

A variety raised by T. A. Knight, Esq., of Downton Castle, from the seed, it is believed, of the Elton. Tree having a round spreading head, moderately productive.

Fruit large, very blunt heart-shaped, nearly roundish. Stalk one and a half to two inches long, slender, set in a pretty deep, broad hollow. Skin pale cream color, semi-transparent, delicately stained on one side with red, and marbled with red dots. Flesh yellowish, without any red, tender, adhering slightly to the stone, with a delicious rich flavor. Very good. Last of June.

Downton.

DROGAN'S WHITE BIGARREAU.

Bigarreau Blanc de Droган.

Fruit heart-shaped, pointed at apex, flattened on one side, yellow, mottled and flushed with red in the sun. Stalk stout. Flesh firm, sweet. (Hogg.)

DROGAN'S YELLOW BIGARREAU.

Bigarreau Jaune de Droган.

Droган's Gelbe Knorpelskirsche.

Fruit large, round. Skin clear pale yellow. Flesh very juicy, sweet, and pleasant. Middle July. (Hogg.)

EARLY BLACK BIGARREAU.

Fruit large, heart-shaped. Skin jet black. Stalk rather long. Flesh dark purple, firm, sweet. Ripe middle of June. (Hogg.)

EARLY LAMAURIE.

A variety described by Rivers, not yet fruited in this country.

Fruit large, dark purple. Flesh rich, juicy, excellent. A week earlier than Early Purple Guigne.

EARLY LYONS.

Rose de Lyons.

This, to our knowledge, has not yet been introduced to this country. Rivers, the celebrated English pomologist, describes it as:

Fruit very large, light red and yellow. Flesh juicy, rich, excellent. Ripens about a week later than Early Purple Guigne.

EARLY PROLIFIC.

Raised by Dr. J. P. Kirtland, Cleveland, Ohio. An excellent early, very prolific variety, of moderate growth.

Fruit medium size, round obtuse heart-shape, light yellow ground, shaded and mottled with bright red. Stalk long. Flesh half tender, juicy, rich, sweet, and very good. Ripe about a week before Mayduke.

EARLY PURPLE GUIGNE.

Early Purple Griotte.
German Mayduke.
Trempe Précoce.

Origin unknown. An exceedingly early variety, ripening the last of May in favorable seasons. Tree hardy, free grower, spreading, somewhat pendent, and the leaves have longer petioles than most other sorts; a good bearer, and indispensable among the early varieties.

Fruit medium size, roundish heart-shaped. Stem long, inserted in a rather shallow cavity. Suture indistinct. Skin smooth, dark red, becoming purple at maturity. Flesh purple, tender, juicy, with a rich and sweet flavor. Good to very good.

Has proved hardy at the West, and well adapted to that climate.

Early Purple Guigne.

EARLY RED BIGARREAU.

Bigarreau Rouge de Gouben.

An excellent early Cherry, the tree somewhat of the habit of a Duke in its growth.

Fruit large, heart-shape, bright red, translucent. Stalk long. Flesh firm, rich, sweet, excellent. Early June. (Hogg.)

EARLY WHITE HEART.

Arden's Early White Heart.	White Transparent.
White Heart.	Amber Heart.
Dredge's Early White Heart.	Swedish.
Herefordshire White.	

An old variety. Tree vigorous, roundish upright, although a good early fruit. It is not equal to Belle D'Orleans, Early Prolific, and others of the same season.

Fruit below medium size, rather heart-shaped—often a little one-sided. Suture quite distinct. Stalk an inch and three-fourths long, rather slender, inserted in a wide shallow cavity. Skin dull whitish yellow, tinged and speckled with pale red in the sun. Flesh half tender, unless fully ripe, when it is melting, with a sweet and pleasant flavor.

Good. First of June. Manning's Early White similar to above.

ELIZABETH.

Originated by Caleb Atwater, Ohio. Tree vigorous, upright, very prolific.

Fruit medium to large, heart-shaped. Skin rich dark red when fully ripe. Flesh half-tender, juicy, pleasantly sweet. Good. Ripe middle to last of June.

ELTON.

Bigarreau Couleur de Chair.	Bigarreau de Rocmont.
Flesh-colored Bigarreau.	Cœur de Pigeon.
Gros Bigarreau Couleur de Chair.	Belle de Rocmont?
Gros Bigarreau Blanc.	Elton Kirsche.
Bigarreau à Gros Fruit Blanc.	Elton's Bunte Knorpelkirsche.
Large Heart-shaped Bigarreau.	

The Elton, a seedling raised in 1806, by the late President of the London Horticultural Society, is certainly one of the first of Cherries in all respects. The trees grow very vigorously, and are readily known, when in foliage, by the unusually dark red color of the foot-stalks of the leaves.

Fruit large, rather pointed heart-shaped. Skin thin, shining, pale yellow on the shaded side, but with a cheek next the sun delicately mottled and streaked with bright red. Stalk long and slender. Flesh somewhat firm at first, but becoming nearly tender, juicy, with a very rich and luscious flavor, not surpassed by any large Cherry known. Ripens about the middle of June, or directly after the May-duke.

Elton.

ESPEREN BIGARREAU.

Bigarreau d'Esperin.
Bigarreau des Vignes.

Tree vigorous, rather spreading, productive.

Fruit large, roundish heart-shaped. Skin yellowish white, mottled and shaded with bright rich red. Stalk long, rather slender, inserted in a large cavity. Flesh rather firm, juicy, and good flavor. Good. Ripe middle of July. This may yet prove the same as Napoleon Bigarreau.

FAVORITE.

Elliott's Favorite.

Tree vigorous and productive.

Fruit small to medium. Stalk long, rather slender, in a slight de-

pression. Color pale yellow, with a light red cheek, somewhat marbled. Flesh tender, juicy, sweet, and of a delicate flavor. Very good. Ripe last of June.

FLORENCE.

Knevett's Late Bigarreau.

A most excellent Cherry, originally brought from Florence, in Italy, which considerably resembles the Bigarreau, but ripens a little later, and has the additional good quality of hanging a long time on the tree.

Fruit large, roundish heart-shaped, flattened at base, pale amber, mottled or mostly covered with bright red. Flesh amber color, firm, rich, sweet, fine flavor. Very good. Stone small. Middle July.

FROGMORE EARLY BIGARREAU.

An early Cherry of recent introduction. It is described in the London Florist as "large, obtuse heart-shaped. Skin with a brilliant red cheek, dotted with minute yellow points. Flesh delicate, translucent, tender, juicy, rich sweet flavor. Ripens before any fruit of its class."

GASTOIGNE'S HEART.

Bleeding Heart.
Red Heart.

Herefordshire Heart.
Guigne Rouge Hâtive.

An old English variety.

Fruit of medium size, long heart-shaped, small drop or tear at the end. Skin dark red. Flesh reddish, half tender, with only a tolerable flavor. Poor. Ripe the last of June. A bad bearer.

Governor Wood.

GIFFORD'S SEEDLING.

Small, roundish heart-shaped. Light red, very sweet. Hardly good. Productive, last of June.

GOVERNOR WOOD.

Raised by Professor Kirtland, Cleveland, O. It deserves a place in every good collection. Tree vigorous, forming a round, regular head, very productive.

Fruit large, roundish heart-shaped. Skin light yellow, shaded and marbled with bright red. Suture half round. Stem an inch and a half long, in a broad cavity. Flesh nearly tender, juicy, sweet, rich, and delicious. Very good to best. Ripe about the middle of June.

GRIDLEY.

Apple Cherry.

Fruit medium, roundish, black. Flesh firm, not very juicy nor rich. Ripens last of June. Poor. Productive. Origin, Massachusetts.

GROSSE DE WAGNELLEE.

Originated in Belgium. Tree vigorous, productive.

Fruit large, oval. Skin yellow, washed and spotted with red. Flesh tender juicy, sweet. July. (Alb. Pom.)

GUIGNE TRÈS PRÉCOCE.

Rivers says of this :

Fruit rather small, round, dark purple. Stalk very short. Flesh very sweet. One of the earliest to ripen, and a great bearer.

HENSEL'S EARLY.

Origin, Lancaster, Pa. Tree a moderate grower, hardy, and productive.

Fruit roundish, obtuse at base. Stalk slender. Flesh half tender, moderately juicy. Good. Early June. (Hort.)

HILDESHEIM BIGARREAU.

Bigarreau Tardif de Hildesheim.

Bigarreau marbré de Hildesheim.

Bigarreau Blanc Tardif de Hildesheim.

Hildesheimer ganz Späte Knorpel Kirsche.

Hildesheimer Späte Herz Kirsche.

Späte Hildesheimer Marmor Kirsche.

The Hildesheim Bigarreau is a German variety which ripens here in August.

Fruit of medium size, heart-shaped. Skin yellow, mottled and marbled with red. Flesh pale yellow, firm, with a sweet and agreeable flavor. Good.

HOADLEY.

Raised by Prof. Kirtland. Tree of healthy, vigorous habit, forming a round, spreading head.

Fruit above medium, regular round heart-shape, light clear carmine red, mottled and striped on pale yellow. Flesh tender, juicy, rich, sweet, and delicious. Very good. Season, 20th to last of June.

HONEY.

Large Honey.

Yellow Honey.

Late Honey.

Mérisier à fruit blanc.

A small, late, very sweet fruit, formerly much esteemed.

Fruit small, roundish, yellow and red. Flesh tender, very sweet. Middle of July.

HOVEY.

Originated with C. M. Hovey, Boston, Mass. Tree vigorous, upright spreading, productive.

Fruit large, heart-shaped, compressed on one side with a distinct line from apex to stalk. Stalk medium. Cavity deep. Skin whitish yellow, shaded and mottled with rich shades of red. Flesh rather firm, juicy, sweet, pleasant. Very good. Middle of July.

HYDE'S LATE BLACK.

Origin, Newton, Mass. Strong grower and good bearer.

Fruit medium, obtuse heart-shaped, purplish black. Flesh half firm, juicy. Good. Ripe first week in July.

HYDE'S RED HEART.

Origin, Newton, Mass. Tree vigorous, productive.

Fruit medium, heart-shaped. Skin pale, but becoming a light red at maturity. Flesh tender, sprightly. Ripe last of June.

JAUNE DE PRUSSE.

Foreign.

Tree vigorous, with long slender branches, productive, small, heart-shaped, light yellow, translucent. Stalk long and slender. Flesh yellowish-white, tender, juicy sweet, a little bitter before fully ripe, which is soon after Downer's Late.

Hovey.

JOCOSOT.

Origin near Cleveland, O.

Fruit large, very regular, uniform heart-shape, slightly obtuse, and with a deep indenture at apex. Surface uneven. Color rich glossy dark liver color, almost black. Flesh tender, juicy, with a rich sweet flavor. Very good. Season, near the last of June.

KENNICOTT.

Raised by Prof. Kirtland. Tree vigorous, hardy, spreading. Very productive.

Fruit large, oval heart-shape, compressed. Suture shallow, half round. Color amber yellow, mottled and much overspread with rich, bright, clear, glossy red. Flesh firm, juicy, rich, and sweet. Very good. Season, 8th to 10th July.

KEOKUK.

Originated by Prof. J. P. Kirtland. Tree a strong, vigorous grower, forming a large tree.

Fruit large, heart-shaped, dark purplish black. Flesh half tender, rather coarse, and deficient in flavor. Hardly good. Its chief merit a market variety. Ripe early in July.

KIRTLAND'S MAMMOTH.

Originated by Prof. Kirtland. Tree vigorous grower, but poor bearer.

Fruit of the largest size, obtuse heart-shaped. Color bright clear yellow, partially overspread and marbled with rich red. Flesh almost tender, juicy, sweet, with a very fine high flavor. Very good, or best. Season, last of June.

KIRTLAND'S MARY.

Raised by Prof. Kirtland. Tree a strong, upright grower, said to be one of the best of his seedlings, and desirable either for the dessert or market purposes.

Fruit large, roundish heart-shape, very regular. Color light and dark rich red, deeply marbled and mottled on a yellow ground; grown fully in the sun, is mostly a rich, dark glossy red. Flesh light yellow, quite firm, rich, juicy, sweet, and very high flavored. Very good or best. Season, last of June and first of July.

KNIGHT'S EARLY BLACK.

A most admirable early Cherry, resembling the Black Tartarian, though much more obtuse in form, but ripening nearly a week earlier. Tree spreading. Moderately productive.

Fruit large, a little irregular in outline, obtuse heart-shaped. Stalk of moderate length, rather stout, and inserted in a deep open cavity. Skin dark purple, becoming black. Flesh purple, tender, juicy, with a rich and sweet juice of high flavor.

LADY OF THE LAKE.

Originated by Charles Pease, Sen., near Cleveland, O. Tree vigorous, upright spreading, productive.

Fruit medium to large, roundish obtuse conic, compressed, shallow suture, a knob, and line on opposite side. Skin light yellow, shaded and marbled with rich bright crimson. Stalk medium, in a deep cavity. Flesh half tender, pale yellow, juicy, sweet. Very good. Middle to last of June.

Knight's Early Black.

LADY SOUTHAMPTON'S YELLOW.

Lady Southampton's Duke.

Golden Drop.

Yellow or Golden.

Spanish Yellow.

Fruit of medium size, heart-shaped. Skin yellow. Flesh firm, not very juicy. Ripens about the middle of July.

LARGE RED BIGARREAU.

Gros Bigarreau Rouge.

Bigarreau à Gros Fruit Rouge.

Bigarreau à Gros Fruit Rouge.

Belle de Rocmont.

Fruit large, oblong heart-shape. Skin dark red in the sun. Flesh firm. Early in July. Poor bearer.

LATE BIGARREAU

Originated by Prof. Kirtland. Tree thrifty, moderate growth, rather spreading, productive.

Fruit large, obtuse heart-shaped. Skin deep yellow, shaded on the sunny side with bright red. Stalk long, inserted in a broad open cavity. Flesh almost firm, juicy, sweet, pleasant flavor. Very good. Ripe last of June and first of July.

LATE PURPLE GUIGNE.

A new foreign variety.

Fruit large, roundish, dark red. Flesh firm, juicy, sweet. Middle July.

LAURA.

Originated with Charles Pease, Sen., Cleveland, O. Tree spreading upright, productive.

Fruit medium to large, heart-shaped, globular, sometimes one-sided. Color pale yellow ground, mostly overspread with rich, bright red, without suture. Stem medium or short, in a shallow depression. Flesh peach-blow white, radiating lines wavy, juicy, sweet, very rich, and high flavor, excellent, half or nearly tender. Pit medium to small. Season early in June, but hangs well.

LEATHER STOCKING.

Raised by Professor Kirtland. Tree vigorous, upright spreading.

Fruit medium, heart-shaped, reddish black. Flesh firm, sweet. Middle to last of July.

LINCOLN.

Originated near Cleveland, O. Tree vigorous, spreading.

Fruit large, oblong heart-shape, pointed. Color when ripe a brown red. Suture rather broad, shallow, half round. Stalk long. Cavity deep. Flesh almost firm, veined and marbled with shades of red, sprightly, juicy, sweet, and pleasant. Good. Stone above medium. First to middle of July. A good market sort. (Elliott.)

LINDLEY.

Origin, near Cleveland, O. Tree vigorous, moderately prolific.

Fruit large, heart-shaped, dark purplish red. Flesh almost firm, tinged with red, juicy, but only good. Early July. (Elliott.)

LOGAN.

Originated with Prof. Kirtland.

Fruit medium or above, obtuse, sometimes regular heart-shaped, with a hollow indenture at apex. Color purplish black when ripe. Flesh nearly firm, juicy, sweet, and rich flavor. Very good. Season middle to last of June.

LUDWIG.

Ludwig's Bigarreau.

Bigarreau de Ludwig.

A Cherry of recent introduction, not yet, to our knowledge, fruited in this country. It is described as large, heart-shaped, or pointed, with a deep suture on one side, bright rich red. Flesh pale yellow, half tender, juicy. Early June.

LUNDIE GEAN.

Fruit medium, roundish, purplish black. Flesh tender, juicy. July.

MADISON BIGARREAU.

Raised by Robert Manning, of Salem, Mass. Tree healthy, very productive.

Fruit of medium size, fair quality, roundish. Skin yellow, shaded with red. Flesh half tender, juicy, with a pleasant flavor. Ripe middle or last of June. Good.

MANNING'S EARLY BLACK HEART.

Raised by Robert Manning, of Salem, Mass. Tree vigorous, spreading.

Fruit medium, similar to the Black Heart, rather earlier and smaller in size. Ripe about the middle of June.

MANNING'S LATE BLACK.

Raised by Robert Manning, of Salem, Mass. Tree vigorous, productive.

Fruit large, roundish, deep purple or nearly black. Flesh purplish, half tender, very juicy, sweet, and excellent. Good. Ripe the last of June. Tree vigorous.

MANNING'S MOTTLED.

Mottled Bigarreau.

Raised by Robert Manning. It is a most abundant bearer. Tree vigorous, upright spreading.

Fruit rather large, roundish heart-shaped, flattened on one side, with distinct suture lines. Skin amber color, finely mottled and overspread with red, with a semi-transparent, glossy appearance. Stalk slender, inserted in a shallow hollow. Flesh, when fully ripe, yellow, tender, with a sweet and delicious juice. Very good. Ripens the last of June.

MERVEILLE DE SEPTEMBRE.

Tardive de Mons.

A French variety, ripening in August, vigorous grower.

Fruit small, firm, rather dry, sweet, but of little value.

MOYER'S HONEY HEART.

Originated in Bucks Co., Pa. Tree a strong grower, forming a round head.

Fruit small or medium, obtuse heart-shape, slightly compressed. Suture small. Apex slight. Skin whitish, shaded and mottled with rich red. Stalk long, slender. Flesh yellow, juicy, sweet, pleasant, often adheres to the stone. Good. Middle July.

NANCY.

Originated by Charles Pease, Sen., Cleveland, O. Tree a vigorous, rather upright spreading grower. Very productive.

Fruit large, obtuse heart-shape. Suture slight. Stalk long, stout, in a large cavity. Skin palé yellow, shaded and mottled with crimson. Flesh tender, juicy, rich, and sweet. Very good. Stone small. Last of June.

NAPOLEON BIGARREAU.

Bigarreau Lauermann.

Lauermann's Kirsche.

Lauermann's Grosse Kirsche.

Clarke's Bigarreau.

Lauermann's Herz Kirsche.

Holland Bigarreau ?

Clarke's Superb.

The Napoleon Bigarreau is large, well-flavored, handsome, and productive.

Fruit of the largest size, very regularly heart-shaped, a little inclining to oblong. Skin pale yellow, becoming amber in the shade, richly dotted and spotted with very deep red, and with a fine marbled dark crimson cheek. Flesh very firm (too much so), juicy, with an excellent flavor. Stalk very stout, short, and set in a narrow cavity. Ripens a few days after the Bigarreau, about the first of July, and is a good and constant bearer. Good. The fruit is not so obtuse as the Bigarreau.

Holland Bigarreau is so much like the above that we think it identical.

OHIO BEAUTY.

Ohio Beauty.

Originated by Prof. Kirtland. Tree a vigorous grower, with a rather spreading head, and has proved so far a productive, valuable kind.

Fruit large, obtuse heart-shaped. Light ground, mostly covered with red. Flesh tender, brisk, juicy. Very good. Ripe about the middle of June.

OSCEOLA.

Originated with Prof. Kirtland. Moderate bearer and medium growth.

Fruit above medium, heart-shaped. Color fine dark red, approaching to black. Flesh juicy, tender, sweet, and excellent. Very good. Ripe last of June.

OX-HEART.

Lion's Heart.

Bullock's Heart.

Very Large Heart.

Ochsen Herz Kirsche.

Fruit large, obtuse heart-shaped. Skin dark red. Flesh red,

half tender, with a pleasant juice, of second quality in point of flavor. Good. Ripens last of June.

PIERCE'S LATE.

Originated with Amos Pierce, Massachusetts. Growth free, rather upright, with a round head.

Fruit medium, obtuse heart-shaped, dark red and mottled, light amber in the shade. Stalk rather short and slim. Flesh soft, tender, very juicy, sweet. Good. Stone small. Ripe the last of July.

PONTIAC.

Originated with Prof. Kirtland. Tree vigorous, round headed, upright spreading. Very productive. Valuable either for table or market purposes.

Fruit large, obtuse heart-shaped. Sides compressed. Color dark purplish red, approaching to black when fully ripe. Flesh half tender, juicy, sweet, and agreeable. Very good. Season, last of June.

Osceola.

POWHATTAN.

For profitable market purposes this is one of the very best, the fruit ripening late, and all being uniform and regular in size. Originated with Prof. Kirtland.

Fruit medium size, uniform, roundish, flattened or compressed on sides. Surface irregular. Color liver-like, highly polished. Suture half round. Flesh rich, purplish red, marbled, half tender, juicy, sweet, pleasant but not high flavor. Good. Season late, 8th to 15th of July.

PRESIDENT.

Tree vigorous, spreading, productive.

Fruit medium to large, regular heart-shape, slightly compressed, slight suture, followed by an indistinct line. Skin amber color, mottled and shaded with carmine and yellow. Flesh tender, juicy, and sprightly sweet. Very good. Last June.

PRINCE'S BLACK HEART.

Originated by Wm. R. Prince, Flushing, Long Island. Tree vigorous, upright spreading.

Fruit medium to large, heart-shaped, slightly compressed. Apex small. Suture small. Surface somewhat uneven. Flesh purplish, rather tender, juicy, sweet, and good to very good. Last of June.

PROUDFOOT.

Raised by D. Proudfoot, Cleveland, O. Tree vigorous.

Fruit large, heart-shaped, dark purplish red. Flesh firm, juicy, sweet. Ripe 15th to last of July.

Red Jacket.

RED JACKET.

One of Prof. Kirtland's seedlings. A free-growing, rather spreading, late, and productive variety. Very profitable for market.

Fruit large, regular, obtuse heart-shaped. Color amber, mostly covered with light red. Flesh half tender, juicy, good but not rich flavor. Stalk long, slender, in a moderate basin. Ripe about the time of Downer's Red.

REMINGTON.

Remington White Heart. Remington Heart.

Fruit small, heart-shaped. Skin yellow, rarely with a faint tinge of red on one side. Flesh yellowish, dry, and somewhat bitter. Middle and last of August.

RICHARDSON.

Raised by J. R. Richardson, Boston. Tree vigorous, productive.

Fruit large, heart-shaped, dark red, inclining to black. Flesh deep red, half tender, juicy, sweet. Good. Last of June.

RIVAL.

An English variety. Its principal value being from its period of late maturity. Tree vigorous, productive.

Fruit medium, obtuse heart-shape, compressed one side. Suture distinct. Skin purplish black, or black. Flesh firm, sweet. Good. August.

RIVERS'S EARLY AMBER.

Raised by Thomas Rivers, England.

Fruit medium size, heart-shaped, prolific, a sub-variety of old Early White Heart, but not as early.

RIVERS'S EARLY HEART.

Raised by Thomas Rivers, England.

Fruit medium size, heart-shaped, ripening just after Belle d'Orleans. Very much inferior.

ROBERTS' RED HEART.

Originated in the garden of David Roberts, of Salem, Mass. Tree hardy, free grower, bears abundantly.

Fruit of medium size, roundish heart-shape. Skin of a pale amber ground, but nearly overspread with pale red, mottled with deeper red. Suture quite distinct. Flesh juicy, sweet, and well flavored. Stalk long, slender, set in a moderate depression. Very good. Ripe last of June

ROCKPORT.

Rockport Bigarreau.

Raised by Dr. Kirtland, Cleveland, O. Tree vigorous, healthy, upright, forming a beautiful pyramidal head; a good bearer, and worthy of a place in every good collection.

Fruit large, roundish obtuse heart-shaped. Color, when fully ripe, a beautiful bright red, shaded with pale amber. Flesh rather firm, juicy, sweet, rich, with an excellent flavor. Very good or best. Ripens early in June, or just before Mayduke.

SPARHAWK'S HONEY.

Sparrowhawk's Honey.

Raised by Edward Sparhawk, of Brighton, near Boston. A profuse bearer. Vigorous grower.

Fruit of medium size, roundish heart-shaped, very regular in form. Stalk of moderate length, rather slender, set in a round, even depression. Skin thin, of a beautiful glossy pale amber red, becoming a lively red when fully ripe. Flesh juicy, with a very sweet flavor. Ripe the last of June.

Rockport.

STRASS'S EARLY BLACK.

Noir Précoce de Strass.

Fruit small, heart-shape, black. Flesh juicy, sweet. Very early in ripening, and an abundant bearer. New.

SUMNER'S HONEY.

Originated by Clement Sumner, Dorchester, Mass. Tree a vigorous grower and good bearer.

Fruit medium, roundish heart-shape. Skin amber, half covered and marbled with pale red. Flesh rather firm, juicy, rich, sweet. Good. Last of June. (Cole.)

SWEET MONTMORENCY.

Allen's Sweet Montmorency.

Raised by J. F. Allen, Salem, Mass. Tree hardy, vigorous growth, good bearer.

Fruit of medium size, round, flattened. Skin pale amber in the shade, light red, slightly mottled, in the sun. Stalk an inch and three-fourths long, rather slender, inserted in a small, shallow, even hollow. Flesh yellowish, tender, sweet, and excellent. Ripens here middle July.

TECUMSEH.

One of Prof. Kirtland's varieties. Tree moderately vigorous, productive.

Fruit medium to large, obtuse heart-shaped. Skin reddish purple. Flesh dark red, half tender, with a brisk vinous flavor. Good to very good. Ripe towards the end of July.

TOBACCO-LEAVED.

Four to the Pound.
Bigarreautier à Feuilles de Tabac.
Guignier à Feuilles de Tabac.

Cerisier de 4 à Livre.
Bigarreautier à Grandes Feuilles.
Vier auf ein Pfund.

Leaves very large.
Fruit small, hard, of no value.

TOWNSEND.

Tree a strong, vigorous grower, productive, and promises well. Raised by W. P. Townsend, Lockport, N. Y.

Fruit large, obtuse heart-shaped, high-shouldered, compressed. Suture distinct. Apex depressed. Stem long, somewhat slender, set in a broad, rather deep depression. Color light amber, mottled and shaded with carmine. Flesh almost tender, juicy, rich, sprightly, refreshing flavor. Pit small. Good to very good. Ripe last of June.

TRADESCANT'S BLACK HEART.

Elkhorn.
Large Black Bigarreau.
Bigarreau Gros Noir.
Gross Schwarze Knoorpel.

Elkhorn of Maryland.
Tradescant's.
Guigne Noir Tardive.
Kirsche mit Säftigen Fleisch.

It is an European variety, but a tree, growing about forty years since in the garden of an inn in Maryland, attracted the notice of the late Wm. Prince, who propagated it under the name of Elkhorn, by which it was there known. The bark is of a peculiarly gray color, and the growth quite vigorous.

Fruit large, heart-shaped, with a very irregular or uneven surface. Skin deep black, glossy (before fully ripe, deep purple, mottled with black). Stalk rather short, set in a pretty deep hollow. Flesh very solid and firm, dark purple, moderately juicy. Good. Ripe first and second week in July.

TRANSPARENT GUIGNE.

Transparent Gean. Transparent.

It is a pretty variety for the dessert, hanging late on the tree.

Fruit small, regular, oval heart-shaped. Skin glossy, thin, yellowish white, delicately blotched with fine red, distinct suture line on both sides. Stalk long and slender. Flesh tender, when fully ripe very sweet, mingled with a very slight portion of the piquant bitter of the Mazzard class of Cherries. Good. First of July.

TRIUMPH OF CUMBERLAND.

Monstrous May. Brenneman's Early.
Street's May. Cumberland Seedling.

Origin, Carlisle, Cumberland Co., Pa. Tree vigorous and spreading, moderately productive.

Fruit large, obtuse heart-shape, one side compressed. Suture slight. Stalk rather long. Skin deep crimson, almost black when fully ripe. Flesh purplish, rather firm, juicy, sweet, not high-flavored. Good. Last of June.

WARREN'S TRANSPARENT.

Origin, Brighton, Mass.

Fruit small, roundish heart-shape, pale yellow and red. Flesh tender. Good. Early July. (Cole.)

WATERLOO.

An English variety. Tree a moderate grower and bearer.

Fruit large, obtuse heart-shaped, deep suture half round. Skin dark purplish black. Stalk rather short. Flesh purplish red, juicy, half tender, sweet. Good. Middle June.

WELLINGTON.

Fruit medium, roundish, obtuse heart-shape, purplish black. Flesh almost firm, juicy, sweet. Good. Early July.

WENDELL'S MOTTLED BIGARREAU.

Originated with Dr. H. Wendell, Albany, N. Y. Tree upright, thrifty growth.

Fruit large, obtuse heart-shaped, dark red, nearly black at maturity, mottled. Flesh dark red, firm, and high-flavored. Good to very good. Ripe about the time of Downer's Late.

WERDER'S EARLY BLACK HEART.

Werd'sche Frühe Schwarze. Herz Kirsche.

An early variety. Tree vigorous, spreading, moderately productive.

Fruit large, roundish heart-shaped. Skin black. Flesh purplish,

tender, sweet, and excellent. Very good. Ripens early in June, or just before Mayduke.

WHITE BIGARREAU.

White Ox-Heart.	Ox-Heart.	White Bigarreau.
Harrison Heart ?	Large White Bigarreau.	Turkey Bigarreau.
	Bigarreau blanc ?	

The White Bigarreau is inferior to the Bigarreau or Graffion in hardiness, and in the circumstance that it is a very poor bearer while the tree is young, though it bears fine crops when it has arrived at from twelve to fifteen years' growth. Growth upright.

Fruit of the largest size, heart-shaped, with a rather irregular outline, and a pretty distinct suture line on one side. Skin yellowish white, overspread with marbling of red. Flesh firm, but scarcely so much so as that of the Bigarreau, and when fully ripe half tender, and more luscious than the latter Cherry. Good to very good. It is very liable to crack after rain. Middle and last of June.

WHITE FRENCH GUIGNE.

A foreign sort, of vigorous growth.

Fruit small, roundish obtuse conical, a little compressed, slight suture. Skin whitish yellow, translucent, sometimes a tinge of crimson in the sun. Stalk long, slender. Flesh tender, juicy, sweet, pleasant. Good. Middle July.

WHITE TARTARIAN.

Fraser's White Tartarian.	Fraser's White Transparent.
	Amber à petit fruit.

Fruit of medium size, obtuse heart-shaped. Skin pale yellow. Stalk slender. Flesh whitish yellow, half tender, and very sweet. Good. Early June.

WILKINSON.

Fruit medium, heart-shape, compressed, slight suture. Skin deep red, almost purplish. Flesh purplish, tender, juicy, pleasant. Good. Stone large. Early July.

CLASS II.

DUKE AND MORELLO CHERRIES.

ADMIRABLE DE SOISSONS.

De Soissons.	Belle de Soissons.
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A Cherry of the Morello class, good for culinary uses.

Fruit medium or above, broadly heart-shaped, slightly compressed, slight suture half round. Skin shades of red on yellow. Stalk rather long. Flesh tender juicy, brisk subacid. Last of June.

ARCH DUKE.

Griotte de Portugal.
Portugal Duke.

Late Arch Duke.
Late Duke of some.

Tree rather more vigorous and upright than the Mayduke, hardy and prolific.

Fruit large, obtuse heart-shaped. Suture distinct on one side. Skin at first bright red, but becoming very dark when mature. Stalk an inch and a half long, slender, inserted in a rather deep open cavity. Flesh light red, melting, juicy, rich subacid flavor. Very good. Ripe the first and second week in July.

BELLE DE CHOISY.

Belle Audegoise ?
Cerise Doucette.

Ambrée de Choisy.
Cerise de la Palembre.
Schöne von Choisy.

Ambrée à Gros Fruit.
Cerise à Noyau Tendre.

In our estimation, there is no Cherry for the dessert more delicious than the Belle de Choisy. It comes from the village of Choisy, near Paris, where it was raised in 1760. The habit of the tree is nearly that of the Mayduke, the leaves dark, and the head upright. It is hardy, a moderate bearer.

Fruit round or slightly depressed. Skin very thin and translucent, showing a net-like texture of flesh beneath ; in color, pale amber in the shade, but in the sun finely mottled with yellowish red—the fruit fully exposed becoming a bright cornelian red. Flesh amber-colored, very tender and melting, of a delicate sweet flavor. Stalk rather short, swollen at the upper end. Best. Middle of June, or directly after the Mayduke.

-BELLE DE SCEAUX.

Chatenay.

A Morello, from France.

Fruit round, deep red. Flesh yellowish, juicy, acid. Last of June.

BELLE MAGNIFIQUE.

Belle et Magnifique.
Belle de Sceaux.

Magnifique de Sceaux.
Belle de Chatenay.

Planchoury ?

Tree hardy, moderately vigorous, productive, a beautiful and excellent late variety. Useful for culinary purposes, and good table fruit when pretty ripe.

Fruit large, roundish, inclining to heart-shape. Stalk long, slender, in an open medium cavity. Skin a fine bright red. Flesh juicy, tender, with a sprightly subacid flavor, one of the best of its class. Ripe middle of July till the middle of August.

Belle Magnifique.

BUTTNER'S OCTOBER MORELLO.

A foreign sort. Small, late, acid, and of little or no value.

CARNATION.

Wax Cherry.

Cerise Nouvelle d'Angleterre.

Grosse Cerise Rouge Pâle.

Griotte de Villennes.

Crown.

Cerise de Portugal.

Griottier Rouge Pâle.

A very handsome, light red, large Cherry, highly esteemed here for brandying and preserving.

Fruit large, round. Skin yellowish white, mottled with red, becoming a lively red slightly marbled. Stalk stout. Flesh tender, a little more firm than most of this division, but juicy, and when fully ripe of a sprightly and good subacid flavor. The foliage is pretty large, and the wood strong, but the tree has a spreading, rather low habit. It is a moderate but regular bearer, and the fruit hangs a long while on the branches without decaying. Good. Ripe the middle and last of July

CLUSTER.

Cerise à Bouquet.

Commune à Trochet.

Bouquet Amarelle.

Flandrische Weichsel.

Cerisier à Trochet.

Très-Fertile.

Trauben Amarelle.

Büschel Kirsche.

Chevrense.

Griottier à Bouquet.

Busch Weichsel.

A very curious fruit, growing closely clustered around a common stalk, small size, borne in clusters of from two to six; round, of a lively red. Ripens the last of June. The tree is small in all its parts.

COE'S LATE CARNATION.

A promising late variety.

Fruit above medium size, roundish. Suture shallow, with a line. Color amber, mostly shaded and mottled with bright red. Flesh juicy and sprightly subacid. Ripe from the middle till the last of July.

DAUPHINE.

Of the Morello class. Tree vigorous, productive.

Fruit medium, roundish, without suture. Skin bright crimson, mottled. Stalk long, slender. Flesh tender, juicy, less acid than most of the Morellos. Very good. Stone small. Last June.

DE CHAUX.

D'Allemagne.

A Morello.

Fruit large, roundish oblate. Skin dark red. Stalk long, slender. Flesh dark, tender, juicy, brisk subacid. Middle July.

DECHENAUT.

A fine large Cherry of the Duke class, ripening about the same time as Mayduke.

Fruit large, roundish heart-shape, broad at the stalk, rather flattened. Suture slight. Skin rich red. Stalk long, in a deep cavity. Flesh tender, succulent. (Hogg.)

DE KLEPAROW.

Belle Polonaise.

A Morello.

Fruit medium, roundish, dark red. Stalk long. Flesh dark, tender, juicy, rich subacid. Middle July. (Hogg.)

DE LA TOUSSAINT.

A variety of little value except as ornamental. It flowers almost continuously, and produces fruit the whole season, so that ripe and green fruit and flowers are upon the tree all at the same time.

The fruit is small, round, deep red, firm, acid.

DONNA MARIA.

A Morello Cherry, forming a small tree, but very prolific.

Fruit of medium size, roundish, dark red, tender, juicy, rich acid. Valuable for cooking. Middle July. (Elliott.)

DOUBLE NATTE.

Doppelte Natte.

Kirsch von der Natte.

Fruit rather large, roundish, a little compressed and inclining to ovate. Skin brownish black. Stalk slender, very long, and bearing leaves. Flesh very red, tender, juicy, brisk, sprightly acid. Early July. (Hogg.)

DUCHESS DE PALLUAU.

A vigorous tree of the Duke class.

Fruit medium size, roundish heart-shaped, compressed, very dark purple. Stem long and slender, in a large open cavity. Flesh dark red, tender, juicy, mild acid. Ripe middle of June.

EARLY MAY.

May Cherry.

Small May.

Cerisier Nain à Fruit Rond.

——— Précoce.

Griottier Nain Précoce.

Hâtive.

Précoce.

Petite Cerise Rouge Précoce.

Königliche Amarelle.

Frühe Kleine Runde.

——— Zwerg Weichsel.

Cerise Indulle.

An early Morello of rather dwarf habit. Ripening about the first of June.

Fruit small, round, slightly flattened, lively red, tender, juicy, acid.

This is an old variety from abroad. The Early May of Illinois and the West is probably a distinct sort, and by some considered as identical with our Kentish or Early Richmond. We have had no opportunity of comparing them.

EXCELLENTE DOUCE TARDIVE.

Originated at Jodoigne, France. A Morello of vigorous habit and productive.

Fruit medium to large, roundish flattened at ends. Skin deep red. Stalk large and long. Flesh yellowish, melting, acid. Stone small. Aug. (An. Pom.)

FLEMISH.

Montmorency.
Cerise à Courte Queue.
Gros Gobet.
English Weichsel?
Double Volgers.
Kentish of some.

Montmorency à Gros Fruit.
Gobet à Courte Queue.
A Courte Queue de Provence.
Weichsel mit ganzkurzen Stiel.
Early May of some.

This is a very odd-looking fruit, being much flattened and having a very short stalk.

Fruit rather large, very much flattened both at the top and base, and generally growing in pairs. Stalk stout, short. Skin shining, of a bright lively red. Flesh yellowish white, juicy, and subacid. Good for preserving; but, unless very ripe, scarcely rich enough for table use. Last of July.

GREAT CORNELIAN.

Double Glass.

Fruit large, oblate, deep suture half round. Skin thin, translucent, at first light becoming dark red. Flesh yellowish, tender, juicy, subacid, vinous. Last June. (Hogg.)

GUIGNE NOIR LUISANTE.

Black Spanish.

Fruit medium size, round heart-shaped, glossy, blackish red. Flesh reddish purple, tender, juicy, rich, acid. Ripe middle to last of July.

HÂTIVE MALGRE TOUT.

A Duke Cherry from France.

Fruit medium, roundish obtuse heart-shape. Skin very dark red, nearly black when fully ripe. Flesh dark red, juicy, subacid. June. (Alb. Pom.)

HOLMAN'S DUKE.

A variety of the Duke class, which has been confounded with May-duke. It is very similar, but ripens later. The tree has short, erect shoots.

Fruit large, round oblate, deep red, almost black. Flesh tender, juicy, rich, excellent. Very good. Middle to last of July.

IMPERATRICE EUGÉNIE.

Empress Eugénie.

A French Cherry of the Duke family, rather dwarf in habit, shoots pretty stout, very productive.

Fruit large, roundish flattened. Skin rich dark red. Suture broad, shallow. Stalk rather short, in a deep cavity. Flesh reddish, tender, rich, juicy subacid. Very good. Stone small. Middle of June.

IMPERIAL MORELLO.

A productive and early bearing variety.

Fruit medium size, roundish, dark purplish red. Flesh tender, juicy, acid. Last of July.

JEFFREY'S DUKE.

Jeffrey's Royal.
Cherry Duke.

Jeffrey's Royal Caroon.
Royale Ordinaire.

Royale.

Fruit of medium size, round, or a little flattened at the apex and basin. Skin of a fine lively red. Stalk moderately long. Flesh yellowish amber, scarcely red. Juice abundant, and of a rich flavor. The trees are of a distinct habit of growth, being very compact, and growing quite slowly. The buds are very closely set, and the fruit is borne in thick clusters. Middle and last of June.

JUNE DUKE.

Wetherill.

Shippen.

A variety described by Coxé as a vigorous grower.

Fruit of large size, very rich, tree abundant bearer. We know little of it, having only heard of it as the Wetherill, grown near Philadelphia.

KENTISH.

Virginian May ?
Early Richmond.
Kentish Red.
Commune.
Muscat de Prague.
Cherry Cluster } of Virginia.
May Cluster }

Common Red.
Pie Cherry.
Montmorency.
Montmorency à longue queue.
Sussex.
De Kalb.

The true Kentish Cherry, an old European sort, better known here as the Early Richmond, is one of the most valuable of the acid Cherries. It begins to color about the 20th of May, and may then be used for tarts, while it will hang upon the tree, gradually growing larger, and losing its acidity, until the last of June, or in dry seasons even until July, when it becomes of a rich, sprightly, and excellent acid flavor. The tree grows about eighteen feet high, with a roundish spreading head, is exceedingly productive, and is from its early maturity a very profitable market fruit, being largely planted for this purpose. This kind is remarkable for the tenacity with which the stone adheres to the stalk. Advantage is taken of this to draw

Early Richmond.

out the stones. The fruit is then exposed to the sun, and becomes one of the most excellent of all dried fruits.

Fruit when it first reddens rather small, but, when fully ripe, of medium size, round, or a little flattened; borne in pairs. Skin of a fine bright red, growing somewhat dark when fully ripe. Stalk an inch and a quarter long, rather stout, set in a pretty deep hollow. Flesh melting, juicy, and, at maturity, of a sprightly rather rich acid flavor. Very good.

KIRTLAND'S MORELLO.

Kirtland's Large Morello.

One of Prof. Kirtland's seedlings. Tree a spreading, rather drooping grower, moderate, regular bearer.

Fruit pretty large for a Morello, roundish, dark red. Flesh juicy, acid, when fully ripe rich. Very good. Stone small. Middle July.

LATE DUKE.

Anglaise Tardive.

A very large and fine Duke Cherry, ripening later than the Mayduke, and therefore a very valuable sort for the dessert or for cooking. The tree is of vigorous growth for its class.

Fruit large, flattened or obtuse heart-shaped. Color, when fully ripe, rich dark red (but at first white, mottled with bright red). Stalk rather slender, inserted in a shallow hollow. Flesh yellowish, tender, juicy, with a sprightly subacid flavor, not quite so sweet and rich as the Mayduke. Ripens gradually, and hangs on the tree from the middle of July till the 10th of August.

Late Duke.

LATE KENTISH.

Common Red. Pie Cherry.
Common Sour Cherry. Kentish Red.

This Cherry, a variety of the Kentish, is better known among us than any other acid Cherry.

It is emphatically the *Pie Cherry* of this country, being more generally grown than any other sort.

Fruit medium, round, flattened. Skin deep lively red, when fully ripe. Flesh very tender, and abounding with a highly acid juice. Ripens middle July.

Louis Philippe.

LOUIS PHILIPPE.

From France. Tree upright spreading, habit between the Dukes and Morellos. Vigorous and very productive.

Fruit large, roundish regular. Stalk rather short, stout, set in a broad even regular cavity, usually grows in clusters. Skin rich dark, almost purplish black red. Flesh red, tender, juicy, sprightly, mild acid. Stone small. Very good or best. Middle to last July.

LOVE APPLE.

Tomato.

A. Cherry from Spain of the Duke class.

Fruit large, roundish obtuse heart-shape, shallow sutures. Skin clear red. Flesh pale, tender, juicy. Good.

MAYDUKE.

Royale Hâtive
Cherry Duke of some.
Cerise Guigne.
Coularde.
De Hollande.
D'Espagne.
Griotte Grosse Noire.
Griotte d'Espagne of some.
Griotte Précoce of some.

Early Duke.
Large Mayduke.
Morris Duke.
Morris's Early Duke.
Benham's Fine Early Duke.
Thompson's Duke.
Portugal Duke.
Buchanan's Early Duke.
Millet's Late Heart Duke.

This invaluable early Cherry is one of the most popular sorts in all countries, thriving almost equally well in cold or warm climates. This, the Black Heart, and the Bigarreau, are the most extensively diffused of all the finer varieties in the United States. And among all the new varieties none has been found to supplant the Mayduke. Before it is fit for table use, it is admirably adapted for cooking, and when fully ripe it is, perhaps, the richest of the subacid Cherries. In the gardens here, we have noticed a peculiar habit of this tree of producing very frequently some branches which ripen much later than the others, thus protracting for a long time the period in which its fruit is in use. The Mayduke is remarkable for its upright, or, as it is called, *fastigiate* head, especially while the tree is young, in distinction to other sorts, which produce many lateral branches.

Fruit roundish or obtuse heart-shaped, growing in clusters. Skin at first of a lively red, but when fully ripe of a rich dark red. Flesh reddish, tender, and melting, very juicy, and at maturity rich and excellent in flavor. This fruit is most frequently picked while it is yet red, and partially acid, and before it attains its proper color or flavor. It begins to color, about New York, in favorable seasons, the last of May, and ripens during the first half of June.

Mayduke is said to be a corruption of *Médoc*, the province in France where this variety (the type of all the class now called Dukes) is believed to have originated.

Mayduke.

MORELLO.

Milan.	English Morello.
Cerise du Nord.	Large Morello.
Griotte Ordinaire du Nord.	Dutch Morello.
September Weichsel Grosse.	Ronald's Large Morello.

The Morello is a fine fruit. Its name is said to be derived from the dark purple color of its juice, which resembles that of the *Morus* or Mulberry. It is highly valuable for all kinds of preserves, and is an agreeable addition to a dessert.

Fruit of pretty large size, round or slightly obtuse heart-shaped. Skin dark red, becoming nearly black when fully ripe. Flesh dark purplish red, tender, juicy, and of a pleasant subacid flavor when quite mature. Ripe 20th of July.

The Common Morello of this country is a smaller variety of the foregoing, and a little darker in color. Little esteemed.

MORELLO DE CHARMEUX.

This is a very late variety of the Morello, with a milder flavor, ripening middle of August.

NOUVELLE ROYALE.

This recently introduced variety of the Duke class of Cherries is stated to possess great size and beauty of fruit, while the tree is of a pyramidal form, very handsome when grown upon the Mahaleb stock.

Fruit large or very large, roundish, flattened at the stalk. Skin brilliant glossy red, somewhat mottled with large dark red dots. Flesh tender, melting, juicy, sprightly, sweet, acid. 5th to 15th July.

OSTHEIM.

Zwerg Kirsche.	Ostheimer Weichsel.
Frankische Wucher Kirsche.	Ostheimer Kirsche.

A small growing tree of the Morello class.

Fruit large, roundish oblate, slightly compressed one side. Skin red, quite dark at maturity. Stalk long. Flesh liver-color, tender, juicy, rich, almost sweet subacid. Very good. Middle July.

PARAMDAM.

Baramdam.

A tree of very dwarf habit.

Fruit small, round, pale red. Flesh pale, tender, agreeable, lively acid. Middle July. (Hogg.)

PLUMSTONE MORELLO.

Tree of slow growth, makes a fine pyramid. A productive, hardy, and valuable sort.

Fruit large, roundish, inclining to heart-shape. Skin deep red. Stalk an inch and a half long, rather slender and straight, set in a hollow of moderate depth. Flesh reddish, tender, juicy, and when well

matured, of a sprightly and agreeable flavor. Good. Stone long and pointed. Ripe last of July and first of August.

REINE HORTENSE.

Monstreuse de Bavay.
Lemercier.

Belle de Bavay.
Seize à la Livre.

French origin, of Duke habit. Tree a healthy and handsome grower, productive, and a very desirable variety.

Fruit very large, roundish elongated. Skin a bright lively red, somewhat marbled and mottled. Suture distinctly marked by a line without any depression. Flesh tender, juicy, very slightly subacid and delicious, best of its season. Ripe from the middle to the last of July.

ROYAL DUKE.

Royale Anglaise Tardive.

Growth upright, compact head, branches less slender than Mayduke. Moderate bearer.

Fruit large, roundish, and distinctly oblate or flattened. Skin dark red. Flesh reddish, tender, juicy and rich. Good. Ripens in the last of June.

RUMSEY'S LATE MORELLO.

Origin unknown. Tree moderately vigorous. Ripens gradually through August and September. Not of much value except to the curious amateur.

Fruit large, roundish heart-shaped. Color rich lively red. Flesh juicy, with too much acid for the table.

SHANNON.

This is a Morello raised by Prof. Kirtland.

Fruit slightly above medium size, globular, flattened at junction with stem, dark purplish red when ripe. Flesh tender, reddish purple, juicy, acid. Stone small. Stalk long, slender, inserted in an open cavity. Good. Season middle of July.

VAIL'S AUGUST DUKE.

A very late Cherry, of the Duke class. Originated with Henry Vail, Esq., Troy, N. Y. Tree very productive, and of vigorous growth.

Fruit large, obtuse heart-shaped. Stalk medium, in rather deep out narrow cavity. Skin rich bright red on the shaded side, and of a lively cornelian red in the sun. Flesh tender, subacid, much like the Mayduke in flavor. Very good. Ripe the last week in July, and the first week or two in August.

Reine Hortense.

ORNAMENTAL VARIETIES.

CHINESE DOUBLE-FLOWERING.

Yung To. *Cerasus serrulata*. Serrulated Leaved Cherry.

This is a variety from China, with the leaves cut on the edges in the manner known as serrulate by botanists. Its flowers, which are borne in fascicles, are white, slightly tinged with pink, and nearly as double as those of the Large Double-Flowering. The tree considerably resembles the sour cherry-tree, and appears rather dwarfish in its growth.

DWARF DOUBLE-FLOWERING.

Double-Flowering Kentish. Small Double-Flowering.
Cérisier à Fleurs Doubles.

This is a double-flowering variety of the sour or Kentish Cherry, and has the more dwarfish habit and smaller leaves and branches of that tree—scarcely forming more than a large shrub, on which account it is perhaps more suitable for small gardens. The flowers are much like those of the Large Double-Flowering, but they are not so regular and beautiful in their form.

LARGE DOUBLE-FLOWERING.

Double French Cherry. Mérisier à Fleurs Doubles.
Prunus cerasus pleno. *Cerasus sylvestris*, flore pleno.

The double-blossomed Cherry bears no fruit, but whoever admires a beautiful flowering tree cannot refuse a place in his garden to this one, so highly ornamental. Its blossoms, which appear at the usual season, are produced in the most showy profusion; they are about an inch and a half in diameter, and resemble clusters of the most lovely full double white roses. The tree has the habit and foliage of the Mazzard Cherries, and soon forms a large and lofty head.

VIRGINIAN WILD CHERRY.

Wild Cherry of the United States. *Cerasus Virginiana*.
Cérisier de Virginie. Virginische Kirsche.

Our native wild Cherry is too well known to need minute description. It forms a large and lofty forest-tree with glossy, dark green leaves, and bears currant-like bunches of small fruit, which are palatable, sweet, and slightly bitter when fully ripe, at midsummer. They are, however, most esteemed for preparing *cherry bounce*, a favorite *liqueur* in many parts of the country, made by putting the fruit, along with sugar, in a demijohn or cask of the best old rum.

The black wild Cherry (*C. serotina*, Torrey and Gray), which ripens the first of September, is the best kind. The other species (*C. Virginiana*), which is commonly known as the *Choke Cherry*, bears reddish colored fruit, which is more astringent, and ripens a month earlier.

WEeping, OR ALL-SAINTS.

Ever-Flowering Cherry.	C. vulgaris, semperflorens.
Cerise de la Toussainte.	Guignier à rameaux pendans.
Cerise Tardive.	Cerisier Pleurant.
Cerise de St. Martin.	St. Martin's Amarelle.
Martin's Weichsel.	Monats Amarelle.
Allerheiligen Kirsche.	

This charming little tree, with slender, weeping branches, clothed with small, almost myrtle-like foliage, is a very pleasing ornament when introduced on a lawn. Its fruit is a small, deep red Morello, which is acid, and in moist seasons is produced for a considerable period successively. When grafted, as it generally is, about the height of one's head, on a straight stem of the common Mazzard, it forms a beautiful parasol-like top, the ends of the branches weeping half way down to the ground.

SELECTIONS OF CHOICE CHERRIES FOR FAMILY USE,
TO RIPEN IN SUCCESSION.

Early Purple Guigne, Belle d'Orleans, Mayduke, Bigarreau, Rockport, Black Tartarian, Elton, Gov. Wood, Coe's Transparent, Osceola, Delicate, Downer's Late, Reine Hortense, Belle Magnifique, Kentish.

The hardiest Cherries are the Kentish (or Early Richmond), the Dukes, and the Morellos. These succeed well at the farthest limits, both North and South, in which the Cherry can be raised; and when all other varieties fail, they may be depended on for regular crops.

CHAPTER XIV.

THE CURRANT.

Ribes rubrum, Lin. *Grossulaceæ*, of botanists.

Groseillier commun, of the French; *Die Johannisbeere*, German; *Albesboom*, Dutch; *Ribes rosso*, Italian; and *Grosella*, Spanish.

THE name Currant is said to be derived from the resemblance in the fruit to the little *Corinth* grapes or raisins, which, under the name of *Currants*, are sold in a dried state in such quantities by grocers; the latter word being only a corruption of *Corinth*, and the fruit of this little grape being familiarly known as such long before the common currants were cultivated.

The Currant is a native of Britain, and the north of Europe, and is, therefore, an exceedingly hardy fruit-bearing shrub, seldom growing

more than three or four feet high. The fruit of the original wild species is small and very sour, but the large garden sorts produced by cultivation, and for which we are chiefly indebted to the Dutch gardeners, are large, and of a more agreeable subacid flavor.

The Black Currant (*Ribes nigrum*) is a distinct species, with larger leaves, and coarser growth, and which, in the whole plant, has a strong odor, disagreeable, at first, to many persons.

USES. The cooling acid flavor of the Currant is relished by most people, in moderate quantities, and the larger varieties make also a pretty appearance on the table. Before fully ripe, currants are stewed for tarts, like green gooseberries, and are frequently employed along with cherries or other fruits in the same way; but the chief value of this fruit is for making *currant jelly*, an indispensable accompaniment to many dishes. *Currant shrub*, made from the fruit in the same manner as lemonade, is a popular summer drink in many parts of the country, and corresponds to the well-known Paris beverage, *eau de groseilles*. A sweet wine of very pleasant taste is made from their expressed juice, which is very popular among farmers, but which we hope to see displaced by that afforded by grapes,—which every one may make with less cost and trouble, and which is infinitely more wholesome, because it requires less additions, of any kind, to the pure juice.

The fruit of the Black Currant is liked by some persons in tarts, but it is chiefly used for making a jam, or jelly, much valued as a domestic remedy for sore throats.

The season when Currants are in perfection is midsummer, but it may be prolonged until October by covering the bushes with mats, or sheltering them otherwise from the sun.

PROPAGATION AND CULTURE. Nothing is easier of culture than the Currant, as it grows and bears well in any tolerable garden soil. To propagate it, it is only necessary to plant in the autumn, or early in the spring, slips or cuttings, a foot long, in the open garden, where they will root with the greatest facility. The Currant should never be allowed to produce suckers, and, in order to insure against this, the superfluous eyes or buds should be taken out before planting it, as has been directed under the head of Cuttings. When the plants are placed where they are finally to remain, they should always be kept in the form of trees—that is to say, with single stems, and heads branching out a few inches from the ground. The after treatment is of the simplest kind; thinning out the superfluous wood every spring is all that is required here. Those who desire berries of an extra large size *stop*, or pinch out, the ends of all the strong growing shoots about the middle of June, when the fruit is two-thirds grown. This forces the plant to expend all its strength in enlarging and maturing the fruit. And we may add to this, that it is better not to continue the cultivation of currant-trees after they have borne more than six or eight years, as finer fruit will be obtained, with less trouble, from young plants, which are so easily raised.

For field culture many prefer to grow them from suckers, but when this mode is adopted, care should be taken to thin out the oldest branches annually, and dig in old manure about the roots.

INSECTS AND DISEASES. Within a few years the Currant and Gooseberry have been affected by the ravages of an insect described by Dr. Asa Fitch, in his reports to the New York State Agricultural

Society, under the name of *Abraxis ribearia*. The moths are of a dull nankeen yellow, and make their appearance in June—depositing their eggs upon the leaves. These soon change to small worms, and rapidly eat up the foliage. The best remedy yet known is, to dust thoroughly with powdered white hellebore.

The Currant-borer, *Prenocerus supernatatus*, is another insect that sometimes creates damage by boring its way through the centre of young shoots and thus destroying them. By examining the young shoots in winter, such as are injured or contain the worm will be found of a brown color or shrivelled. Cutting away soon checks them.

There are, nominally, many sorts of Currants, but the following sorts comprise all at present known worthy of cultivation.

CLASS I.

RED AND WHITE CURRANTS.

ATTRACTOR.

A variety from France. Growth rather slow, spreading, very productive. Leaves small, sharply serrate or toothed, and three-lobed.

Fruit medium, yellowish white. Bunches medium, short.

BUIST'S LONG-BUNCHEd.

Originated by Robert Buist, Philadelphia, Pa. A very vigorous upright grower, and very productive.

Fruit of large size. Bunches very long, tapering, much like Red Dutch in flavor and color.

CHAMPAGNE.

Pheasant's Eye.

Groseillier à Fruit Couleur de Chair.

A large and handsome Currant, of a pale pink or flesh color, exactly intermediate in this respect between the Red and White Dutch. It is quite an acid sort, but is admired by many for its pretty appearance.

CHERRY.

A strong-growing variety, with stout, erect, short-jointed shoots. Leaves large, thick, and dark green. Not any more productive than other Currants, but a valuable one for market on account of its size.

Fruit of the very largest size. Bunches short. Berries deep red, and rather more acid than Red Dutch.

FERTILE DE PALLUAU.

A variety of rather recent introduction from France. A vigorous

upright grower, productive. Fruit large. Bunches long, bright red, moderately juicy.

GONDOUIN RED.

Red Provens.

From France. Red. Vigorous grower, very productive.

Fruit not as large nor as good as Red Dutch, fails to ripen well, quite acid and worthless.

GONDOUIN WHITE.

Fruit large, whitish yellow, quite sweet, more so than any other sort. Branches rather long, strong growth, productive.

KNIGHT'S EARLY RED.

The merit of this variety is in its ripening a few days earlier than other sorts.

KNIGHT'S LARGE RED.

Fruit very large, bright red. Bunches very large, very productive, an excellent sort.

KNIGHT'S SWEET RED.

This is not a sweet Currant, but is considerably less acid than other red Currants, not as sweet as White Dutch.

Fruit nearly as large as Red Dutch, rather lighter in color. Productive.

LA FERTILE.

From France. A vigorous upright grower, and productive.

Fruit large. Bunches long, dark red. Flavor similar to Red Dutch.

LA HÂTIVE.

Hâtive de Bertin.

A variety from France. Plant vigorous, foliage not as large as the cherry.

Fruit large, dark red. Bunches medium length, tapering. In quality about equal to Red Dutch.

LA VERSAILLAISE.

Macrocarpa.

Caucase.

Fertile d'Angers.

Imperial Red.

A variety from France. A very vigorous grower, with large, coarse foliage, productive.

Fruit of the largest size, dark red. Bunches resembling Cherry Currant, but occasionally longer.

We have received this Currant under the various names above given.

but have been unable to discover any difference. There may be distinct sorts under these names, but we have failed to obtain them.

LONG-BUNCED RED.

Grosse Rouge de Holland.

Fruit large. Bunches long. Berries deep red, much like Red Dutch with a little larger clusters, and rather larger fruit. Very productive.

PRINCE ALBERT.

Moderately vigorous grower, large foliage, late in ripening, productive and valuable.

Fruit large, similar in color to Victoria.

RED DUTCH.

Large Red Dutch.

Large-Bunched Red.

New Red Dutch.

Morgan's Red.

Groseillier Rouge à Gros Fruit.

An old, well-known sort, thrifty, upright growth, very productive.

Fruit large, deep red, rich acid flavor, with clusters two or three inches long.

SHORT-BUNCED RED.

Much like Red Dutch, with rather shorter bunches.

Fruit not quite as large, but similar in quality.

STRIPED-FRUITED.

Grosse Weiss und Rothgestreifte Johaunesbeere. Silver-Striped.

A fruit from Germany. Distinctly striped, small, poor bearer, and of no value except as a curiosity. Gloire des Sablons is similar to the above, and both without value except for ornament.

TRANSPARENT.

Blanc Transparent.

A French Currant.

Fruit very large, yellowish white, similar to White Grape in growth and fruit, and we are somewhat disposed to consider them identical. Very productive.

VICTORIA.

May's Victoria.
Goliath.

Raby Castle.
Red Grape.

Houghton Castle.
Wilmot's Red Grape.

A very excellent, rather late sort, with very long bunches of bright red fruit, and is an acquisition to this class of fruits. Berries as large as Red Dutch. Bunches rather longer, of a brighter red, growth more slow, spreading, and very productive. Will hang on the bushes some two weeks longer than most Currants.

WHITE DUTCH.

New White Dutch.
White Crystal.
White Clinton.

Reeve's White.
Morgan's White.
White Antwerp.

Dana's New White ?
White Leghorn.

This is precisely similar to Red Dutch in habit, but the fruit is larger, with rather shorter bunches, of a fine yellowish white color, with a very transparent skin. It is considerably less acid than the Red Currants, and is therefore much preferred for the table. It is also a few days earlier. Very productive.

WHITE GRAPE.

Imperial White.

Impérial Blanc.

Bunches moderately long. Berries very large, whitish yellow, sweet and good. Very productive. Branches more horizontal than White Dutch, and less vigorous.

WHITE PROvence.

A strong, upright growing variety, leaves often silvery edged.

Fruit yellowish white. Bunch short, tapering. Not as productive or profitable as White Grape.

CLASS II.

BLACK CURRANTS.

BANG UP.

A variety similar, and no way superior, to the Black English.

BLACK GRAPE.

Ogden's Black Grape.

Very much resembling Black Naples, but the plant, perhaps, a stronger and more vigorous grower.

BLACK NAPLES.

The Black Naples is a beautiful fruit, the finest and largest of all Black Currants, its berries often measuring nearly three-fourths of an inch in diameter. Its leaves and blossoms appear earlier than those of the Common Black, but the fruit is later, and the clusters, as well as the berries, are larger and more numerous.

COMMON BLACK.

Black English.

Casis.

The common Black English Currant is well known. The berries are quite black, less than half an inch in diameter, and borne in clusters of four or five berries.

Several varieties of Yellow and Black Currants, which we have received from Utah, have not fruited sufficiently for us to decide upon their values.

SELECTION OF CURRANTS. Red Dutch, White Dutch, White Grape, La Versailles, Victoria, Cherry.

ORNAMENTAL VARIETIES. There are several very ornamental species of Currant, among which we may here allude to the MISSOURI CURRANT (*Ribes Aureum*), brought by Lewis and Clarke from the Rocky Mountains, which is now very common in our gardens, and generally admired for its very fragrant yellow blossoms. Its oval blue berries, which are produced in great abundance, are relished by some persons. But there is a *Large-Fruited* Missouri Currant, a variety of this, which bears berries of the size of the Black Naples, and also some with yellow fruit of large size, almost equalling small cherries.

The RED FLOWERING CURRANT (*R. sanguineum*) is a very beautiful shrub from the western coast of America, with foliage somewhat like that of the Common Black, but which bears very charming clusters of large light crimson blossoms in April.

There are several other varieties, as *R. sanguineum*, fl. pl., *R. sanguineum atro-purpurea*, and *R. Gordoni*. They are not quite hardy enough to stand our winters without protection, but at the South will make a valuable addition to their shrubbery.

CHAPTER XV.

THE CRANBERRY.

Orycoccus, Arb. Brit. *Ericaceæ*, of botanists.

Airelle, of the French; *Die Moosebeere*, German; *Teen bessen*, Dutch; *Ossicocco*, Italian.

The Cranberry is a familiar trailing shrub, growing wild in swampy, sandy meadows and mossy bogs, in the northern portions of both hemispheres, and produces a round, red, acid fruit. Our native species (*O. macrocarpus*), so common in the swamps of New England, and on the borders of our inland lakes, as to form quite an article of commerce, is much the largest and finest species; the European Cranberry (*O. palustris*) being much smaller in its growth, and producing fruit inferior in size and quality. Also the Russian (*O. viridis*), a medium-sized variety.

Of the *O. macrocarpus*, there are three varieties:—The “Bell-shaped,” which is the largest and most valued, of a very dark, bright red color. The “Cherry,” two kinds, large and small; the large one the best, of a round form, a fine dark red berry, nearly or quite equal to the Bell-shaped; and the Bugle, Oval, or Egg-shaped, two kinds, large and small, not so high-colored as the Bell and Cherry—not so much prized, but still a fine variety.

The value of the common Cranberry for tarts, preserves, and other

culinary uses, is well known, and in portions of the country where it does not naturally grow, or is not abundantly produced, it is quite worth while to attempt its culture. Although, naturally, it grows mostly in mossy wet land, yet it may be easily cultivated in beds of peat soil, made in any rather moist situation; and if a third of old thoroughly decayed manure is added to the peat, the berries will be much larger and of more agreeable flavor than the wild ones. A square of the size of twenty feet, planted in this way, will yield three or four bushels annually—quite sufficient for a family. The plants are easily procured, and are generally taken up like squares of sod or turf, and planted two or three feet apart, when they quickly cover the whole beds.

In some parts of New England, low and coarse meadows, of no value, have been drained and turned to very profitable account by planting them with this fruit. In New Jersey, on Long Island, and elsewhere, large tracts of light sandy soils have been planted to Cranberries, and grown with profit and success. The Cranberry grows freely in light soils, but it is necessary to cover the surface, after ploughing, a depth of several inches, with clean sand. The average product is from eighty to one hundred bushels of cranberries, and the care they require after the land is once prepared and planted is scarcely any at all, except in gathering. Some of the farms in Massachusetts yield large crops, partly from natural growth, and partly from cultivated plantations. The Cranberry grows wild in the greatest abundance on the sandy low necks near Barnstable, and an annual Cranberry festival is made of the gathering of the fruit, which is done by the mass of the population, who turn out on the day appointed by the authorities, and make a general gathering with their cranberry rakes, a certain portion of the crop belonging, and being delivered, to the town.

A laborer will gather about thirty bushels of the fruit in a day with a cranberry rake.

CHAPTER XVI.

THE FIG.

Ficus Carica, L. Arb. Brit. *Urticaceæ*, of botanists; *Figuier*, of the French; *Feigenbaum*, German; *Fico*, Italian; *Higuera*, Spanish.

THIS celebrated fruit-tree, whose history is as ancient as that of the world, belongs properly to a warm climate, though it may be raised in the open air in the Middle States, with proper care.

In its native countries, Asia and Africa, near the sea coast it forms a low tree, twenty feet in height, with spreading branches, and large, deeply lobed, rough leaves. It is completely naturalized in the south of Europe, where its cultivation is one of the most important occupations of the fruit-grower.

The fruit of the Fig-tree is remarkable for making its appearance, growing, and ripening, without being preceded by any apparent blossom. The latter, however, is concealed in the *interior* of a fleshy receptacle

which is called, and finally becomes, the fruit. The flavor of the fig is exceedingly sweet and luscious, so much so as not to be agreeable to many persons when tasted for the first time; but, like most fruits of this kind, it becomes a great favorite with all after a short trial, and is really one of the most agreeable, wholesome, and nutritious kinds of food. It has always, indeed, been the favorite fruit of warm countries, and the ideal of earthly happiness and content, as typified in the Bible, consists in sitting under one's own fig-tree.

Its cultivation was carried to great perfection among the ancient Romans, who had more than twenty varieties in their gardens. But the Athenians seem to have prided themselves most on their figs, and even made a law forbidding any to be exported from Attica. Smuggling, however, seems to have been carried on in those days, and a curious little piece of etymological history is connected with the fig. The informers against those who broke this law were called *sukophantai*, from two words in the Greek, meaning the "discoverers of figs." And as their power appears also to have been used for malicious purposes, thence arose our word *sycophant*. The fig was first introduced from Italy about 1548, by Cardinal Poole, and to this country about 1790, by Wm. Hamilton, Esq.

PROPAGATION. This tree is very readily increased by cuttings taken off in the month of March, and planted in a light soil in a hot-bed, when they will make very strong plants the same season. Or they may be planted in a shady border in the open air, quite early in April, with tolerable success. In either case the cuttings should be made eight or ten inches long, of the last year's shoots, with about half an inch of the old or previous year's wood left at the base of each.

SOIL AND CULTURE. The best soil for the fig is one moderately deep, and neither too moist nor dry, as in the former case the plant is but too apt to run to coarse wood, and in the latter, to drop its fruit before it is fully ripe. A mellow calcareous loam is the best soil in this climate—and marl, or mild lime in compost, the most suitable manure.

As in the Middle States this tree is not hardy enough to be allowed to grow as a standard, it is the policy of the cultivator to keep it in a low and shrub-like form, near the ground, that it may be easily covered in winter. The great difficulty of this mode of training, with us, has been that the coarse and over-luxuriant growth of the branches, when kept down, is so great as to render the tree unfruitful, or to rob the fruit of its due share of nourishment. Happily the system of *root-pruning*, recently found so beneficial with some other trees, is in this climate most perfectly adapted to the fig. Short-jointed wood, and only moderate vigor of growth, are well-known accompaniments of fruitfulness in this tree; and there is no means by which firm, well-ripened, short-jointed wood is so easily obtained as by an annual pruning of the roots—cutting off all that project more than half the length of the branches. In this way the fig-tree may be kept in that rich and somewhat strong soil necessary to enable it to hold its fruit, and ripen it of the largest size, without that coarseness of growth which usually happens in such soil, and but too frequently renders the tree barren. The mode of performing root-pruning we have already described, but we may add here that the operation should be performed on the fig early in November. When this mode is adopted but little pruning will be necessary, beyond that of keeping the plant in a somewhat low and regular shape, short-

ening-in the branches occasionally, and taking out old and decaying wood.

In winter the branches of the fig must be bent down to the ground, and fastened with hooked pegs, and covered with three or four inches of soil, as in protecting the foreign grape. This covering should be removed as soon as the spring is well settled. Below Philadelphia, a covering of straw, or branches of evergreens is sufficient—and south of Virginia the fig is easy of culture as a hardy standard tree.

Two crops are usually produced in a year by this tree: the first, which ripens here in midsummer, and is borne on the previous season's shoots; and the second, which is yielded by the young shoots of this summer, and which rarely ripens well in the Middle States. It is, therefore, a highly advantageous practice to rub off all the young figs of this second crop after midsummer, as soon as they are formed. The consequence of this is to retain all the organizable matter in the tree, and to form new embryo figs where these are rubbed off, which then ripen the next season as the first crop.

RIPENING THE FRUIT. In an unfavorable soil or climate, the ripening of the fig is undoubtedly rendered more certain and speedy by touching the eye of the fruit with a little oil. This is very commonly practised in many districts of France. "At Argenteuil," says London, "the maturity of the latest figs is hastened by putting a single drop of oil into the eye of each fruit. This is done by a woman, who has a phial of oil suspended from her waist, and a piece of hollow rye straw in her hand. This she dips into the oil, and afterwards into the eye of the fig."

We have ourselves frequently tried the experiment of touching the end of the Fig with the finger dipped in oil, and have always found the fruits so treated to ripen much more certainly and speedily, and swell to a larger size than those left untouched.

There are forty-two varieties enumerated in the last edition of the London Horticultural Society's Catalogue. Few of these have, however, been introduced into this country, and a very few sorts will comprise all that is most desirable and excellent in this fruit. The following selection includes those most suitable for our soil and climate.

Fruit nearly all ripen in August.

CLASS I.

RED, BROWN, OR PURPLE.

BLACK GENOA.

The fruit of this Fig is long obovate, that portion next the stalk being very slender. Skin dark purple, becoming nearly black, and covered with a purple bloom. Pulp bright red, flavor excellent. Habit of the tree moderately strong.

BLACK ISCHIA.

Early Forcing.

Blue Ischia.

One of the most fruitful sorts, and pretty hardy.

Fruit of medium size, roundish, a little flattened at the apex. Skin dark violet, becoming almost black when fully ripe. Flesh deep red, and of very sweet, luscious flavor.

BROWN ISCHIA.

Chestnut. Chestnut-colored Ischia.

A good variety, with, however, a rather thin skin, rendering it liable to crack or burst open when fully ripe. It is hardy, of good habit, and a very excellent bearer.

Fruit of medium size, roundish obovate. Skin light or chestnut brown. Pulp purple, very sweet and excellent.

BROWN TURKEY.

Brown Italian.	Large Blue.	Italian.
Brown Naples.	Murrey.	Lee's Perpetual.

This is undoubtedly one of the very best for this country, and for open air culture, as it is perhaps the very hardiest, and one of the most regular and abundant bearers.

Fruit large, oblong or pyriform. Skin dark brown, covered with a thick blue bloom. Flesh red, and of very delicious flavor.

BRUNSWICK.

Madonna.	Hanover.	Brown Hamburg.	Black Naples.
Clementine.	Bayswater.	Red.	

One of the largest and finest purple Figs, well adapted for hardy culture.

Fruit of the largest size, pyriform in shape, with an oblique apex. Eye considerably sunk. Stalk short and thick, of a fine violet brown in the sun, dotted with small pale brown specks, and, on the shaded side, pale greenish yellow. Flesh reddish brown, slightly pink near the centre, and somewhat transparent. Flavor rich and excellent. The only fault of this variety for open air culture is, that it is rather too strong in its growth, not being so easily protected in winter as more dwarfish sorts.

MALTA.

Small Brown.

A small, but very rich Fig, which will often hang on the tree until it begins to shrivel, and becomes "a fine sweetmeat."

Fruit much compressed at the apex, and very much narrowed in towards the stalk. Skin light brown. Pulp pale brown, and of a sweet, rich flavor. Ripens later than the foregoing, about the last of August.

SMALL BROWN ISCHIA.

A very hardy sort, which, in tolerably warm places south of Philadelphia, will make a small standard tree in the open air, bearing pretty good crops, that ripen about the first of September.

Fruit small, pyriform, with a very short footstalk. Skin light brown. Pulp pale purple, of high flavor. Leaves more entire than those of the common Fig.

VIOLETTE.

A very good sort from the neighborhood of Paris, where it produces two crops annually.

Fruit small, roundish obovate, flattened at the apex. Skin dark violet. Pulp nearly white, or a little tinged with red on the inside, and of pleasant flavor.

VIOLETTE DE BORDEAUX.

Bordeaux.

A Fig which is much cultivated in France, being quite productive, though of inferior flavor to many of the foregoing sorts.

Fruit large, pyriform, about three inches long and two in diameter. Skin deep violet when fully ripe, but at first of a brownish red. Pulp reddish purple, sweet, and good.

CLASS II.

FRUIT, WHITE, GREEN, OR YELLOW.

ANGÉLIQUE.

Concourelle Blanche.

Mélotte

This little Fig is a very abundant bearer, and a pretty hardy sort.

Fruit small, obovate. Skin pale greenish yellow, dotted with lighter colored specks. Pulp white, but only tolerably sweet. It will usually bear two crops.

LARGE WHITE GENOA.

Fruit large, roundish obovate. Skin thin, pale yellow. Pulp red, and well flavored.

MARSEILLES.

White Marseilles.
White Naples.
Pocock.

Ford's Seedling.
White Standard.
Figue Blanche.

A very favorite sort for forcing and raising under glass, but which does not succeed so well as the Brown Turkey and the Ischias for open culture.

Fruit small, roundish obovate, slightly ribbed. Skin nearly white, with a little yellowish green remaining. Flesh white, rather dry, but sweet and rich.

NERII.

A fruit rather smaller and longer than the Marseilles, and which, from a mingling of slight acid, is one of the most exquisite in its flavor.

Fruit small, roundish obovate. Skin pale greenish yellow. Pulp red. Flavor at once delicate and rich. This is a very favorite variety according to Loudon, "the richest fig known in Britain."

PREGUSSATA.

A sort lately introduced from the Ionian Islès into England. It is tolerably hardy, quite productive, and succeeds admirably under glass.

Fruit of medium size, roundish, a good deal flattened. Skin purplish brown in the shade, dark brown in the sun. Pulp deep red, with a luscious, high flavor. Seeds unusually small. Ripens gradually, in succession.

WHITE ISCHIA.

Green Ischia.

A very small Fig, but one of the hardiest of the light-colored ones.

Fruit about an inch in diameter, roundish obovate. Skin pale yellowish green, very thin, and, when fully ripe, the darker-colored pulp appears through it. Pulp purplish, and high flavored. A moderate grower and good bearer.

CHAPTER XVII.

THE GOOSEBERRY. •

Ribes Grossularia, Arb. Brit. *Grossulaceæ*, of botanists.
Groseillier, of the French; *Stachelbeerstrauch*, German; *Uva Spino*, Italian;
Grosella, Spanish.

THE Gooseberry of our gardens is a native of the north of Europe, our native species not having much improved by garden culture. This low prickly shrub, which in its wild state bears small round or oval fruit, about half an inch in diameter, and weighing one-fourth of an ounce, has been so greatly improved by the system of successive reproduction from the seed, and high culture by British gardeners, that it now bears fruit nearly or quite two inches in diameter, and weighing an ounce and a half. Lancashire, in England, is the meridian of the gooseberry, and to the Lancashire weavers, who seem to have taken it as a hobby, we are indebted for nearly all the surprisingly large sorts of modern date. Their annual shows exhibit this fruit in its greatest perfection, and a GOOSEBERRY BOOK is published at Manchester every year, giving a list of all the prize sorts, etc. Indeed the climate of England seems, from its moistness and coolness, more perfectly fitted than any other to the growth of this fruit. Under our more clear and hot suns, however, the best varieties of English sorts do not succeed well, suffering from mildew of the fruit and foliage in nearly every location. A few varieties of the English sorts, and some few sorts of American origin, succeed, and their growth near large cities is considered quite profitable.

USES. This fruit is, in the first place, a very important one in its green state, being in high estimation for pies, tarts, and puddings, coming into use earlier than any other. The earliest use made of it appears to have been as a sauce with green goose, whence the name, goose-berry. In its ripe state it is a very agreeable table fruit, and in this country, following the season of cherries, it is always most acceptable. Unripe gooseberries are bottled in water for winter use (placing the bottles, nearly filled, a few moments in boiling water, afterwards corking and sealing them, and burying them in a cool cellar, with their necks downward). They are also canned, the same as with cherries, peaches, and other fruits.

As a luxury for the poor, Mr. London considers this the most valuable of all fruits, "since it can be grown in less space, in more unfavorable circumstances, and brought sooner into bearing than any other."

PROPAGATION. Gooseberry plants should only be raised from cuttings. New varieties are of course raised from seed, and the production of new American varieties of large size and fine quality affords a field of occupation which we should rejoice to see abundantly filled.

In preparing cuttings select the strongest and straightest young shoots of the current year, at the end of October (or very early in the ensuing spring); cut out all the buds that you intend to go below the ground (to prevent future suckers), and plant the cuttings in a deep rich soil, on the north side of a fence, or in some shaded border. The cuttings should be inserted six inches deep, and from three to six or eight inches should remain above ground. The soil should be pressed very firmly about the cuttings, and, in the case of autumn planting, the cuttings should be inserted into the ground level with the upper buds, and then covered with a mulch of coarse manure, to be taken away in the following spring, when they should be examined, and the earth pressed to render it firm again should the cutting have been raised by severe frost. After they have become well rooted—generally in a year's time—they may be transplanted to the borders, where they are finally to remain.

CULTIVATION. The Gooseberry in our climate is very impatient of drought, and we have uniformly found that the best soil for it is a deep strong loam; or at least whatever may be the soil, and it will grow in a great variety, it should always be *deep*—if not naturally so, it should be made deep by trenching and manuring. It is the most common error to plant this fruit shrub under the branches of other trees for the sake of their shade—as it always renders the fruit inferior in size and flavor, and more likely to become mouldy. On the contrary, we would always advise planting in an open border, as, if the soil is sufficiently deep, the plants will not suffer from dryness, and should it unfortunately be of a dry nature, it may be rendered less injurious by covering the ground under the plants with straw or litter. In any case a *rich* soil is necessary, and as the Gooseberry is fond of manure, a pretty heavy top-dressing should be dug in every year around bearing plants. For a later crop a few bushes may be set on the north side of a fence or wall.

For the Gooseberry, regular and pretty liberal pruning is absolutely necessary. Of course no suckers should be allowed to grow. In November the winter pruning should be performed. The leaves now being off, it is easy to see what proportion of the new as well as old wood may be taken away; and we will here remark that it is quite impossible

to obtain fine gooseberries here, or anywhere, without a very thorough thinning out of the branches. As a general rule, it may safely be said that one-half of the head, including old and young branches (more especially the former, as the best fruit is borne on the young wood), should now be taken out, leaving a proper distribution of shoots throughout the bush, the head being sufficiently thinned to admit freely the light and air. An additional pruning is, in England, performed in June, which consists in stopping the growth of long shoots by pinching out the extremities and thinning out superfluous branches; but if the annual pruning is properly performed this will not be found necessary, except to obtain fruit of extraordinary size.

We do not think that this fruit shrub can be said to bear well for more than a half-dozen years successively, when grown in the single stem or tree form. In large plantations of acres, and where cultivation is given by means of the horse and plough, the system of growing in the bush form is by many considered most profitable; and when so done, all that is requisite, from year to year, for many years, is to cut away dead wood, head back vigorous shoots, and keep the form open.

A succession of young plants should be kept up by striking some cuttings every season.

VARIETIES. The number of these is almost endless, new ones being produced by the prize growers every year. The last edition of the London Horticultural Society's Catalogue enumerates 149 sorts considered worthy of notice, and Lindley's Guide to the Orchard gives a list of more than seven hundred prize sorts. It is almost needless to say that many of these very closely resemble each other, and that a small number of them will comprise all the most valuable.

The sorts bearing fruit of medium size are generally more highly flavored than the very large ones. We have selected a sufficient number of the most valuable for all practical purposes.

I. Red Gooseberries.

BOARDMAN'S BRITISH CROWN. Fruit very large, roundish, hairy, handsome and good. Branches spreading.

CHAMPAGNE. A fine old variety, of very rich flavor. Fruit small, roundish oblong, surface hairy, pulp clear; branches of very upright growth.

CAPPER'S TOP SAWYER. Fruit large, roundish, pale red, hairy; rather late; flavor very good. Branches drooping.

FARROW'S ROARING LION. An immense berry, and hangs late. Fruit oblong, smooth; flavor excellent; branches drooping.

HARTSHORN'S LANCASHIRE LAD. Fruit large, roundish, dark red, hairy; flavor very good; branches erect.

KEEN'S SEEDLING. Fruit of medium size, oblong, hairy; flavor first-rate; branches drooping. Early and productive.

LEIGH'S RIFLEMAN. Fruit large, roundish, hairy; flavor first-rate; branches erect.

MELLING'S CROWN BOB. Fruit large, oblong, hairy; flavor first-rate; branches spreading.

MISS BOLD. Fruit of medium size, roundish, surface downy; flavor excellent; branches spreading.

RED WARRINGTON. Fruit large, roundish oblong, hairy; flavor first-rate; branches drooping.

II. *Yellow Gooseberries.*

BUERDSILL'S DUCKWING. Fruit large and late, obovate, smooth; flavor good; branches erect.

CAPPER'S BUNKER HILL. Fruit large, roundish, smooth; flavor good; branches spreading.

GORTON'S VIPER. Fruit large, obovate, smooth; flavor good; branches drooping.

HILL'S GOLDEN GOURD. Fruit large, oblong, hairy; flavor good; branches drooping.

PART'S GOLDEN FLEECE. Fruit large, oval, hairy; flavor first-rate; branches spreading.

PROPHET'S ROCKWOOD. Fruit large and early, roundish, hairy; flavor good; branches erect.

YELLOW CHAMPAGNE. Fruit small, roundish, hairy; flavor first-rate; branches erect.

YELLOW BALL. Fruit of middle size, roundish, smooth; flavor first-rate; branches erect.

III. *Green Gooseberries.*

COLLIER'S JOLLY ANGLER. Fruit large and late, oblong, downy; flavor first-rate; branches erect.

BERRY'S GREENWOOD. Fruit large, oblong, smooth; flavor good; branches drooping.

EARLY GREEN HAIRY (or *Green Gascoigne*.) Fruit small and early, round, hairy; flavor excellent; branches spreading.

EDWARD'S JOLLY TAR. Fruit large, obovate, smooth; flavor first-rate; branches drooping.

GLENTON GREEN. Fruit of middle size, oblong, hairy; flavor excellent; branches drooping.

GREEN WALNUT. Fruit middle size, obovate, smooth; flavor first-rate; branches spreading.

HEPBURN GREEN PROLIFIC. Fruit of middle size, roundish, hairy; flavor first-rate; branches erect.

MASSEY'S HEART OF OAK. Fruit large, oblong, smooth; flavor first-rate; branches drooping.

PARKINSON'S LAUREL. Fruit large, obovate, downy; flavor first-rate; branches erect.

PITMASTON GREEN GAGE. Fruit small, and hangs long, obovate, smooth; flavor rich and excellent; branches erect.

WAINMAN'S GREEN OCEAN. Fruit very large, oblong, smooth; flavor tolerably good; branches drooping.

IV. *White Gooseberries.*

CLEWORTH'S WHITE LION. Fruit large and hangs late, obovate, downy; flavor first-rate. Branches drooping.

CROMPTON SHEBA QUEEN. Fruit large, obovate, downy; flavor first-rate. Branches erect.

COOK'S WHITE EAGLE. Fruit large, obovate, smooth. Flavor first-rate. Branches erect.

CAPPER'S BONNY LASS. Fruit large, oblong, hairy. Flavor good. Branches spreading.

HAPLEY'S LADY OF THE MANOR. Fruit large, roundish oblong, hairy. Flavor good. Branches erect.

SAUNDERS' CHESHIRE LASS. Fruit large and very early, oblong, downy. Flavor excellent. Branches erect.

WOODWARD'S WHITESMITH. Fruit large, roundish oblong, downy. Flavor first-rate. Branches erect.

WELLINGTON'S GLORY. Fruit large, rather oval. Very downy. Skin quite thin. Flavor excellent. Branches erect.

WHITE HONEY. Fruit of middle size, roundish oblong, smooth. Flavor excellent. Branches erect.

TAYLOR'S BRIGHT VENUS. Fruit of middle size, hangs a long time, obovate, hairy. Flavor first-rate. Branches erect.

The following list of selected sorts, from one hundred varieties, is prepared by Thomas Rivers, Sawbridgeworth, England :—

RED GOOSEBERRIES.

Atlas, late.	Huntsman, early.	Prince Albert, early.
Echo, late.	Hopley's Companion.	Prince Regent, early.
Guido, very large.	Overall, late.	Young Wonderful.

WHITE GOOSEBERRIES.

Freedom.	Ostrich, early.	Smiling Beauty.
Lady Delamere.	Queen Caroline.	Riley's Tallyho.

GREEN GOOSEBERRIES.

Conquering Hero, late.	Elijah, early.	Favorite.
Husbandman, late.	Green River, late.	Independent.
Jolly Cutler, late.	Keepsake.	Profit, late.
Riley's.	Thumper, very late.	Wistastoa Hero, early.

YELLOW GOOSEBERRIES.

Banks Dublin.	Husbandman, late.	Scorpion, early.
Broom Girl.	Marigold, early.	Sovereign, early.
Briton.	Pilot, early.	Teazer, late.

AMERICAN VARIETIES.

DOWNING.

A seedling of Houghton, originated at Newburgh, N. Y. Upright vigorous growing plant, very productive.

Fruit somewhat larger than Houghton, roundish oval, whitish green with the rib veins distinct. Skin smooth. Flesh rather soft, juicy, very good. Excellent for family use.

HOBBS' SEEDLING.

A variety claimed to have originated by O. J. Hobbs, of Randolph, Pa. It is light pale green, roundish, slightly oval, smooth. Flesh medium firmness. A good keeper, and nearly one-half larger than Houghton's.

HOUGHTON'S SEEDLING.

Originated with Abel Houghton, Lynn, Mass. A vigorous grower. Branches rather drooping, slender, very productive, generally free from mildew. A desirable sort.

Fruit medium or below, roundish, inclining to oval. Skin smooth, pale red. Flesh tender, sweet, and very good.

MOUNTAIN SEEDLING.

Originated with the Shakers at Lebanon, N. Y. Plant a strong straggling grower. An abundant bearer.

Fruit large, the largest of any known American sort, long oval, dark brownish red, with long stalk. Skin smooth, thick. Flesh sweet. A good market sort.

PALE RED.

American Red.
Robert's Sweet Water.
Ohio Seedling.
Dutch Joe.

American Seedling.
Ohio Prolific.
St. Clair.
Cluster.

A variety of unknown origin. Bush more upright than Houghton. Slender wood. Very productive.

Fruit small or medium, or size of the Houghton; darker in color when fully ripe. Hangs a long time upon the bush. Flesh tender, sweet, very good.

SMITH'S IMPROVED.

Smith's Seedling.

A new variety recently introduced. Grown from seed of the Houghton, by Dr. Smith, of Vermont, and in growth of plant more upright and vigorous than its parent; the fruit is larger and somewhat oval in form, light green, with a bloom. Flesh moderately firm, sweet and good.

CHAPTER XVIII.

THE GRAPE.

Vitis vinifera, L. *Vitaceæ*, of botanists.

Vigne, of the French; *Weintrauben*, German; *Vigna*, Italian; *Vid*, or *Vina*, Spanish.

THE history of the Grape is almost as old as that of man. Growing in its highest perfection in Syria and Persia, its luscious fruit, and the

unrivalled beverage which its fermented juice affords, recommended to the especial care of the patriarchal tillers of the soil, and vineyards were extensively planted long before orchards or collections of other fruit-trees were at all common.

The grapes of the old world are all varieties of the wine grape (*Vitis vinifera*), which, though so long and so universally cultivated and naturalized in all the middle and southern portions of Europe, is not a native of that continent, but came originally from Persia. From the latter country, as civilization advanced westward, this plant accompanied it—first to Egypt, then to Greece and Sicily, and gradually to Italy, Spain, France, and Britain, to which latter country the Romans carried it about two hundred years after Christ. To America the seeds and plants of the European varieties were brought by numerous emigrants and colonists within the first fifty years after its settlement.

The wild grapes of our own country are quite distinct species from the wine grape of Europe—are usually stronger in their growth, with larger and more entire foliage, and, in their native state, with a peculiar foxy odor or flavor, and more or less hardness of pulp. These traits, however, disappear in process of cultivation, and we have reason to hope that we shall soon obtain from the wild type new varieties of high quality, and of superior hardiness and productiveness in this climate.

The grape-vine is in all cases a trailing or climbing deciduous shrub, living to a great age, and, in its native forests, clambering over the tops of the tallest trees. In the deep rich alluvial soils of western America it is often seen attaining a truly prodigious size, and several have been measured on the banks of the Ohio the stems of which were three feet in circumference, and the branches two hundred feet long, enwreathing and festooning the tops of huge poplars and sycamores. In a cultivated state, however, it is found that fine flavor and uniform productiveness require the plants to be kept pruned within a small compass.

USES. The grape in its finest varieties, as the Hamburgh and the Muscat, is in flavor hardly surpassed by any other fruit in delicacy and richness, and few or none are more beautiful in the dessert. Dried, it forms the raisin of commerce, the most excellent of all dried fruits, everywhere esteemed. And wine, the fermented juice, has always been the first of all exhilarating liquors. Some idea of the past consumption of this product may be formed from the fact that more than 500,000,000 imperial gallons have been made in France in a single year; and as a data to judge of its value we may add that, while a great proportion of the *vin ordinaire*, or common wine, is sold at 10 or 12 cents a bottle, on the other hand, particular old and rare vintages of Madeiras or Sherries will not unfrequently command twenty or thirty dollars a gallon.

SOIL. The universal experience in all countries has established the fact that a dry and warm soil is the very best for the vine. Where vineyards are cultivated, a limestone soil, or one composed of decaying calcareous rocks, is by far the best; but where, as in most gardens, the vine is raised solely for its fruit, the soil should be highly enriched. The foreign grape will scarcely thrive well here on a heavy soil, though our native varieties grow and bear well on any strong land; but the essence of all that can be said in grape culture respecting soil is, that it be dry and light, deep and rich. Frequent top-dressings of well-rotted

manure should be applied to vines in open borders, and this should, every third or fourth year, be alternated with a dressing of slaked lime.

PROPAGATION. The grape-vine makes roots very freely, and is, therefore, easy of propagation. Branches of the previous or current year's wood, bent down at any time before midsummer, and covered with earth, as layers, root very freely, and make bearing plants in a couple of years, or very frequently indeed bear the next season.

But the finer varieties of the vine are almost universally propagated by cuttings, as that is a very simple mode, and an abundance of the cuttings being afforded by the annual trimming of the vines.

When cuttings are to be planted in the open border, a somewhat moist and shaded place should be chosen for this purpose. The cuttings should then be made of the young wood of the previous year's growth, cut into lengths about a foot long, and having two or three buds—one near the top, one at the bottom, and the third in the middle. Before planting the cutting, pare off its lower end smoothly, close below the buds, and finally plant it in mellow soil, in a slit made by the spade, pressing the earth firmly about it with the foot.*

The rarer kinds of foreign grapes are usually grown by cuttings of shorter length, consisting only of two buds; and the most successful mode is to plant each cutting in a small pot, and plunge the pots in a slight hot-bed, or place the cuttings at once in the mould of the bed itself. In either case they will make strong plants in the same season.

But the most approved way of raising vine plants in pots is that of propagation by *eyes*, which we have fully explained in the first part of this work. This, as it retains the least portion of the old wood, is manifestly the nearest approach to raising a plant from the seed, that most perfect of all modes with respect to the constitution of a plant. In the case of new or rare sorts, it offers us the means of multiplying them with the greatest possible rapidity. As the grape usually receives its annual pruning in autumn or winter, the cuttings may be reduced to nearly their proper length, and kept in earth, in the cellar, until the ensuing spring. The harder sorts may be buried in the open ground.

The foreign and the native grapes are very different in their habits in this climate, and therefore must be treated differently. The native sorts are cultivated with scarcely any further care than training up the branches to poles or a trellis, and are, on this account, highly valuable to the farmer; while the European varieties are of little value in this climate except with especial care, and are therefore confined to the garden.

1. *Culture of the Foreign Grape.*

The climate of the temperate portion of this country, so favorable to all other fruits, is, unfortunately, not so for the foreign Grape. This results, perhaps, from its *variability*, the great obstacle being the *mildew*.

* In sandy or dry soils, to insure greater success, cover the upper end of the cutting with grafting-wax, or something of the kind, to prevent evaporation. The practice of growing grapes from single eyes, by making cuttings of one eye each, and callosing them in sand, in the cellar or pit, has been recently renewed. The cuttings are made of one eye each, placed in sand, in a cool cellar or shed, free from frost, and in spring planted out, covering the bud half an inch or so with soil, and over the whole spreading a mulch of tan-bark or sawdust one or two inches deep.

which, seizing upon the young fruit, prevents its further growth, causes it to crack, and renders it worthless. Unwilling to believe that this was not the fault of bad culture, many intelligent cultivators, and among them men of capital and much practical skill, have attempted vineyard culture with the foreign sorts in various sections of the country, under the most favorable circumstances, and have uniformly failed. On the other hand, the very finest Grapes are produced under glass, in great quantities, in our first-rate gardens. In the small yards or gardens of our cities, owing to the more uniform state of the atmosphere, the foreign Grape thrives pretty well; and finally, in all gardens of the Middle States the hardier kinds may, under certain modes of culture, be made to bear good fruit.

Without entering into any inquiries respecting the particular way in which the mildew (which is undoubtedly a parasitical plant) is caused, we will endeavor to state concisely some practical truths, to which our own observation and experience have led us, respecting the hardy culture of the foreign Grape.

In the first place, it is well known to gardeners here that young and thrifty vines generally bear one or two fair crops of fruit; second, that as the vine becomes older, if it is pruned in the common mode (that is to say, the *spurring-in* mode of shortening the side branches, and getting fresh bearing shoots from main branches every year), it soon bears only mildewed and imperfect fruit; and, finally, that the older and larger the vine, the less likely is it to produce a good crop.

This being the case, it is not difficult to see that as the vine, like all other trees, is able to resist the attacks of disease or unfavorable climate just in proportion as it is kept in a young and highly vigorous state, it follows, if we allow a plant to retain only young and vigorous wood, it must necessarily preserve much of the necessary vigor of constitution. And this is only to be done, so far as regards training, by what is called the *renewal* system.

The renewal system of training consists in annually providing a fresh supply of young branches, from which the bearing shoots are produced, cutting out all the branches that have borne the previous year. Fig. 37 represents a bearing vine treated in this manner, as it would appear in the spring of the year after having been pruned. In this figure *a* represents the two branches of last year's growth trained up for bearing the present year; *b*, the places occupied by the last year's wood, which, having borne, has been cut down to within an inch of the main arm, *c*.

Renewal Training.

The present year, therefore, the two branches, *a*, will throw out side shoots, and bear a good crop, while the young branches will be trained up in the places of *b*, to bear the next year when *a* are in like manner cut down.

This renewal training will usually produce fair fruit, chiefly, as it appears to us, because the ascent and circulation of the sap, being mainly carried on through young wood, is vigorous, and the plant is healthful and able to resist the mildew; while, on the contrary, the circulation of the sap is more feeble and tardy through the more compact and rigid sap-vessels of a vine full of old wood.*

* See *Hoare on the Grape-Vine*.

The above mode of training is very easily understood, but we may add here, for the benefit of the novice: 1st, that vines, in order that they may bear regularly and well, should always be kept within small bounds; 2d, that they should always be trained to a wall, building, or *upright trellis*; * and 3d, that the leaves should never be pulled off to promote the ripening of the fruit. The ends of the bearing shoots may be *stopped* (pinched off) when the fruit is nearly half grown, and this is usually all the summer pruning that, under our bright sun, the grape-vine properly treated requires.

Following out this hint, that here the vine only bears well when it is young, or composed mainly of young wood, an intelligent cultivator near us secures every year abundant crops of the Chasselas by a system of renewal by *layers*. Every year, from his bearing vines, he lays down two or more long and clean shoots of the previous year's growth. These root freely, are allowed to make another season's growth, and then are made to take the place of the old plants, which are taken out; and by this continual system of providing young plants by layers he always succeeds in obtaining from the same piece of ground fair and excellent grapes.

CULTURE UNDER GLASS WITHOUT ARTIFICIAL HEAT. The great superiority of this fruit when raised under glass, renders a vinery an indispensable feature in every extensive garden. Even without fire-heat grapes may, under our bright sun, be grown admirably; the sudden changes of the weather being guarded against, and the warmth and uniformity of the atmosphere surrounding the vines being secured. Cheap structures of this kind are now very common, and even the Muscat of Alexandria, and other sorts which are usually thought to require fire-heat, ripen regularly and well with moderate attention.

A vinery of this kind may be erected so as to cost very little, nearly after the following manner: Its length may be thirty feet; its width sixteen feet; height at the front two feet; at the back twelve feet. This part of the structure may all be built of wood, taking for the frame cedar or locust posts, setting them three and a half feet in the ground, the portion rising above the ground being squared to four or five inches. On these posts (which are placed six feet apart) nail, on both sides, matched and grooved planks, one and a quarter inches thick. The space between these planks not occupied by the post, fill in with dry tan, which should be well rammed down. The rafters should be fixed, and from three to four feet apart. The sashes forming the roof (which are all the glass that will be necessary) should be stationary, ventilation being given by small windows at the top of the back wall, fitted with hinges, to be opened or shut at pleasure by means of a pulley cord. The building will, of course, front the south, and the door may be at either end.

The border for the grapes should be made partly on the inside and partly on the outside of the front wall, so that the roots of the vines may extend through to the open border. A trellis of wire should be fixed to the rafters, about sixteen inches from the glass, on which the vines are to be trained. Early in the spring the vines, which should be two-year-old roots, may be planted in the inside border, about a foot from the front wall, one vine below each rafter.

* And never on an arbor, except for the purposes of shade.

SOIL. The border should be thoroughly prepared and pulverized before planting the grapes. Two-thirds of mellow sandy loam, mixed with one-third of a compost formed of well-fermented manure, bits of broken charcoal, and a little lime rubbish, forms an excellent soil for the grape in this climate. If the soil of the garden is old, or is not of a proper quality for the basis of the border, it is best to prepare some for this purpose by rotting and reducing beforehand a quantity of loamy turf from the road-sides. The depth of the border need not exceed two feet, but if the subsoil is not dry at all seasons it should be well drained, and filled up half a foot below the border with small stones or brick-bats.

PRUNING. Decidedly the best mode of pruning for a cold house, or vinery without fire-heat, is what is called the long or renewal mode, which we have already partially explained. Supposing the house to be planted with good young plants, something like the following mode of training and pruning may be adopted. The first season one shoot only is allowed to proceed from each plant, and this, at the end of the first season, is cut down to the second or third eye or bud. The year following two leading shoots are encouraged, the strongest of which is headed or stopped when it has extended a few joints beyond the middle of the house or rafter, and the weaker about half that length. In November these shoots are reduced, the strong one having four or five joints cut from its extremity, and the weaker one to the third eye from its lower end or place of origin. In the third season one leading shoot is laid in from each of these, the stronger one throwing out side shoots on which the fruit is produced, which side shoots are allowed to mature one bunch of grapes each, and are topped at one or two joints above the fruit. No side shoots are allowed to proceed from the weaker shoot, but it is laid in to produce fruit the ensuing season, so that, by the third season after planting, the lower part of the house or rafters is furnished with a crop of fruit proceeding from wood of the preceding year. At next autumn pruning the longest of these main shoots is shortened about eighteen inches from the top of the rafter, and the next in strength to about the middle of the rafter, and all the spurs which had borne fruit are removed. Each vine is now furnished with two shoots of bearing wood, a part of old barren wood which has already produced fruit, and a spur near the bottom for producing a young shoot for the following year. In the fourth summer a full crop is produced, both in the lower and upper part of the house, the longer or oldest shoot producing fruit on the upper part of its length, and the shorter on its whole length; from this last a leading shoot is laid in, and another to succeed it is produced from the spur near the bottom. At the next autumn pruning the oldest or longest shoot, which has now reached the top of the house, is entirely cut out and removed, and replaced by that which was next in succession to it, and this in its turn is also cut out and replaced by that immediately behind it, a succession of a yearly shoot being obtained from the lower part of the old stem. (*McIntosh.*) This is decidedly the most successful mode for a vinery without heat, producing abundant and fair crops of fruit. Hoare, who is one of the most experienced and ingenious writers on the grape, strongly recommends it, and suggests that "the old wood of a vine, or that which has previously produced fruit, is not only of no further use, but is a positive injury to the fertility of the plant. The truth of this remark depends

on the fact that every branch of a vine which produces little or no foliage appropriates for its own support a portion of the juices of the plant that is generated by those branches that do produce foliage."

ROUTINE OF CULTURE. In a vinery without heat this is comparatively simple. As soon as the vines commence swelling their buds in the spring they should be carefully washed with mild soap-suds, to free them from any insects, soften the wood, and assist the buds to swell regularly. At least three or four times every week they should be well syringed with water, which, when the weather is cool, should always be done in the morning. And every day the vine border should be duly supplied with water. During the time when the vines are in blossom, and while the fruit is setting, all sprinkling or syringing over the leaves must be suspended, and the house should be kept a little more closed and warm than usual, and should any indications of mildew appear on any of the branches it may at once be checked by dusting them with flower of sulphur. Air must be given liberally every day when the temperature rises in the house, beginning by opening the rear windows a little in the morning, more at mid-day, and then gradually closing them in the same manner. To guard against the sudden changes of temperature out of doors, and at the same time to keep up as moist and warm a state of the atmosphere within the vinery as is consistent with pretty free admission of the air during sunshine, is the great object of culture in a vinery of this kind.

Thinning the fruit is a very necessary practice in all vineries, and on it depends greatly the flavor as well as the fine appearance and size of the berries and bunches. The first thinning usually consists in taking off all superfluous blossom-buds, leaving only one bunch in the large sorts, or two in the small ones, to each bearing shoot. The next thinning takes place when the berries are set and well formed, and is performed with a pair of scissors, taking care not to touch the berries that are left to grow. All this time one-third of the berries should be taken off with the point of the scissors, especially those in the centre of the cluster. This allows the remainder to swell to double the size, and also to form larger bunches than would otherwise be produced. Where the bunches are large, the shoulders should be suspended from the trellis by threads, in order to take off part of the weight from the stem of the vine. The last thinning, which is done chiefly to regulate the form of the bunch, is done by many gardeners just before the fruit begins to color—but it is scarcely needed if the previous thinning of the berries has been thoroughly done.

The regular autumnal pruning is best performed about the middle of November. The vines should then be taken down, laid down on the border, and covered for the winter with a thick layer of straw or a slight covering of earth.

CULTURE UNDER GLASS WITH FIRE-HEAT. As the foreign Grape is almost the only fruit of temperate climates which cannot be raised in perfection in the open air in this climate, we shall give some concise directions for its culture in vineries with artificial heat. Those who only know this fruit as the Chasselas or Sweetwater appears, when grown in the open air, have little idea of the exceeding lusciousness, high flavor, size, and beauty of such varieties as the Black Hamburgh or Muscat of Alexandria, when well grown in a first-rate vinery. By the aid of artificial heat, which in this climate is, after all, chiefly required

in the spring and autumn, and to counteract any sudden cold changes of atmosphere, this most admirable fruit may easily be produced for the dessert from May till December. Indeed, by vineries constructed in divisions, in some of which vines are forced and in others retarded, some have Grapes nearly every month in the year.

Construction of the Vinery. The vinery with fire-heat may be built of wood, and in the same simple manner as just described, with the addition of a flue above the surface of the ground, running close along the end, two feet from the front wall, and about a foot from the back wall, and returning into a chimney in the back wall over the furnace.*

For the sake of permanence, however, a vinery of this kind is usually built of brick; the ends and front wall eight inches thick; the back wall a foot thick—or eight inches, with occasional abutments to increase its strength. In fig. 38.

(I) is shown a simple plan of a vinery of this kind. In this the surface of the ground is shown at *a*, below which the foundation walls are sunk three feet. Above the surface the front wall, *b*, rises two feet, the back wall, *c*, twelve feet, and the width of the house is fourteen feet. On these walls are placed the rafters, from three to four feet distant.

In the present example the flues are kept out of the way, and the space clear, by placing them in a square walled space directly under the walk; the walk itself being formed by an open grating or lattice, through which the heat rises freely. The arrangement of the flue will be better understood by referring to the ground plan (II). In this the furnace is indicated at *d*, in the back wall;† from this the flue rises gradually to *e*, whence it continues nearly the length of the house, and returning enters the chimney at *f*. For the convenience of shelter, firing, etc., it is usual to have a *back shed*, *g*, behind the back wall. In this shed may be a bin for wood or coals, and a sunk area (shown in the dotted lines around *d, f*), with steps to descend to the furnace and ash-pit. There are two doors, *h*, in the vinery at either end of the walk.

Plan and Section of a Vinery, with Fire-heat.

* Heating by hot water is considered more successful in its results, because of enabling a more even and steady temperature to be maintained. The expense is somewhat greater at first—but in the end, perhaps, most economical.

† This furnace should be placed two feet below the level of the flue at *e*, in order to secure a draught, after which it may be carried quite level till it enters the chimney. An air-chamber may be formed round it, with a register to admit heated air to the house when necessary. A furnace fourteen inches square and deep, with an ash-pit below, in which anthracite coal is burned, will be found a very easy and perfect mode of heating a house of this width, and thirty feet long.

The border should be thoroughly prepared previously to planting the vines, by excavating it two feet deep and filling it up with suitable compost. This is best formed of one-half loamy turf, well rotted by having been previously laid up in heaps (or fresh and pure loamy soil from an old pasture or common); one-third thoroughly fermented horse or cow manure, which has lain in a turf-covered heap for three months; and one-third broken pieces of charcoal and old lime rubbish: the whole to be thoroughly mixed together before planting the vines.

The vines themselves should always be planted in a border prepared inside of the house; and in order to give the vines that extent of soil which is necessary for them, the best cultivators make an additional border, twelve or fourteen feet wide outside, in front of the vinery. By building the foundation of the front wall on piers, within a couple of inches of the surface, and supporting the wall above the surface on slabs of stone reaching from pier to pier, the roots of the vines easily penetrate to the border on the outside.

The vines should be planted early in the spring. Two-year-old plants are preferable, and they may be set eighteen inches from the front wall—one below each rafter, or, if the latter are over three feet apart, one also in the intermediate space.

The pruning and training of the vines we have already described. The *renewal* system of pruning we consider the best in all cases. The *spur* system is, however, practised by many gardeners, with more or less success. This, as most of our readers are aware, consists in allowing a single shoot to extend from each root to the length of the rafters; from the sides of this stem are produced the bearing shoots every year; and every autumn these spurs are shortened back, leaving only one bud at the bottom of each, which in its turn becomes the bearing shoot, and is again cut back the next season. The fruit is abundantly produced, and of good flavor, but the bunches are neither so large nor fair, nor do the vines continue so long in a productive and healthy state as when the wood is annually renewed.

The essential points in pruning and training the vine, whatever mode be adopted, according to Loudon, "are to shorten the wood to such an extent that no more leaves shall be produced than can be fully exposed to the light; to stop all shoots produced in the summer that are not likely to be required in the winter pruning, at two or three joints, or at the first large healthy leaf from the stem where they originate; and to stop all shoots bearing bunches at one joint, or at most two, beyond the bunch. As shoots which are stopped generally push a second time from the terminal bud, the secondary shoots thus produced should be stopped at one joint. And if at that joint they push also, then a third stopping must take place at one joint, and so on as long as the last terminal bud continues to break. Bearing these points in mind, nothing can be more simple than the pruning and training of the vine."

When early forcing of the vines is commenced, the heat should be applied very gently for the first few days, and afterwards very gradually increased. Sixty degrees of Fahrenheit's thermometer may be the maximum till the buds are all nearly expanded. When the leaves are expanded, sixty-five may be the maximum and fifty-five the minimum temperature. When the vines are in blossom, seventy-five or eighty in mid-day, with the solar heat, should be allowed, with an abundance of

air, and somewhat about this should be the average of mid-day temperature.

To insure a good crop of Grapes, we are satisfied that they must have—*plenty of heat—plenty of air—plenty of moisture—severe thinning of bunches—and severe thinning of berries.* The vines, also, must be pruned often, and kept free; the wood *never* crowded. Great attention must be paid to the airing of the house, which must be done gradually, that there may be at no time a *sudden* change in the temperature.

With such attention, and the prerequisite of a rich border, on a dry subsoil, good crops of fine Grapes are always to be obtained. The vines require much moisture until they have completed their last swell, when the moisture should be withdrawn.

INSECTS AND DISEASES. When properly grown under glass the Grape is a very vigorous plant, liable to few diseases. The bleeding which often happens at the commencement of growth, usually ceases without doing harm when the foliage begins to expand. If excessive, it may be stopped by a mixture of three parts of cheese-parings and one part lime applied to the wound. The red spider, which sometimes infests vineries kept at a high temperature, is usually destroyed by coating over the flues with a wash of quick-lime and sulphur, after which the house must be kept closed for half a day. The smaller insects which occasionally prey on the young shoots are easily kept down by syringing the parts affected with a solution of whale-oil soap.

VARIETIES. There are in the catalogue a vast number of names of Grapes, many of which belong to the same fruit. But there are really only twenty or thirty varieties which are at all worthy of cultivation in gardens. Indeed, the most experienced gardeners are satisfied with a dozen of the best sorts for their vineries.

We will describe some of the finest foreign Grapes that have been introduced.

ALEPPO.

Switzerland Grape.	Raisin d'Aless.
Striped Muscadine.	Chasselas panaché.
Variegated Chasselas.	Maurillan panaché.
Raisin Suisse.	Maurillan noir panaché.

A very singular Grape, the berries being mostly striped with white and black in distinct lines. The foliage is also prettily striped in autumn.

Bunches rather below medium size. Berries medium size, roundish. Skin thin, striped with white and dark red, or black. Flesh juicy, and of a rich and excellent flavor.

ALICANTE.

Black Lisbon.	Black St. Peters.	Black Portugal.
Black Palestine.	Black Spanish.	Black Valentia.
Meredith's Alicante.	St. Peters.	Espagnin Noir.
Alicantenivein.	Blauer von Alicante.	Sanct Peter's Traube.
Schwarzer Spanischer.		

An excellent late variety, which is large and showy, and hangs well.

Bunches large, sometimes shouldered. Berries large, oval. Skin tough, rather thick, jet black, with a blue bloom. Flesh tender, juicy.

BLACK CHAMPION.

Bunch large, long, shouldered. Berries large, roundish oval, deep black with a slight bloom. Flesh firm, juicy, sweet, rich. Ripens earlier than Black Hamburg. A good variety for a cold vinery.

BLACK CLUSTER.

Black Morillon.	Morillon noir.	Auverne.
Franc Pineau.	Auverna.	Auvernas Rouge.
Pineau.	Vrai Auvernas.	True Burgundy.
Raisin de Bourgne.	Small Black Cluster.	Burgunder.
Black Burgundy.	Rother.	Early Black.
Schwarzer.		

This is readily distinguished from Miller's Burgundy, by the absence of the down on its leaves. The fruit is very sweet and excellent.

Bunches small, compact (*i. e.*, berries closely set). Berries middle sized, roundish oval. Skin deep black. Juice sweet and good. Ripens in the open air about the 20th of September.

BLACK FRONTIGNAN.

Muscat Noir.	Sir William Rowley's Black.
Muscat Noir Ordinaire.	Purple Frontignau.
Black Frontignac.	Purple Constantia.
Black Constantia of some.	Bourdales des Hautes Pyrénées.
Muscat Noir de Jura.	

An excellent Grape, originally from the town of Frontignan, in France, where it and other similar sorts are largely cultivated for making the Muscadine or Frontignan wine.

Bunches rather long. Berries of medium size, round, quite black. Skin thin. Flavor musky and rich. Ripens in October. A good bearer.

BLACK HAMBURGH.

Warner's Black Hamburg.	Frankenthaler.
Purple Hamburg.	Frankenthaler Gros Noir.
Red Hamburg.	Trollinger.
Brown Hamburg.	Blue Trollinger.
Dutch Hamburg.	Troller.
Victoria.	Welscher.
Salisbury Violet.	Fleisch Traube.
Hampton Court Vine.	Hudler.
Valentine's.	Languedoc.
Gibraltar.	Mohrendutte.
Frankendale.	Weissholziger Trollinger.
Black Frankenthal.	

The Black Hamburg has long been considered the first of black Grapes for the vinery, but it will very rarely perfect its fruit out of doors. Its very large size and most luscious flavor render it universally esteemed.

Bunches large (about nine inches deep), and mostly with two shouldered, making it broad at the top. Berries very large, roundish, slightly inclining to oval. Skin rather thick, deep brownish purple, becoming

nearly black at full maturity. Flavor very sugary and rich. A good and regular bearer.

BLACK LOMBARDY.

West's St. Peters.
Raisin de Cuba.

Poonah.
Money's.

Raisin des Carnes.

Bunches large and long, with shoulders. Berries large, roundish oval. Skin thin, very black at maturity. Flavor very rich and sugary. The leaves are rather small, and turn purple as the fruit ripens. It requires a pretty high temperature, and is then a great bearer.

BLACK MOROCCO.

Le Cœur.
Black Muscadel.

Ansell's Large Oval Black.
Raisine d'Espagne.

A large and showy Grape, ripening late, but requiring a good deal of heat. The blossoms are a little imperfect, and require to be fertilized with those of the Black Hamburgh, or some other hardy sort.

Bunches large. Berries very large, oval. Skin thick, dark red. Flavor tolerably sweet and rich.

BLACK MUSCADINE.

Black Chasselas.

Chasselas Noir.

A pretty good black Grape, scarcely succeeding well, however, in the open air, and inferior to other sorts for the vinery.

Bunches of medium size, compact. Berries roundish oval. Skin thick, black, overspread with a blue bloom. Juice sweet, and of pretty good flavor.

BLACK MUSCAT OF ALEXANDRIA.

Red Muscat of Alexandria.
Muscat Hamburgh.

Red Frontignac of Jerusalem.

Bunches large and shouldered. Berries large, oval. Skin thick, of a reddish color, becoming black at maturity. Flesh quite firm, with a rich musky flavor. Requires a vinery with fire-heat.

BLACK PRINCE.

Boston.
Pocock's Damascus.

Sir A. Pytches' Black.
Steward's Black Prince.

The Black Prince is very highly esteemed. It is hardier than the Black Hamburgh, bearing profusely, with the easiest culture, in the vinery.

Bunches long and not generally shouldered. Berries large, rather thinly set, oval. Skin thick, black, covered with a thick blue bloom. Flesh tender, juicy, rich sugary, sprightly.

BLACK SWEETWATER.

Water Zoet Noir.

Bunches small, compact. Berries small, round. Skin thin, with a sweet and pleasant juice. A second-rate, but rather hardy sort.

BLACK TRIPOLI.

Black Grape from Tripoli.

This Grape is said to be a large and very excellent one, ripening late, and well worthy of a place in the vinery. It requires some fire-heat.

Bunches of medium size, shouldered, rather loose. Berries large, round, often slightly flattened. Seeds quite small. Skin thin, purplish black, slightly covered with bloom. Flesh tender and sweet, with a very high-flavored rich juice.

BOWOOD MUSCAT.

Tynningham Muscat.

A new variety, claimed as a seedling from the Muscat of Alexandria which it closely resembles, but has rather shorter-jointed wood, and sets its fruit and bears well.

BURCKHARDT'S PRINCE.

Aramon.

Plante Riche.

Ugrie Noir.

A late variety that hangs well.

Bunches long, tapering. Berries medium, round, a few inclining to oval. Skin of a deep black color, covered with a thick bloom. Flesh rather firm, juicy, rich, piquant, vinous.

CANON HALL MUSCAT.

A variety differing from its parent, the Muscat of Alexandria, in being of stronger growth and more tapering bunches. Berries large, roundish oval, whitish, juicy, rich. Requires special care to grow it well.

CHAPTAL.

A French Grape, a great bearer, and adapted to a cold vinery.

Bunches large and long. Berries large, round, amber color when ripe. Flesh sweet, juicy.

CHARLSWORTH TOKAY.

A variety from England, reputed to be of superior quality.

Bunches long, compact. Berries large, oval. Skin thick, white. Flavor rich and excellent, with a Muscat perfume.

CHASSELAS MUSQUÉ.

Musk Chasselas.

Le Cour.

St. Albans.

A very delicious Grape, the highest flavored Chasselas, having much of the flavor of the Muscat of Alexandria.

Bunches of medium size, long and rather loose. Berries middle

size, round. Skin thin, yellowish white. Flesh tender, with an abundant juice, of a rich musky flavor. Leaves smaller and deeper green than those of the Sweetwater or Muscadine. Requires heat.

CHASSELAS ROYAL.

A new and excellent Grape.

Bunches short and thick, with shoulders. Berries large, round, pale amber color when ripe. A great bearer. (Rivers.)

CHASSELAS VIBERT.

A strong grower, well suited to a cold vinery.

Bunches long. Berries large, round, golden amber when ripe. Flesh juicy, rich. (Rivers.)

DUCHESS OF BUCCLEUGH.

A Grape of recent introduction, and highly praised. It is said to be a cross between the Muscat and Chasselas Musqué.

Bunches large, long, tapering, slightly shouldered. Berries medium, roundish. Early, and an abundant bearer. Suited for a hot or cold vinery.

EARLY BLACK BORDEAUX.

One of the best very early sorts.

Bunches medium, short, shouldered. Berries medium, round, quite black, with a thin bloom. Flesh tender, melting, rich, sweet.

EARLY BLACK JULY.

July Grape.

Raisin Précoce.

Schwarzer Frühzeitiger.

Madeleine.

Morillon Hâtif.

Burgunder.

Jacob's Traube.

Madeleine Noir.

De St. Jean.

August Traube.

The earliest of Grapes, and chiefly valued for the dessert on that account. In the open air it ripens here the last of July, or early in August. The leaves are rather small, and light green above and beneath.

Bunches small and compact. Berries small, quite round. Skin thick, black, covered with a blue bloom. Flavor moderately sweet, but not rich or perfumed.

EARLY GOLDEN FRONTIGNAN.

A variety adapted to hot or cold vineries.

Bunch long, medium, not shouldered. Berries medium, round, yellow, with minute dark dots. Flesh juicy, sprightly, melting, sweet.

EARLY SAUMUR FRONTIGNAN.

Muscat de Saumur.

Madeleine Musquée de Courtiller.

Muscat Hâtif de Saumur.

Précoce Musqué.

A very early variety, ripening well in a cold vinery.

Bunches small, compact, shouldered. Berries medium, roundish

flattened. Skin thin, translucent amber color at maturity. Flesh juicy, with a pleasant, slight Muscat flavor.

EARLY SILVER FRONTIGNAN.

Bunch medium to large, shouldered. Berries large, roundish oval, whitish yellow, with a silver bloom. Flesh very tender, melting, rich, very juicy, and agreeable. An early and productive sort, suited to hot or cold vinery.

EARLY SMYRNA FRONTIGNAN.

Muscat de Smyrne.

Isaker Daisiko.

One of the earliest sorts, well suited for a cold vinery.

Bunches medium, well set, not shouldered. Berries medium, round, bright amber. Flesh melting, rich, juicy, delicious.

EARLY WHITE MALVASIA.

Morna Chasselas.

Early Chasselas.

Grove End Sweet Water.

White Melier.

Early Kienzheim.

Mornair blanc.

Le Melier.

Melier blanc.

Blanc de Bonneuil.

A nice early Grape, and a good bearer, which is in fact only an earlier variety of the Chasselas. It bears very well in the open air.

Bunches, in size and form, much like those of the White Chasselas or Royal Muscadine. Berries round, yellowish white. Skin thin. Flesh sweet, juicy, and agreeable in flavor. Ripens in August. The leaves are pale green on the upper side, slightly downy below, cut into five rather deep lobes.

ESPERIONE.

Turner's Black.

Hardy Blue Windsor.

Cumberland Lodge.

The Esperione is a hardy, luxuriant, and prolific Grape, growing as well in the open air as the Muscadine, and even better in many situations.

Bunches large, shouldered, like the Black Hamburgh in size. Berries round, or occasionally flattened, and often indented with a groove. Skin thick, dark purple, powdered with a thick blue bloom. Flesh adheres to the skin, of a pleasant, sprightly flavor, not very rich.

FINTINDO.

This Grape is of Italian origin, brought to notice by M. De Bavay, of Vilvorde, who received it of Major Esperen, and is said to have been discovered by the French army in Naples. Its growth is vigorous. Peduncle very stout.

Bunch large, compact, and shouldered. Berries of the largest size, nearly round, slightly oval. Skin dark violet. Flesh abounds in a sugary juice, and has a peculiarly pleasant aroma. It has a resemblance to the Black Hamburgh, but is considerably earlier.

FOSTER'S WHITE SEEDLING.

A new variety, described as superior to the Royal Muscadine, and ripening at the same time.

Bunches large, sets well. Berries above medium, roundish oval, yellowish amber. Flesh tender, melting, sweet, and rich flavored. Said to have the character of hanging without shrivelling.

GOLDEN CHAMPION.

A new variety but just introduced. It is described in the Gardener's Magazine as remarkably free and robust in growth, and of as easy culture as Black Hamburgh.

Bunches large, of a slightly-tapering form, and heavily shouldered. Berries extra large, obovate or ovate, slightly pointed—in some instances almost round. Flesh firm, yet remarkably juicy, tender, and rich flavor.

GOLDEN HAMBURGH.

Busby's Golden Hamburgh. Stockwood Park Golden Hamburgh.

A new white Grape of excellent quality. Requires careful cultivation, as it soon decays after ripening.

Bunches large, somewhat loose, shouldered. Berries large, roundish oval, rich yellow. Skin thin. Flesh tender, juicy, rich, melting, sweet.

GREEN'S PROLIFIC.

A new variety, originated by W. R. Green, Newburgh, N. Y. Vine a strong grower, very productive, and sets well.

Bunch large, long, shouldered, very compact. Berry medium, round, deep black, blue bloom, raised a little at apex. Flesh juicy, melting, sweet, vinous.

GRIZZLY FRONTIGNAN.

Red Frontignan.
Muscado Rosso.
Muscat Rouge.

Muscat Gris.
Red Constantia.
Grauer Muscateller.

Grizzly Frontignac.
Kümmel Traube.

This delicious Grape requires to be grown in a vinery, when it is, to our taste, scarcely surpassed.

Bunches rather long, with narrow shoulders. Berries round, of medium size, and growing closer upon the bunches than those of the White Frontignan. Skin thick, pale brown, blended with pink and yellow. Flesh very juicy, rich, musky, and high flavored.

GROS MAROC.

Marocain.

An excellent variety, ripening after Black Hamburgh. A great bearer, well suited to a cold vinery.

Bunches large, long, shouldered. Berries large, oval, covered with a thick bloom. Skin thick, deep reddish purple. Flesh tender, sweet, rich.

JURA MUSCAT.

Muscat Noir de Jura.

A valuable Grape. Vine very prolific.

Bunches long, tapering, slightly shouldered. Berries above medium oval, and well set. Skin purplish black or dark chocolate, with a thin blue bloom. Flesh solid, tender, juicy, richly flavored, with a fine Muscat aroma.

KNIGHT'S VARIEGATED CHASSELAS.

Variegated Chasselas.

A hybrid seedling, raised by Mr. Knight from the White Chasselas impregnated by the Aleppo. A curious and pretty fruit, but not first-rate in flavor.

Bunches rather long, unshouldered. Berries below the middle size, round, loosely set. Skin quite thin, white, shaded with bluish violet, sometimes becoming purplish in the sun. Flesh tender, sweet, and pleasant.

LADY DOWNE'S.

Lady Downe's Seedling.

This variety was grown from seed of the Black Morocco crossed by the Chasselas or Sweetwater. It is among the most valuable, ripening its fruit and hanging a long time—Hogg says, from August until March.

Bunches large, rather loose, shouldered. Berries above medium, roundish oval. Skin rather thick, reddish purple, becoming quite black, with a delicate bloom. Flesh dull white, firm, sweet, and richly flavored.

LOMBARDY.

Flame-Colored Tokay. Rhemish Red. Wantage. Red Grape of Taurida.

The Lombardy is remarkable for the very large size of the bunches, which are frequently twelve to eighteen inches long. It is a handsome fruit, the berries thickly set (so much so as to need a good deal of thinning), and it requires fire-heat to bring it to full perfection.

Bunches very large, handsomely formed, with large shoulders. Berries large, roundish. Skin thick, pale red or flame-colored. Flesh firm, sweet, with a sprightly, very good flavor.

MILLER'S BURGUNDY.

Miller Grape.

Mulleвреbe.

Fromenté.

Farineux noir.

Müller.

Morillon Taconné.

Pulverulenta.

Sauvignien noir.

Le Meunier.

Morone Farinaccio.

Aleatica du Po.

Noirin.

A variety that ripens pretty well in the open air, and is readily known by the dense covering of *cottony down* which lines both sides of the leaves, whence the name *Miller's Grape*.

Bunches short, thick, and compact. Berries roundish oval, very closely set together. Skin thin, black, with a blue bloom. Flesh tender, abounding with a sweet, high-flavored juice. Each berry contains two small seeds.

MUSCAT OF ALEXANDRIA.

Alexandrian Frontignan.	Moscatel Gordo Blanco.
Charlesworth Tokay Malaga.	Passe Musquée.
Muscat Escholata.	Passe Musquée.
Muscat Grec.	Tottenham Park Muscat.
Muscat of Jerusalem.	Uva Salamana.
Muscat of Lunel.	White Muscat of Alexandria.
Muscat Romain.	Muscat Esculata?

A well-known Grape which furnishes the Muscatel Raisins, from Spain. It requires a high temperature to ripen it thoroughly.

Bunches very large, long, loose shouldered. Berries large, oval, unequal in size. Skin thick, pale amber, thin white bloom. Flesh firm, moderately juicy, sweet and rich, fine Muscat flavor.

PITMASTON WHITE CLUSTER.

A pretty hardy Grape, raised in Pitmaston, England, from the Black Cluster, ripening rather earlier than the Sweetwater, of good quality, and well deserving a place where the foreign Grapes are cultivated in the open air.

Bunches of medium size, compact, and shouldered. Berries middle-sized, round. Skin thin, amber color, occasionally tinged with a little russet when fully ripe. Flesh tender, juicy, sweet, and excellent.

PRIMAVIS FRONTIGNAN.

An early ripening variety that sets well and is productive.

Bunches large, long, shouldered, berries medium to large, round, amber. Flesh rather solid, tender, juicy, sweet, and rich. One of the finest of the Muscat Chasselas family. Early.

RED CHASSELAS.

Red Muscadine.	Chasselas Rouge Foncée.
Chasselas Rouge.	Cerese Septiembre.

This Grape a good deal resembles the White Chasselas, except that the berries are slightly colored with red. Very rarely, when over ripe, they become a dark red.

Bunches loose, not large. Berries medium size, round. Skin thin, at first pale green, but when exposed to the sun they become red. Flesh tender, sweet, and very good.

REEVES' MUSCADINE.

An excellent variety for the cold vinery.

Bunches large, conical, loose, shouldered. Berries large, nearly round, amber color. Flesh tender, rich, juicy, sweet.

ROYAL MUSCADINE.

Amber Muscadine.	Chasselas de Fontainebleau.
Early White Teneriffe.	D'Arbois.
Golden Chasselas.	Raisin de Champagne.
White Chasselas.	Amiens.
Chasselas doré.	Campanella Bianca.
Chasselas blanc.	White Nice, or Xeres.

A truly excellent Grape in all respects—one of the very best for

hardy culture in this climate, or for the vinery. It is everywhere highly esteemed, and is the Chasselas *par excellence* of the French.

Bunches large and shouldered. Berries larger than those of the Sweetwater, round. Skin thin, at first greenish white, but turning to an amber color when fully ripe. Flesh tender, with a rich and delicious flavor. Ripens here about the 20th of September. Wood and foliage stronger than those of the Sweetwater.

SCOTCH WHITE CLUSTER.

Blacksmith's White Cluster.

Laan Hâtif.

Van der Laan Précoce.

Diamant.

Diamant Traube.

This Grape was raised by a blacksmith of Edinburgh in 1812.

Bunches of middle size, compact. Berries medium-sized, roundish-oval. Skin white, thin. Flesh tender, juicy, sweet, and excellent.

SYRIAN.

Jews.

Palestine.

Terra de la Promise.

This is believed to be the Grape mentioned in the Scriptures as found by the Israelites on the brook of Esheol, the bunches of which were so large as to be borne on a staff by two men. It is a very superb-looking fruit, and has been grown in this country to very large size. In England bunches of it have been produced weighing 19½ lbs.

Bunches enormously large, and regularly formed, with broad shoulders. Berries large, oval. Skin thick, white at first, but becoming a tawny yellow or amber when at full maturity. Flesh firm and solid, moderately juicy and sweet, though not rich. Will hang till Christmas in a vinery. The wood and foliage are very large.

TREBBIANO.

Trebbiano Bianco.

Trebbiano Vero.

Erbalus.

Ugni Blanc.

A variety that requires a tolerably high temperature, especially during the fall months. It is a late sort, and hangs well.

Bunches very large, broad, shouldered. Berries medium, roundish, oval. Skin thick, somewhat adhering to the flesh, whitish, with a delicate bloom. Flesh firm, sweet, rich.

TRENTHAM BLACK.

Long Noir d'Espagne.

A fine variety, well suited to the cold vinery. It ripens with Black Hamburgh, but will hang plump and fresh long after that variety has shrivelled.

Bunches large, tapering, and shouldered. Berries above medium, oval. Skin tough, jet black, covered with a thin bloom. Flesh melting, juicy, rich, sugary, vinous.

TROVEREN FRONTIGNAN.

Troveren. Muscat Troveren. Muscat Troveren Blanc.

This, says Rivers, is one of, if not the finest of all the Frontignans. A great bearer, and with a rich Muscat flavor in the fruit.

Bunches large. Berries very large, roundish oval, greenish, changing to pale amber. Flesh firm and crackling, juicy, sweet, and acid. Requires fire heat.

TYNINGHAM MUSCAT.

A late variety that sets well and is very productive.

Bunches very large, double-shouldered. Berries large, oval, amber yellow, slight bloom. Flesh solid, juicy, sweet, and of a rich Muscat flavor.

VERDELHO.

Verdal. Verdilhio. Madeira Wine Grape.

A vigorous growing Grape, of good quality, from Madeira, which is largely used in that island for making the best wines.

Bunches rather small, loose. Berries small, rather unequal in size, and often without seeds. Skin thin, semi-transparent, yellowish green, a little tinged with russet when very ripe. Juice a little acid at first, but rich and excellent at maturity.

WHITE FRONTIGNAN.

White Constantia.	White Frontniac.	Nepean's Constantia.
Muscat Blanc.	Raisin de Frontignan.	Muscat Blanc de Jura.
Moschata Bianca.	Moscado Bianco.	Moscatel Commun.
Muscatteller.	Weisser Muscatteller.	Weisse Muscaten Traube.

The White Frontignan is a very favorite Grape, as the many names quoted above, by which it is known in various parts of Europe, sufficiently prove. Its hardy habit, uniform productiveness in the vinery, and most luscious flavor, make it everywhere esteemed.

Bunches of medium size, or pretty long, and without shoulders. Berries middle-sized, round, rather thickly set. Skin thin, dull white or yellow, covered with a thin bloom. Flesh tender, with a rich, perfumed, musky flavor.

WHITE HAMBURGH.

White Lisbon. White Portugal. White Raisin.

This is the Portugal Grape of commerce, which is so largely exported to different parts of the world in jars. It is not a high-flavored though a very showy grape, and will hang a long time on the vines after maturity. It requires fire-heat.

Bunches very large and loose. Berries large oval. Skin thick, greenish white. Flesh solid, sweet, and sometimes with a slight Muscat flavor. Bunches of this variety weighing over three pounds have been grown near Boston.

WHITE NICE.

A very large and showy fruit, and, in a vinery with fire-heat, a very excellent sort. M'Intosh, an English gardener of reputation, has grown bunches of this the White Nice to the enormous weight of eighteen pounds, and considers it "one of the noblest of grapes."

Bunches very large, with loose shoulders. Berries roundish, medium size, thinly distributed over the shoulders and sides of the bunch. Skin thin, rather tough, greenish white, becoming, finally, a little yellowish. Flesh crisp, sweet, and of very good flavor. Leaves and wood very strong, the latter remarkably downy beneath.

WHITE RESSLING.

Schloss Johannisberg.	Rudesheimerberg.	Riessling.
Petit Riessling.	Grosser Riessling.	Rossling.
	Kleiner Riessling.	

The most celebrated Grape of the Rhine, producing the celebrated Hock wines.

Bunches of medium size, compact. Berries rather small, round. Skin thin. Flesh tender and juicy, with sweet and sprightly pleasant flavor.

WHITE SWEETWATER.

Early White Muscadine.	White Muscadine.	Early Sweetwater.
Stillward's Sweetwater.	Dutch Sweetwater.	Chasselas Pr.coce.
Chasselas Royal.	Water Zoete Blanc.	

This Grape is better known and more commonly cultivated than any other in this country, although it is inferior to the Royal Muscadine. It differs from the latter in having weaker wood, and open, loose bunches of a paler color.

Bunches middle-sized, loose or open, usually with many small imperfect berries, shouldered. Berries of the middle size, round. Skin thin, clear watery green, rarely becoming amber, except very fully exposed to the sun. Flesh crisp, watery, sweet, but not high-flavored. Ripens in the open air from the 20th to the last of August—a fortnight earlier than the Royal Muscadine.

WHITE TOKAY.

Genuine Tokay.	Gray Tokay.	Tokai blanc.
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This is the fruit from which the delicious Tokay wine of Hungary is made. Its flavor is good, and its aroma peculiarly agreeable.

Bunches of medium size, compact. Berries rounded oval, closely set. Skin thin, of a dull white. Flesh very delicate, sweet and perfumed.

YEDDO.

A variety from Japan, introduced with high praise, but proved of little value.

Bunches medium. Berries medium, brownish. Flesh rich and sweet. Not good enough for the vinery, and liable to mildew in the open air.

AMERICAN GRAPES.

The better varieties of the native Grapes are among the most valuable of fruits in the Middle States. Hardy, vigorous, and productive, with a moderate amount of care they yield the farmer and the common gardener, to whom the finer foreign sorts, requiring much attention and considerable expense in culture, are denied, the enjoyment of an abundance of very good fruit.

The grape region has been lately greatly extended by the addition of new varieties, which, in consequence of ripening their fruit much earlier than the Isabella and Catawba, are suited to two or three degrees of latitude farther north than the limit of the cultivation of these varieties.

The garden culture of the hardy native grapes, although not very difficult, cannot be accomplished so as to give the fruit in perfection, without some attention to their habits and wants. The soil should be dry, deeply worked, and well enriched, always bearing in mind that it is an essential point to secure a perfectly open, sunny exposure, as it may always be assumed that with us no atmosphere can be too warm or bright for the grape; for although it will make the most vigorous shoots in the shade of trees or buildings, yet the crops will be small, the fruit poor and uncertain, and the vines likely to fall a prey to mildew.

In the second place, the vines should be *kept within moderate bounds*, and trained to an *upright trellis*. The Isabella and Concord are so rampant in their growth, when young, that the indulgent and gratified cultivator is but too apt to allow them to overbear; the border should always be given to the exclusive occupancy of the vines, and the roots should be allowed space proportional to the branches they are to carry. By observing these directions, and not suffering the vines to overbear, they may be continued a long time in full vigor and productiveness.

The system of pruning and training these grapes generally pursued is the upright mode, with the spur mode of training. The first season's growth of a newly planted vine is cut back to two buds the ensuing fall or spring. These two buds are allowed to form two upright shoots the next summer, which at the end of the season are brought down to a horizontal position, and fastened each way to the lower horizontal rail of the trellis, being shortened at the distance of three or four feet from the root—or as far each side as the plant is wished to extend. The next season, upright shoots are allowed to grow one foot apart, and these, as soon as they reach the top of the trellis, are also stopped. The next year, the trellis being filled with the vines, a set of lateral shoots will be produced from the upright leaders, with from one to three bunches upon each, which will be the first crop. The vine is now perfect, and, in the spur mode of pruning, it is only necessary at the close of every season, that is, at the autumnal or winter pruning, to cut back these lateral shoots or fruit-spurs to within an inch of the upright shoot from which they sprang, and a new lateral producing fruit will annually supply its place, to be again cut out at the winter pruning.

After several years' bearing, if it is found that the grapes fail in size or flavor, the vines should be cut down to the main horizontal shoots at the bottom of the trellis. They will then speedily make a new set of upright shoots which will produce very abundantly, as at first.

It cannot be denied that the *renewal* system of training (507) is

certain of yielding always the largest and finest fruit, though not so large a crop—as half the surface of the vine is every year occupied with young wood, to take the place of that annually cut out.

What we have already stated (509) respecting pruning will apply equally well here. If the vine is *fully exposed to the sun* it will require very little summer pruning; in fact, none, except stopping the young shoots three joints beyond the farthest bunch of grapes, at mid-summer—for the leaves being intended by nature to elaborate the sap, the more we can retain of them (without robbing the fruit unduly of fluids expended in making new growth) the larger and higher flavored will be the fruit; careful experiments having proved that there is no more successful mode of impoverishing the crop of fruit than that of pulling off the leaves.

In the axils of the leaves by the side of the buds which are to send forth shoots for next season's crops, branches *called laterals* push forth, which should be pinched off at the first leaf, and at the next leaf where they start again; generally the second stopping will be sufficient.

The annual pruning of the hardy grapes is usually performed during mild days in February or March—at least a month before vegetation is likely to commence. Many cultivators prefer to prune their vines in November, and, except for cold latitudes or exposures, this is undoubtedly the better season.

VINEYARD CULTURE. The vineyard culture of the native grape is very simple. Strong, loamy, or gravelly soils are preferable—limestone and clay shale being usually the best—and a *warm, open, sunny exposure* being indispensable.

In preparing the soil, if it is loamy or gravelly, a simple deep ploughing is all that is requisite; but if it is clay, or underlaid with a clay hard-pan, the subsoil should be thoroughly broken to a depth of not less than sixteen inches. This, on most lands, can be done by means of a plough and team. Steep sidehills or slopes must of course be prepared by hand labor, digging and trenching the ground thoroughly with the spade.

The vines are planted in rows, the distance from plant to plant varying according as it is a strong and vigorous grower like Concord, or a moderate short-jointed grower like Delaware. The first are generally planted eight by eight feet or eight by ten feet apart, and the latter four by six feet; while varieties of intermediate vigor are placed at six by eight feet. The renewal system of pruning is generally practised, and the vines are trained both on stakes and wire trellis, the latter being most generally considered as the best and most economical.

The ordinary culture is as simple as that of a field of Indian corn—one man and horse with a plough, and the horse cultivator, being able to keep a pretty large surface in good order. The annual pruning is performed in autumn or winter, top-dressing the vines when it is necessary in the spring; and the summer work, thinning, tying, and gathering being chiefly done by women and children.

The summer work is one requiring some care and watchfulness, although attendant with light labor, and, as we have said, may be performed by women and children. In vineyard culture the long renewal system is most practised; by it the vine the first year is permitted to make but one leading shoot, all the buds likely to form other shoots being rubbed off early in spring, or as soon as they have fully developed. The second

year this one cane, or the first year's growth, is cut down to two buds, and these are grown to two long canes, all others, as the first year, being rubbed off. The third year one of these canes of the second year's growth is cut down to two buds, and the other to four buds—the former again permitted to make two good long stout canes, and the latter allowed to produce about four or six clusters of fruit, all the ground shoots being rubbed away. When the buds break in spring, as soon as they are about one inch long the bearing canes are to be examined, and all but one shoot at each axil be rubbed out, otherwise there will be a mass of small shoots and clusters without any perfect fruit. It is also in some varieties deemed advisable to rub out entire all the buds of each alternate joint, leaving only one-half the natural quantity to fruit. When this is done the winter pruning of the bearing cane should be somewhat longer than when each bud is allowed to fruit.

The two buds or canes for the next year's fruiting are allowed to grow as long as they will, and are trained upright; the other, on which the fruit is grown, is carried off at an angle of about forty-five degrees, and when it has made its shoots, set its fruit, and grown so that there are three or four leaves or joints beyond the fruit they are stopped by pinching, as we have advised in the training of foreign grapes, the only point of difference being in permitting our native sorts more liberty and foliage. The following season, or fourth year, the cane which has this year borne fruit is cut down to two buds, and the two canes of this year's growth are cut to four or more buds for fruit-bearing, and trained at an angle of forty-five degrees each way, while the two buds on the bearing cane of last year make canes for the succeeding year's bearing.

DISEASES AND INSECTS. The mildew and rot are diseases which most affect the success of grape culture in this country. Many theories and suggestions as to their origin, cause, etc., have been promulgated and printed, but we feel that as yet no clear and full explanation or cause has been adduced. Sudden changes of temperature, a cold night or two in the month of August, a few days of foggy warm rain, followed by clear sunshine, often producing the disease, with serious results, without regard to the most thorough practices of prevention as advised by theorists.

The beetles which sometimes infest the grape-vines in summer, especially the large brownish yellow vine beetle (*Pelidnota punctata*), and the grape-vine flea-beetle (*Haltica chalybea*), are very destructive to the foliage and buds, and the most effectual remedy is hand-picking when taken in time.

GRAFTING the grape may be performed, and often quite successfully. Operators differ in their opinion as to the best season, some preferring the autumn, some early spring, and some quite late spring. But, whatever time is taken, it must be remembered that the union of the graft and stock should always be covered with earth, leaving the top or upper bud of the graft level with the ground.

KEEPING. Grapes may be kept into mid-winter or even spring. They should be gathered in a dry day, laid in tiers of two bunches deep on shelves for a couple of days, then aired, and each bunch carefully wrapped in soft paper and packed in boxes, not over five or six inches deep, and laid away in a cool dry room. Another plan is to pack them in layers with fine soft hay, cut by a cutting machine into about inch-long bits, laying a layer of hay, then grapes, and then hay again. If

grapes are gathered before they are fully matured, they do not have as good flavor, nor are they as rich and sweet as when fully ripe. In handling, be careful to take them always by the stem.

VARIETIES.

ADIRONDAC.

The original vine of this Grape was discovered in the grounds of J. G. Witherbee, Port Henry, Essex Co., N. Y., and was introduced to notice by J. W. Bailey, of Plattsburgh, N. Y. The growth and foliage is much like Isabella, but not as vigorous.

Bunches large, compact, shouldered. Berries large, round. Skin thin, dark purplish black, covered with a delicate white bloom. Flesh very tender, juicy, mild, pleasant, sweet, not rich. Ripens a week or ten days earlier than Isabella.

AGAWAM.

Rogers' No. 15.

Raised by E. S. Rogers, of Salem, Mass. Vine very vigorous, very productive, but subject to rot badly in unfavorable seasons.

Bunch large, moderately compact, shouldered. Berry large, roundish, dark red or maroon. Flesh almost tender, juicy, vinous, with a little of the native aroma. Ripens soon after the Concord.

ALBINO.

Garber's Albino.

Raised by J. B. Garber, Columbia, Pa.

Bunch small. Berry nearly round, slightly oval, yellowish or amber color. Flesh acid, tough, too late for the North.

ALEXANDER'S.

Schuylkill Muscadell.

———— Muscadine.

Cape Grape.

Springmill Constantia.

Clifton's Constantia.

Madeira, of York, Pa.?

Tasker's Grape.

Winne.

Schuylkill Madeira.

Constantia.

Black Cape.

York Lisbon.

Vevay.

Rothrock, of Prince.

This Grape, a natural seedling, was first discovered by Mr. Alexander, gardener to Gov. Penn, before the war of the Revolution. It is not unfrequently found, as a seedling, from the wild Foxgrape, on the borders of our woods.

Bunches rather compact. Berries of medium size, roundish oval. Skin thick, quite black. Flesh with a very firm pulp, but juicy, rather harsh. October.

The White Cape is similar to above, differing only in its color, which is greenish white.

ALLAIR.

Bunch small, loose. Berry medium, reddish brown. Flesh pulpy, harsh, poor.

Adirondac.

ALVEY.

Hagar.

Introduced by Dr. Harvey, of Hagerstown, Md. Vine vigorous, moderately productive.

Bunches above medium, long, and shouldered. Berries medium or small, roundish, black. Flesh tender, refreshing, vinous. Ripens middle to last of September.

ARCHER.

Origin, Philadelphia, Pa.

Bunch large. Berries medium, roundish, greenish white, amber in the sun, white bloom. Flesh juicy, sweet, pleasant. Very good. Nov. (Hort.) Ripens too late for the North.

ARKANSAS.

A small black variety from the Southwest, that is said to promise well for making of red wine.

Bunch compact. Berry round, black. Flesh juicy, rich. Ripens with Catawba.

ARCOTT.

Resembles Cassady. Liable to cast its foliage. Skin thick. Valuable only for wine. (Miss. Rep.)

AUGHWICK.

A new variety, described as having originated with Wm. A. Fraker, Shirleysburgh, Huntingdon Co., Pa.

Bunches and berries similar to Clinton in size and form and color. Flesh dark red, juicy, making a dark wine. We have not seen the Grape.

AUGUST PIONEER.

Origin unknown. It is one of the coarsest of native sorts, large, black, with a firm, hard, pulpy flesh, fit only for stewing. Middle of August.

AUTUCHON.

Arnold's No. 5.

Originated in 1859, by Charles Arnold, Paris, C. W., from seed of Clinton crossed with Golden Chasselas. Leaf deeply lobed.

Bunch quite long, moderately compact, often shouldered. Berries medium, greenish white with a golden tint when fully ripe. Skin thin. Flesh void of pulp, resembling White Chasselas, but more sprightly and rich. Ripens with Delaware. (C. Arnold, MS.)

BALDWIN LE NOIR.

Originated at West Chester, Pa.

Bunches small, rather loose. Berries small, quite dark, almost black. Flesh somewhat pulpy, brisk, rough acid. May do for wine; not desirable for table use. October.

BARNES.

Origin, Parker Barnes, Boston, Mass.

Bunches shouldered. Berries medium, oval, black, sweet, good September 5th, or nearly as early as Hartford. New. (Strong.)

BARRY.

Rogers' No. 43.

Raised by E. S. Rogers, of Salem, Mass. Vine vigorous, productive.

Bunch rather large, short, broad, compact, often shouldered. Berry large, roundish, black. Flesh tender, nearly free from pulp, juicy, sweet, pleasant. Ripens about the time of Concord.

BAXTER.

A late ripening variety from the South.

Bunch long, loose. Berries small, black, juicy, not much pulp, but quite acid here at the North. May be better South. Very late in ripening.

BIRD'S EGG.

Bunch long, pointed. Berry long oval, whitish, with brown specks. Flesh pulpy. Only good. Curiosity.

BLACK HAWK.

Originated at Lebanon, Pa., from seed of Concord vine. Strong, vigorous, hardy.

Bunch medium to large. Berry large, nearly round. Flesh somewhat pulpy, like its parent. Comparatively new and untested.

BLACK JULY.

Lincoln.
Devereux.
Sumpter.
Blue Grape.

Sherry.
Thurmond.
Hart.
Tuley.

McLean.
Husson.
Lenoir, incorrectly.

Origin uncertain. A small black Grape, a half-hardy vine, not an early bearer.

Bunches small, compact. Berries small, dark bluish black. Flesh tender, juicy, vinous, somewhat prized South for wine.

BLAND.

Bland's Virginia.	Bland's Madeira.	Red Scuppernong of some.
Bland's Pale Red.	Powell.	

The Bland does not ripen well North, except in favorable situations, and should always be planted in a warm exposure. It is said to have been found on the eastern shore of Virginia, by Col. Bland of that State.

Bunches rather long, loose, and often with small imperfect berries. Berries round, on long stalks, hanging rather thinly. Skin thin, at first pale green, but pale red when ripe. Flesh slightly pulpy, of a pleasant, sprightly, delicate flavor, and with little or no musky scent, but a slight astringency. Ripens late.

BLOOD'S BLACK.

A native fox Grape, healthy, hardy, and productive of fruit, quite harsh and foxy.

Bunches short, compact, shouldered. Berry round, black. Ripens about with Hartford, and inferior.

BLUE FAVORITE.

A Southern Grape that does not ripen well North. Vine vigorous, productive.

Bunch above medium. Berries medium, round, blue black, sweet, vinous, much coloring matter. Ripe South early in September, and there said to be much esteemed for wine-making.

BLUE IMPERIAL.

Origin uncertain. Vine vigorous, free from mildew, not productive.

Bunches medium, short. Berry large, round, black. Flesh with a hard acid centre or pulp. Ripens with Hartford. Inferior.

BRANDYWINE.

Origin, Wilmington, Del.

Bunch large, shouldered, rather compact. Berry oval, greenish white. Flesh tender. Middle September. (Car. Mon.)

BRANT.

Arnold's No. 8.

Raised by Charles Arnold, Paris, C. W., from seed of Clinton fructified with mixed foreign pollen. Vine strong, healthy grower. Foliage of a dark reddish green, deeply lobed. Smooth on both sides.

Bunch and berry medium, black. Flesh free from pulp, very juicy, sweet, and, when perfectly ripe, rich and aromatic. Ripens early. (C. Arnold, MS.)

BRINCKLE.

Raised by Peter Raabe, near Philadelphia. Vine tender.

Bunch large, rather compact, sometimes shouldered. Berries round, black. Flesh slightly pulpy, vinous, saccharine. Good. Ripens Sept.

BROWN.

Very much like Isabella, and ripens with it.

BURROUGHS.

From Vermont. Vine allied to the Clinton.

Bunch small. Berry round, black, thick bloom. Flesh harsh, acid, austere. Ripens a little earlier than Isabella.

BURTON'S EARLY.

A large early, poor Fox Grape. Unworthy culture.

CAMDEN.

Of the fox class.

Bunch medium. Berry large, greenish white. Flesh with a hard centre, acid, poor.

CANADA.

Arnold's No. 16.

Raised from seed of Clinton crossed with pollen of Black St. Peter's. Vine and foliage somewhat like Clinton. The fruit also resembles Clinton in appearance of bunch, but larger berry.

Bunch and berry above medium, shouldered. Skin thin, black, with a fine bloom. Flesh free from pulp, juicy, with a distinct foreign flavor, and aromatic. Ripens with Concord. (Chas. Arnold, MS.)

CARTER.

Of a foxy character. Berries round, large, almost black. Ripens with Isabella, and inferior.

CASSADY.

An accidental seedling that sprang up in P. H. Cassady's yard, in Philadelphia.

Bunches medium size, tolerably compact, and sometimes shouldered. Berry below medium, round, greenish white, with occasionally a faint salmon tint, and thickly covered with white bloom. Flesh juicy, little pulp, pleasant, peculiar honey sweet.

CATAWBA.

Red Muncy.
Michigan.

Catawba Tokay.
Fancher?

Saratoga?

This excellent native Grape was first introduced to notice by Major Adlum, of Georgetown, D. C., and was found by him in Maryland.

The Catawba is too late in ripening for general cultivation in the Eastern and Northern States; but where it does succeed few Grapes are its superior. Clay shale soils appear to give most richness to the fruit; but very handsome clusters are grown in gravelly or sandy soils. It is a popular and profitable market sort. Vine hardy and productive.

Bunches of medium size, somewhat loose, shouldered. Berries round (or sometimes slightly oval), pretty large. Skin rather thick, pale red in the shade, but pretty deep red in the sun, covered with a lilac bloom. Flesh slightly pulpy, juicy, very sweet, with an aromatic, rich, musky flavor. Ripe from the 1st to the middle of October, and should be allowed to hang till fully ripe.

Mead's Seedling, and Mammoth Catawba, and Poeschel's Mammoth are claimed as seedlings of the Catawba; but they are so nearly identical as not to require distinct descriptions. The Zane, White Catawba, Pond's Seedling, James' Seedling, Clermont, also belong to this class.

CHALLENGE.

Raised by Rev. Asher Moore, from a cross between Concord and Royal Muscadine. Vine hardy and thrifty.

Bunches short, compact, shouldered. Berries rather large, round, pale red like Catawba. Flesh slightly pulpy, juicy, sweet. Ripens before Concord. (W. F. Basset.)

CHARTER OAK.

A very large, coarse, native Fox Grape, quite worthless except for size.

CHIPPEWA.

A variety found growing on the banks of the Chippewa Creek, and described in 1858 by Wm. H. Read.

Bunches good size, compact, heavily shouldered. Berries medium, black, covered with bloom. Flesh tender, melting, sweet, and excellent. We have never seen the vine or heard of it since the first above-published description in the "Country Gentleman."

CLARA.

A chance seedling in grounds of Peter Raabe, Philadelphia, Pa. Vine rather tender.

Bunch medium, loose, shouldered. Berry medium, roundish, pale yellow, translucent. Flesh tender, juicy sweet. A fine amateur sort. Ripens with Catawba.

CLARET.

A seedling of Chas. Carpenter, Kelly Island, O. Vine vigorous. Bunch and berry medium, claret red, acid. Not valuable.

CLINTON.

Worthington.

Origin uncertain, said to have originated in Western New York. Growth vigorous, hardy, and productive.

Bunch medium, shouldered, long and narrow, somewhat irregular, but compact. Berries round, rather below medium size, black, covered with a thick bloom, juicy, with some acidity and toughness in its pulp, but with a brisk vinous flavor. Colors early, but does not fully ripen until quite late, or after frost.

CLOVER STREET BLACK.

A seedling raised by Jacob Moore, from Diana crossed by Black Hamburg.

Bunches large, compact, shouldered. Berries large, roundish, black, with a dark violet bloom. Flesh tender, sweet. Vine moderately vigorous. Ripens with Concord. (Hov. Mag.)

CLOVER STREET RED.

Same origin as the preceding.

Bunches larger than Diana, loose, occasionally with a similar long stalk or shoulder appended to the top. Berries large, roundish oval, crimson when fully ripe, with a slight Diana flavor. Vine a strong grower. Ripens with Diana. (Hov. Mag.)

COLUMBIA.

This Grape is said to have been found by Mr. Adlum on his farm at Georgetown, D. C. A vigorous grower, productive.

Bunch small, compact. Berry small, black, with a thin bloom, with very little hardness or acidity in its pulp, not high-flavored, but pleasant and vinous. Ripe last of September.

Concord.

CONCORD.

This fine hardy native Grape was raised from seed by E. W. Bull, Concord, Mass. It is of very healthy, vigorous habit, and productive.

Bunch rather compact, large shouldered. Berries large, globular, almost black, thickly covered with bloom. Skin rather thick, with more of the native pungency and aroma than the Isabella, which it resembles, but does not quite equal in quality. Flesh somewhat buttery, moderately juicy, sweet, with considerable toughness and acidity in its pulp. It is more hardy than the Isabella, and ripens about ten days earlier, consequently it is a very valuable variety for a large northern range where the Isabella does not ripen. It is very popular, but as a market sort the fruit, if left to ripen before gathered, does not carry well long distances, and is liable to drop from the bunch after a few days.

CONQUEROR.

A cross between Concord and Royal Muscadine, grown by Rev. Asher Moore. Vine hardy, thrifty, productive.

Bunches rather long, loose, shouldered. Berries medium to large, somewhat pear-shaped, glossy, black, with a fine bloom. Flesh slightly pulpy, juicy, sweet. Ripens with Concord. New. (W. F. Bassett, MSS.)

CORNUCOPIA.

Arnold's No. 2.

Raised in the year 1859, by Charles Arnold, from seed of Clinton, crossed with St. Peters. Vine very healthy and vigorous. Leaves large, dark green, smooth on both sides. Wood short-jointed. Very productive, and a long keeper.

Bunch large, compact, shouldered. Berry above medium, very black, with a fine bloom. Skin thin. Flesh juicy, no pulp. Ripens with Concord, which ripens early. (C. Arnold, MSS.)

COTTAGE.

This is a new variety, originated with E. W. Bull, and by him described as:

Fruit black, and ripening two weeks before Concord.

COWAN.

McCowan.

A native.

Bunch and berry medium, black, rather harsh and austere. Not desirable.

CREVELLING.

Catawissa Bloom.
Columbia County.

Bloomburg.
Laura Beverly?

Claimed to be of Pennsylvania origin. Vine hardy and vigorous, moderately productive. It has imperfect blooms, but is said to be quite productive when grown side by side with Concord.

Bunch medium to large, long, loose, shouldered. Berries medium, nearly round, black, with a blue bloom. Flesh tender, very little pulp, juicy, sweet, and moderately rich, more so than Concord. Ripens soon after Hartford Prolific.

CROTON.

A new variety, originated by Stephen Underhill, Croton Point, N. Y., from seed of Delaware crossed by Chasselas. The vine is a fine grower, hardy.

Bunch medium, shouldered, moderately compact. Berries small to medium, light greenish yellow. Skin thin. Flesh juicy, sprightly, sweet, pleasant, rich. Ripens about with Hartford Prolific.

CUNNINGHAM.

Long.

Said to have originated with Jacob Cunningham, Prince Edward Co., Va. Vine vigorous healthy. A variety of value for wine, South and Southwest.

Bunch medium, brownish, compact, often, not always, shouldered. Berries small, round, black. Flesh juicy, rich. Not quite hardy at the North, and ripens later than Catawba.

CUYAHOGA.

Wemple.

A chance seedling found and grown by — Wemple, Collamer, Cuyahoga Co., O. Vine strong grower, requires a warm sandy soil and exposure to make it desirable at the North; but when well grown is of fine quality. South it casts its foliage, and is not valuable.

Bunch medium, compact. Berry medium, dull greenish amber when fully ripe. Flesh tender, juicy, rich, vinous, sweet. Ripens with Catawba or a little later.

CYNTHIANA.

Red River.

Of unknown origin, said to be Kansas. A distinct and valuable variety for making of red wine South and West, or wherever the Catawba will ripen. Vine very vigorous, hardy, and productive. It much resembles Norton's Virginia, and is perhaps superior.

Bunches moderately compact, shouldered. Berries small, round, black, blue bloom. Flesh juicy, the juice not quite as dark in color as Norton's Virginia.

DANA.

A seedling grown by Francis Dana, of Roxbury, Mass., and described in the "Massachusetts Horticultural Transactions."

Bunch medium, shouldered, compact, with a peculiar red stem. Berries rather large, nearly round, red, with a rich heavy bloom, so that when fully ripe they appear almost black. Flesh as free from pulp as Delaware; not so sweet, but more spirited and vinous, yet not acid. Ripe last of September.

DELAWARE.

Heath.

Italian Wine.

The precise origin of this Grape is not known. It was found many years since in the garden of Paul H. Provost, Frenchtown, Hunterdon Co., N. J. It is moderately vigorous in growth, with short-jointed

wood. Quite hardy, requires rich soil, open, and well drained, to produce the finest of fruit. One of our most, if not the most, valuable sorts for general cultivation. Very productive.

Delaware.

Bunch small, very compact, and generally shouldered. Berries rather small, round. Skin thin, of a beautiful light red, very translucent. It is without hardness or acidity in its pulp, exceedingly sweet but sprightly, vinous, and aromatic.

DETROIT.

This variety is supposed to be a seedling. It was found in a garden in Detroit, Mich. Not having seen the fruit, we copy from description in the *Horticulturist*: "Vine very vigorous and hardy. Foliage resembling Catawba. Wood short-jointed.

"Bunches large, compact. Berries very dark, rich brown claret, with a light bloom, round and regular. Flesh with very little pulp, rich and sugary. Ripens earlier than Catawba."

DIANA.

A seedling of the Catawba, raised by Mrs. Diana Crehore, of Boston. It is a very fine fruit when well ripened, but while it colors early, does not ripen much, if any, earlier than Catawba. It is a very vigorous vine, requiring much room and long pruning, and increases in productiveness and good quality as the vines get age. It does not require a very rich soil.

Bunches large, very compact, and heavy, not properly shouldered, but often having a small bunch appended by a long branch of the peduncle.

The color is a fine reddish lilac, thickly covered with bloom. The berries round. The fruit when fully ripe abounds in fine rich juice, vinous, and aromatic, from which all the offensive native odor has disappeared. It hangs long on the vines, is not injured by severe frosts, and keeps admirably for winter use.

DIANA HAMBURGII.

Originated from seed of Diana, crossed with Black Hamburg, by Jacob Moore, Rochester, N. Y. Vine a fair grower, with short-jointed wood, tolerably healthy, sometimes disposed to mildew. We have seen but little of it, and think it not suited for out-door culture.

Bunch large, moderately compact, shouldered. Berries roundish oval, rich red, with a bloom. Flesh tender, sweet, somewhat aromatic, like Diana. Ripens nearly with Isabella.

DRACUT AMBER.

Originated by J. W. Manning, Dracut, Mass. Vine very vigorous, of the Fox Grape class, productive.

Bunch large, compact, often shouldered. Berry large, round. Skin thick. Flesh quite pungent and foxy. Ripens about with Concord.

EARLY HUDSON.

A round black Grape, early, and of little value, except as a curiosity, inasmuch as some of the berries contain no seed.

ELIZABETH.

Originated on the farm of Joseph Hart, near Rochester, N. Y., and described in the *Rural New Yorker*.

Bunches large, compact. Berries large, roundish oval, greenish white, with a slight purple tinge in the sun. Flesh rather pulpy, acid.

ELSINGBURGH.

Smart's Elsingburg.

Elsenborough.

Elsilboro.

A very nice little Grape for the dessert, perfectly sweet and melting, without pulp, originally brought from a township of this name in Salem Co., N. J. It is not a great deal larger than the common Frost Grape in the size of the berry. A moderate, but regular bearer, ripens well, and much esteemed by many for the table.

Bunches pretty large, loose, and shouldered. Berries small, round. Skin thin, black, covered with a blue bloom. Flesh entirely without pulp, melting, sweet, and excellent. The leaves are deeply five-lobed, pretty dark green, and the wood rather slender, with long joints.

• EMILY.

Raised by Peter Raabe, near Philadelphia.

Bunch large, not very compact, occasionally shouldered. Berry below medium, from three-eighths to one-half an inch in diameter, round, pale red. Flesh very juicy, with little or no pulp. Tender vine.

EUMELAN.

A chance seedling, originated at Fishkill, N. Y. Vine hardy, productive, and ripens early.

The bunch of good size, compact, shouldered. Berry medium size, nearly round, of a deep purple or bluish black color, covered with a light bloom. Flesh tender, melting, ripening to the centre, sweet, sprightly, vinous.

FLORA.

Origin, Philadelphia, Pa.

Bunch small, compact. Berry small, roundish oval, purplish red. Flesh somewhat pulpy, acid at centre, juicy, vinous. Ripens about with Isabella. Vine hardy and productive.

FRANKLIN.

Vine much the habit and growth of Clinton. Not as good a bearer.

Bunch small, not very compact. Berry small, black, juicy, quite acid, austere. Unworthy.

GARRIGUES.

Raised by Edward Garrigues, Kingsessing, Philadelphia. A vigorous grower, hardy and productive, very much resembles Isabella, and no doubt a seedling of it. Ripens a few days earlier.

GOETHE.

Rogers' No. 1.

Raised by E. S. Rogers, of Salem, Mass. Vine vigorous, productive, and has more of the foreign character in it than any other of his seedlings. It does not ripen here, except in favorable seasons. It is said to succeed well South and Southwest.

Bunch large, moderately compact, shouldered. Berry very large, oval, yellowish green, often blotched with dull red. Flesh tender to the centre, juicy, sweet, pleasant, slightly aromatic.

GOLDEN CLINTON.

King.

A seedling of Clinton, and resembles that variety, except in color of fruit, which is yellowish white. Not as productive as Clinton.

GRAHAM.

An accidental seedling, introduced by William Graham, of Philadelphia.

Bunch of medium size, shouldered, not compact. Berry half an inch in diameter, round, purple, thickly covered with a blue bloom, contains little or no pulp, and abounds in juice of agreeable flavor. A poor grower and bearer.

HALL.

A variety grown by David Hall, of Urbana, O. Berries medium, dark, almost black, better than Clinton, not equal to Isabella, but earlier. May be better South.

HARTFORD PROLIFIC.

Seneca ?

Framingham.

Raised by Mr. Steel, of Hartford, Conn. Hardy, vigorous, and productive.

Bunch large, shouldered, rather compact. Berry large, globular, with a good deal of the native perfume. Skin thick, black, covered with a bloom. Flesh sweet, moderately juicy, with considerable toughness and acidity in its pulp. Ripe among the very earliest. An early variety for marketing, but too liable to drop its fruit from the bunch as soon as fully ripe.

HATTIE.

There are two Grapes under this name. One originated with Mrs. N. R. Haskell, Monroe, Mich. Is a medium-sized bunch, rather long and loose. Berries medium, slightly oval, bright clear red, translucent, with a bloom. Flesh juicy, with little pulp, pleasantly vinous, not rich. Ripens with Concord. The other Hattie, or Hettie, is of unknown origin. Bunch small. Berry black. Flesh somewhat pulpy, a poor grower and bearer, but ripens early.

HERBEMONT.

Warren.

Herbemont's Madeira.

Warrenton.

Neil Grape.

Origin claimed for many localities, but not yet fully ascertained. It is, however, a Southern Grape, a vigorous grower, a good bearer, and particu-

larly fitted for those Southern latitudes that are liable to injury from late frosts in spring, as it flowers very late. It is highly esteemed as a wine grape in Missouri, Tennessee, and other Southern and Southwestern sections. At the North it does not ripen its fruit except in warm, sheltered situations.

Bunch large and compact, shouldered. Berries below medium, round, dark blue or violet, covered with a thick light bloom. Skin thin, which is filled with a sweet, rich, vinous aromatic juice of so little consistence that it cannot be called flesh.

HINE.

Originated with Jason Brown, of Put-in-Bay, O., from seed of Catawba.

Bunch large, compact, slightly shouldered. Berries medium, round, irregular in size, dark claret red. Flesh juicy, rich and sweet, slightly pulpy. Ripens about with Concord.

HOWELL.

Origin unknown.

Bunch and berries medium, oval, black. Skin thick. Flesh with firm pulp, pleasant. Good. Middle September.

HUDSON.

Originated in the garden of Mr. Calkins, Hudson, N. Y. Growth similar to Isabella.

Bunch and berry much the same, but less sprightly and not quite so rich.

HYDE'S ELIZA.

Originated with Eliza Hyde, Catskill, N. Y. Vine moderately vigorous, and productive.

Bunch medium, compact, often with a small shoulder. Berry medium size, round, black, covered with a thin, light bloom. Flesh tolerably juicy, somewhat buttery, with a pleasant vinous flavor. Ripe a few days before Concord.

IONA.

Originated by Dr. C. W. Grant, Iona Island, N. Y. Vine vigorous, productive. A superior grape when in perfection.

Bunch medium to large, shouldered, sometimes double-shouldered. Berries medium, roundish oval, light clear red, fine bloom. Skin thin. Flesh soft, tender to the centre, juicy sweet, vinous. Ripens a few days after Delaware, and continues a long time in use.

ISABELLA.

Paign's Isabella.
Woodward.
Payne's Early.

Christie's Improved Isabella.
Sanbornton?

This very popular Grape, a native of South Carolina, was brought to the North and introduced to the notice of cultivators about the year

Iona.

Israella.

1818, by Mrs. Isabella Gibbs, the wife of George Gibbs, Esq., in honor of whom it was named. Its great vigor, hardiness, and productiveness, with the least possible care, have caused it to be most widely disseminated. It is, perhaps, a little more hardy, and ripens earlier than the Catawba.

Bunches of good size—five to seven inches long, rather loose, shouldered. Berries oval, pretty large. Skin thick, dark purple, becoming at last nearly black, covered with a blue bloom. Flesh tender, with some pulp, which nearly dissolves when fully mature; juicy, sweet and rich, with slight musky aroma.

This Grape is frequently picked as soon as it is well colored, and long before it is ripe.

Many seedlings of the Isabella have been grown, differing very little in form, size, or quality of fruit, or in growth and productiveness, and therefore we prefer to class them as sub-varieties. They are Clo-anthe, Aiken, Richmond, Baker, Bogue's Eureka, Sanbornton, Wright's Isabella, Lee's, &c., &c.

ISRAELLA.

Originated with Dr. C. W. Grant, of Iona Island, N. Y. Vine vigorous, hardy, and productive.

Bunch medium to large, shouldered, compact. Berries large, slightly oval. Skin rather thin. Flesh tender, juicy, free from pulp, sweet. Ripens soon after Hartford Prolific.

IVES.

Ives' Seedling.

Ives' Madeira.

Kittredge.

Raised by Henry Ives, of Cincinnati. Vine vigorous, productive. Has lately come into pretty high repute as a valuable wine Grape in its native locality.

Bunch medium size, compact, shouldered. Berry medium, black, roundish oval. Flesh with some pulp, juicy, sweet, a little too harsh for table use. Ripens with Isabella.

KILVINGTON.

Origin unknown.

Bunch medium, tolerably compact. Berry small, round, dull red, with a bloom. Flesh pulpy, half tender, vinous.

KINGSESSING.

Bunch long, loose, shouldered. Berry medium, round, pale red, with a bloom. Flesh pulpy.

KITCHEN.

Seedling from Franklin.

Bunch and berry medium. Berry round, black. Flesh acid, juicy.

LABE.

Bunch rather small, short, oblong. Berries medium, loosely set, black. Flesh half tender, pulpy, sharp sweet.

LAKE.

Iden.

Bunch and berry small, black, early, acid, harsh.

LENOIR.

This Grape takes its name from Lenoir Co., N. C. It has been confounded with Black July, but is distinct, as shown in foliage. The foliage of this has lobed leaves.

Bunch medium, compact, shouldered. Berry small, round, dark, almost black. Flesh tender, vinous, juicy, sweet. A good variety South, but too late in ripening for the North.

LINDLEY.

Rogers' No. 9.

Raised by E. S. Rogers, of Salem, Mass. Vine vigorous, very productive.

Bunch medium, rather long, compact. Berry medium, roundish, red or reddish. Flesh tender, juicy, sweet, slightly aromatic. Ripens a little before the Concord.

LOGAN.

Supposed origin, Ohio. Vine a moderate grower and bearer.

Bunches medium, shouldered. Berries roundish oval, black. Flesh juicy, sweet, some pulp at centre. Ripens just after Hartford Prolific.

LOUISA.

Raised by Samuel Miller, Calmdale, Lebanon Co., Pa.; hardy, vigorous grower.

Bunch medium, rather compact, occasionally shouldered. Berry round, inclining to oval, black, with a blue bloom similar to Isabella, and ripe a few days earlier.

LOUISIANA.

A variety from Louisiana, by some considered a native; others say it is foreign. George Husman says:

"It can hardly be distinguished from the Rulander in appearance, but has a more sprightly flavor. Ripens at the same time."

LYDIA.

A chance seedling, originated on Kelly Island, and introduced by Chas. Carpenter. Vine about with Isabella in growth and hardihood, but not a good bearer.

Bunches short, compact, roundish. Berries large, greenish white, tinge of yellow when fully ripe. Skin thick. Flesh juicy, rich, sweet, with very little pulp, and free of native aroma. Ripens with Delaware.

LYMAN.

Origin unknown. A Northern variety, said to have been brought from Quebec upwards of fifty years ago. Hardy and productive.

Bunch small, rather compact. Berry round, medium or below, black,

Martha.

covered with a thick bloom, similar in flavor to Clinton, and ripens about the same time.

SHERMAN and McNEIL are varieties grown from the above, but hardly to be distinguished from it. McCoun is another of this class.

MANHATTAN.

Originated near New York. A poor bearer.

Bunches small. Berries medium, round, greenish white, with a bloom. Flesh sweet, rather pulpy.

MARION.

Origin unknown.

Bunch large, compact. Berries roundish oval, purplish black, tough centre, austere. Colors early, but ripens late.

MARTHA.

Raised by Samuel Miller, Bluffton, Mo. The habit of the vine is much like Concord, but it has not yet been tested, as we think, sufficiently to decide on its productiveness.

Bunches medium, not very compact, shouldered. Berry large, roundish, greenish yellow, with a bloom. Flesh similar to Concord, perhaps a little sweeter. A promising new sort, ripening a few days earlier than Concord.

MARY.

Raised by Charles Carpenter, Kelly Island. Vine hardy, strong grower. Fruit ripens too late for the North.

Bunch medium, moderately compact. Berries medium, round, greenish white, with a bloom. Flesh tender, slight pulp, juicy, sweet, brisk flavor.

MARY ANN.

Raised by J. B. Garber, Columbia, Pa. An early Grape, hardy. Not equal to Isabella.

Bunch medium, moderately compact, shouldered. Berry medium, oval, black, pulpy acid, foxy. Ripens about with Hartford.

MASSASOIT.

Rogers' No. 3.

Raised by E. S. Rogers, of Salem, Mass. Vine moderately vigorous, productive.

Bunch medium, rather loose, short, shouldered. Berry large, round, claret red. Flesh tender, juicy. Ripens before Concord.

MAXATAWNEY.

Originated at Eagleville, Montgomery Co., Pa., in 1844. Vine healthy, vigorous, hardy, and productive. Requires a warm situation at the North, but Southwest proves one of the finest of White Grapes.

Bunch medium, not generally shouldered, somewhat loose, occasionally compact. Berries medium, roundish oval, greenish white, with an amber tint when ripe. Flesh tender, not pulpy, very sweet and delicious. Ripens last of September.

MERRIMACK.

Rogers' No. 19.

Raised by E. S. Rogers, of Salem, Mass. Vine very vigorous, very productive.

Bunch rather large, short, and broad, compact. Berry large, round,

Mottled.

black, with a slight bloom. Flesh tender nearly to the centre, juicy, sweet, and very much like the Wilder, and ripens at the same time.

MILES.

Origin, Westchester Co., Pa. Vine a moderate grower, hardy, and productive.

Bunch small, rather compact. Berry small, round, black. Flesh tender, slight pulp at centre, brisk vinous, pleasant. Ripens among the earliest, but does not hang long.

MISSOURI.

Missouri Seedling.

A native sort, with short-jointed wood, and only moderate grower

Bunch small, moderately compact. Berries small, round, nearly black. Flesh juicy, rather pulpy, vinous, pleasant when well ripened. Ripens about with Isabella.

MODENA.

A new variety, raised by A. J. Caywood, of Poughkeepsie, N. Y., from seed of the Concord.

Bunch medium. Berries medium, roundish, black, something like Concord, but richer in saccharine. Ripens about with Concord.

MONTGOMERY.

Merritt's Seedling.

A variety of undoubted foreign parentage. It is a large, showy bunch, and matures tolerably well in the open ground while the plants are young.

MOTTLED.

A seedling grown by Charles Carpenter, Kelly Island, O. Vine hardy, very short-jointed. A profuse bearer, ripening with Delaware. It will hang a long time after ripe, and keeps unusually well.

Bunch medium, slightly shouldered, close, compact. Berries round, medium size, maroon red, with spots that when held to the light give it a mottled appearance, hence its name. Flesh tender. Pulp small. Juice sweet, rich, vinous, abundant.

MOUNT LEBANON.

Origin, Columbia Co., N. Y.

Bunch larger than Northern Muscadine. Berry round, reddish. Flesh pulpy, tough, sweet, perhaps a little better than Northern Muscadine.

NEFF

Keuka.

Origin, on the farm of Mr. Neff, near Keuka, on Crooked Lake, New York.

Bunch medium. Berry medium, dark copper red. Flesh pulpy, and somewhat foxy. Good native. Early.

NONANTUM.

A new seedling, grown by Francis Dana, near Boston, and described as:

"Bunch small, shouldered. Berry good size, oval, similar to Isabella. Entirely free from pulp. Good flavor."

NORTH AMERICA.

Vine vigorous, unproductive.

Bunch small, shouldered. Berry round, black, juicy. Ripens about with Hartford Prolific.

NORTH CAROLINA.

North Carolina Seedling.

Bunch medium to large, shouldered, compact. Berry large, black, oblong, pulpy, but sweet and good. Ripens only a few days after Hartford Prolific. Vine very productive, hardy, and healthy. Strong grower. (Husman.)

NORTHERN MUSCADINE.

Raised by the Shakers, at New Lebanon, Columbia Co., N. Y.

Bunches small, short, compact. Berry large, round, chocolate or brownish red. Skin thick, with a pungency and odor common to the Wild Fox Grape, and is a very little, if any, improvement on it. The berries fall from the bunch as soon as ripe, which is about two weeks before Isabella.

NORTON'S VIRGINIA.

Norton's Seedling.

A variety introduced by Dr. D. N. Norton, of Richmond, Va. It is a most productive Grape in garden or vineyard, bearing very large crops (especially at the South, where many kinds rot) in all seasons. It is valued for making a red wine.

Bunch medium, shouldered, somewhat compact. Berries small, round. Skin thin, dark purple. Flesh tender, with a brisk, rather rough flavor. Ripens with Catawba.

OHIO.

Cigar-Box Grape.
Longworth's Ohio.

Jack.
McCandless.

Black Spanish Alabama.
Jacquez.

The origin of this Grape is unknown. It is said to have been brought from the Straits of Gibraltar, in 1805, to Oakland, Ala. Vine vigorous, long-jointed, not hardy at the North.

Bunches large and long, from six to ten inches, and often fifteen inches in length, rather loose, tapering, shouldered. Berries small, round. Skin thin, purple, with a blue bloom. Flesh tender and melting, without any pulp, brisk and vinous.

ONONDAGA.

Originated in Fayetteville, Onondaga Co., N. Y., with Lewis Hueber, from a cross between Diana and Delaware.

Bunches about the size and form of Diana, compact. Berry medium.

amber color when ripe. Flesh delicate, sweet, rich, without any of the native aroma. Ripens with Delaware. (W. Brown Smith, MSS.)

Oporto.

A strong, vigorous growing vine, should be long pruned to produce well.

Bunch small, slightly shouldered. Berries medium, round, black. Flesh purple, pulpy, austere.

OSMOND.

A seedling from the Franklin, by O. T. Hobbs, Randolph, Pa.

Bunch and berry small, round, black, blue bloom. Flesh vinous, harsh.

OTHELLO.

Canadian Hamburg.

Arnold's No. 1.

Canadian Hybrid.

Raised in 1859, by Charles Arnold, Canada West. A good, strong grower and very productive. Leaves deeply lobed, smooth.

Bunches large, shouldered, compact. Berries large, round. Flesh solid, crisp, free from pulp, juicy, sprightly. Ripens with Delaware.

PAULINE.

Burgundy of Georgia.

Red Lenoir.

A Southern Grape, of little value at the North, where it does not ripen or grow well.

Bunch large, long, tapering, shouldered. Berries small, very compact, copper color or violet, with a lilac bloom. Flesh brisk vinous, sweet, aromatic at the South.

PERKINS.

Vine vigorous, productive.

Bunch medium, compact, shouldered. Berry full medium, roundish oval, light red at first, becoming quite copper color at maturity, covered with a light bloom. Flesh rather pulpy, foxy, showy. Ripens before Isabella.

POLLOCK.

Raised by Mr. Pollock, Tremont, N. Y.

Bunches large as Concord, compact. Berries large, dark purple or black. Flesh free of pulp, vinous, not too sweet. (Strong.)

RAABE.

Raised by Peter Raabe. Vine moderately vigorous, not profitable.

Bunches small, compact, rarely shouldered. Berry below medium size, round, dark red, thickly covered with bloom. Flesh very juicy, with scarcely any pulp. Ripens about with Concord.

REBECCA.

Originated in the garden of E. M. Peake, of Hudson, N. Y. Vine moderately vigorous, a nice amateur Grape. Succeeds finely in some localities.

Rebecca.

Bunches medium, very compact, rarely shouldered. Berries of full medium size, roundish oval, strongly adhering to the peduncle. Color light green in the shade, auburn or golden in the sun, and covered with a light bloom, considerably translucent. Flesh of some consistence, juicy, sweet, and delicious, with a perceptible native perfume, but very agreeable. Ripens with Isabella, and keeps well.

RENTZ.

Origin, Cincinnati, O.

Bunch large, loose. Berry round, purplish red. Flesh pulpy, foxy May do for wine.

ST. CATHERINE.

Raised by James W. Clark, Framingham, Mass.

Bunch large, rather compact. Berries large, chocolate color, rather sweet, tough, foxy. Not of much value.

ST. GENEVIEVE.

Rulander.

Amoureux.

Red Elben.

An old Southern variety, and valuable in the South and South-west. Vine vigorous, short-jointed, does not succeed North.

Bunch medium to small, shouldered, compact. Berry small, roundish oval, dark purple or black, tender, juicy, sweet, and rich at the South, where it ripens last of July.

SALEM.

Rogers' No. 22.

Raised by E. S. Rogers, of Salem, Mass. Vine healthy, vigorous, and productive. We have not fruited it sufficient to express a decided opinion of it, more than it promises well.

Bunch large, short, and broad, compact. Berry large, round, a shade or two darker in color than Catawba. Flesh tender, juicy, nearly free from pulp, sweet, aromatic, and well-flavored. Ripens soon after Delaware.

SCUPPERNONG.

Bull or Bullet.

American Muscadine.

Roanoke.

Vitis rotundifolia.

Vitis Vulpina.

The Scuppernong Grape is a very distinct Southern species, found growing wild, from Virginia to Florida, and climbing the tops of the tallest trees. It is easily known from every other Grape by the small size of its leaves, which are seldom over two or three inches in diameter, and by their being glossy and smooth on both the under and upper surfaces. These leaves are roundish and coarsely serrated, and the young shoots are slender; the old wood is smooth, and not shaggy, like that of most vines.

We have made several trials with the Scuppernong Grape, but find it quite too tender for a Northern climate, being killed to the ground by our winters. At the South it is a very hardy, productive, and excellent wine grape. The White and Black Scuppernong scarcely differ, except in the color of the fruit. The *tendrils* of each correspond in hue with the fruit.

Bunches small, loose, seldom composed of more than six berries. Berries round, large. Skin thick, light green in the white, dark red in

the black variety. Flesh quite pulpy, except when very thoroughly ripe, juicy and sweet, but with a strong musky scent and flavor.

Salem.

SHEPPARD'S DELAWARE.

Raised from seed of Catawba by J. N. Sheppard, in 1853, from whom,

with its history, we received it. The vine and fruit are similar in all respects to Delaware.

SHURTLEFF'S SEEDLING.

Raised many years ago by Dr. S. A. Shurtleff, Brookline, Mass. We copy Coles' description:

"Bunches large. Berries medium, oval. Skin thick, lilac. Flesh of a sweet rich flavor. Ripe early September."

TAYLOR'S BULLET.

A variety introduced by Judge Taylor, of Henry Co., Ky. It is a very strong, rampant grower, and requires long space and training to produce good fruit. Confined to single stakes or low trellis it does not set well at the North, but does better South.

Bunches small, short, compact, shouldered. Berries small, greenish white to pale amber, round, sweet, and nearly free from pulp. Ripens about with Isabella.

TELEGRAPH.

Christine.

This variety was found in a yard near Philadelphia, Pa. A hardy and vigorous vine. Fruit of fair quality, ripening early or about with Hartford Prolific.

Bunch above medium to large, compact. Berry large, round, black. Flesh juicy, with some pulp, similar in quality to Hartford Prolific.

TO KALON.

Wyman. Carter. Spofford Seedling. The Beautiful.

Raised by Dr. Spofford, of Lansingburgh, N. Y. Vine vigorous, hardy, and productive, but is inclined to rot, and does not ripen well.

Bunches large and shouldered. Berries varying in form from oval to oblate, very dark in color and profusely covered with bloom. Its fruit, when ripe, is very sweet, buttery, without foxiness in its aroma, or but little toughness or acidity in its pulp. Ripens a little earlier than Catawba.

UNA.

Originated with E. W. Bull, Concord, Mass., who describes it as hardy and prolific. Earlier than Concord, and the berries pure white, changing to golden amber.

UNDERHILL.

Underhill's Seedling. Underhill's Celestial.

Originated at Charlton, Saratoga Co., N. Y., by Dr. A. K. Underhill. It is an improved variety of Fox Grape, large and showy. Vine hardy.

Bunch large. Berries large, round. Skin thick, clear dark red, without bloom. Flesh pulpy, hard at centre, sweet. Ripens about with Concord.

UNION VILLAGE.

Shaker Grape.

Ontario.

Imitation Hamburg.

Origin claimed among the Shakers of Union Village, O. It is perhaps the largest berry of any good native Grape. Vine very vigorous and coarse grower, but a little tender at the North—requires protection.

Bunches large, compact, shouldered. Berries very large, round, deep black, slight bloom. Flesh, when fully ripened, without any hardness, juicy, vinous, pleasant, not rich. Ripens with Isabella.

URBANA.

Bunch medium, short, shouldered. Berry medium to large, round, white, yellowish in the sun, juicy, vinous acid, hard centre, aromatic skin. Ripens about with Isabella.

VENANGO.

Miner's Seedling.

An old variety, said to be cultivated by the French at Fort Venango, on the Alleghany river, some eighty years since. A very vigorous grower, and hardy.

Bunch compact, of a fine lilac color, with the toughness of pulp belonging to the native varieties, but with a peculiar aromatic flavor. Ripens earlier than Catawba.

WALTER.

Originated with A. J. Caywood, Poughkeepsie, N. Y., from seed of Delaware crossed with Diana. As yet it has only been fruited in the hands of its originator, where it promises to be valuable.

Bunch medium, shouldered, moderately compact. Berries medium, round, light red. Flesh juicy, sweet, not quite tender at the centre. Ripens about with Concord.

WILDER.

Rogers' No. 4.

Raised by E. S. Rogers, of Salem, Mass. Vine vigorous, very productive. This is one of the best of Rogers' seedlings, adheres well. The bunch keeps well after it is gathered, and is a promising variety for market.

Bunch large, compact, shouldered, sometimes double-shouldered. Berry large, round, black, slight bloom. Flesh tender nearly to the centre, juicy, sweet, rich, slightly aromatic. Ripens about the time of Concord.

WILMINGTON.

Originated on the farm of Mr. Jeffries, near Wilmington, Del. Vine very vigorous, hardy.

Bunches large, loose, sometimes shouldered. Berries large, round,

inclining to oval, greenish white, or when fully ripe, yellowish. Flesh acid, pungent, not desirable at the North, may be better South. Ripens late.

WINSLOW.

This originated in the garden of Charles Winslow, Cleveland, O. The vine resembles Clinton, is hardy and productive; the fruit matures very early, and is less acid than Clinton.

Bunch medium, compact. Berries small, round, black. Flesh reddish tinge, some pulp, vinous, sweet, juicy.

WYOMING RED.

Hopkins Early Red.

The origin of this Grape is uncertain. It is said to have been found in the Wyoming Valley, Pa. The leaf and wood are described as similar to Delaware, only more vigorous. The fruit is also similar in color, but the berries are larger, and by some thought richer in quality.

Another Grape has been described as *Wyoming*, the fruit of which is black. We have not seen either of the above.

YORK MADEIRA.

Canby's August.
Black German.
Wolfe.

Large German.
Small German.
Monteith.

Marion Port.
German Wine.
Tryon.

Supposed origin, York Co., Pa. Vine hardy, short-jointed, moderately vigorous and productive.

Bunch medium, compact, shouldered. Berry medium, roundish, black, sweet, sprightly, pleasant. Colors early, but does not ripen quite as early as Isabella.

SELECTION OF VARIETIES.

The Grape varies so much in its values when grown in different localities, that it is difficult to make a selection of varieties. The Concord has proved almost universally successful, but is not a grape of high character. Wilder, or Rogers' No. 4, is a better grape, and so far a success when grown.

Delaware and Mottled are two sorts of fine quality, hardy vines, but the Delaware especially requires rich soil and good cultivation. Rebecca and Allen's Hybrid are varieties among the White Grapes, most valuable, so far as tested, for private gardens.

Adirondac, Iona, Isabella, Massasoit, or Rogers' No. 3, Crevelling, Catawba, Isabella, Elsingburgh, Maxatawney, are valuable fruits, and where they are found to succeed, and ripen well, should be freely planted.

CHAPTER XIX.

THE MELON.

Cucumis Melo, L. *Cucurbitaceæ*, of botanists.

Melon, of the French; *Melona*, German; *Melcon*, Dutch; *Melone*, Italian, and *Melon*, Spanish.

THE Melon (or Muskmelon) is the richest and most luscious of all herbaceous fruits. The plant which bears this fruit is a trailing annual, supposed to be a native of Persia, but which has been so long in cultivation in all warm climates that it is quite doubtful which is its native country.

The climate of the Middle and Southern States is remarkably favorable for it—indeed far more so than that of England, France, or any of the temperate portions of Europe. Consequently Melons are raised as field crops by market gardeners, and in the month of August the finest citrons or green-fleshed Melons may be seen in all the markets of the States in immense quantities. Warm dry soils are peculiarly favorable to the growth of Melons, and even at low prices the product is so large that this crop is one of the most profitable.

CULTURE. The culture of the Melon is very easy in all except the most northern portions of the United States. Early in May a piece of rich, light soil is selected, well manured, and thoroughly dug or prepared by deep ploughing and harrowing. Hills are then marked out, six feet apart each way. These hills are prepared by digging a foot deep and two feet across, which are filled half full of good, well-rotted manure. Upon the latter are thrown three or four inches of soil, and both manure and soil are then well mixed together. More soil, well pulverized, is now thrown over the top, so as to complete the hill, making it three inches higher than the surface. Upon this plant eight or ten grains of seed, covering them about half an inch deep.

When the plants have made two rough leaves, thin them so as to leave but two or three to each hill. Draw the earth nicely around the base of the plants with the hoe. In case the striped bug (*Galercuaca vittata*) attack the plants, which it often does, the best remedy is to hand-pick them early in the morning and then draw earth up even with the base of the leaves. The *cucumber flea-beetle* is kept off by dusting the vines early in the morning, daily, for a period, while they are yet moist with dew, using either dry fine soil, soot, or plaster.

As soon as the runners show the first blossom-buds, stop them by pinching out the bud at the extremities. This will cause an increased production of lateral shoots, and add to the size of the fruit. Nothing more is necessary but to keep the surface free from weeds, and to stir the soil lightly with the hoe, in field culture. In gardens, thinning the fruit, and placing bits of slate or blackened shingles under each fruit, improve its size and flavor.

To retain a fine sort of Melon in perfection, it should be grown at some distance from any other sort, or even from any of the cucumber family, otherwise the seeds of the next generation of fruit will be spoiled by the mixture of the pollen.

VARIETIES. A large number of varieties are enumerated, but many

of these do not succeed without extra care, which their quality is not found to repay. Indeed what is popularly known as the *Citron* Melon, one of the finest of the green-fleshed class, is the greatest favorite with all American gardeners. It is high-flavored, uniformly good, very productive, and in all respects adapted to the climate.

Melons have become so intermingled during the past ten or fifteen years that it is almost impossible at this time to classify them, as was once done. As before said, however, the *Citron* or *Fine Netted*, being types of the *Green-Fleshed*, are among the highest flavored and most delicate.

ALLEN'S SUPERB.

A variety of the *Nutmeg*, a trifle larger than the old *Nutmeg*, round, considerably netted. Flesh green, and sweet. Esteemed as profitable for market growing.

ALVORD'S HYBRID.

This variety varies much in form, from round to oval. Color of skin pale whitish green, deeply ribbed, moderately netted, sometimes almost smooth. Rind moderately thick. Flesh whitish green. Good but not rich. Ripens medium season.

BEECHWOOD.

Fruit of medium size, quite dark green, roundish oval. Skin greenish yellow. Flesh green, very sweet. A fine variety for growing in frames under glass.

CHRISTIANA.

Originated in Beverly, Mass. Requires a little extra care, but when well grown one of the finest.

Fruit medium size, roundish, yellowish green. Flesh yellow, sweet rich, juicy. Ripens early.

GREEN CITRON.

This is much the finest Melon for general culture.

Fruit rather small, roundish, flattened at the end, regularly ribbed and thickly netted. Skin deep green, becoming pale greenish yellow at maturity. Rind moderately thick. Flesh green, firm, rich, and high-flavored. Ripens pretty early and bears a long time.

ISPAHAN.

This is large, handsome, with flesh of a light sulphur yellow, not rich or sweet.

JENNY LIND.

A variety somewhat resembling the foregoing, but not quite as large, of a rich, delicious sweet flavor. Ripens quite early and produces abundantly.

LARGE MUSK CANTELOPE.

An old and well-known variety, hardly worth growing except for its size.

Fruit large, long oval, deeply ribbed. Flesh thick, light salmon color, sweet, juicy. It is early and productive, and often used for making mango pickles.

NUTMEG.

An old variety, often seen impure, but when in perfection very melting and excellent.

Fruit large, roundish oval. Skin very thickly netted, pale green, slightly but distinctly ribbed. Rind rather thin. Flesh pale green, very melting, sweet and good, with a high musky flavor. Medium season.

PERSIAN.

There are several sorts under this name. The best among them has long oval-shaped fruit, with a thin and delicate skin, and flesh quite tender, juicy, rich, and sweet. Medium season.

PINE-APPLE.

A dark-green oval Melon, of medium size, rough-netted. Flesh thick, firm, juicy, and sweet.

SKILLMAN'S FINE NETTED.

Earliest of the green-fleshed Melons, small, rough-netted, flattened at the ends. Flesh green, very thick, firm, sugary, and of the most delicious flavor.

WHITE JAPAN.

Comparatively new. Originally from Japan.

Fruit small to medium, ribbed, sometimes slightly netted, color creamy white. Flesh thick, juicy, sweet, and well-flavored.

Besides the foregoing there are *Winter Melons* from the South of Europe, very commonly cultivated in Spain, which, if suspended in a dry room, may be kept till winter. The GREEN, VALENCIA, and the DAMPSHA are the three principal sorts; they are oval, skin netted, flesh white, sugary, and good.

CHAPTER XX.

THE WATER-MELON.

Cucurbita citrullus, L. *Cucurbitaceæ*, of botanists.

Pasteur, of the French; *Wasser Melone*, German; *Cocomero*, Italian.

THE Water-melon is a very popular and generally cultivated fruit in this country. The vine is a training annual of the most vigorous

growth, and the fruit is very large, smooth, and green, with a red or yellow core. Though far inferior to the Melon in richness, its abundant cooling juice renders it very grateful and refreshing in our hot midsummer days. Immense fields of the Water-melon are raised, and their culture is very easy throughout all the Middle and Southern States.

The cultivation of the Water-melon is precisely similar to that of the melon, except that the hills must be eight feet apart. The finest crops we have ever seen were grown upon old pieces of rich meadow land, the sod well turned under with the plough at the last of April, and the melons planted at once.

The following are its best varieties:—

APPLE-SEEDED.

Medium roundish, slightly oval, dark rich green. Rind thin. Flesh scarlet, crisp, sweet, and very good. Early and prolific. Seeds very small, dull reddish brown. A nice little melon, but only desirable for the amateur.

BAUGH.

Received from Kentucky.

Fruit large, long oval, pale green. Flesh red, nearly solid, juicy, sweet. Rind thin. Rather early. Seeds reddish.

BLACK SPANISH.

A rich and very excellent Water-melon.

Fruit large, roundish oblong. Skin very dark, blackish green, slightly marbled. Rind moderately thick. Flesh red, solid, rich, and very sweet. A late variety.

BRADFORD.

Originated in South Carolina.

Fruit large, oblong. Skin usually dark green, with gray longitudinal stripes, mottled and streaked with green. Rind half an inch thick. Flesh red to the centre, with a fine sugary flavor, of the best quality.

CAROLINA.

The large common variety.

Fruit very large, oblong. Skin dark green and white marbled. Rind thick. Flesh deep red, hollow at the centre, sweet and good. Seeds large, black.

There is also a sub-variety, with pale yellow flesh and white seeds.

CLARENDON.

Origin, Clarendon District, South Carolina.

Large, oblong. Skin mottled gray, with dark-green longitudinal stripes. Rind half an inch thick. Flesh scarlet to the centre, with a sugary and exquisite flavor, "best" quality. Seeds yellow, with a black

stripe around the edge, and from one to three black spots on each side; the form and number corresponding on the two sides.

CITRON WATER-MELON.

This is a small, round, pale green, marbled sort, ripening late, and esteemed by many for preserving.

ICE-CREAM.

A fine variety, large, round, early and prolific. Skin very light green. Rind rather more than half an inch thick. Flesh white, crisp, sugary, and excellent. Seeds white.

IMPERIAL.

A remarkably fine-flavored and very productive sort, from the Mediterranean. Keeps a long time after it is ripe.

Fruit of medium size, nearly round. Skin pale green and white, marbled. Rind remarkably thin. Flesh solid to the centre, light red, crisp, rich, and high-flavored. Seeds quite small, reddish brown.

MOUNTAIN SPROUT.

Large, long oval, striped with light and dark green. Flesh scarlet, a little open in the centre. Rind thin. Seeds light fawn-color, one of the best.

MOUNTAIN SWEET.

Similar to the above, except it often has a mammelonne neck. Flesh rather more solid, and of excellent flavor. This is grown extensively for the markets.

ODELL'S LARGE WHITE.

Very large, round. Skin gray, with green network. Rind three-quarters of an inch thick. Flesh pale red, of a very good quality. Keeps a long time after being gathered.

Originated with Col. A. G. Sumner, South Carolina.

ORANGE.

Peculiar for the division of its flesh from the rind, medium size, roundish oval, light green, with shades of darker green. Rind half an inch thick. Flesh red, not very solid, of good quality, but not equal to Mountain Sweet and Imperial.

RAVENS-CROFT.

Origin, South Carolina.

Large, oblong, dark green, faintly striped, and marked with lighter green. Rind half an inch thick. Flesh red to the centre, with a delicious sugary flavor, of the best quality. Seeds cream-color, having a brown stripe around the edge.

SOUTER.

Large, oblong, sometimes roundish. Skin peculiarly marked with grayish dots, and pale and dark green stripes. Rind half an inch thick. Flesh deep red to the centre. Flavor sugary and delicious, of the best quality. Seed cream white, with a faint russet stripe around the edge. Very productive.

Originated in South Carolina.

CHAPTER XXI.

THE MULBERRY.

Morus, Tourn. *Urticacæ*, of botanists.

Mûrier, of the French; *Maulbeerbaum*, German; *Moro*, Italian; *Morel*, Spanish

THE Mulberry is a hardy, deciduous fruit-tree, but little cultivated in this country, though it is really a very considerable acquisition to our list of summer fruits, and every garden of considerable size ought to contain one or two trees. The fruit ripens in July, very soon after the season of cherries. It is rarely picked from the trees, as it falls as soon as ripe, and it is therefore the custom to keep the surface below it in short turf, and the fruit is picked from the clean grass. Or, if the surface is dug ground, it may be sown thickly with cress seed, six weeks previously to the ripening of the fruit, which will form a temporary carpet of soft verdure.

THE BLACK MULBERRY, or English Mulberry (*Morus nigra*, L.), is a very celebrated old fruit-tree, originally from Asia, more or less commonly cultivated in all parts of Europe, but yet quite rare in this country. Its growth is slow, and it seldom attains a height of more than twelve or fifteen feet, forming a low, branching tree, with lobed leaves, but it is very long lived, and there is a specimen in England, at the seat of the Duke of Northumberland, 300 years old. In this country it is scarcely hardy enough north of New York, except in sheltered situations. An occasional extreme cold winter kills them; they are also subject to canker and die off.

The fruit is incomparably larger and finer than that of the Red Mulberry, being an inch and a half long, and nearly an inch across—black, and of delicious flavor.

EVERBEARING. Originated here from seed of the Multicaulis. Tree very vigorous and very productive, an estimable variety, and surpassed by none except the Black English, and possesses the same rich subacid flavor. It continues in bearing a long time.

Fruit cylindric, one and a quarter of an inch long, and nearly half an inch in diameter. Color maroon, or an intense blue black at full maturity. Flesh juicy, rich, sugary, with a sprightly vinous flavor. Hick's Everbearing, from Kentucky, is similar to the above.

JOHNSON, a seedling from Ohio. Fruit very large, oblong cylindric; blackish color, subacid, and of mild, agreeable flavor. Growth of the wood strong and irregular. Leaves uncommonly large.

The RED MULBERRY (*Morus rubra*, L.) is a native species, more or less common in our woods, with large, rough, heart-shaped or lobed leaves. The fruit is about an inch long, and very pleasant and palatable, though much inferior to the Black English. It bears transplanting well, or is easily raised from seed, and may, undoubtedly, be greatly improved by repeated reproduction in this way. As it forms a large ornamental tree, with a fine spreading head, forty feet high, it is well deserving a place on the lawn, or near the house, in ornamental plantations.

There are many varieties of the White Mulberry, commonly cultivated for silk, but which produce fruit of no value.

The best soil for the Mulberry is a rich, deep, sandy loam. The tree requires little or no pruning, and is of very easy culture. It is usually propagated by cuttings, three feet long, planted in the spring, half their depth in the ground; cuttings made of pieces of the roots will also send up shoots and become plants.

CHAPTER XXII.

THE NECTARINE.

Persica vulgaris (v.) *Lævis*, Dec. *Rosaceæ*, of *Botanists*.

THE Nectarine is only a variety of the peach with a smooth skin (*Pêche lisse*, or *Brugnon*, of the French). In its growth, habit, and general appearance, it is impossible to distinguish it from the peach-tree. The fruit, however, is rather smaller, perfectly smooth, without down, and is one of the most wax-like and exquisite of all productions for the dessert. In flavor it is perhaps scarcely so rich as the finest peach, but it has more piquancy, partaking of the noyau or peach-leaf flavor.

The Nectarine is known in Northern India, where it is called *moonalla aroo* (smooth peach). It appears to be only a distinct, accidental variety of the peach, and this is rendered quite certain since there are several well-known examples on record of both peaches and nectarines having been produced on the same branch—thus showing a disposition to return to the natural form. Nectarines, however, usually produce nectarines again on sowing the seeds; but they also occasionally produce peaches. The Boston Nectarine originated from a peach-stone.

The Nectarine appears a little more shy of bearing in this country than the peach, but this arises almost always from the destruction of the crop of fruit by the *curculio*, the destroyer of all smooth-skinned stone fruit in sandy soils. It is quite hardy here wherever the peach will thrive, though it will not generally bear large and fine fruit, unless the branches are *shortened-in* annually, as we have fully directed for the peach-tree.

With this easy system of pruning, good crops are readily obtained wherever the *curculio* is not very prevalent.

The culture of the Nectarine is in all respects precisely similar to that of the peach, and its habits are also completely the same.

VARIETIES.

The same characters are used as in describing peaches, for which the reader is referred to that part.

ALBERT.

A variety raised by Thomas Rivers, of Sawbridgeworth, England. It is one of the finest of Nectarines, but requires a warm location and soil to ripen it well.

Leaves with reniform glands. Flowers large.

Fruit large, round. Skin greenish white, with a pale red cheek. Flesh pale red next the stone, juicy, melting, brisk, vinous. Separates freely from the stone. Season middle of August.

BALGOWAN.

Balgone.

De Balgone.

A variety allied to Violette Hâtive, but more hardy and vigorous.

Leaves with reniform glands. Flowers small.

Fruit very large, roundish, inclining to ovate. Skin pale green, mottled with red on the shaded side, covered with deep bright red next the sun. Flesh greenish, veined with red at the stone, rich, melting. Season middle August. (Hogg.)

BOSTON.

Lewis's.

Perkins' Seedling.

This American seedling was raised from a peach-stone by Mr. T. Lewis, of Boston. The fruit, though not of high flavor, is excellent, the tree very hardy and productive, and one of the best for general standard culture. Leaves with globose glands. Flowers small.

Fruit large and handsome, roundish oval. Skin bright yellow, with very deep red cheek, shaded off by a slight mottling of red. Flesh yellow to the stone (which is small and pointed), sweet, though not rich, with a pleasant and peculiar flavor. Separates from the stone. Ripe first of September.

BROOMFIELD.

Lewis (incorrectly of some).

A handsome clingstone Nectarine, of second quality. It is an accidental seedling, which sprang up in the garden of Henry Broomfield, Esq., of Harvard, Mass. Leaves with obscure, reniform glands. Flowers small.

Fruit large, roundish. Skin rather dull yellow, with a dull or rather dingy red cheek. Flesh yellow, and adheres closely to the stone, juicy, rather pleasant, but not high-flavored. First to the middle of September.

CHAUVIÈRE.

A variety originated in France.

Fruit medium, roundish, depressed at base. Skin smooth, colored with carmine or deep purple and dotted with gray in the sun. Flesh white, firm, juicy, vinous, aromatic, freestone. Season last of August. (Alb. Pom.)

DOWNTON.

The Downton is a seedling raised by Mr. Knight. It is in quality, appearance, and season, an intermediate variety between the *Violette Hâtive* and the *Elruge*, ripening a few days earlier than the latter. Leaves with reniform glands. Flowers small.

Fruit large, roundish oval. Skin pale green, with a deep violet red cheek. Flesh pale green, slightly red at the stone; melting, rich, and very good. Separates from the stone. Ripens about the 25th of August.

DUC DU TELLIER'S.

Duc Tilliers.
Duc de Tello.

Duke de Tilley.
Du Tilly's.

A very excellent Nectarine, considerably resembling the *Elruge*, but a much greater bearer. Leaves with reniform glands. Flowers small.

Fruit rather large, roundish oblong, being slightly narrowed at the top, and broad at the base or stalk. Skin pale green, with a marbled purplish-red cheek. Flesh greenish white, pale red at the stone, melting, juicy, sweet, and good. Separates from the stone. Last of August.

EARLY NEWINGTON.

Early Black Newington.
New Dark Newington.
New Early Newington.

Lucombe's Black.
Lucombe's Seedling.
Early Black.

Black.

The Early Newington is one of the best of clingstone Nectarines. It is not only a richer flavored fruit than the old Newington, but it is larger, dark-colored, and earlier. Leaves serrated, without glands. Flowers large.

Fruit large, roundish ovate, a little enlarged on one side of the suture, and terminating with an acute swollen point at the top. Skin pale green in its ground, but nearly covered with bright red, much marbled and mottled with very dark red, and coated with a thin bloom. Flesh greenish white, but deep red at the stone, juicy, sugary, rich, and very excellent. Beginning of September.

ELRUGE.

Common Elruge.
Claremont.
Oatlands.

Anderson's.
Temple's.
Peterborough.

Spring Grove.

The *Elruge* is everywhere esteemed as one of the very finest Nectarines. It is an English variety which has been a good while cultivated, and, with the *Violette Hâtive*, is considered indispensable in every collection. In this country, when the young wood is annually *shortened-in*, it bears good crops on standard trees, which ripen finely.

Without this precaution, like almost all other Nectarines, the fruit is small, poor, and ripens imperfectly. Leaves with reniform glands. Flowers small.

Fruit of medium size, roundish oval, the suture slight except at the top, where it is distinctly marked. Skin with a pale-green ground, but when fully exposed it is nearly covered with deep violet, or blood-red, dotted with minute brownish specks. Flesh pale green to the stone, or slightly stained there with pale red; melting, very juicy, with a rich, high flavor. Stone oval, rough, of a *pale* color. Separates from the stone. Last of August and beginning of September.

FAIRCHILD'S.

Fairchild's Early.

A very small, indifferent sort, only valued for its earliness, and scarcely worth cultivating. Leaves with reniform glands. Flowers small.

Fruit small, about an inch and a fourth in diameter, round, slightly flattened at the top. Skin yellowish green, with a bright red cheek. Flesh yellow to the stone, rather dry, with a sweet, but rather indifferent flavor. Separates from the stone. Beginning of August.

FELIGNY.

De Feligny.

Du Hainaut.

Leaves with coarse serratures and reniform glands.

Fruit medium, roundish oval. Skin smooth, carmine red on rich yellow, reddish gray in sun. Flesh white, shaded with purplish red next the stone, juicy, vinous, perfumed. Early September. (An. Pom.)

GALOPIN.

A variety from Belgium.

Fruit large, roundish, flattened next the stem. Skin thick, firm, yellow, covered with violet in the sun. Flesh greenish, tinted with red, juicy, slightly acid, sugary. August. (Verg.)

GATHOYE.

From Belgium.

Fruit small to medium, roundish. Skin yellowish green, marbled with reddish purple. Flesh white, melting, juicy, sweet. August. (Verg.)

GOLDEN.

Orange.

Fine Gold-fleshed.

An old English variety. Leaves with reniform glands. Flowers small.

Fruit of medium size, roundish ovate. Skin of a fine bright, waxen yellow color, with a small scarlet cheek. Flesh orange yellow, firm, juicy, sweet, and tolerably good. It ripens about the 10th of September. Clingstone.

HARDWICKE.

Hardwicke's Seedling.

Was raised at Hardwicke House, in Suffolk, England, and has the reputation of being "one of the best and hardiest of Nectarines, and a very excellent bearer." Leaves with globose glands.

Fruit very large, roundish, inclining to oval, and resembling the Elruge. Skin pale green, with a deep violet red cheek. Flesh pale green, slightly marked with red at the stone, juicy, melting, rich, and high-flavored. End of August. Freestone.

HUNT'S TAWNY.

Hunt's Large Tawny.

Hunt's Early Tawny.

This is the best very early Nectarine. It is a very distinct sort, with serrated leaves, and was originated in England about fifty years ago. It is worthy of general cultivation, as it is not only early but hardy, and an abundant bearer. Leaves serrated, without glands. Flowers small.

Fruit nearly of medium size, roundish ovate, being considerably narrowed at the top, where there is a prominent swollen point; and the fruit is slightly enlarged on one side of the suture. Skin pale orange, with a dark-red cheek, mottled with numerous russety specks. Flesh deep orange, juicy, melting, rich, and very good. Separates from the stone. It ripens from the 5th to the 15th of August.

LORD NAPIER.

New. Raised by Thomas Rivers, England.

Fruit medium, pale cream-color, with a red cheek. Flesh melting. Separating from the stone. Glands kidney-shape. Flowers large. Ripens first week in August. (Rivers.)

MUFFRUM.

Of unknown origin.

Fruit small, roundish, deep suture half round. Skin smooth, golden yellow, shaded and dotted with rich purplish red. Flesh yellow rich, juicy, sweet. Separates from the stone. Early September. (Alb. Pom.)

MURREY.

Murry.

Black Murry.

The Murrey is an old English Nectarine, which, though of good quality, is rather a poor bearer. Leaves with reniform glands. Flowers small.

Fruit of medium size, roundish ovate, slightly swollen on one side of the suture. Skin pale green, with a dark-red cheek. Flesh greenish white, melting, sweet, and of good flavor. Stone almost smooth. Separates freely. Ripens about the 20th of August.

NEWINGTON.

Scarlet Newington.	Anderson's.
Scarlet.	Anderson's Round.
Old Newington.	Rough Roman.
Smith's Newington.	Brugnon de Newington.
French Newington.	D'Angleterre.

Sion Hill.

A very good clingstone Nectarine, of English origin. It should be allowed to hang on the tree till it begins to shrivel, when the flavor is much improved. Leaves serrated, without glands. Flowers large.

Fruit rather large, roundish. Skin pale greenish yellow, nearly covered with red, marbled with dark red. Flesh firm, pale, but deep red next the stone, juicy, sweet, and rich, with an excellent vinous flavor. Ripens about the 10th of September.

NEW WHITE.

Neat's White.	Flanders.
Cowdray White.	Emerton's New White.

Large White.

The New White is a fine light-skinned variety. Leaves with reniform glands. Flowers large.

Fruit rather large, nearly round. Skin white, with occasionally a slight tinge of red when exposed. Flesh white, tender, very juicy, with a rich, vinous flavor. The stone is small. Separates freely. Ripens early in September.

OLD WHITE.

This Nectarine is supposed to have been introduced from Asia into England about sixty years ago. It is much like the foregoing in flavor, perhaps a little richer, but it is less hardy and productive. Leaves with reniform glands. Flowers large.

Fruit rather large, roundish oval. Skin white, slightly tinged with red. Flesh white, tender, juicy, and rich. Separates freely from the stone. Early in September.

PETERBOROUGH.

Late Green.

Vermash.

This is the latest Nectarine known. It is rather small, and of inferior quality, and scarcely deserves cultivation except to make complete a large collection. Leaves with reniform glands. Flowers small.

Fruit rather small, roundish. Skin mostly green, or slightly tinged with dingy red on the sunny side. Flesh greenish white to the stone, somewhat juicy, and of tolerable flavor. Separates freely from the stone. It ripens early in October.

PINE-APPLE.

Raised by Thomas Rivers, England.

Fruit large, nearly oval, pointed. Color deep orange and crimson. Ripens a week later than Pitmaston Orange. (Rivers.)

PITMASTON ORANGE.

Williams' Orange.

Williams' Seedling.

The Pitmaston Orange, which is considered the best *yellow*-fleshed Nectarine, was raised in 1816 by John Williams, of Pitmaston, near Worcester, England. The tree is vigorous. Leaves with globose glands. Flowers large.

Fruit large, roundish ovate, the base (towards the stalk) being broad, and the top narrow, and ending in an acute swollen point. Skin rich orange yellow, with a dark brownish-red cheek, streaked at the union of the two colors. Flesh deep yellow, but red at the stone; melting, juicy, rich, sweet, and of excellent flavor. The stone is rather small, separates freely. Ripens middle and last of August.

RED ROMAN.

Old Roman.
Roman.Brugnon Violette Musquée.
Brugnon Musquée.

The Red Roman is a very old European variety, having been enumerated by Parkinson in 1629. It is one of the richest and best of clingstone Nectarines. The tree healthy and productive. Leaves with reniform glands. Flowers large.

Fruit large, roundish, a little flattened at the top. Skin greenish yellow, with a brownish, muddy red cheek, which is somewhat rough, and marked with brown russety specks. Flesh firm, greenish yellow, and deep red at the stone, juicy, with a rich, high vinous flavor. Ripening early in September.

RIVERS' ORANGE.

New variety, produced by Thomas Rivers, England, from seed of Pitmaston Orange. It is described as much resembling its parent, but higher flavored, and ripening a week or so later. The tree is a great bearer, robust, and hardy. Leaves with uniform glands. Flowers large.

RIVERS' WHITE.

Originated in 1857, by Thomas Rivers, England.

Fruit large, roundish. Skin smooth, whitish, with slight shades of red in sun, white bloom. Flesh melting, juicy, vinous. Glands reniform. Flowers large. Earlier than New White.

STANWICK.

A new late variety. At the South, probably, it will prove an acquisition.

It was grown in England from a stone brought from Syria, and is described in the Journal of the London Horticultural Society as above medium size, roundish oval, slightly heart-shaped at base. Skin pale

greenish white, shaded into deep rich violet in the sun. Flesh white, tender, juicy, rich, sugary, and without the slightest trace of prussic acid flavor.

VICTORIA.

Raised by Thomas Rivers, Sawbridgeworth, England, from seed of *Violette Hâtive* fertilized by *Stanwick*.

Fruit large, roundish, flattened at top. Skin greenish yellow, crimson on the sunny side. Flesh rich, sweet, one of the best. Glands reniform. Flowers small. Middle of August. New.

VIOLETTE HÂTIVE.

Early Violet.
Violet.
Early Brugnion.
Brugnion Red at the Stone.
Hampton Court.
Large Scarlet.
New Scarlet.
Aromatic.

Petite *Violette Hâtive*.
Brugnion Hâtif.
*Violette Angervillière*s.
Violette Musquée.
Lord Selsey's Elruge.
Violet Red at the Stone.
Violet Musk.

The *Violette Hâtive*, or Early Violet Nectarine, everywhere takes the highest rank among Nectarines. It is of delicious flavor, fine appearance, hardy, and productive. Externally the fruit is easily confounded with that of the Elruge, but it is readily distinguished by its dark-colored stone, and the deep red flesh surrounding it. The fruit is usually rather darker colored. It is of French origin, and has been long cultivated. Leaves with reniform glands. Flowers rather small.

Fruit rather large, roundish, narrowed slightly at the top, where it is also marked with a shallow suture. Skin pale yellowish green in the shade, but when exposed nearly covered with dark purplish red, mottled with pale-brown dots. Flesh whitish, but much rayed with red at the stone. The latter is roundish, the furrows not deep, and the surface reddish brown. The flesh is melting, juicy, rich, and very high-flavored. It ripens about the last of August.

The *VIOLETTE GROSSE* (Thomp.) resembles the foregoing in leaves and flowers, and general appearance. The fruit is, however, larger, but not so richly flavored.

Selection of choice hardy Nectarines for a small Garden.—Violet Hâtive, Elruge, Hardwicke, Hunt's Tawny, Boston, Roman, New White.

CHAPTER XXIII.

NUTS.

THE CHESTNUT (*Castanea vesca*, W.; *Châtaignier*, of the French; *Kastanienbaum*, German; *Castagno*, Italian) is one of our loftiest

forest-trees, common in most parts of the United States and Europe, and bearing excellent Nuts. The foreign variety best known in this country is the Spanish Chestnut, with fruit nearly as large as that of the Horse-Chestnut, and which is excellent when boiled or roasted. It thrives very well here, but is not quite hardy to the north or east of this. One or two English varieties have been produced, of considerable excellence, among which the Downton is considered the best. The French cultivate a dozen or more varieties of greater or less excellence, but though some of them have been introduced, we have not yet fairly tested them in this country.

The CHINQUAPIN, or Dwarf Chestnut, common in some parts of the Middle and Southern States, is a dwarf species of the chestnut, usually growing not more than six to ten feet high, and bearing fruit of half the size of the common chestnut, with the same flavor. It is worth a place in a small fruit-garden as a curiosity.

All the chestnuts are very easily cultivated in any good, light soil, and may be propagated by grafting and by sowing the seeds.

THE EUROPEAN WALNUT (*Juglans regia*, L. ; *Noyer*, of the French ; *Walnussbaum*, German ; *Noce*, Italian ; and *Nogal*, Spanish), better known here as the *Madeira Nut*, is a fine lofty growing tree, with a handsome spreading head, and bearing crops of large and excellent nuts, enclosed like those of our native black walnut in a simple husk. It stands the winter very well here, and to the south of this it would undoubtedly be a profitable fruit to plant for the market. The fruit in a green state is very highly esteemed for pickling, and the great quantities of the ripe nuts annually imported and sold here, prove the estimation in which they are held for the table. There are several varieties reputed to be of rather finer quality, which, however, have not displaced the original species, even in the gardens of Europe, and have not yet borne fruit here.

This tree is usually propagated by the seed, and transplanted from the nurseries when from three to six feet high. But it may also be grafted, with due care, on the common hickory-nut. A number of distinct varieties have been produced from seed and perpetuated by grafting. Among them the following are regarded as of the most value :—

DWARF PROLIFIC.

Early-Bearing.

Fertile.

Precocious.

This is a dwarf-growing and very early bearing variety, very desirable for small fruit-gardens, as it may in our Northern States be easily protected in winter. The trees commence bearing when not more than three feet high, and, like the common walnut, it reproduces itself nearly always from seed.

LARGE-FRUITED.

Double.

French.

De Jauge.

This is the largest of all, and of little value except as its size makes it attractive, or its shell may be of value for forming toys.

THIN-SHELLED.

A Coque Tendre.

This is an oblong-shaped nut with a tender shell, well filled, one of the best.

The FILBERT (*Noisette*, of the French; *Haselstaude*, German; *Avellano*, Spanish) is an improved variety of the common hazel-nut of the woods of Europe (*Corylus avellana*, L.). The fruit is three or four times as large as that of our common hazel-nut, and from its size and excellent flavor is admired for the dessert. The old Spanish filbert, common in many of our gardens, is a worthless, nearly barren variety; but we have found the better English sorts productive and excellent in this climate, and at least a few plants of them should have a place in all our gardens. They are generally raised from layers, made in the spring, but they may also be grafted readily on the common hazel-nut, or the Spanish nut. When planted out they should not be permitted to sucker, and should be kept in the form of bushes with low heads, branching out about two feet from the ground, and they should be annually pruned somewhat like the gooseberry, so as to preserve a rather thin, open head, shortening back the extremities of the young shoots one-half, every spring.

The following are the best filberts known:—

COSFORD. Nut large, oblong. Husk hairy. Shell remarkably thin, and kernel of excellent flavor. A good bearer.

FRIZZLED. Easily known by its handsome, deeply cut husk. Nut of medium size, oval, compressed. Husk hairy. Shell thick. Kernel sweet and good.

LAMBERT (*Kentish Cob*, *Filbert Cob*). This is perhaps the best of all the nuts, some of them being an inch or more in length. Husk nearly smooth. Nut large, oblong, and somewhat compressed. Shell pretty thick, of a brown color. Kernel full and rich. A great bearer.

PEARSON'S PROLIFIC (*Dwarf Prolific*, *Nottingham Prolific*). Nut medium size, obtusely ovate. Shell rather thick. Kernel full.

PURPLE FILBERT (*Purple-leaved*). This is an ornamental shrub, as well as productive of excellent fruit. Its fruit is much like the Red Filbert, but the foliage is of a deep purple or red color.

NORTHAMPTONSHIRE PROLIFIC. Ripens early. Nut of medium size, oblong. Husk hairy. Shell thick.

RED FILBERT. Easily known from other sorts by the crimson skin of the kernel. Fruit of medium size, ovate. Shell thick. Kernel with a peculiar, excellent flavor.

WHITE FILBERT. Resembles the last, but with a light yellow or white skin. The tree is also quite bushy. Nuts ovate. Husk long and tubular.

The English generally call those varieties with long husks, *filberts* (*full-beards*), and those with short husks, simply *nuts*.

The HICKORY-NUT (*Carya alba*), or shell-bark, the Black Walnut (*Juglans nigra*), and the Butternut (*J. cinerea*), are native nut-bearing trees, common in our forests, and too well known to need description here. There are occasionally found in the woods accidental varieties of the *shell-bark hickory* of much larger size and finer flavor than the

common species, which are highly worthy of cultivation, as we confess, to our own taste, this nut is much superior to the European walnut. There is indeed no doubt that, with a little care in reproduction by seed, the shell-bark may be trebled in size, and greatly improved in flavor.

CHAPTER XXIV.

THE OLIVE.

Olea Europea, L. ; *Oleina*, of botanists.
Olivier, of the French ; *Oehlbaum*, German ; *Ulico*, Italian ; *Olivo*, Spanish.

THE Olive, which, as Loudon justly remarks, furnishes, in its invaluable oil, the cream and butter of Spain and Italy, will undoubtedly one day be largely cultivated in our Southern States.

The uses and value of the olive-oil are still comparatively unknown in this country. In the South of Europe it is more valuable than bread, as, to say nothing of its wholesomeness, it enters into every kind of cookery, and renders so large a quantity of vegetable food fit for use. A few olive-trees will serve for the support of an entire family, who would starve on what could otherwise be raised on the same surface of soil ; and dry crevices of rocks, and almost otherwise barren soils in the deserts, when planted with this tree, become flourishing and valuable places of habitation.

The olive is a native of the temperate sea-coast ridges of Asia and Africa ; but it has, time out of mind, been cultivated in the South of Europe. It is a low evergreen tree, scarcely twenty feet high, its head spreading, and clothed with stiff, narrow, bluish-green leaves. Its dark green or black fruit is oval, the hard fleshy pulp enclosing a stone. In a pickled state the fruit is highly esteemed. The pickles are made by steeping the unripe olives in lye-water, after which they are washed and bottled in salt and water, to which is often added fennel, or some kind of spice. The oil is made by crushing the fruit to a paste, pressing it through a coarse hempen bag into hot water, from the surface of which the oil is skimmed off. The best oil is made from the pulp alone : when the stone also is crushed, it is inferior.

PROPAGATION AND CULTURE. A very common mode of propagating the olive in Italy is by means of the *novoli* (little eggs). These are knots or tumors, which form in considerable numbers on the bark of the trunk, and are easily detached by girdling them with a pen-knife, the mother-plant suffering no injury. They are planted in the soil like bulbs, an inch or so deep, when they take root and form new trees. It is also propagated by cuttings and seeds. The seedlings form the strongest and thriftiest trees ; they are frequently some months in vegetating, and should therefore be buried an inch deep in the soil as soon as ripe.

The wild American olive (*Olea Americana*, L.) or Devil-wood, a tree

that grows more or less abundantly as far north as Virginia, will undoubtedly prove a good stock on which to ingraft the European olive. It is of a hardier habit, and, though worthless itself, may become valuable in this way.

The olive-tree commences bearing five or six years after being planted. Its ordinary crop is fifteen or twenty pounds of oil per annum, and the regularity of its crop, as well as the great age to which it lives, renders an olive plantation one of the most valuable in the world. With respect to its longevity we may remark, that there is a celebrated plantation near Terni, in Italy, more than five miles in extent, which, there is every reason for believing, has existed since the time of Pliny.

The Olive is not a very tender tree. It will thrive farther north than the orange. The very best sites for it are limestone ridges, and dry, crumbling, limestone rocky regions always produce the finest oil. The tree, however, thrives most luxuriantly in deep, rich, clayey loams, which should be rendered more suitable by using air-slaked lime as manure. It requires comparatively little pruning or care when a plantation is once fairly established.

VARIETIES. There are numberless varieties enumerated in the French catalogues, but only a few of them are worth the attention of any but the curious collector. The common European Olive is, on the whole, much the best for general cultivation, yielding the most certain and abundant crops.

The sub-variety most cultivated in France is the LONG-LEAVED OLIVE (*Olea, e. longifolia*), with larger and longer leaves; the fruit nearly of the same size as that of the common olive.

The favorite sort in Spain is the BROAD-LEAVED OLIVE (*Olea e. latifolia*). Its fruit is nearly double the size of the common Olive, and yields an abundance of oil, but the latter is so strong in flavor as to be more relished by the Spaniards than by strangers.

The OLIVIER À FRUIT ARRONDI (*Olea spherica*, N. Duh.) is a hardy French variety, which, in a moist, rich soil, yields most abundant crops of fine oil.

The OLIVIER PICHOLINE (*Olea oblonga*, N. Duh.) yields the fruit most esteemed for pickling. It grows quite readily in any tolerable soil, and is one of the hardiest varieties.

The OLIVIER PLEUREUR (*Olea erianomorpha*, N. Duh.), or Weeping Olive, is one of the largest and finest trees. Its branches are pendent, its fruit excellent, and the oil pure and abundant. It is a very hardy sort, and grows best in damp valleys.

CHAPTER XXV.

THE ORANGE FAMILY.

Citrus, L. *Aurantiaceæ*, of botanists.

THE Orange family includes the common orange (*Citrus aurantium*); the Lemon (*C. limonum*); the Lime (*C. limetta*); the Shaddock (*C.*

accumana); and the Citron (*C. medica*); all different species, with the same general habit.

The Orange, a native of Asia, is the most attractive and beautiful of fruit-trees, with its rich, dark evergreen foliage and its golden fruit, and it may well therefore enjoy the reputation of being the Golden Apple of the Hesperides. When to these charms we add the delicious fragrance of the blossoms, surpassing that of any other fruit-tree, it must be conceded that, though the orange must yield in flavor to some other fruits, yet, on the whole, nothing surpasses an orange grove, or orchard, in its combination of attractions—rich verdure, the delicious aroma of its flowers, and the great beauty of its fruit.

The south of Europe, China, and the West Indies, furnish the largest supplies of this fruit. But it has, for a considerable time, been cultivated pretty largely in Florida, and the orange groves of St. Augustine yield large and profitable crops. Indeed the cultivation may be extended over a considerable portion of that part of the Union bordering on the Gulf of Mexico; and the southern part of Louisiana, and part of Texas, are highly favorable to orange plantations. The Bitter Orange has become quite naturalized in parts of Florida, the so-called Wild Orange seedlings furnishing a stock much more hardy than those produced by sowing the imported seeds. By continually sowing the seed of these Wild Oranges, they will furnish stocks suited to almost all the Southern States, which will in time render the better kinds grafted upon them comparatively hardy.

North of the latitude where, in this country, the orange can be grown in groves or orchards, it may still be profitably cultivated with partial protection. The injury the trees suffer from severe winters arises not from their freezing—for they will bear, without injury, severe frost—but from the rupture of sap-vessels by the sudden thawing. A mere shed, or covering of boards, will guard against all this mischief. Accordingly, towards the south of Europe, where the climate is pretty severe, the orange is grown in rows against stone walls or banks, in terraced gardens, or trained loosely against a sheltered trellis; and at the approach of winter they are covered with a slight movable shed, or frame of boards. In mild weather the sliding doors are opened, and air is admitted freely—if very severe, a few pots of charcoal are placed within the enclosure. This covering remains over them four or five months, and in this way the orange may be grown as far north as Baltimore.

SOIL AND CULTURE. The best soil for the orange is a deep rich loam. In propagating them, sow, early in the spring, the seeds of the naturalized or wild bitter orange of Florida, which gives much the hardiest stock. They may be budded in the nursery-row the same season, or the next, and for this purpose the earliest time at which the operation can be performed (the wood of the buds being sufficiently firm), the greater the success. Whip or splice grafting may also be resorted to early in the spring. Only the hardiest sorts should be chosen for orchards or groves; the more delicate ones can be grown easily with slight covering in winter. Fifty feet is the maximum height of the orange in its native country, but it rarely forms in Florida more than a compact low tree of twenty feet. It is better, therefore, to plant them so near as partially to shade the surface of the ground.

INSECTS. The orange plantations of Florida have suffered very

severely from the attacks of the scale insect (*Coccus hispidum*), which in some cases has spread over whole plantations, and gradually destroyed all the trees. It is the same small, oval, brownish insect, so common in our greenhouses, which adheres closely to the bark and underside of the leaves. A wash of sal soda or potash water, applied with a brush to the bodies and limbs of the trees, is the most certain and sure remedy for destroying this insect that we have known. Repeating this once or twice will probably effectually rid the trees of the scaled insect.

VARIETIES. From among the great number of names that figure in the European catalogues, we select a few of those really deserving attention in each class of this fruit.

THE ORANGE.

The Orange (*Oranger*, French; *Pomeranzenbaum*, German; *Arancio*, Italian; and *Naranjo*, Spanish) is, on the whole, the finest tree of the genus. Its dark-green leaves have winged foot-stalks, its fruit is round, with an orange-colored skin. It is one of the longest lived fruit-trees, as an instance of which we may quote the celebrated tree at Versailles, called "the Grand Bourbon," which was sown in 1421, and is at the present time in existence, one of the largest and finest trees in France.

The fruit of the orange is universally esteemed in its ripe state. The bitter orange is used for marmalades; the green fruits, even when as small as peas, are preserved, and used in various ways in confectionery; the rind and pulp are used in cooking; and the orange flowers, distilled, give the orange-flower water, so highly esteemed as a perfume and in cookery.

Besides the COMMON SWEET ORANGE, the most esteemed sorts are the MALTESE and the BLOOD-RED, both of excellent flavor, with red pulp. The MANDARIN orange is a small, flattened fruit, with a thin rind separating very easily from the pulp, frequently parting from it of itself, and leaving a partially hollow space. It comes from China, and is called there the Mandarin, or noble orange, from its excellent quality. The flesh is dark orange-colored, juicy, and very rich.

The BERGAMOT orange has small flowers and pear-shaped fruit. The leaves, flowers, and fruit being peculiarly fragrant, it is highly esteemed by the perfumer, and yields the bergamot essence. "The rind, first dried and then moistened, is pressed in moulds into small boxes for holding sweetmeats, to which it communicates a bergamot flavor."

The HAVANA or common sweet orange is a well-known fruit, of good size and moderately rough rind, pulp well filled with delicious juice.

The ST. AUGUSTINE oranges are a large variety of the Havana, much better than those brought from Cuba.

The ST. MICHAEL'S orange is a small fruit, the skin pale yellow, the rind thin, the pulp often seedless, juicy, and lusciously sweet. It is considered the most delicious of all oranges, and the tree is a most abundant bearer.

The SEVILLE, or bitter orange, is the hardiest of all the varieties, enduring very hard frosts without injury. It has the largest and most fragrant flowers; the pulp, however, is bitter and sharp, and is valued chiefly for marmalades. The *Double Bigarade* is a French variety of this species, with fine double blossoms.

Besides the above, the *Fingered*, *Sweet-skinned*, *Pear-shaped*, and *Ribbed* oranges, are the most striking sorts—all chiefly cultivated by curious amateurs.

LEMONS.

The Lemon (*Limonier*, of the French and German ; *Limone*, Italian ; *Limon*, Spanish) has longer, paler leaves than the orange, the footstalks of which are naked or wingless ; the flowers tinged with red externally, and the fruit is oblong, pale yellow, with a swollen point, and usually an acid pulp. Its principal use is in making lemonade, punch, and other cooling acid drinks.

Besides the common Lemon, there is an Italian variety, called the SWEET LEMON, the pulp of which is sweet and good.

THE LIME.

The Lime (*Limettier*, of the French) differs from the Lemon by its smaller, entirely white flowers, and small, roundish, pale yellow fruit, with a slight protuberance at the end. The acid, though sharp, is scarcely so rich and high as that of the lemon, and is used for the same purposes. The green fruit is more esteemed than any other for preserving. The Italians cultivate a curiously marked variety called *Pomo d'Adamo*, in which Adam is said to have left the marks of his teeth.

THE CITRON.

The Citron (*Cédratier*, of the French ; *Citronier*, German ; *Cedrato*, Italian) is one of the finest growing trees of this family, with large, oblong, wingless leaves, and flowers tinged with purple externally. The fruit, shaped like that of the lemon, is much larger, of a yellow color, warted and furrowed externally. The rind is very fragrant and very thick, the pulp is subacid, and is used in the same way as that of the lemon. It is chiefly valued, however, for the rich sweetmeat or preserve, called *citron*, made from the rind.

The MADRAS citron is considered the largest and best variety.

THE SHADDOCK.

The Shaddock (*Pampelmous*, French ; *Arancio massimo*, Italian) may be considered a monstrous orange, with a comparatively tasteless pulp. It is a native of China and Japan, and has its name from Dr. Shaddock, who first carried it to the West Indies. The leaves are winged, like those of the orange, the flowers white, and the fruit globular. Its size is very large, as it often weighs six or eight pounds. The pulp is sweetish, or subacid, and the juice is rather refreshing. It is, however, more showy than useful, and certainly makes a magnificent appearance in a collection of tropical fruits.

CHAPTER XXVI.

THE PEACH.

Persica vulgaris, Dec. *Rosacea*, of botanists.

Pêcher, of the French; *Pfirschaum*, German; *Persickeboom*, Dutch; *Persico*, Italian; and *el Melocoton*, Spanish.

THE Peach-tree is a native of Persia and China, and was brought from the former country to Italy by the Romans in the time of the Emperor Claudius. It was considerably cultivated in Britain as early as the year 1550, and was introduced to this country by the early settlers somewhere about 1680. From Persia, its native country, its name in all languages—*Persico*—*Pêcher*—*Peach*—has evidently been derived.

The peach is a rather small fruit-tree, with narrow, smooth, serrated leaves, and pink blossoms. It is more tender and of shorter duration than most other of the fruits usually grown in temperate climates. It is never raised in England, and not generally in France, without the aid of walls. Even at Montreuil, near Paris, a village whose whole population is mainly employed in cultivating the peach for market, it is grown entirely upon white-washed walls. China and the United States are, therefore, the only temperate countries where the peach and the apple both attain their highest perfection in the open orchard. The peaches of Peking are celebrated as being the finest in the world, and of double the usual size.

It is a curious fact in the history of the peach, that with its delicious flavor were once coupled, in the East, certain notions of its poisonous qualities. This idea seems vaguely to have accompanied it into Europe, for Pliny mentions that it was supposed that the king of Persia had sent them into Egypt to poison the inhabitants, with whom he was then at war. As the peach and the almond are closely related, it has been conjectured by Mr. Knight that the poisonous peaches referred to were swollen almonds, which contain a considerable quantity of prussic acid. But it is also worth remarking that the peach-tree seems to hold very much the same place in the ancient Chinese writings that the tree of knowledge of the old Scriptures, and the golden Hesperides apples of the heathens, do in the early history of the western nations. The traditions of a peach-tree, the fruit of which when eaten conferred immortality, and which bore only once in a thousand years—and of another peach-tree of knowledge, which existed in the most remote period, on a mountain guarded by a hundred demons, the fruit of which produced death—are said to be distinctly preserved in some of the early Chinese writings. Whatever may have been the nature of these extraordinary trees, it is certain that, as Lord Bacon says, “not a slip or sucker has been left behind.” We must therefore content ourselves with the delight which a fine peach of modern times affords to the palate and the eye.

We believe there is at the present time no country in the world where the peach is grown in such great quantities as in the United States. North of a line drawn from the Mohawk river to Boston, comprising most of the Eastern States, they do not indeed flourish well, requiring some artificial aid to produce regular crops; but in all the Middle, Southern, and Western States, they grow and produce the

heaviest crops in every garden and orchard. Thousands of acres are devoted to this crop for the supply of the markets of our large cities. The market price usually varies according to the abundance of the crop, and to the earliness or lateness of the season at which they are offered. Many growers have orchards of from 10,000 to 100,000 trees of different ages, and send to market in good seasons as many bushels of fruit from the bearing trees. When the crop is not universally abundant, the profits are very large; if the contrary, they are often very little.

The very great facility with which the peach grows in this country, and the numerous crops it produces, almost without care, have led to a carelessness of cultivation which has greatly enfeebled the stock, and, as we shall presently show, has in many places produced a disease peculiar to this country. This renders it necessary to give some additional care and attention to the cultivation of the peach; and with very trifling care this delicious fruit may be produced in great abundance for many successive years.

USES. Certainly no one expects us to write the praises of the peach as the most delicious of fruits. "To gild refined gold" would be a task quite as necessary, and if any one doubts the precise rank which the peach should take among the different fruits of even that cornucopian month—September—and wishes to convince us of the higher flavor of a Seckel or a Belle Lucrative pear, we will promise to stop his mouth and his argument with a sunny-cheeked and melting "George the Fourth," or luscious "Rareripe!" No man who lives under a warm sun will hesitate about giving a due share of his garden to peaches, if he have no orchard; and even he who lives north of the best Indian corn limits ought to venture on a small line of espalier for the sake of the peach. In pies and pastry, and for various kinds of preserving, the peach is everywhere highly esteemed. At the South and West a considerable quantity of peach brandy is annually distilled from them, but we believe by no means so much as formerly. Hogs are fattened, in such districts, on the refuse of the orchard and distillery.

In most parts of the country where peaches are largely cultivated the fruit is dried, and in this state sent to market in very large quantities. The drying is performed, on a small scale, in spent ovens; on a large scale, in a small drying-house heated by a stove, and fitted up with ventilated drawers. These drawers, the bottoms of which are formed of laths, or narrow strips sufficiently open to allow the air to circulate through them, are filled with peaches in halves. They are cut in two without being peeled, the stones taken out, and the two halves placed in a single layer with the skin downward. In a short time the heat of the drying-house will complete the drying, and the drawers are then ready for a second filling. Farther south they are spread upon boards or frames, and dried in the sun merely; but usually with the previous preparation of dipping the peaches (in baskets) for a few minutes in boiling water before halving them.

The leaf of the peach, bruised in water and distilled, gives the peach water, so much esteemed by many for flavoring articles of delicate cookery; and steeped in brandy or spirits, they communicate to it the flavor of Noyau. Indeed a very good imitation of the celebrated Noyau is made in this way, by using the best white brandy, which, after being thus flavored, is sweetened with refined sugar mixed with a small quantity of milk, and afterwards decanted.

PROPAGATION. The peach is the most easily propagated of all fruit-trees. A stone planted in the autumn will vegetate in the ensuing spring, grow three or four feet high, and may be budded in August or September. Two years from this time, if left undisturbed, it will usually produce a small crop of fruit, and the next season bear very abundantly, unless the growth is over-luxuriant.

In nursery culture it is customary to bury the peach-stones in autumn, in some exposed spot, in thick layers covered with earth. Here they are allowed to lie all winter. As early in the spring as the ground is in fine friable condition, the stones are taken out of the ground, cracked, and the kernels sown in mellow prepared soil, in the nursery rows where they are to grow. They should be covered about an inch deep. Early in the following September they will be fit for *budding*. This is performed with great ease on the peach, and grafting is therefore seldom or never resorted to in this country, except at the South. The buds should be inserted quite near the ground. The next season the stock should be headed back in March, and the trees will, in good soil, grow to the height of a man's head in one year. This is by far the best size for transplanting the peach—one year old from the bud.

In England the plum stock is universally employed. The advantage gained thereby is, a dwarfer and neater habit of growth for their walls. In France, some of the best cultivators prefer the almond stock. Healthy peach stocks afford the most natural foundation for the growth of standard orchard trees. At the same time we must protest against the indiscriminate employment of peach-stones from any and every source. With the present partially diseased state of many orchards in this country, this is a practice to be seriously condemned; and more especially as, with a little care, it is always easy to procure stones from sections of country where the *Yellows* is not prevalent.

For rendering the peach quite dwarf, the *Mirabelle* plum stock is often employed abroad.

SOIL AND SITUATION. The very best soil for the peach is a rich, deep, sandy loam; next to this, a strong, mellow loam; then a light, thin, sandy soil; and the poorest is a heavy, compact clay soil. We are very well aware that the extensive and profitable appropriation of thousands of acres of the lightest sandy soil in New Jersey and Delaware, has led many to believe that this is the best soil for the peach. But such is not the fact, and the short duration of this tree in those districts is unquestionably owing to the rapidity with which the soil is impoverished. We have, on the contrary, seen much larger, finer, and richer flavored peaches *produced for a long time successively* on mellow loam, containing but little sand, than upon any other soil whatever.

It is a well-founded practice not to plant peach orchards successively upon the same site, but always to choose a new one. From sixteen to twenty-five feet apart may be stated as the limits of distance at which to plant this tree in orchards, more space being required in warm climates and rich soils than under the contrary circumstances. North of New York it is better always to make plantations in the spring, and it should be done pretty early in the season. South of that limit it may usually be done with equal advantage in the autumn.

In districts of country where the fruit in the blossom is liable to be cut off by spring frosts, it is found of great advantage to make plantations on the north sides of hills, northern slopes or elevated grounds, in

preference to warm valleys and southern aspects. In the colder exposures the vegetation and blossoming of the tree is retarded until after all danger of injury is past. Situations near the banks of large rivers and inland lakes are equally admirable on this account, and the blossoms are not injured once in a dozen years; while on level grounds, distant but a little way, they are destroyed every fourth or fifth season.

With regard to the culture of peach orchards, there is a seeming disparity of opinion between growers at the North and South. Most of the cultivators at the South say, *never plough* or cultivate an orchard after it has borne the first crop. Ploughing bruises the roots, enfeebles the trees, and lessens the crop. Enrich the ground by top-dressings, and leave it in a state of rest. The best northern growers say, always keep the land in good condition, mellow and loose by cultivation, and crop it very frequently with the *lighter* root and field crops. Both are correct, and it is not difficult to explain the seeming difference of opinion.

The majority of the peach orchards south of Philadelphia, it will be recollected, grow upon a thin, light soil, previously rather impoverished. In such soils it is necessarily the case that the roots lie near the surface, and most of the food derived by them is from what is applied to the surface or added to the soil. Ploughing, therefore, in such soils, wounds and injures the roots, and cropping the ground takes from it the scanty food annually applied or already in the soil, which is not more than sufficient for the orchard alone. In a stronger and deeper soil the roots of the peach-tree penetrate farther, and are mostly out of the reach of serious injury by the plough. Instead of losing by being opened and exposed to the air, the heavier soil gains greatly in value by the very act of rendering it more friable, while at the same time it has naturally sufficient heart to bear judicious cropping with advantage rather than injury to the trees. The growth and luxuriance of an orchard in strong land, kept under tillage, is suprisingly greater than the same allowed to remain in sod. The difference in treatment, therefore, should always adapt itself to the nature of the soil. In ordinary cases, the duration of peach orchards in the light sandy soil is rarely more than three years in a bearing state. In a stronger soil, with proper attention to the shortening system of pruning, it may be prolonged to twenty or more years.

PRUNING. It has always been the prevailing doctrine in this country that the peach requires no pruning. It has been allowed to grow, to bear heavy crops, and to die, pretty much in its own way. This is very well for a tree in its native climate, and in a wild state; but it must be remembered that the peach comes from a warmer country than ours, and that our peaches of the present day are artificial varieties. They owe their origin to artificial means, and require therefore a system of culture to correspond.

In short, we view this absence of all due care in the management of the peach-tree, *after it comes into bearing*, as the principal original cause of its present short duration, and the disease which preys upon it in many of the older parts of the country. We therefore earnestly desire the attention of peach-growers to our brief hints upon a regular system of pruning this valuable tree. Of course we speak now of common standard trees in the orchard or garden.

A peach-tree, left to itself after being planted, usually comes into bearing the third or fourth year, and has a well-shaped rounded head,

full of small bearing branches, and well garnished with leaves. It must be borne in mind that the fruit is only borne on the young shoots of the previous summer's growth. In a young tree these are properly distributed throughout. But in a couple of seasons, the tree being left to itself, the growth being mostly produced at the ends of the principal branches, the young shoots in the interior of the head of the tree die out. The consequence is, that in a short time the interior of the tree is filled with long lean branches, with only young shoots at their extremities. Any one can

A peach-tree without pruning, as commonly seen.

see that such a tree can be provided with but half the number of healthy, strong shoots for bearing, that one would have if filled throughout with vigorous young wood. The sap flows tardily through the long and rigid branches, and not half leaves enough are provided to secure the proper growth of the fruit. And, finally, all the fruit which the tree yields being allowed to remain at the ends of the branches, they often break under its weight.

Now, we propose to substitute for this what is generally known as the *shortening-in* system of pruning. We affirm, both from its constant success abroad, and from our own experience and observation in this country, that, putting its two diseases out of the question, the peach may be continued in full vigor and production, in any good soil, for from ten to thirty years.

Let us take a healthy tree in the orchard or garden, in its first blossoming year. It is usually about six to eight feet high, its well-shaped head branching out about three feet* from the ground. It has never yet been trimmed, except to regulate any deformity in its shape, and this is so much the better.

At the end of February, or as early in the spring as may be, we commence pruning. This consists only of *shortening-in*, i.e., cutting off *half the last year's growth* over the whole outside of the head of the tree, and also upon the inner branches. As the usual average growth is from one to two feet, we shall necessarily take off from six to twelve inches. It need not be done with precise measurement; indeed, the strongest shoots should be shortened back most, in order to bring up the others, and any long or projecting limbs that destroy the balance of the head should be cut back to a uniform length. This brings the tree into a well-rounded shape. By reducing the young wood one-half, we at the same moment reduce the coming crop one-half in number. The remaining half, receiving all the sustenance of the tree, are of double the size. The young shoots, which start out abundantly from every part of the tree, keep it well supplied with bearing wood for the next year, while the greater luxuriance and size of the foliage, as a necessary consequence, produces larger and higher flavored fruit.† Thus, while we have

* We think *low* heads much preferable to high ones on many accounts. They shade the root, and are more within reach both for pruning and gathering.

† It is well, in shortening-back, to cut off the shoot close above a *wood-bud* rather than a blossom-bud. Few persons are aware how much the size and

secured against the prevalent evil, an over-crop, we have also provided for the full nourishment of the present year's fruit, and induced a supply of fruit-bearing shoots throughout the tree for the next season.

This course of pruning is followed regularly, every year, for the whole life of the tree. It is done much more rapidly than one would suppose; the pruned wounds are too small to cause any gum to flow; and it is done at the close of winter, when labor is worth least to the cultivator.

The appearance of a tree pruned in this way, after many years of bearing, is a very striking contrast to that of the poor skeletons usually seen. It is, in fact, a fine object, with a thick, low, bushy head, filled with healthy young wood, and in the summer with an abundance of dark-green, healthy foliage and handsome fruit. Can any intelligent man hesitate about adopting so simple a course of treatment to secure such valuable results? We recommend it with entire confidence to the practice of every man in the country that cultivates a peach-tree. After he has seen and *tasted* its good effects, we do not fear his laying it aside.*

A peach-tree pruned by the shortening-in mode.

Training the peach-tree against walls or espaliers is but little practised in this country. Espalier and cordon training, on a small scale, is, however, highly worthy of the attention of persons desiring this fruit

beauty of the fruit depend on the size and vigor of the leaves. We have seen two peach-trees of the same age side by side, one unpruned, and the other regularly *shortened-in*, and both bearing about four bushels. That of the latter was, however, of double the size, and incomparably finer.

* Our attention has been drawn to the following remarkable examples of the good effects of regular pruning, which we translate from the leading French journal of horticulture. We ask the attention of our readers to these cases, especially after perusing our remarks on the Yellows and its cause.

"M. Du villiers laid before the Royal Society of Horticulture an account of some old peach-trees that he had lately seen at the Château de Villiers, near Fert-Aleps (Seine-et-Oise). These trees, eight in number, are growing upon a terrace wall, which they cover perfectly, and yield abundant crops. The gardener assured M. Du villiers that they had been under his care during the thirty years that he had been at the château; that they were as large when he first saw them as at present, and that he supposed them to be at least *sixty years old*. We cannot doubt (says the editor) that it is to the annual pruning that these peach-trees owe this long life; for the peach-trees that are left to themselves in the latitude of Paris never live beyond twenty or thirty years. M. Du villiers gave the accurate measurement of the trunks and branches of these trees, and stated, what it is more interesting to know, that although all their trunks are hollow, like those of old willows, yet their vigor and fertility are still quite unimpaired." (*Annales de la Société d'Horticulture*, tome xxx. p. 58.)

In volume 25, page 67, of the same journal, is an account of a remarkable peach-tree in the demesne of M. Joubert, near Villeneuve le Roi (d. partement de l'Yonne). It is trained against one of the wings of the mansion, covers a large space with its branches, and the circumference of its trunk, taken at some distance from the ground, is two feet and a half. *It is known to be, actually, of more than 93 years' growth*, and is believed to be more than 100 years old. It is still in perfect health and vigor. It is growing in strong soil, but it has been regularly subjected to a uniform and severe system of pruning, equivalent to our shortening-in mode. Where can any peach-tree of half this age be found in the United States, naturally a much more favorable climate for it than that of France?

in the colder parts of the country, where it does not succeed well as a standard. Everywhere in New England excellent crops may be produced in this way. Full directions for training the peach *en espalier* and cordon, with illustrations, are given in pages 42 and 43.

Cordon or low fan training is practised by some cultivators at the North, and in sections where the crop of the peach is uncertain by reason of extreme cold in winter or late spring frosts destroying the buds. When the cordons or low fans are kept within one to two feet from the ground the trees may be readily protected in winter by covering with corn-stalks, straw, or brush of evergreens.

INSECTS AND DISEASES. For a considerable time after the peach was introduced into America, it was grown everywhere south of the 40° of latitude, we may say literally, *without cultivation*. It was only necessary to plant a stone in order to obtain in a few years, and for a long time, an abundance of fruit. Very frequently these chance seedlings were of excellent quality, and the finer grafted varieties were equally luxuriant. Two maladies have appeared within the last twenty years, which, because they are little understood, have rendered this fine fruit-tree comparatively short-lived and of little value. These are the *Peach-borer* and the *Yellows*.

The PEACH-BORER or Peach-worm (*Aegeria exitiosa*, Say) does great mischief to this tree by girdling and devouring the whole circle of bark just below the surface of the ground, when it soon languishes and dies.

The insect in its perfect state is a slender, dark-blue, four-winged moth, somewhat like a wasp. It commences depositing its eggs in the soft and tender bark at the base of the trunk, usually about the last of June, but at different times from June to October. The egg hatches and becomes a small white *borer* or grub, which eventually grows to three-fourths of an inch long, penetrates and devours the bark and sap wood, and, after passing the winter in the tree, it enfolds itself in a cocoon under or upon the bark, and emerges again in a perfect or winged form in June, and commences depositing its eggs for another generation.

It is not difficult to rid our trees of this enemy. In fact, nothing is easier to him who is willing to devote a few moments every season to each tree. The eggs which produce the borer, it will be recollected, are deposited in the soft portion of bark, just at the surface of the earth. Experience has conclusively proved that if a quantity of leached ashes, charcoal, or even common soil, be heaped to the height of one foot around the trunk of each tree at the end of May, and suffered to remain till October, the peach-borer will not attack it. It has been tried most successfully in large orchards, where the protected trees have long remained sound, while those unprotected have been speedily destroyed by the borer. The remedy undoubtedly lies chiefly in covering the most vulnerable portion of the tree from the attack of the insect. These mounds or heaps of earth, ashes, etc., should be spread over the surface every autumn on approach of winter, thus exposing the larvæ of the insect, if any have entered the tree, to cold and destruction.

Another simple remedy is in spring to first draw away a little earth from the crown of the tree, then wrap the body up, one foot from the ground, with strong coarse paper, securing it with tying, and replace the earth.

Many careful and rigid cultivators prefer a regular examination of

the trees every spring and autumn. On removing the earth for a few inches, the appearance of gum or castings quickly indicates where the borer has made his lodging. A few moments with the knife will then eradicate the insect for the season.

THE YELLOWS. This most serious malady seems to belong exclusively to this country, and to attack only the peach-tree. Although it has been the greatest enemy of the peach-planter for the last thirty years,—rendering the life of the tree uncertain, and frequently spreading over and destroying the orchards of whole districts,—still little is known of its nature, and nothing with certainty of its cause. Many slight observers have confounded it with the effects of the peach-borer, but all persons who have carefully examined it know that the two are totally distinct. Trees may frequently be attacked by both the yellows and the borer, but hundreds die of the yellows when the most minute inspection of the roots and branches can discover no insect or visible cause. Still we believe proper cultivation will entirely rid our gardens and orchards of this malady; and this belief is in part borne out by experiments under our own inspection. In order to combat it successfully, it is necessary that the symptoms should be clearly understood.

Symptoms. The Yellows appears to be a constitutional disease, no external cause having yet been assigned for it. Its infallible symptoms are the following:—

1. The production upon the branches of very *slender, wiry shoots*, a few inches long, and bearing starved diminutive leaves. These shoots are not protruded from the extremities, but from latent buds on the main portions of the stem and larger branches. The leaves are very narrow and small, quite distinct from those of the natural size, and are either pale yellow or destitute of color.

2. The premature ripening of the fruit. This takes place from two to four weeks earlier than the proper season. The first season of the disease it grows nearly to its natural size; the following season it is not more than half or a fourth of that size; but it is always marked externally (whatever may be the natural color) with specks and large spots of purplish red. Internally the flesh is more deeply colored, especially around the stone, than in the natural state.

Either of the foregoing symptoms (and sometimes the second appears a season in advance of the first) are undeniable signs of the Yellows, and they are not produced by the attacks of the worm or other malady. We may add to them the following additional remarks:—

It is established beyond question, that the Yellows can always be propagated by budding or grafting from a diseased tree; that the stock, whether peach or almond, also takes the disease, and finally perishes; and that the seeds of the diseased trees produce young trees in which the Yellows sooner or later breaks out. To this we may add that the peach, budded on the plum or apricot, is also known to die with the Yellows.

Very frequently only a single branch, or one side of a tree, will be affected the first season. But the next year it invariably spreads through its whole system. Frequently trees badly affected will die the next year. But usually it will last, growing more and more feeble every year, for several seasons. The roots, on digging up the tree, do not appear in the least diseased.

The soil does not appear materially to increase or lessen the liability to the Yellows, though it first originated, and is most destructive, in light, warm, sandy soils.

Lastly, it is the nearly universal opinion of all orchardists that the Yellows is a *contagious* disease, spreading gradually, but certainly, from tree to tree through whole orchards. It was conjectured by the late William Prince that this takes place when the trees are in blossom, the contagion being carried from tree to tree in the pollen by bees and the wind. This view is a questionable one, and it is rendered more doubtful by the fact that experiments have been made by dusting the pollen of diseased trees upon the blossoms of healthy ones without communicating the Yellows.

We consider the contagious nature of this malady an unsettled point. Theoretically, we are disinclined to believe it, as we know nothing analogous to it in the vegetable kingdom. But on the other hand it would appear to be practically true, and for all practical purposes we would base our advice upon the supposition that the disease is contagious. For it is only in those parts of the Atlantic States where every vestige of a tree showing the Yellows is immediately destroyed, that we have seen a return of the normal health and longevity of the tree.*

Cause of the Yellows. No writer has yet ventured to assign a theory, supported by any facts, which would explain the cause of this malady. We therefore advance our opinion with some diffidence, but yet not without much confidence in its truth.

We believe the malady called the Yellows to be a *constitutional taint* existing in many American varieties of the Peach, and produced, in the first place, by bad cultivation and the consequent exhaustion arising from successive over-crops. Afterwards it has been established and perpetuated by sowing the seeds of the enfeebled tree, either to obtain varieties or for stocks.

Let us look for a moment into the history of the Peach culture in the United States. For almost a hundred years after this tree was introduced into this country it was largely cultivated, especially in Virginia, Maryland, and New Jersey, as we have already stated, in perfect freedom from such disease, and with the least possible care. The great

* The following extract from some remarks on the Yellows by that careful observer, Noyes Darling, Esq., of New Haven, Ct., we recommend as worthy the attention of those who think the disease contagious. They do not seem to indicate that the disease spreads from a given point of contagion, but breaks out in spots. It is clear to our mind that in this, and hundreds of other similar cases, the disease was *inherent* in the trees, they being the seedlings of diseased parents.

"When the disease commences in a garden or orchard containing a considerable number of trees, it does not attack all at once. It breaks out in *patches* which are progressively enlarged, till eventually all the trees become victims to the malady. Thus, in an orchard of two and a half acres, all the trees were healthy in 1827. The next year two trees on the *west side* of the orchard, within a rod of each other, took the Yellows. In 1829, six trees on the *east side* of the orchard were attacked; five of them standing within a circle of four rods diameter. A similar fact is now apparent in my neighborhood. A fine lot of 200 young trees, last year in perfect health, now show disease in two spots near the opposite ends of the lot, having exactly six diseased trees in each patch contiguous to each other; while all the other trees are free from any marks of disease."—*Cultivator*.

natural fertility of the soil was unexhausted, and the land occupied by orchards was seldom or never cropped. Most of the soil of these States, however, though at first naturally rich, was light and sandy, and in course of time became comparatively exhausted. The peach-tree, always productive to an excess in this climate, in the impoverished soil was no longer able to recruit its energies by annual growth, and gradually became more and more enfeebled and short-lived. About 1800, or a few years before, attention was attracted in the neighborhood of Philadelphia to the sudden decay and death of the orchards without apparent cause. From Philadelphia and Delaware the disease gradually extended to New Jersey, where, in 1814, it was so prevalent as to destroy a considerable part of all the orchards. About three or four years later it appeared on the banks of the Hudson (or from 1812 to 1815), gradually and slowly extending northward and westward to the remainder of the State. Its progress to Connecticut was taking place at the same time, a few trees here and there showing the disease, until it became well known (though not yet generally prevalent) throughout most of the warmer parts of New England.

It should be here remarked, that though the disease had been considerably noticed in Maryland and the Middle States previously, yet it was by no means general until about the close of the war of 1812. At this time wheat and other grain crops bore very high prices, and the failing fertility of the peach orchard soils of those States was suddenly still more lowered by a heavy system of cropping between the trees without returning anything to the soil. Still the peach was planted, produced a few heavy crops, and declined from sheer feebleness and want of sustenance. As it was the custom with many orchardists to raise their own seedling trees, and as almost all nurserymen gathered the stones *indiscriminately* for stocks, it is evident that the constitutional debility of the parent trees would naturally be inherited to a greater or less degree by the seedlings. Still the system of allowing the tree to exhaust itself by heavy and repeated crops in a light soil was adhered to, and generation after generation of seedlings, each more enfeebled than the former, at last produced a completely sickly and feeble stock of peach-trees in those districts.

The great abundance of this fruit caused it to find its way more or less into all the markets on the sea-coast. The stones of the enfeebled Southern trees were thus carried north, and, being esteemed by many better than those of home growth, were everywhere more or less planted. They brought with them the enfeebled and tainted constitution derived from the parent stock. They reproduced almost always the same disease in the new soil; and thus, little by little, the Yellows spread from its original neighborhood, below Philadelphia, to the whole northern and eastern sections of the Union. At this moment, 1845, it is slowly but gradually moving West; though the rich and deep soils of the Western alluvial bottoms will, perhaps, for a considerable time, even without care, overpower the original taint of the trees and stones received from the East.

Let us now look a little more closely into the nature of this enfeebled state of the peach-tree which we call the Yellows.

Every good gardener well knows that if he desires to raise a healthy and vigorous seedling plant, he must select the seed from a parent plant that is itself decidedly healthy. Lindley justly and concisely re-

marks: "All seeds will not equally produce vigorous seedlings; but the healthiness of the new plant will correspond with that of the seed from which it sprang. For this reason it is not sufficient to sow a seed to obtain a given plant; but in all cases, when any importance is attached to the result, the plumpest and healthiest seeds should be selected, if the greatest vigor is required in the seedling, and feeble or less perfectly formed seeds, when it is desirable to check natural luxuriance." *

Again, Dr. Van Mons, whose experience in raising seedling fruit-trees was more extensive than that of any other man, declares it as his opinion that the more frequently a tree is reproduced *continuously* from seed, the more feeble and short-lived is the seedling produced.

Still more, we all know that certain peculiarities of constitution or habit can be propagated by grafting, by slips, and even by seeds. Thus the *variegated* foliage, which is a disease of some sort, is propagated forever by budding, and the disposition to mildew of some kinds of peaches is continued almost always in the seedlings. That the peach-tree is peculiarly constant in any constitutional variation, the *Nectarine* is a well-known proof. That fruit-tree is only an accidental variety of the peach, and yet it is continually reproduced with a smooth skin from seed.

Is it not evident, from these premises, that *the constant sowing of the seeds of an enfeebled stock of peaches would naturally produce a sickly and diseased race of trees?* The seedlings will at first often appear healthy, when the parent had been only partially diseased, but the malady will sooner or later show itself, and especially when the tree is allowed to produce an over-crop.

That poor soil and over-bearing will produce great debility in any fruit-tree, is too evident to need much illustration. Even the apple, that hardiest orchard tree, requires a whole year to recover from the exhaustion of its powers caused by a full crop. The great natural luxuriance of the peach enables it to lay in new fruit-buds while the branches are still loaded with fruit, and thus, except in strong soil, if left to itself, it is soon enfeebled.

There are some facts in our every-day observation which may be adduced in proof of this theory. In the first place, the varieties of this tree always most subject to this disease are the *yellow peaches*; and they, it is well known, also produce the heaviest crops. More than nine-tenths of the victims, when the disease first appeared, were the yellow-fleshed peaches. On the other hand, the white-fleshed kinds (those white and red externally) are much more rarely attacked; in some parts of the country never. They are generally less vigorous, and bear more moderate crops. And it is well worth remarking that certain fine old sorts, the ends of the branches of which have a peculiar *mildewed* appearance (such as the old Red Rareripec, the Early Anne, &c.), which seems to check the growth without impairing the health, are rarely, if ever, attacked by the Yellows. Slow-growing and moderately productive sorts, like the Nutmeg peaches, are almost entirely exempt. We know an orchard in the adjoining county where every tree has gradually died with the Yellows, except one tree which stood in the centre. It is the Red Nutmeg, and is still in full vigor. It is certainly true that these sorts often decay and suddenly die, but we believe chiefly from the neg-

* Theory of Horticulture.

lect which allows them to fall a prey to the Peach-borer. Indeed the frequency with which the Borer has been confounded with the Yellows by ignorant observers, renders it much more difficult to arrive at any correct conclusions respecting the *contagious* nature of the latter disease.*

It may be said, in objection to these views, that a disease which is only an enfeeblement of the constitution of a tree, would not be sufficient to alter so much its whole nature and duration as the Yellows has done that of the peach. The answer to this is, that the debility produced in a single generation of trees probably would not have led to such effects, or to any settled form of constitutional disease. But it must be borne in mind that the same bad management is to a great extent going on to this day, the whole country over. Every year, in the month of August, the season of early peaches, thousands of bushels of fruit, showing the infallible symptoms of the Yellows,—a spotted skin, &c.,—are exposed and sold in the markets. Every year more or less of the stones of these peaches are planted, to produce, in their turn, a generation of diseased trees, and every successive generation is even more feeble and sickly than the last! Even in the North, so feeble has the stock become in many places, that an excessive crop of fine fruit is but too frequently followed by the Yellows. In this total absence of proper care in the selection both of the seed and the trees, followed by equal negligence of good cultivation, is it surprising that the peach has become a tree comparatively difficult to preserve, and proverbially short-lived?

Abroad, it is well known that the peach is always subjected to a regular system of pruning, and is never allowed to produce an over-crop. It is not a little singular, both that the Yellows should never have originated there, and that, notwithstanding the great number of American varieties of this fruit that have been repeatedly sent to England and are now growing there, the disease has never extended itself, or been communicated to other trees, or even been recognized by English or French horticulturists. We must confess, these facts appear to us strong proofs in favor of our opinion as to the nature and origin of the malady.

Remedy for the Yellows. It may seem to many persons a difficult task to rid ourselves of so wide-spread a malady as this, yet we are confident that a little perseverance and care will certainly accomplish it. In the present uncertainty with regard to its contagious nature, it is much the wisest to reject "the benefit of the doubt," and act upon the principle that it is so. We know at the present moment several gardens where the trees are maintained in good health by immediately rooting out and destroying every tree as soon as it shows marked symptoms of the malady.

1. We would therefore commence by exterminating, root and branch, every tree which has the Yellows. And another tree should not be planted in the same spot without a lapse of several years, or a thorough removal of the soil.

2. The utmost care should be taken to select seeds for planting from perfectly healthy trees. Nurserymen, to secure this, should gather them

* All knowledge relating to the Yellows appears to us as much in obscurity as when this was written. In our experience no one variety seems more liable to be attacked than another, the most vigorous trees being as often affected as those of moderate growth.—C. D.

from the latest ripening varieties, or procure them from districts of the country where the disease is not known.

3. So far we have aimed only at procuring a healthy stock of trees. The most important matter remains to be stated—*how to preserve them in a healthy state.*

The answer to this is emphatically as follows: *pursue steadily, from the first bearing year, the shortening-in system of pruning* already explained. This will at once secure your trees against the possibility of over-bearing and its consequences, and maintain them in vigor and productiveness for a long time.* It will, in short, effectually prevent the Yellows where it does not already exist in the tree. To whoever will follow these precautions, pursue this mode of cultivation, and adopt at the same time the remedy for the Borer already suggested, we will confidently insure healthy, vigorous, long-lived trees, and the finest fruit. Will any reasonable man say that so fine a fruit as the peach does not fully merit them?

Whether the system of shortening-in and careful culture will prevent the breaking out of the Yellows, when constitutionally *latent* in the tree, we will not yet undertake to say. In slight cases of the disease we believe that it may. Of one thing, however, we are certain: it has hitherto failed entirely to reclaim trees in which the malady had once broken out. Neither do we know of any well-attested case of its cure, after this stage, by any means whatever. Such cases have indeed been reported to us, and published in the journals, but, when investigated, they have proved to be trees suffering by the effects of the *borer* only.

A planter of peach-trees must, even with care, expect to see a few cases of Yellows occasionally appear. The malady is too widely extended to be immediately vanquished. Occasionally trees having the constitutional taint will show themselves where least suspected; but when the peach is once properly cultivated these will every day become more rare, until the original health and longevity of this fruit-tree is again established.

THE CURL is the name commonly given to a malady which often attacks the leaves of the peach-tree. It usually appears in the month of May or June. The leaves curl up, become thickened and swollen, with hollows on the under and reddish swellings on the upper side, and finally, after two or three weeks, fall off. They are then succeeded by a new and healthy crop of foliage. Although it does not appear materially to injure either the tree or the crop, yet it greatly disfigures it for a time.

Innumerable seedlings have been produced in this country, and some of them are of the highest excellence. It is very desirable to reduce the collection of peaches to reasonable limits, because, as this fruit neither offers the same variety of flavor nor the extent of season as the apple and pear, a moderate number of the choicest kinds, ripening from

* The following remarks, directly in point, are from London's last work "The effect of shortening the shoots of the peach is not merely to throw more sap into the fruit, but to add vigor to the tree generally by increasing the power of the roots relatively to the branches. The peach being a short-lived tree, it has been justly remarked by Mr. Thompson, were it allowed to expend all its accumulated sap every year, it would soon exhaust itself and die of old age."—*Suburban Horticulturist*.

the earliest to the latest, is in every respect better than a great variety, many of which must necessarily be second-rate.

It is worthy of remark, that most of our American varieties of the first quality have proved second-rate in England. This is owing to the comparative want of sun and heat in their climate. Indeed, our finest late peaches will not ripen at all except under glass, and the early varieties are much later than with us. On the other hand, many of the best European sorts are finer here than in England, and we have lately endeavored to introduce all of the foreign sorts of high quality.

In the description of peaches and nectarines the form and outlines of many kinds are so nearly similar that we are obliged to resort to other characteristics to distinguish the varieties. The two most natural classes into which the kinds of this fruit are divided are freestones and clingstones (melters and paries, of the English); the flesh of the former parting freely from the stone, that of the latter adhering.

Next to this, the strongest natural distinction is found in the *leaves* of the peach. At the base of the leaves of certain kinds are always found small *glands*, either round and regular, or oblong and irregular, while the leaves of certain other kinds have no glands, but are more deeply cut or *serrated* on the margin. These peculiarities of the foliage are constant, and they aid us greatly in recognizing a variety by forming three distinct classes, viz. :—

Characters in the leaves of peaches.

1. Leaves serrated and *without glands*, *a*. 2. Leaves with small round or *globose glands*, *b*. 3. Leaves with large, irregular, *reniform glands*, *c*.

This distinction of leaves is valuable, because it not only assists us

when we have the fruit before us, but it may be referred to, for the sake of verifying an opinion, at any time during the season of foliage.

There is also another class of characteristics to be found in the *blossoms*, which is constant and valuable, though not so much so as that of the leaves, because it can only be referred to for a few days in the spring. The blossoms afford two well-marked subdivisions: 1st. Large flowers, always red in the centre, and pale at the margin; 2d. Small flowers, tinged with dark at the margin.*

The most desirable peaches for market-growers in this country are very early and very late kinds. These command double the price in market of kinds ripening at the middle season. For New England and the North only the earliest kinds are desirable, as the late ones seldom mature well.

In describing peaches we have embodied their character as Free-stones or Clingstones in the text descriptive.

RAISING PEACHES IN POTS. The uncertainty of peach culture in the open air has become so common in many sections where once the crop was as sure as that of the apple, that many persons are resorting to orchard houses, or artificial in-door culture, both for supply of families and also as a profitable item of fruit-growing for market.

"Two modes are adopted: one without fire-heat, the crop maturing a little earlier than in common orchards; the other, where by the use of fire-heat the fruit is obtained two or three months earlier than in open ground." The former mode has been successfully prosecuted by Messrs. Ellevanger and Barry, Rochester, N. Y.; and the following, written by P. Barry and published in Thomas' *American Fruit Culturist*, we copy:

"We have now fruiting in wooden boxes, ten by ten inches, fifty-three varieties of peaches, eleven varieties of nectarines, and seven of apricots.

"Age, Potting, and Soil. The trees are now three years from the bud. They were taken up in the fall of 1861: heeled-in and covered during winter; potted early in spring—March, I think; soil a mixture of about three parts yellow sandy loam and one part of old hot-bed manure.

"Summer Care. After potting they were kept in a cool house, partly covered with glass, until they had made shoots four or five inches long, and the danger of cold weather over. They were then plunged to the rim of the boxes in an open border until the fall. They were carefully watered when necessary during summer, and the shoots kept as much as possible in uniform vigor by pinching.

"Pruning. When potted the yearling trees were cut back to six or eight inches, and in some cases to four inches, or only two or three buds above the union of bud and stock, the object being to grow them in the form of bushes. We now find that those cut back farthest are the best trees. [Fig. 350 represents the yearling tree; Fig. 351 the same, cut back; Fig. 352 the tree set in a pot; and Fig. 353, the same after a year's growth.]

"Wintering. On the approach of very cold weather, or just before the freezing of the ground so as to prevent out-door work, they were

* Lindley makes a third division, embracing a few sorts with blossoms of an intermediate size. But it is of no practical value, as any doubt as to which of the two divisions any blossom belongs is immediately set at rest by the *color* of the blossom.

removed to a shed, where they were plunged, as they had been during summer, up to the edges of the tubs.

“Spring Treatment.” On the return of mild spring weather abundance of air was admitted, and they remained there till 1st May, when they were placed under glass, the buds at this time being about to expand. Here they were kept till the 15th of June, at which time the fruits were set, and all danger of cold to affect the foliage past.

“Ventilation and Watering.” During the period they were under

glass, May 1st to June 15th, the principal points of management were VENTILATION, which was ample, and WATERING—the latter being one of the most important points in the treatment of all trees and plants in pots. Careless watering will ruin any plant, no matter how skilfully or carefully other points may be managed. DAILY watering is necessary, and, as soon as out of bloom, a free use of the syringe night and morning.

“Summer Treatment.” On the 15th June, when all danger of cold was over, and the fruits set, they were removed from the glass covering and plunged in an open but sheltered border, and mulched with old hot-bed manure. Since that time they have received no care but watering, except an occasional pinch to regulate the growth of shoots.

“There has not been a single leaf curled on any one of all these trees, showing conclusively that the curl is due to unfavorable changes of weather. Each tree now is a bush about two and a half feet high, and occupies about three feet square of space.

“The first winter we had potted trees we kept them in a cellar, but most of the buds dropped, and we changed to the cool dry shed, the boxes plunged, and this has been successful.”

In houses where fire-heat is used, and the fruit brought forward so as to ripen in May and onward, the pots are either immersed in beds of tan bark over the flues or heating pipes, or placed on platforms or shelves, the pot containing the tree inside of one, two, or three sizes

larger, and the space between filled with moss ; this serves to keep the roots at a more even temperature than would be the case were they to stand without this double potting. The trees are generally prepared by training one or two years before being brought into fruit, forming a head at about one foot to sixteen or eighteen inches of stem. This is done by a systematic system of pinching or summer pruning, removing the end of each shoot as fast as it grows to form three or four leaves. This pinching gives to the head a compact round form, and supplies it with numerous spurs or bearing shoots. The trees or pots are kept in the house all winter, and the thermometer in no instance allowed to go below zero, as the buds are more easily affected than those of out-door culture. It is usual to commence heating by artificial means about the middle of January, increasing it as the season advances and the natural growing season and influence of the sun's rays are increased, giving all the time attention to reducing the temperature at night and increasing it by day, as in the natural life out of doors. Great heat may be maintained in a peach-house, but it must be always accompanied by abundant watering, or the trees will be liable to drop their fruit before mature. Some growers place their trees in warm, sheltered situations out of doors a few days before fall ripening, believing it affects and increases the flavor of the fruit.

Growing peaches in pots without the aid of glass structures or fire-heat has also been successfully practised. The trees are prepared, pruned, and grown the same as for house culture, and during the growing season the pots are plunged in the open ground in a warm, sheltered position in the garden, due attention being given to watering. Just before the approach of severe winter, say about the middle of November, they are removed into a cool, light cellar or pit frame, there to remain during winter. In spring they are returned to the garden, and should there be any sign of frost or cold, to injure the blooms, they are protected by means of a cloth awning, arranged so that it can be drawn over them at a moment's notice.

VARIETIES.

The varieties of peach are almost innumerable, new seedlings being produced in this country with great facility, and, after being heralded for a season, are suffered to pass out of existence and their places occupied with still later productions. A few of the old sorts remain as good to-day as when this work was first written, and occasionally a new variety is found of superior merits. In the following pages descriptive we have endeavored to record all of much value, omitting many which are inferior, and others perhaps that, although good, were not sufficiently so to make them desirable, and therefore they are rare to be found in any collection.

A BEC.

Mignonne à Bec.

Pourprée à Bec.

This is a new variety, ripening early in August. The leaves have globose glands. Flowers large.

Fruit large, roundish, uneven in its outline, having a bold blunt nipple at the apex. Suture shallow, highest on one side. Skin thin, of a lemon yellow, with crimson cheek. Flesh white, slight tinge of red next the stone, tender, melting, sweet. Freestone. (Hogg.)

ABRICOTÉE.

Yellow Admirable.	Grosse Jaune Tardive.	D'Abricot.
Apricot Peach.	Admirable Jaune.	D'Orange. (Orange Peach.)

The Apricot Peach (or *Yellow Admirable*, as it is more frequently called) is an old French variety, but little cultivated in this country, though deserving of attention in the Middle States. It ripens very late, and is thought to have a slight apricot flavor. It grows with moderate vigor, and bears abundantly. Leaves with reniform glands. Flowers large.

Fruit large, roundish oval, with a small suture running on one side only. Skin clear yellow all over, or faintly touched with red next the sun. Flesh yellow, but a little red at the stone, firm, rather dry, with a sweet and agreeable flavor. Stone small. Ripens at the beginning of October.

ACTON SCOTT.

The Acton Scott is an English Peach, raised by Mr. Knight. It is an excellent early fruit, and will thrive and ripen well at the North. Leaves with globose glands. Flowers large.

Fruit of medium size, rather narrow and depressed at the top, with a shallow suture. Skin rather woolly, pale yellowish white, with a marbled bright red cheek. Flesh pale quite to the stone, melting, sugary, and rich, with sometimes a slight bitter flavor. Middle of August.

ALBERT'S LATE RARERIPE.

A Southern variety. Glands globose.

Fruit large, roundish. Suture slight. Skin not very downy, yellowish white, sprinkled with red dots and a marbled red cheek. Flesh pale, light red at the stone, juicy, sweet. Freestone. September. (White.)

ALEXANDRA.

Alexandra Noblesse.

Seedling Noblesse.

This variety was raised by Thomas Rivers, from the Old Noblesse, and, unlike the old variety, the tree is not subject to mildew. Glands globose. Flowers large.

Fruit of the largest size, round, and marked with a deep suture. Skin covered with a rough down, pale, with a few clusters of red dots on the side next the sun. Flesh white, quite pale at the stone, tender, melting, juicy, rich, vinous. Freestone. Early in August. (Hogg.)

ALIDA.

Originated with Charles Carpenter, Kelly Island, O.

Fruit large, round, dark red. Flesh yellow, juicy, good. September. Freestone.

ALLEN.

An old sort, cultivated in Massachusetts. It has the habit of reproducing itself true from seed.

Fruit small, roundish, white, with a red cheek. Flesh white, juicy, pleasant. Freestone.

AMELIA.

Stroman's Carolina.
Orangeburg.

Rayzer's June.
Sally's Peach.

Nonesuch of North Carolina.

This Peach originated with Mr. Stroman, in Orangeburg District, S. C. Glands reniform. Flowers small.

Fruit large, roundish oblong. Suture large and deep, extending nearly round. Skin pale whitish yellow, shaded and marbled with crimson in the sun, downy. Flesh white, juicy, melting, sweet, rich, vinous. Freestone. Last of August. Ripens at the South with Early York.

AMELIA.

This fine large Peach originated with George Husman, Hermann, Mo. It is much like Columbia, but later in ripening. Leaves with indistinct globose, almost reniform glands.

Fruit large, round. Suture well defined, deepest towards the apex, which has a rounded point. Skin rich yellow, marbled with dull red. Flesh thick, rich, juicy, sweet. Ripe a few days later than Columbia. Freestone. (Hort.)

AREMIE.

Origin, Pomaria, S. C.

Fruit very large. Flesh yellow, juicy, high-flavored. 10th August. Clingstone. (Sumner's MS.)

ASTOR.

An American Peach, which originated in New York. It is good, but hardly first-rate; not very productive. Flowers large. Leaves with globose glands.

Fruit large, rather flattened or broad, and slightly sunk at the top. Suture well marked. Skin pale yellowish white, with a deep red cheek. Stone small. Flesh melting, very juicy, sweet, and of excellent flavor. Ripens the last week in August. Freestone.

ATWOOD.

Originated with Roscius Atwood, Newberry, S. C.

Fruit large. Quality *best*, productive. Clingstone. (Sumner's MS.)

AUSTIN'S LATE RED.

Glands reniform. Flowers large.

Fruit large, oblong, white, with a red cheek. Flesh white, juicy, vinous, and well-flavored. Clingstone. Ripens middle of October. (P. J. Berckman, MS.)

BALDWIN'S LATE.

Glands reniform. Flowers small.

Fruit large, oblong, with a distinct swollen point. Skin greenish white, with a slight red cheek. Flesh very firm, juicy, melting, and well-flavored. Freestone. Ripe the last of October at the South. Disseminated by Dr. Baldwin, of Montgomery. (White's Gard.)

BARRINGTON.

Buckingham Mignonne.

Colonel Ausley's.

A handsome, very fine, and very hardy English Peach. The tree is vigorous and healthy. The fruit ripens at the medium season, about a week after the Royal George. Leaves with globose glands. Flowers large.

Fruit large, roundish, inclining to ovate, and rather pointed at the top, with a moderate suture on one side. Skin pale yellowish white, with a deep-red marbled cheek. Flesh but slightly tinged with red at the stone, melting, juicy, very rich, and of the first quality. Stone rugged, dark brown. Beginning of September. Freestone.

BATCHELDER.

Origin, Haverhill, Mass. Hardy and productive; said to produce the same from seed.

Fruit large, round. Skin white, with a deep blush. Flesh white, melting, juicy, very pleasant vinous flavor. Last of September. (Cole.)

BAUGH.

Leaves with reniform glands.

Fruit medium, roundish, terminated with a small point. Suture obscure. Skin pale yellow, almost white, with a slight blush towards the sun. Flesh yellowish white, pure white at the stone, melting and juicy, with a sweet, pleasant flavor. Separates from the stone. Ripens the first of October. (White's Gard.)

BELLE BAUSSE.

Belle Bauce.

Pourprée Vineuse.

Vineuse Hâtive.

Pourprée Hâtive Vineuse.

Vineuse de Fromentin.

This delicious Peach is a variety of Grosse Mignonne, but larger, and ripens ten days later. Glands globose. Flowers large.

Fruit large, somewhat flattened at extremities. Suture distinct, higher on one side than the other. Skin thin and delicate, covered with fine down, highly colored almost over the entire surface with deep red. Flesh white, with a rosy tint round the stone, tender, melting, vinous. Freestone. Early September.

BELLE CHEVREUSE.

Glands reniform. Flowers small.

Fruit elongated, with a bold nipple at summit. Skin downy, yellow.

lowish, marbled with red in the sun. Suture distinct. Flesh whitish yellow, red at stone, sweet, and juicy. September. (Hogg.)

BELLE DE BEAUCAIRE.

A Southern variety. Glands globose. Flowers small.

Fruit large, roundish, with protruding point. Suture shallow. Skin light yellowish green, with cheek slightly reddened. Flesh pale greenish yellow, red at the stone, a little coarse, melting, rich. Freestone. Ripe last of July, South. (White's Gard.)

BELLE DE DOUE.

Belle de Douai.

A large melting Peach, an early variety of Bellegarde. Flesh vinous, rich flavored. Freestone. Glands globose. Flowers small. Middle August. (Hogg.)

BELLE DE LA CROIX.

A new Peach raised at Bordeaux. Glands reniform. Flowers small.

Fruit large, round. Flesh sweet and rich. Middle August. (Hogg.)

BELLE DE VITRY.

Admirable Tardive.

Bellis.

This is not the Belle de Vitry of most of our gardeners, which is the *Early Admirable*; it is quite distinct, also, from the *Late Admirable*; but is the Belle de Vitry described by Duhamel, and is a very firm-fleshed and excellent French variety, little known in this country. Leaves serrated without glands. Flowers small.

Fruit middle size, rather broad, with a deep suture, and the top depressed. Skin pale yellowish white, tinged and marbled with bright and dull red. Flesh rather firm, red at the stone, melting, juicy, and rich. Ripens here the last of September. Freestone.

BELLE ET BONNE.

A foreign variety. Leaves without glands. Flowers large.

Fruit large, roundish. Suture deep. Skin downy, clear yellow, shaded with bright red in the sun. Flesh white, fine, melting, highly perfumed. Freestone. August. (An. Pom.)

BELLE GARDE.

Galande.

Noir de Montreuil.

French Royal George.

Smooth-leaved Royal George.

Early Royal George.

Red Magdalen.

Brentford Mignonne.

Ronald's Mignonne.

Early Garlande.

Belle de Fillemont.

This very excellent French Peach is the one most highly esteemed by the Montreuil growers, who supply the Paris markets, and it is

equally valued by the English. It is also one of the handsomest and most delicious fruits here. Leaves with globose glands. Flowers small.

Fruit large, round, and regular, the suture shallow, the top slightly hollowed, and having a little projecting point. Skin pale yellowish green, with a rich red cheek, often streaked with darker purple. Flesh slightly marked with red at the stone, a little firm, but very melting, juicy, rich, and high-flavored. Stone rather large. End of August and first of September. Freestone.

BERGEN'S YELLOW.

One of the best of the yellow-fleshed Peaches, but not a good bearer, and therefore unprofitable. Leaves with reniform glands. Flowers small.

Fruit large (often measuring nine inches in circumference), globular, depressed, and broad; the suture well marked, and extending more than half round. Skin deep orange, dotted with some red, and with a very broad, dark-red cheek. Flesh deep yellow, melting, juicy, and of rich and luscious flavor. Ripens at the beginning of September. Freestone.

BLANTON CLING.

Yellow Blanton Cling.

Leaves large. Glands reniform. Flowers small.

Fruit large, and shaped like Lemon Cling, with the same projecting, swollen point. Skin rich orange, with a slightly reddened cheek. Flesh orange yellow, firm, but full of a delicious vinous juice. Later and better than Lemon Cling. Reproduces itself from seed. Ripens 10th August. (White's Gard.)

BLOOD CLINGSTONE.

Indian Blood.

Claret Clingstone.

Blood Cling.

The Blood Clingstone is a very large and peculiar fruit, of no value for eating, but esteemed by many for pickling and preserving; the flesh very red, like that of a beet. This is an American seedling, raised many years ago from the French Blood Clingstone—*SANGUINOLE À CHAIR ADHÉRENTE*. It is a much larger fruit than the original sort, which has large flowers; otherwise they are the same in all respects. Leaves with reniform glands. Flowers small.

Fruit often very large, roundish oval, with a distinct suture. Skin very downy, of a dark, dull, clouded, purplish red. Flesh deep red throughout, firm and juicy—not fit for eating. September to October.

There is a FRENCH BLOOD FREESTONE (*Sanguinole, Sanguine, Cardinale, or Betrave*, Duh., Thomp.) of the same nature, and used for the same purpose as this, but smaller in size, and not equal to it for cooking. Leaves without glands.

There is also a Blood Freestone, raised by John M. Ives, Salem, Mass., which is of medium size. Blood red throughout. Tree hardy and a good bearer.

BOXXE GROS DE NOISETTE.

Originated with M. Noisette, Paris, France.

Fruit large, roundish, depressed. Suture deep. Skin nearly smooth, white, with faint marblings of red in the sun. Flesh yellowish white, red at the stone, juicy, vinous, aromatic. Freestone. September.

BORDEAUX CLING.

Raised in New Bordeaux, Abbeville District, S. C., from a stone brought from Bordeaux. Glands reniform. Flowers large.

Fruit large, oblong or oval, a little one-sided. Suture shallow. Skin very downy, lemon yellow, with a red cheek. Flesh yellow, red at the stone (to which it clings), juicy, melting. A showy market sort. First of August. (Wm. N. White, MS.)

BREVOORT.

Brevoort's Morris.

Brevoort's Seedling Melter.

One of the richest and most delicious of American Peaches, and one of the favorite sorts for garden cultivation. It was raised by Henry Brevoort, of New York. Bears regular, moderate crops. Leaves with reniform glands. Flowers small.

Fruit medium or large, round and rather broad, with a distinct suture, deep at the top. Skin pale yellowish white, often a little dingy, with a bright red cheek. Flesh rather firm, slightly red at the stone, rich, sugary, and high-flavored. Freestone. First of September.

BRIGGS.

Origin, Dedham, Mass. Hardy and productive.

Fruit large, roundish. Suture continued almost round it. Skin white, nearly covered with bright red. Flesh white, tinged with red at the stone, very juicy, of a rich, sweet, slightly vinous flavor. Freestone. From first to middle of September. (Cole.)

CABLE'S LATE.

Cable's Late Melocoton.

Originated with E. Cable, Cleveland, O. A seedling of the Red Cheek Melocoton, and resembles Crawford's Late, somewhat larger, and ripening a little earlier. Tree a good bearer. Freestone. (Elliott.)

CAMBRIDGE BELLE.

Hovey's Cambridge Belle.

Raised by Hovey & Co., Boston, Mass.

Fruit large, roundish. A beautiful Peach, with a clear waxen skin, and a blush on the exposed side, and of a rich, brisk, delicious flavor. Freestone. Ripe early in September. (Hov. Mag.)

CANARY.

An American variety. Glands globose. Flowers small.

Fruit medium, roundish oblong. Skin thin, beautiful bright yellow. Flesh yellowish, melting, juicy, rich, and good. July, South; August, North. Freestone.

CARPENTER'S WHITE.

Raised by William S. Carpenter, New York City. Tree vigorous and productive, with globose glands. Flowers small.

Fruit large and round. Skin white, with a slight shade of green. Flesh white to the stone, juicy, melting, and of good flavor. Separates from the stone. Ripens about the middle of October.

CATHERINE.

Congress.

The Catherine Cling is an old English variety, of excellent quality, but not, we think, equal to the *Large White Clingstone*, a native seedling, so much esteemed in the Middle States. Leaves with reniform glands. Flowers small.

Fruit large, roundish oval, more swollen on one side than the other, and terminated by a small swollen point at the top. Skin pale yellowish green, much sprinkled with red dots, the exposed cheek of a bright lively red, streaked with darker red. Flesh firm, yellowish white, but dark red at the stone, to which it adheres very closely, juicy, rich, and good. Middle and last of September.

CHANCELLOR.

Chancellière.

Noisette

Late Chancellor.

Stewart's Late Galande.

Edgar's Late Melting.

The Chancellor is said to have been originated by M. de Segnier, of Paris, then Chancellor of France. Leaves with reniform glands. Flowers small.

Fruit large, oval, with a well-marked suture. Skin pale yellowish white, with a dark crimson cheek. Flesh very deep red next the stone, melting, and possessing a rich vinous flavor. Stone oblong. Freestone. Middle of September.

CHINESE CLING.

Reniform glands. Flowers small.

Fruit large, globular. Sides compressed. Suture quite shallow. Skin creamy white, shaded and marbled with fine red. Flesh white, red at the stone (which is adherent), very juicy, melting, with a rich, excellent vinous flavor. Ripens first to middle of September; at the South, from the middle of July to the first of August.

CHRISTIANA.

Originated at Pomaria, S. C.

Fruit large, beautiful. Flesh white to the stone. Flavor delicious. Freestone. September. (Sumner's MS.)

CLEMENCE ISAURE.

A new French Peach. Leaves with large reniform glands. Flowers small.

Fruit large, roundish oval. Suture well marked. Skin covered with a gray down, whitish yellow, deep purple in the sun. Flesh deep yellow, purplish next the stone. Freestone. September. (Verg.)

CLINTON.

A native variety, of second-rate flavor. Leaves with globose glands. Flowers large.

Fruit of medium size, roundish, a little depressed at the top, but nearly without suture. Skin pale yellowish white, with a red cheek marked by broken stripes of dull red. Flesh scarcely stained at the stone, juicy and good. Last of August. Freestone.

COLE'S EARLY RED.

An American Peach, which is a very fruitful and excellent variety for market culture. Leaves with globose glands. Flowers small.

Fruit of medium size, roundish, with but little suture. Skin pale in the shade, but nearly all covered with red, becoming dark red on the sunny side. Flesh melting, juicy, rich, and very sprightly. Beginning to the middle of August. Freestone.

COLUMBIA.

Indian Peach.

Pace.

Mulatto.

The Columbia is a singular and peculiar Peach. It was raised by Mr. Coxe, the author of the first American work on fruit-trees, from a seed brought from Georgia. It is a very excellent fruit, which every amateur will desire to have in his garden. The tree is not a very rapid grower, and bears only moderate crops, being, of course, all the less subject to speedy decay. The young wood is purple. Leaves with reniform glands. Flowers small.

Fruit large, globular, broad and much depressed, the suture distinct, extending half way round. Skin rough and rather thick, dull dingy red, sprinkled with spots and streaks of darker red. Flesh bright yellow, of the texture, as Coxe remarks, of a very ripe pine-apple, rich, juicy, and of very excellent flavor. Ripens from the beginning to the middle of September. Freestone.

COLUMBUS, JUNE.

Glands globose. Flowers small.

Fruit medium to large, flattened or slightly hollowed at the apex. Suture shallow. Skin pale yellowish white, with a rich red cheek. Flesh slightly red at the stone, melting, juicy, and high-flavored, excellent. Ripens here in Georgia 20th June. Free. (White's Gard.)

COMET.

Raised by Thomas Rivers, of England, from the Salway. Glands reniform. Flowers small.

Fruit large, round. Skin pale yellow, with a crimson cheek. Flesh pale yellow, separating freely from the stone, juicy, melting. Early October. (Hogg.)

COMTESSE DE HAINAUT.

Originated in Belgium. Flowers large.

Fruit large, roundish. Suture distinct, not deep. Skin covered with a light down, clear yellow, red in the sun. Flesh yellowish white, red at the stone, juicy, melting. Stone large. Freestone. September. (An. Pom.)

COOLEGE'S FAVORITE.

Cooledge's Early Red Rareripec.

This most popular early New England Peach was raised from seed by Mr. J. Cooledge, of Watertown, Mass. It is unusually productive, and a very bright-colored handsome Peach, of excellent quality; and its hardness renders it valuable at the North. Leaves with globose glands. Flowers small.

Fruit large, roundish (the suture prominent at the top only), but rather the largest on one side. Skin clear, smooth, white, with a fine crimson mottled cheek. Flesh very melting and juicy, with a rich, sweet, and high flavor. Middle of August. Freestone.

COUNTS'.

Originated with H. H. Counts, Lylesford, S. C.

Fruit large, white, with red cheek. Flesh white, rich, juicy, superior. Clingstone. (Sumner, MS.)

CRAWFORD'S EARLY.

Early Crawford.

Crawford's Early Melocoton.

This is the most splendid of all early yellow-fleshed Peaches, and is scarcely surpassed by any other variety in size and beauty of appearance. As a market fruit it is perhaps the most popular of the day. It was originated by William Crawford, Esq., of Middletown, N. J. The tree is vigorous, very fruitful, and hardy. Leaves with globose glands. Flowers small.

Fruit very large, oblong, the swollen point at the top prominent; the suture shallow. Skin yellow, with a fine red cheek. Flesh yellow, melting, sweet, rich, and very excellent. It ripens here the last week in August. Freestone.

CRAWFORD'S LATE.

Crawford's Superb Malacatune.

Crawford's Late Melocoton, from the same source as the foregoing, is one of the most magnificent American Peaches. We think it deserving of universal cultivation. As a splendid market fruit it is unrivalled, and its size and beauty will give it a place in every garden. Leaves with globose glands. Flowers small.

Fruit very large, roundish, with a shallow but distinct suture. Skin yellow, with a fine dark-red cheek. Flesh deep yellow, but red at the stone, juicy and melting, with a very rich and excellent vinous flavor. Ripens from the 20th to the last of September. Freestone.

CRIMSON GALANDE.

Crimson Mignonne.

Glands globose. Flowers small. Fruit medium, roundish, faint suture, pitted at apex. Skin almost covered with dark crimson, nearly black. Flesh tender, melting, blood red at the stone, juicy, rich. Freestone. (Hogg.)

CROCKETT'S LATE WHITE.

A late-maturing white Peach, originated in New Jersey, where it is popular as a market sort. Leaves with reniform glands.

Fruit medium to large, oblong. Skin greenish white, occasionally some red in sun. Flesh pale, sweet, not very juicy. Last September. Freestone. (Gar. Mon.)

DAGMAR.

A new Peach raised by Thomas Rivers, England. Glands globose. Flowers small.

Fruit round, marked with a shallow suture, deepest at apex. Skin tender, very downy, pale straw-color, nearly covered with minute crimson dots, giving a mottled appearance. Flesh white, very tender, melting, juicy, rich, vinous, sweet. Freestone. August. (Hogg.)

DE BEURRE.

A French Peach. Leaves without glands. Flowers small.

Fruit medium, oval, depressed at apex. Skin easily detached from the flesh, covered with a short, fine down, whitish yellow, washed with brownish red in the sun. Flesh fine, melting, purplish next the stone, sweet, vinous. August. Freestone. (Verg.)

DE BONLEZ.

A Belgian variety. Flowers large.

Fruit large, round, depressed. Suture deep. Skin downy, yellowish, deeply colored with red in the sun. Flesh firm, yellowish, red at the stone. September. Freestone. (Alb. Pom.)

DESSE TARDIVE.

Glands globose. Flowers small.

Fruit large, round, flat at top, deep suture next the stalk. Skin pale yellow, faint tinge of rosy red next the sun. Flesh greenish white, slightly tinged with red next the stone, melting, juicy, sweet. September. Freestone. (Hogg.)

DE ZEIHERN.

Fruit medium, round. Suture deep, large. Skin downy, yellow, more or less colored with bright red. Flesh white, melting, juicy, sweet. August. Freestone. (Alb. Pom.)

DOCTOR HOGG.

Originated with Thomas Rivers, England. It is described as the largest early Peach known. Glands reniform. Flowers large.

Fruit large, round. Suture distinct. Skin lemon yellow, dotted with crimson, and a crimson cheek in the sun. Flesh yellowish white, somewhat firm, but melting and juicy, stained with red at the stone. Last of July or early August. Freestone.

D'OIGNES.

Originated in Belgium. Leaves serrated.

Fruit medium to large, roundish. Suture large and shallow. Skin downy, greenish yellow, with red in the sun. Flesh yellowish white, much colored around the stone, melting, juicy. September. Freestone. (An. Pom.)

DONAHOO CLING.

From Mr. Donahoo, Clark Co., Ga. Glands reniform. Flowers small.

Fruit very large, roundish. Suture quite deep on one side, and visible entirely around the fruit. Apex depressed. Skin creamy white, dotted and tinged with red in the sun. Flesh white to the stone, exceedingly juicy, rich, and luscious. Ripens from 10th to 20th September.

DOUBLE MONTAGNE.

Double Mountain.

Montagne.

Montauban.

A Peach much resembling the Noblesse, of French origin. Leaves serrated, without glands. Flowers large.

Fruit of medium size, roundish, but somewhat narrower at the top. Skin pale greenish white, with a soft red cheek, which is marbled with darker red at maturity. Flesh white to the stone, very delicate and melting, with a plentiful and high-flavored juice. Stone ovate and rugged. Middle of August. Freestone.

DRUID HILL.

Originated by Lloyd N. Rogers, Esq., of Druid Hill, near Baltimore. The tree is unusually vigorous, the shoots and leaves very large, and it bears abundantly. The very late season of its maturity renders it valuable, as most of the luscious sorts are then gone. Leaves with globose glands. Flowers small.

Fruit large, roundish; the cavity of the stalk rather narrow, the suture very slight, and the swollen point distinct, but scarcely prominent. Skin pale greenish white, clouded with red on the sunny side. Flesh greenish white, purple at the stone, very juicy and melting, with an exceedingly rich, high vinous flavor. Stone long and rather compressed, much furrowed. Ripens from the 20th of September to the 1st of October. Freestone.

DUFF YELLOW.

Glands globose. Flowers small. An excellent early market Peach

Fruit very large, round, with a sharp point. Skin yellow, with a red cheek. Flesh yellow, juicy, and pretty well flavored, a little acid, red at the stone. Clingstone. Ripens early in July. (P. J. B., MS.)

DUPERRON.

A seedling of M. Duperron. Promises of value. Leaves with globose glands. Flowers small.

Fruit large to very large, roundish, depressed at end. Suture shallow. Skin downy, golden yellow, more or less washed with pale red. Flesh yellow. Clingstone. October.

DWARF ORLEANS.

Italian Dwarf.

This variety, introduced many years since, and described by Wm. Prince, in 1828, has recently been brought out anew under the name of Italian Dwarf. It forms a diminutive tree of about two feet in height, is a slow grower, with short-jointed wood, suited as a curiosity for pot-growing. Leaves long. Flowers large.

The fruit is nearly as large as the Nutmeg Peach. White flesh, juicy. Freestone.

EARLY ADMIRABLE.

Admirable.

Belle de Vitry.

L'Admirable.

A very excellent French Peach, wrongly known by many in this country as the Belle de Vitry, which is a distinct variety. We find it early, and very prolific. Leaves with globose glands. Flowers large.

Fruit not quite round. Skin pale yellowish white, with a lively red cheek. Flesh red next the stone, melting, and juicy, with a good, rich, sweet flavor. Middle of August.

EARLY ALBERT.

An early Peach raised by Thomas Rivers, of England. Glands globose. Flowers small.

Fruit above medium, roundish, frequently one side of suture higher than the other, pitted at apex. Skin greenish yellow, shaded with deep crimson. Flesh white, tender, melting, with a faint brick red tinge next the stone, rich juicy. Freestone. Last of July. (Hogg.)

EARLY ALFRED.

Raised by Thomas Rivers, from seed of Hunt's Tawny Nectarine. Glands globose. Flowers large.

Fruit rather large, marked with a deep suture. Skin straw-color, mottled with crimson in the sun. Flesh white, melting, vinous, rich. Early August. (Hogg.)

EARLY ANNE.

Anne.

Green Nutmeg.

The Early Anne is an old and familiar English sort. The tree is of slender growth. Leaves serrated, without glands. Flowers large, nearly white.

Fruit rather small, round. Skin white, with a faint tinge of red next the sun. Flesh white to the stone, soft, melting, sweet, and of pleasant flavor. Last of July and first of August.

Fay's Early Anne, a seedling of the above, by Lincoln Fay, of Chautauque Co., N. Y., is larger and better. Ripens a week or two later, and just before Early York (serrate). Skin whitish, sometimes slightly tinged with red. Flesh white, juicy, melting, and very good.

EARLY BEATRICE.

This Peach, says its originator, Thomas Rivers, Sawbridgeworth, England, is the earliest sort known, ripening from 5th to 11th of July. Leaves with reniform glands. Flowers large.

Fruit medium size, with a marbled red cheek. Flesh melting, very juicy.

EARLY CHELMSFORD.

Mammoth.

Leaves glandless.

Fruit large, roundish. Suture clear round, deep on one side. Skin white, with a bright red cheek. Flesh white, very melting and juicy, of a very delicious, slightly vinous flavor. Freestone. 20th to last of August.

EARLY GROSSE MIGNONNE.

Grosse Mignonne Hâtive.

Mignonne Hâtive.

This is a very fine Peach, ripening early in August. Glands globose. Flowers large.

Fruit medium, roundish, pitted at apex. Nipple one side, and shallow suture. Skin with a pale red cheek in the sun, dotted thickly with bright crimson dots. Flesh white, veined with red, very juicy, vinous, sweet. Freestone. (Hogg.)

EARLY LOUISE.

Seedling of Thomas Rivers. Glands reniform. Flowers small.

Fruit medium, bright red. Flesh melting, juicy, excellent. Freestone. July 12th to 16th. (Rivers' Cat.)

EARLY MALDEN.

Raised by James Dougall, Canada West. Flowers small. Leaves glandless.

Fruit medium, roundish, one side enlarged. Suture distinct on one side. Skin whitish, mostly shaded with red in the sun. Flesh white, juicy, melting, sprightly. Freestone. Middle of August.

EARLY NEWINGTON FREESTONE.

Newington Peach.
Early Newington.

Smith's Early Newington.
Smith's Newington.

This is a large and exceedingly high-flavored early Peach ; indeed we consider it without a superior at its season. It is quite distinct from the other Newingtons, which are clings and rather late, while this is early and generally parts from the stone, though it frequently happens that some of the fruit on the same tree adheres partially or wholly to the stone ; and this peculiarity (common, so far as we know, to but one other kind) is one of its constant characteristics. The tree is only a moderate bearer. Leaves with globose glands. Flowers small.

Fruit rather large, round, with a distinct suture, and one-half the fruit always the larger. Skin pale yellowish white, dotted and streaked with red, the cheek a rich red. Flesh white, but red at the stone, to which many particles adhere. If not fully ripe it has the habit of a cling. Flesh juicy, melting, with a rich vinous flavor. Ripens directly after the Early York, about the 24th of August.

EARLY RIVERS.

Glands reniform. Flowers large.

Fruit large, pale straw-color, with a delicate pink cheek. Flesh melting, remarkably rich and racy. Middle July. (Rivers' Cat.)

EARLY SILVER.

Raised by Thomas Rivers, in 1857, from seed of the White Nectarine. Glands reniform. Flowers large.

Fruit very large, roundish ovate, sometimes a nipple at the apex. Skin cream-color, with a slight blush in the sun. Flesh white, melting, juicy, brisk. Middle August. Freestone. (Hogg).

EARLY SWEET WATER.

Sweet Water.

Large American Nutmeg.

It is an American Peach, raised from a stone of the Early Anne. The tree is thrifty and productive, with pale shoots, and nearly white blossoms. Leaves with globose glands. Flowers large.

Fruit of medium size, sometimes large, roundish, with a slight suture. Skin pale white, very seldom with a faint blush when fully exposed. Flesh white, slightly stained at the stone, melting, juicy, sweet, and of very agreeable flavor. Ripe about the 8th of August. Stone small.

EARLY SWEET WATER (Prince's) is distinct from this, and, Mr. Prince says, equally valuable.

EARLY TILLOTSON.

The Early Tillotson was first introduced to notice by J. J. Thomas, of Macedon, Wayne Co. It is considered a native of that part of the State.

This has not succeeded well here, and most cultivators at the North have discontinued it. It mildews badly, grows slowly, and is not pro-

ductive. At the South it is one of their very best early peaches, and in many localities it has proved fine. Leaves deeply serrated, without glands. Flowers small.

Fruit of medium size, round. Skin nearly covered with red, the ground color, pale yellowish white, being thickly dotted with red, and the exposed cheek being a dark red. Flesh whitish, but red at the stone, to which, though a freestone, it partially adheres, melting, juicy, with a rich, highly excellent flavor. It ripens the middle of August.

EARLY VICTORIA.

Raised by Thomas Rivers, England. Much like its parent, Early York.

EARLY YORK.

Early Purple. Pourprée Hâtive. Serrate Early York.

The Early York has long been the most popular of early Peaches in this country. It is at least a week earlier than the (true) Royal George, more melting and juicy, though not quite so rich, and deserves a place in every garden. In unfavorable soil, the ends of the branches are a little liable to mildew; but the tree is very hardy and productive. There are one or two newer seedlings raised from this, and bearing the same name, in New Jersey, which are rather more thrifty for the orchard, but do not possess the high flavor of the old kind. They are easily known from it by the absence of glands in the leaves and by the large flowers of the true sort. It is quite distinct from the Red Rare-ripe, which is large, broader, deeply marked with a suture, later in ripening and richer flavored. Leaves serrated, without glands. Flowers large.

Fruit of medium size, roundish, inclining a little to ovate, with a slight suture only. Skin very thin, pale red, thickly dotted over a pale ground in the shade, but quite dark red in the sun. Flesh greenish white, remarkably tender and melting, full of rich, sprightly juice. Ripens about the 18th of August.

EASTBURN.

Eastburn's Choice.

American.

Fruit large, roundish, pale yellow, with red on the sunny side. Flesh yellowish, red near the stone, juicy. Freestone. September. (Elliott.)

EATON'S GOLDEN.

Origin, North Carolina. Glands reniform. Flowers large.

Fruit above medium, round. Suture shallow. Skin golden yellow, with occasionally a few faint pink spots near the base. Flesh golden yellow, sweet, juicy, with a marked apricot flavor. Clingstone. Ripe middle of September. (P. J. B., MS.)

ELIZA PEACH.

Origin, Philadelphia. Leaves large, with reniform glands.

Fruit medium, round, terminating in a nipple. Skin yellow, with a mottled red cheek. Flesh yellow, red at the stone. Last of September. Freestone.

ELMIRA CLING.

Originated with M. W. Phillips, Mississippi. Glands reniform. Flowers small.

Fruit large, oval, depressed. Suture rather shallow on one side. Skin white, with a greenish yellow tinge, quite downy. Flesh white, tinged with red at the stone, to which it adheres. Sweet and good. Early in August.

EMPEROR OF RUSSIA.

Cut-Leaved.	Serrated.	New Cut-Leaved.	Unique.
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A very rich and fine-flavored Peach, raised by Mr. Floy, in 1812. Its growth is slow, and its shoots are inclined to become mildewed. It is rather a shy bearer. The leaves are very deeply cut, or serrated on the edges. Leaves serrated, without glands. Flowers small.

Fruit large, roundish and broad, with one half more swollen than the other. Skin downy, dull yellowish white, with a dark-red cheek. Flesh yellowish white, rather firm, rich, and high-flavored. Last of August.

ERNOULT.

This is a singularly formed and colored Peach, from Belgium. Leaves with globose glands.

Fruit large, roundish, depressed. Suture shallow in the middle of the fruit, deeper at ends, and peculiarly wrinkled pit at apex. Skin downy, clear yellow, shaded with deep reddish purple in the sun. Flesh white, some red next the stone, melting, juicy, rich. Freestone. (An. Pom.)

EXQUISITE.

A variety that originated in Georgia. Glands globose. Flowers small.

Fruit large, roundish oval. Suture distinct. Nipple at apex. Skin yellow, mottled with crimson in the sun. Flesh deep yellow, red at stone, tender, melting, juicy, vinous. September.

FAVORITE.

Favorite Red.

A capital orchard fruit, of large size, hardy, and a most abundant bearer. It is a very good native Peach, though not of high flavor. Leaves with obscure globose glands, often with none. Flowers small.

Fruit large, oblong or oval. Skin white, rather downy, much covered with red, which becomes a very dark red when fully exposed in the sun. Flesh red at the stone, a little firm, but juicy, with a good, vinous, but not rich flavor. Second week in September.

FLATER'S ST. JOHN.

Yellow St. John.

A new variety, of Southern origin, said to be one of the most promising of the early varieties.

Fruit large, somewhat resembling Early Crawford, but deeper color. Flesh yellow, juicy, sweet. Freestone. Ripens a little before Early Tillotson. (R. R. Hunley, MS.)

FLEWELLEN CLING.

Fruit large, globular, depressed at the apex. Skin downy, yellowish white, mostly overspread with shades of red, dark dull purplish red in the sun, the lighter tints of red somewhat in stripes. Flesh yellowish white, red at the stone, to which it firmly adheres, very juicy, sweet, and high-flavored. A desirable early cling for the South. First of August.

FOX'S SEEDLING.

A good and productive late Peach, a native of New Jersey. Leaves with globose glands. Flowers small.

Fruit round, a little compressed. Cavity at the stalk narrow. Skin white with a red cheek. Flesh melting, juicy, sweet, and good. Middle of September. Freestone.

FREEMAN.

This Peach originated in South Pass, Ill., and was brought to notice by Parker Earle. It is there esteemed as highly valuable for late market, ripening considerably later than the Smock. Leaves with globose glands.

Fruit large, round, yellow, with red in the sun. Flesh yellow, red next the stone, juicy. Freestone.

FRUITLAND.

Fruitland Seedling.

A new variety, originated at Augusta, Ga.

Fruit large, obovate to a point, greenish white, with a pale mottled red cheek. Flesh greenish white, very juicy, vinous, a little red at the stone. Freestone. Early September. (P. J. Berckman's Cat.)

FULKERSON.

Fulkerson's Early.

Originated with R. P. Fulkerson, Ashland, O. Hardy and productive.

Fruit medium, obtuse, rounded. Sides irregular, unequal. Suture half round. Skin whitish, rich red cheek. Flesh whitish yellow, tinged with red at the pit, juicy, rich, sweet, and high-flavored. Freestone. 20th August. (Elliott.)

GAYLORD.

Originated by Dr. M. W. Phillips, Mississippi. Glands globose. Flowers small.

Fruit large to very large, round, with a sharp point. Skin roseate, with a red cheek. Flesh white, juicy, rich, and superior. Freestone. Ripe middle of August. (P. J. B., MS.)

GEORGE THE FOURTH.

This is certainly the most popular Peach for garden culture in the United States. It is large, bears regular and moderate crops, is of the highest flavor, and the tree is unusually hardy and vigorous, succeeding well in all parts of the country. No garden should be without it. The original tree stood in the garden of Mr. Gill, Broad Street, New York. Leaves large, with globose glands, often obscure. Flowers small.

Fruit large, round, deeply divided by a broad suture, and one half a little larger than the other. Skin pale yellowish white, finely dotted with bright red, and deepening into a rich dark-red cheek on one side. Flesh pale, marked with red at the stone (which is small), melting, very juicy, with a remarkably rich, luscious flavor. Ripens the last of August. Freestone.

GOODE'S OCTOBER.

Belongs to the Indian type. Origin, South Carolina.

Fruit large, round or slightly oblong. Skin white, veined with red, and quite downy. Flesh white, with red near the stone, very juicy, vinous subacid. Clingstone. Ripe early October. (P. J. B., MS.)

GORGAS.

Originated with Benjamin Gullis, Philadelphia. Growth vigorous. Leaf glandless. Flowers small.

Fruit rather large, roundish, with a small swollen point at the apex. Skin yellowish white, clouded and blotched with red on the exposed surface; dull greenish on the shaded parts. Suture indistinct. Flesh whitish, slightly stained at the stone, juicy. Freestone. Middle September.

GREAT EASTERN.

Origin, Fruitland Nursery, Augusta, Ga. A very large fruit. Glands globose. Flowers small.

Fruit very large, round, sometimes a little flattened. Skin greenish white, with a red cheek. Flesh white, juicy, and well-flavored. Ripe middle of July. (P. J. B., MS.)

GREGORY'S LATE.

A very late variety. Leaves with globose glands. Flowers small.

Fruit large, ovate, pointed. Skin pale green, with a dark red cheek. Flesh melting, vinous, sweet. Early October. Freestone. (Hogg.)

GREEN CATHARINE.

Origin uncertain. Glands globose. Flowers small.

Fruit large, roundish. Skin pale green, with a red cheek only when exposed to the sun. Flesh greenish white, red at the stone, very juicy, melting, and very good flavor. Freestone. Requires a warm season to bring it to perfection. Ripe from the first to middle of September.

GROSSE MIGNONNE.

Royal Kensington.	Neil's Early Purple.
Grimwood's Royal George.	Johnson's Early Purple.
————— New Royal George.	Mignonne.
Large French Mignonne.	Velouté de Merlet.
French Mignonne.	Pourprée de Normandie.
Swiss Mignonne.	La Royale.
Purple Avant.	Pourprée Hâtive.
Early Purple Avant.	Ronald's Seedling Galande.
Early May.	Royal Sovereign.
Early Vineyard.	Superb Royal.

The Grosse Mignonne is certainly the "world-renowned" of Peaches. It is everywhere esteemed as one of the most delicious of varieties. Leaves with globose glands. Flowers large.

Fruit large, roundish, always somewhat depressed, and marked with a hollow suture at the top. Skin pale greenish yellow, mottled with red, and having a purplish-red cheek. Flesh yellowish white, marked with red at the stone, melting, juicy, with a very rich, high, vinous flavor. Stone small, and very rough. Middle of August, before the Royal George. Freestone.

HAINES' EARLY RED.

An early Peach, originated in New Jersey, of very fine flavor, and so hardy and productive as to be a popular orchard fruit. Leaves with globose glands. Flowers small.

Fruit of medium size, round, depressed at the top, with a well-marked suture extending round the fruit, which is always one half larger than the other. Skin pale white, marked with red, and nearly covered with deep red. Flesh greenish white, very juicy, melting, sweet, and well-flavored. Middle of August.

HALE'S EARLY.

Early German.

This very early and profitable market Peach was originated in Summit Co., O., by a German, and was first distributed under the name Early German. The tree is quite hardy and productive, maturing the earliest of any good sort. Leaves with globose glands. Flowers large.

Fruit medium size, nearly round. Skin greenish, mostly covered and mottled with red when ripe. Flesh white, melting, juicy, rich, sweet. Freestone. Last of July.

HARKER'S SEEDLING.

Origin, New Jersey. Glands globose. Flowers small.

Fruit large, roundish, mostly covered with red. Flesh yellowish, sweet, juicy. Early September. Freestone. (Elliott.)

HASTINGS' RARERIPE.

Origin unknown. Globose glands. Flowers small.

Fruit above medium, round, often a little flattened. Skin yellowish white, having a purplish-red cheek on the sunny side, shaded off with specks of the same color. Productive, juicy, and of delicious flavor. Middle of September. Freestone.

HATCH.

Originated with S. O. Hatch, Franklin, Conn. Hardy and valuable at the North. Glands globose.

Fruit roundish, pointed. Suture shallow. Skin deep yellow blush in the sun. Flesh yellow, melting, sweet, and excellent. Freestone. First of September. (Cole.)

HÂTIVE DE FERRIÈRES.

An early French variety. Leaves without glands.

Fruit medium, roundish. Suture shallow; one side a little enlarged. Skin white, nearly covered with rich red. Flesh white, slightly tinged at the stone, juicy, melting, with a sweet, rich, vinous flavor. Freestone. Ripe last of August, just after Early York.

HEATH.

Heath Clingstone. Fine Heath. White English. Red Heath.

The most superb and most delicious of all late Clingstones. It seldom ripens in New England, but here, and to the southward, it is one of the most valuable kinds, of very large size, and the very finest flavor.

Coxe informs us that this is a seedling produced in Maryland from a stone brought by Mr. Daniel Heath from the Mediterranean; and it is frequently still propagated from the stone, without variation. The tree is vigorous, long-lived, and moderately productive; with the *shortening-in* mode of pruning, the fruit is always large and fine, otherwise often poor. This tree is well deserving of a place on the espalier rail, or wall, at the North. Leaves nearly smooth on the edges, with reniform glands. Flowers small.

Fruit very large, oblong, narrowing to both ends, and terminating at the top with a large swollen point; the suture distinct on one side. Skin downy, cream-colored white, with a faint blush or tinge of red in the sun, or a brownish cheek. Flesh greenish white, very tender and melting, exceedingly juicy, with the richest, highest, and most luscious flavor, surpassed by no other variety. It adheres very closely to the stone. It ripens in October, and frequently keeps for a month after being gathered.

HENRY CLAY.

A Southern Peach, introduced and described in the Horticulturist by Rev. A. B. Lawrence, Woodville, Miss.

Fruit very large. Skin deep purple in the sun, shading to bright

pink and creamy white. Flesh grayish white, delicate, tender, peculiar flavor, partaking slightly of pine-apple and strawberry. First of August; September at the North. Freestone.

HOFFNER.

Hoffner's Seedling.

Originated near Cincinnati, O. Glands globose.

Fruit medium to large, roundish. Skin greenish white, red in the sun. Flesh yellowish white, juicy. August. Freestone.

HONEY.

De Montigny.

This is undoubtedly a variety that reproduces itself from seed with great exactness. The one grown mostly in this country was raised by Charles Downing, many years since, from seed brought from China and presented to him.

Hogg describes a Honey as having originated at the "Jardin des Plantes," and from Chinese seed. Glands reniform. Flowers large.

Fruit small, oval, compressed, with a pretty deep suture along one side, and turning the point to the opposite side, giving it the appearance of a beak. Skin whitish yellow, washed and marbled with fine red in the sun. Flesh creamy white, fine, juicy, melting, with a peculiar honeyed, rich, delicious sweet flavor. Freestone. Last of August.

HORTON'S DELICIOUS.

Fruit large, roundish, inclining to oval, depressed at apex, point very small, and within the depression. Suture shallow. Skin moderately downy, of a rich creamy white, with a faint blush in the sun. Flesh white to the stone, with the exact flavor of a Heath Cling. From first to middle of October. (Clingstone.)

HULL'S ATHENIAN.

From Henry Hull, Jr., Athens, Ga.

Fruit very large, oblong, depressed at apex. Suture a mere line. Skin very downy, yellowish white, marbled with dull red in the sun. Flesh white, pale red at the stone, rather firm and rich. October. Clingstone.

HYSLOP.

Hyslop's Clingstone.

Origin unknown. An American variety, hardy and productive. Glands reniform. Flowers small.

Fruit large, roundish, inclining to oval. Skin white, with a crimson cheek. Flesh very juicy, melting, with a rich vinous flavor. Adheres to the stone. First of October.

INCOMPARABLE.

Pavie Admirable.

Late Admirable Cling.

Larger than the Catherine, which it resembles. Leaves with reniform glands. Flowers small.

Fruit large, roundish, one side enlarged. Skin pale yellowish white, light red on the exposed side. Flesh yellowish white, red at the stone, juicy, melting, and of agreeable flavor. Last of September.

JACKSON CLING.

Raised by Mrs. L. A. Franklin, Athens, Ga.

Fruit large, oblong, with a very large, swollen point. Skin rich dark yellow, covered with dark red in the sun. Flesh rather firm, orange yellow, and dark red at the stone; juicy, sprightly. Last of August.

JACQUES' RARERIPLE.

Jacques' Yellow Rareripe.

Origin, Massachusetts. A large yellow Peach of medium quality, and productive. Glands reniform. Flowers small.

Fruit large, roundish, compressed. Suture shallow. Skin dark yellow, mostly shaded with dull red. Flesh yellow, red at the stone, juicy, slightly subacid. Freestone. Middle of September.

JANE.

Baxter's Seedling, No. 1.

Irish Jane.

Origin, Philadelphia, Pa.

Fruit large, roundish oblate, greenish yellowish-white, with a red cheek. Good. Last of September. Freestone.

JONES' EARLY.

Raised by S. T. Jones, Staten Island, N. Y. Globose glands.

Fruit medium, roundish. Suture shallow, distinct, extending around the fruit. Skin yellowish white, tinged with pale red in the sun. Flesh yellowish white, slight red at the stone, juicy. Middle of August. Freestone.

JONES' LARGE EARLY.

Raised by S. T. Jones. Glands reniform.

Fruit large, roundish, flattened at each end. Suture deep, one half a little larger than the other. Skin delicate white, broadly shaded with deep crimson in the sun. Flesh white, pink at the stone, very juicy, rich, sprightly, and delicious. Freestone. Middle of August. (Hov. Mag.)

JOSE SWEET.

Glands globose. Flowers small.

Fruit medium, roundish. Suture deep. Skin greenish white, with a dull red cheek, juicy, delicious. Last September. Freestone.

JULIA.

Origin, South Carolina.

Fruit medium, white, with a slight red cheek. Flesh white, juicy, vinous. One of the best late sorts for the South. November. Freestone. (P. J. Berekman's Cat.)

KENRICK'S HEATH.

Freestone Heath.

Heath Free.

White Heath.

A large, showy, oblong Peach, often growing to the largest size, and a very hardy tree, but the quality of the fruit is only second-rate. This sort, which is a native of New England, is vigorous, and bears large crops. It is quite distinct from the celebrated Heath Cling. Leaves with reniform glands. Flowers small.

Fruit very large, oblong, with a slight suture, and a small swollen point at the top. Skin pale greenish white, with a purplish red cheek. Flesh greenish white, deep red at the stone, a little coarse, melting, quite juicy, with a pleasant subacid flavor. Middle of September.

LADY PALMERSTON.

One of Thomas Rivers' new varieties, and described by him as having reniform glands. Flowers small.

Fruit large, greenish yellow, marbled with crimson. Flesh pale yellow, melting. Very good. Ripe last of September.

LADY PARHAM.

Originated with Thomas Affleck. Glands reniform. Flowers small.

Fruit medium, roundish, one side larger than the other, depressed at the summit. Suture distinctly marked, the swollen point small. Skin yellowish white, downy. Flesh pale, red at the stone, firm, rich, vinous. Middle of October. Freestone.

LA GRANGE.

The La Grange is a white freestone Peach, of very late maturity, large size, and fine flavor. It was originated from seed in the garden of Mr. John Hulse, Burlington, N. J.

Its late period of maturity, its color, its productiveness, and size, have given it quite a reputation among the extensive growers of New Jersey, and it is undoubtedly a most valuable fruit, not only for the table, but for preserving at the most desirable period for this purpose, late in the season. Leaves with reniform glands. Flowers small.

Fruit large, oblong, shaped somewhat like the Heath Cling. Skin greenish white, with occasionally some red on the sunny side. Flesh pale, juicy, melting, very rich, sweet, high-flavored, and delicious. Last of September and beginning of October. Freestone.

LARGE EARLY YORK.

Honest John.

New York Rareripe.

A valuable variety, so much like Haines' Early and Walter's Early

that it is difficult to decide whether they are not identical. Leaves with globose glands. Flowers small.

Fruit above medium, roundish. Skin whitish, with marblings and dots of red, clear rich red-cheek in the sun. Flesh almost white, fine-grained, juicy, rich, mild, excellent. Freestone. Last of August.

LARGE WHITE CLINGSTONE.

New York White Clingstone.

Williamson's New York.

Selby's Cling.

The Large White Clingstone is one of the most popular of this class of Peaches. We think it superior to the Catherine and Old Newington, and only surpassed in flavor by the Oldmixon Cling and the Heath Cling.

This variety was raised by David Williamson, in New York. The light color and excellent quality of this fruit render it the greatest favorite for preserving in brandy or sugar. It bears regular and good crops. Leaves with globose glands. Flowers small.

Fruit large, round, the suture slight, and the swollen point at the top small. Skin white (inclining to yellow only when over-ripe), dotted with red on the sunny side, or with a light-red cheek when fully exposed. Flesh whitish, tender, very melting, full of juice, which is very sweet, luscious, and high-flavored. Beginning and middle of September.

LATE ADMIRABLE.

La Royale.

Pêche Royale

Téton de Venus.

French Bourdine.

Judd's Melting.

Motteux's.

Pourpree Tardive, } *incorrectly*

Late Purple, } *of some.*

"The Late Admirable" is one of those delicious sorts that, originating a long time ago in France, have received the approval of the best cultivators everywhere. It is hardy and productive in this climate. Leaves with globose glands. Flowers small.

Fruit very large, roundish, inclining to oval, with a bold suture dividing the fruit pretty deeply all round, and a small, acute, swollen point at the top. Skin pale yellowish green, with a pale red cheek, marbled with darker red. Flesh greenish white, but red at the stone, very juicy, melting, and of delicate, exquisite flavor. Middle of September.

LATE RED RARERIFE.

Prince's Red Rareripe.

This American fruit is one of the finest of Peaches. Its large size, and its productiveness and vigor, unite to recommend it to universal favor. The rather *grayish* appearance of the fruit serves to distinguish it, at first sight, from all others. Leaves with globose glands. Flowers small.

Fruit large and heavy, roundish oval. Suture depressed only at the top, where the swollen point is distinctly sunken. Skin downy, pale grayish yellow, thickly marbled and covered with reddish spots; the cheek dull, deep red, distinctly mottled with fawn-colored specks. Flesh white, but deep red at the stone, very juicy, melting, and of rich, high flavor. First to the 10th of September. Freestone.

LATE YELLOW ALBERGE.

October Yellow. Algiers Yellow. Algiers Winter.

A very late Clingstone, originally introduced from the South of France, but now abandoned. Leaves with reniform glands. Flowers large.

Fruit of medium size, roundish oval. Skin downy, green, becoming yellow. Flesh yellow to the stone, very firm, rather juicy, sweet October.

LEMON CLINGSTONE.

Kennedy's Carolina.	Long Yellow Pine-apple.
Kennedy's Lemon Clingstone.	Pine-apple Clingstone.
Largest Lemon.	Yellow Pine-apple.
Allison.	

The Lemon Clingstone is one of the largest and most beautiful of all the yellow-fleshed clings. It is originally a native of South Carolina. There are now many seedlings reproduced from it. This is a very productive, hardy tree. Leaves long, with reniform glands. Flowers small.

Fruit large, oblong, narrowed at the top, and having a large, projecting, swollen point, much like that of a lemon. Skin fine yellow, with a dark brownish-red cheek. Flesh firm, yellow, slightly red at the stone, adhering firmly, with a rich, sprightly, vinous, subacid flavor. Middle and last of September.

LENOIR.

Fruit medium, round, with one side projecting. Skin white, smooth, washed and splashed with red. Flesh white, juicy, perfumed. Freestone. Ripe middle August.

LEOPOLD I.

A Belgian Peach. Leaves serrated, with slight reniform glands. Flowers large.

Fruit large, roundish. Suture well marked. Skin downy, clear yellow, shaded with red in the sun. Flesh fine, melting, juicy. September. Freestone.

LINCOLN.

Origin, Lincoln, Mass. Very hardy and productive. Glands globose.

Fruit large, roundish. Suture large. Skin rich yellow, mostly covered with dark purplish red, much downy. Flesh yellow, with a tinge of red at the stone, juicy, of a very rich, sweet, and excellent flavor. Freestone. From first to last of September.

LORD PALMERSTON.

This is another of Thomas Rivers' new sorts, grown, as he says, from seed of the Princess of Wales, and resembling in size its grandparent, the Monstrous Pavie of Pomponne. Glands globose. Flowers large.

Fruit very large. Skin whitish, with a pink cheek. Flesh firm, yet melting, juicy, and rich. Middle to end of September.

LYON.

An accidental seedling, originating on the grounds of George Husman, Hermann, Mo.

Fruit rather large, round, somewhat irregular, largest on one side. Suture slight, marked with a red streak. Skin smooth, little down, yellowish white, nearly covered and marbled with beautiful red, becoming deep purple in the sun. Flesh veined with red, deep red at the stone, juicy, sweet, vinous. "One of the best among thirty of my varieties." Early August. Freestone. (Husman, MS.)

MADAME D'ANDRIMONT.

Originated in Belgium. Leaves glandless. Flowers large.

Fruit large, roundish, depressed at ends. Suture shallow. Skin downy, pale yellow, bright red in the sun. Flesh white, marbled with bright purple next the stone. August. Freestone. (Verg.)

MADELEINE DE COURSON.

Red Magdalen.
True Red Magdalen.

French Magdalen.
Rouge Paysanne.

Madeleine Rouge.

The Red Magdalen of Courson is a favorite old French Peach. Leaves serrated, without glands. Flowers large.

Fruit of medium size, or rather below it, round, flattened, with a deep suture on one side. Skin pale yellowish white, with a lively red cheek. Flesh white, slightly red at the stone, juicy, and melting, with a rich, vinous flavor. Middle and last of August. Freestone.

MALTA.

Pêche Malte.

Malte de Normandie.

Italian.

Belle de Paris.

An old European Peach. The tree is not a great bearer. The fruit of the Malta keeps well after being gathered. Leaves serrated, without glands. Flowers large.

Fruit of rather large size, roundish, flattened, with a broad, shallow suture on one side. Skin pale dull green, marked on the sunny side with broken spots and blotches of dull purple. Flesh greenish, with a little dark red at the stone, very juicy and melting. Last of August. Freestone.

MERRIAM.

Glands globose.

Fruit very large, short oval. Skin light yellow, bright red cheek. Flesh yellow, red at the stone, melting, very juicy, of a sweet luscious flavor. First of October. (Cole.)

MIGNONNE DUBARLE.

Glands globose. Flowers large.

Fruit of medium size, roundish, inclining to oval. Nipple at apex. Suture distinct. Skin nearly covered with bright red in the sun. Flesh tender, melting, juicy, rich. Middle August. Freestone. (Hogg.)

MRS. HUNLEY.

Origin, Fruitland Nursery, Augusta, Ga. Glands reniform. Flowers small.

Fruit medium to large, one-sided, pale yellow, with occasionally a little red near the base. Flesh yellow, rich, melting. Ripens last of September. (P. J. B., MS.)

MRS. POINSETTE.

Origin, South Carolina. Tree vigorous and productive. Globose glands.

Fruit large, globular, with a regular suture. Skin yellowish, inclining on the exposed side to a brownish tint, veined with red. Flesh of rich yellow, juicy, melting, and of first quality, partially adherent. Ripens from 1st to 12th of August in South Carolina. (William Summer.)

MONTGOMERY'S LATE.

Southern origin. Glands reniform. Flowers large.

Fruit large, round, depressed at apex. Suture shallow, but distinct. Skin downy, yellowish white, dotted with red, and having a dull red cheek. Flesh pale white, red at the stone, very juicy, melting. Ripens the first of September, continues nearly all the month. Freestone.

MOLDEN'S WHITE.

Origin, Molden Mountain, on the Chesapeake. A fine white Peach, valuable for its lateness. Glands reniform. Flowers small.

Fruit large, roundish oval. Suture distinct. Skin creamy white, rarely with a tinge of red. Flesh white to the stone, juicy, sweet, melting. Ripe last of September. Freestone.

MOORE'S FAVORITE.

Origin, garden of H. R. Moore, Chelsea, Mass. Tree hardy, vigorous. Glands globose.

Fruit large, roundish. Suture round the fruit. Skin white, with a broad, bright bluish. Flesh white, fine, juicy, of a rich vinous flavor. Stone small, free. September 1st to 15th. (Cole.)

MOORE'S JUNE.

Origin, Athens, Ga. Glands reniform. Flowers small.

Fruit below medium, globular. Suture shallow. Skin yellowish, with red dots and marblings, and deep red in the sun. Flesh white, marbled with red from the skin to the stone in the darker-colored ones, but red only at the stone where grown in the shade; juicy, vinous. Last of June and first of July. Freestone.

MORRISANIA POUND.

Hoffman's Pound.

Morrison's Pound.

A very large variety, originated many years ago, by Martin Hoffman, but first disseminated from the garden of Gouverneur Morris, of

Morrisania, near New York. It is a good fruit, but its place has been taken, of late, by other more popular sorts. Leaves with globose glands. Flowers small.

Fruit very large and heavy, nearly round. Skin dull greenish white, with a brownish-red cheek. Flesh pale yellow, firm, juicy, sugary, and rich in flavor. Ripens the middle and last of September. Freestone.

MORRIS'S RED RARERIPE.

Morris Red.

Red Rareripec.

Large Red Rareripec.

This very popular and well-known American Peach has been justly esteemed for its acknowledged good flavor, beauty, and productiveness. Leaves with small globose glands. Flowers small.

Fruit large, roundish, a little depressed at the top, with a moderately well-marked suture. Skin fine pale greenish white, a little dotted, and with a lively, rich red cheek. Flesh pale greenish white, quite red at the stone, very melting and juicy, with a sweet and rich flavor. Last of August. Freestone.

MORRIS'S WHITE RARERIPE.

Morris's White.

White Rareripec.

Luscious White Rareripec.

Lady Ann Steward.

White Melocoton

Cole's White Melocoton.

Freestone Heath

Morris's White Freestone.

Morris's White Rareripec, a native, is the most popular and well-known white Peach, and is everywhere cultivated in this country, either under this or some of the other names quoted above. It is a rich fruit in a warm climate, but is not quite so high flavored at the North or East. The tree is vigorous and healthy, and bears fair crops. In some sections tender and variable in quality. Leaves with reniform glands. Flowers small.

Fruit rather large, oval. Suture only of moderate depth, swollen point small. Skin rather downy, greenish white on all sides at first, but white with a creamy tint when fully ripe, and, when fully exposed, sometimes with a slightly purple cheek. Flesh white to the stone, a little firm, melting juicy, sweet, and rich. Middle of September.

NAPOLÉON.

Supposed to have originated near Macon, Ga. Glands reniform. Flowers small.

Fruit medium to large, round, very downy. Skin almost dark red. Flesh pink, veined with red, juicy, rich. Freestone. Ripens last of July. (P. J. B., MS.)

NECTARINE PEACH.

Raised from stone of a Dutch Nectarine, by Thomas Rivers. Glands reniform. Flowers large.

Fruit large. Skin smooth. Flesh melting, rich, peculiar, fine flavor
Middle September. (Rivers' Cat.)

NIVETTE.

Nivette Veloutée.

Veloutée Tardive.

Dorsetshire.

The Nivette is an excellent French variety, much resembling the Late Admirable. Leaves with globose glands. Flowers small.

Fruit large, roundish, inclining to oval. Suture shallow, and the top slightly depressed. Skin pale green, with a lively red cheek. Flesh pale green, but deep red at the stone, juicy, melting, and very rich. Beginning and middle of September.

NOBLESSE.

Vanguard.

Mellish's Favorite.

Lord Montague's Noblesse.

An English Peach, esteemed wherever known, as one of the largest and most valuable varieties. Leaves serrated, without glands. Flowers large.

Fruit large, roundish oblong, a little narrowed at the top, and terminated by an acute swollen point. Skin slightly downy, pale green throughout, marked on the cheek with delicate red, clouded with darker red. Flesh pale greenish white to the stone, melting, very juicy. Last of August. Freestone.

OLDMIXON CLINGSTONE.

Oldmixon Cling.

The Oldmixon Clingstone is certainly one of the highest flavored of all Peaches known in this country, where it is raised in perfection, and should have a place in every good garden. Indeed we consider this, the Large White Cling, and the Heath Cling, as being the sorts among the most desirable of this class of Peaches for small collections. Leaves with globose glands. Flowers small.

Fruit large, roundish oval. The suture distinct only at the top, on one side of which the fruit is slightly enlarged. Skin yellowish white dotted with red, or with a red cheek, varying from pale to lively red. Flesh pale white, very melting and juicy, with an exceedingly rich, luscious, high flavor. First of September.

OLDMIXON FREESTONE.

Oldmixon Clearstone.

A large American Peach, of late maturity and rich flavor. It was, we believe, raised either from a stone of the Catherine Cling or the Oldmixon Cling, the latter having been brought to this country many years ago by Sir John Oldmixon. It bears good crops, and is a valuable variety for market or garden. Leaves with globose glands. Flowers small.

Fruit large, roundish or slightly oval, one side swollen, and the suture visible only at the top. Cavity but slightly sunk at the stalk. Skin pale yellowish white, marbled with red, the cheek a deep red. Flesh white, but quite red at the stone, tender, with an excellent rich sugary, and vinous flavor. Beginning of September.

OLD NEWINGTON.

Newington. Large Newington.

A celebrated English Clingstone, which has been in cultivation more than two hundred years, and still is perhaps the best in the English climate. Although excellent, it is not so generally esteemed here as the Large White Cling and Oldmixon Clingstone. Leaves serrated, without glands. Flowers large.

Fruit large, roundish, the suture slight. Skin pale yellowish white, with a fine red cheek, marked with streaks of darker red. Flesh pale yellowish white, deep red at the stone, to which it always adheres very firmly; melting, juicy, and rich. Ripens about the 15th of September.

ORANGE CLINGSTONE.

The Orange Cling is a very large, handsome, and excellent fruit, somewhat resembling the Lemon Cling in color, but globular in form, rather richer in flavor, and quite a distinct sort. Leaves large, serrated, without glands. Flowers small.

Fruit large, round, the suture distinctly marked, and extending nearly round the fruit, swollen point at the top, none. Skin deep orange, with a rich dark-red cheek. Flesh dark yellow, rather firm, juicy, with rich, vinous flavor. September.

OSCEOLA.

Origin, Macon Co., Ga. Belongs to the Indian type. Flowers large.

Fruit medium, round. Suture medium, golden yellow, with an orange cheek, and a few reddish veins. Flesh yellow, stained and streaked with dull red, sweet, pleasant. Freestone. Last of September.

OWEN.

Owen's Lemon Rareripe.

Origin, garden of J. Owen, Cambridge, Mass. Glands globose. Flowers small.

Fruit large, roundish. Suture large. Skin rich yellow, mostly covered with dark red or purplish red in the sun. Flesh yellow, red at the stone, tender, very juicy, of a delicious saccharine and slightly sub-acid flavor. Freestone. Middle to last of September.

There is another OWEN, originated in Habersham Co., Ga., which is described as having globose glands.

Fruit medium. Skin creamy white, downy. Flesh white to the stone, juicy, melting, sweet, and rich. Freestone. September.

PAVIE DE POMPONE.

Monstrous Pomponne.

Pavie Rouge de Pomponne.

Monstrous Pavie.

Pavie Camu.

Pavie de Pomponne Grosse.

Gros Melocoton.

Pavie Monstrueux.

Gros Persique Rouge.

A large old French Clingstone. The fruit is very solid in flesh. The tree is of very strong growth. Leaves with reniform glands. Flowers large.

Fruit very large, roundish oval, with a well-marked suture extending to the top, and terminating there in an obtuse swollen point. Skin yellowish white, a good deal covered with the broad very deep red color of its cheek. Flesh firm, yellowish white, deep red at the stone, to which it adheres very firmly, and which is rather small, juicy. Flavor sweet and good. First of October.

PICQUET'S LATE.

Originated with Antoine Picquet, Bell Air, Ga. Glands reniform. Flowers large.

Fruit large to very large, round, sometimes a little flattened and one-sided. Skin yellow, with a red cheek. Flesh yellow, melting, sweet, rich, and perfumed. Very good. Freestone. Early September. (P. J. B., MS.)

POOLE'S LARGE YELLOW.

Poole's Late Yellow Freestone.

A very large Peach, of the Melocoton family. Leaves with reniform glands.

Fruit large, roundish, with suture. Skin deep yellow, dark-red cheek. Flesh yellow, but red at the stone, juicy. Last of September. Freestone.

PRESIDENT.

One of the best of our Peaches, and a capital variety. Originated, several years ago, on Long Island. Leaves with globose glands. Flowers small.

Fruit large, roundish oval, the suture shallow. Skin very downy, pale yellowish green, with a dull red cheek. Flesh white, but deep red at the stone, very juicy, melting, rich, and high-flavored. Stone very rough. Middle of September. Freestone.

PRESIDENT CHURCH.

Raised by the Rev. A. Church, President of Franklin College, Ga. Glands reniform.

Fruit large, roundish, inclining to oval. Suture shallow, often a mere line, with a small point at the apex, which is rarely depressed. Skin pale red in the shade, beautifully mottled and washed with dark red in the sun. Flesh white, pale red at the stone, very juicy, melting. Freestone. Ripe middle September.

PRINCE OF WALES.

A late Peach grown from seed of Pitmaston Orange Nectarine, by Thomas Rivers, England. Glands reniform. Flowers small.

Fruit very large, roundish, rather flattened. Skin downy, green in shade, but dark red in sun. Flesh greenish white, stained with red next the stone, tender, melting, juicy. Middle September. Freestone. (Hogg.)

PRINCE'S CLIMAX.

Originated on the farm of George Mitchell, Flushing, Long Island; very productive.

Fruit large, oval. Skin yellow, with a crimson cheek, and two thirds mottled with crimson. Flesh yellow, very rich, aromatic, pine apple flavor; adheres to the stone. Ripens the middle and end of September.

PRINCE'S EXCELSIOR.

Originated with William R. Prince, Flushing, Long Island.

Fruit large, round. Suture slight, little abortive mamelon. Skin creamy white, shaded with crimson. Flesh yellow, rich, aromatic, sweet and rich; separates freely from the stone. Ripens middle of October.

PRINCE'S PARAGON.

Tree very vigorous and very productive.

Fruit large, oval. Skin yellowish green, shaded with red. Flesh juicy, luscious, and fine flavor. Separates from the stone. Ripens about the middle of September. (Wm. R. Prince, MS.)

PRINCESS OF WALES.

Raised by Thomas Rivers, from seed of Pavie de Pomponne. Glands globose. Flowers large.

Fruit very large, round, terminated by a nipple. Skin cream-colored, very slightly shaded with blush. Flesh melting, juicy, rich, deep red at the stone. Freestone. October. (Hogg.)

PUCELLE DE MALINES.

A foreign variety not much known here. Leaves without glands. Flowers large.

Fruit large, round. Suture distinct. Skin downy, yellow, becoming red in the sun. Flesh yellowish white, stained with red round the stone, melting, juicy, sweet. Early September. Freestone.

RAY.

Originated by Dr. H. Ray, of Yallobusha Co., Miss. Glands reniform.

Fruit medium, roundish, with a nipple. Skin cream white, spotted with purple. Flesh juicy. Late in August. South. (Gar. Mon.)

RAYMACKERS.

A foreign variety. Leaves serrated.

Fruit large, round. Suture deep at ends. Skin downy, clear yellow, largely colored with carmine. Flesh white, melting, vinous. Sept. Freestone. (Alb. Pom.)

RED-CHEEK MELOCOTON.*

Malagatune.
Malacatune.
Hogg's Melocoton.

Yellow Malocoton.
Yellow Malagatune.
Red Cheek Malocoton.

The Melocoton (or Malagatune, as it is commonly called) is almost too well known to need description. Almost every orchard and garden in the country contains it, and hundreds of thousands of bushels of the fruit are raised and sent to market in this country every year. It is a beautiful and fine fruit in favorable seasons, though in unfavorable ones the acid frequently predominates somewhat in its flavor. It is an American seedling, and is constantly reproducing itself under new forms, most of the varieties in this section having, directly or indirectly, been raised from it; the finest and most popular at the present time being Crawford's Early and Late Melocotons, both greatly superior, in every respect, to the original Melocoton.

Pettit's Imperial, Middleton's Imperial, Scott's Nonpareil, and Tice, are seedlings of this variety, but not sufficiently distinct and valuable to merit cultivation. Leaves with globose glands. Flowers small.

Fruit large, roundish oval, with a swollen point at the top. Skin yellow, with a deep red cheek. Flesh deep yellow, red at the stone, juicy, melting, with a good, rich, vinous flavor. First of September. Freestone.

RED NUTMEG.

Avant Rouge.
Avant Pêche de Troyes.

Red Avant.
Brown Nutmeg.

Early Red Nutmeg.

The Red Nutmeg is a very small and inferior Peach, which has long been cultivated solely on account of its earliness. It is now seldom seen in our gardens, being abandoned for better sorts. It is desirable, however, in a complete collection. The tree grows slowly, and is of dwarf habit. Leaves small, with reniform glands. Flowers large.

Fruit small, roundish, with a distinct suture, terminating in a small, round, swollen point at the top. Skin pale yellow, with a bright, rich red cheek. Flesh yellowish white, red at the stone, with a sweet and rather pleasant flavor. Middle and last of July. Freestone.

RED RARERIPE.

Large Red Rareripe, of some.

Early Red Rareripe.

This Peach strongly resembles the Royal George, and we believe it an American seedling from that variety, which is, however, distinct, and superior in flavor.

It must be observed, that this is totally different both from the *Early York* and *Morris's Red Rareripe*, with which it is often confounded by some. The fruit is larger, broader, and a week later than the first; and its serrated leaves, and different flavor, separate it widely from the latter. Ends of the branches sometimes slightly mildewed. Leaves serrated, without glands. Flowers small.

* *Melocoton* is the Spanish for Peach.

Fruit rather large, globular, but broad, depressed, and marked with a deep, broad suture, extending nearly round the whole fruit. Skin white, mottled, and marked with numerous red dots, and the cheek of a rich dark red. Flesh whitish, but red at the stone, melting, juicy, very rich and high-flavored. Middle and last of August. Freestone.

REEVES' FAVORITE.

Raised by Samuel Reeves, Salem, N. J. A hardy and productive kind. Glands globose. Flowers small.

Fruit large, roundish, inclining to oval, with a swollen point. Skin yellow, with a fine red cheek. Flesh deep yellow, red at the stone, juicy, melting, with a good, vinous flavor. Freestone. Middle of September.

REINE DES VERGERS.

Monstrueuse de Doue.

Orchard Queen.

An old French Peach but little known in this country. Leaves with reniform glands. Flowers small.

Fruit large, roundish, narrowing a little at stem end. Suture nearly round. Skin whitish, mostly covered with dull deep purplish red in the sun. Flesh whitish red at the stone, juicy, melting, vinous. Last September. Freestone.

RIVERS' EARLY YORK.

Leaves with globose glands. Flowers large.

Fruit medium. Skin marbled with red. Flesh melting, juicy, Nectarine flavor. Not liable to mildew. Early August. Freestone. (Rivers' Cat.)

RODMAN'S RED.

Rodman's Cling.

An American Clingstone, not of the richest quality but very showy for market. Leaves with reniform glands. Flowers small.

Fruit large, roundish oblong. Skin mostly covered with fine red. Flesh white, juicy, rather firm, vinous. Last of September.

ROSE AROMATIC.

Originated with J. F. Nesmith, Indian Town, S. C.

Fruit medium, oblong. Suture distinct, one side enlarged. Skin yellow with dark orange cheek, washed with red, very downy. Flesh white, red near the stone, rather dry, with a peculiar rose aromatic perfume. Freestone. Ripe last of July. (P. J. B., MS.)

ROSEBANK.

Raised by James Dougall, Windsor, Canada West. Tree healthy, moderate bearer.

Fruit large, round. Suture deep. Skin greenish white, with a beautiful dark red mottled cheek. Flesh whitish, juicy, melting, rich, and excellent. Separates from the stone. Last of August.

ROYAL CHARLOTTE.

New Royal Charlotte.	Lord Fauconberg's Mignonne.
Grimwood's Royal Charlotte.	Madeleine Rouge Tardive.
New Early Purple.	Madeleine Rouge à Moyenne Fleur.
Lord Nelson's.	Madeleine à Petite Fleur.

A very excellent Peach, and a favorite variety with all European gardeners. Its leaves are more coarsely and deeply serrated than those of other varieties. Leaves serrated, without glands. Flowers small.

Fruit rather large, inclining to ovate, being rather broader at the base than at the top; the suture of moderate size. Skin pale greenish white, with a deep red marbled cheek. Flesh white, but pale red at the stone; melting, juicy, rich, and excellent. Beginning of September. Freestone.

ROYAL GEORGE.

Early Royal George.	Red Magdalen.
Millet's Mignonne.	Madeleine Rouge à Petite Fleur
Lockyer's Mignonne.	French Chancellor, incorrectly, of some.
Griffin's Mignonne.	Early Bourdine, " "
Superb.	Double Swalsh, " "

Few of the early Peaches surpass in flavor and beauty the Royal George. It is one of the finest European varieties. It is a regular and moderate bearer. Leaves serrated, without glands. Flowers small.

Fruit above the middle size, or rather large, globular, broad, and depressed, the suture deep and broad at the top, and extending round two-thirds of the fruit. Skin pale or white, thickly sprinkled with red dots, and the cheek of a broad, rich, deep red, slightly marbled. Flesh whitish, but very red at the stone, melting, juicy, very rich, and of the highest flavor. From the 20th to the last of August. Freestone.

SCOTT'S EARLY RED.

Scott's Early Red is a variety of a very excellent flavor, and a prolific bearer, which was received from New Jersey. Leaves with obseure globose glands. Flowers small.

Fruit of medium size, roundish, a little depressed, the suture distinctly marked, but not deep. Skin pale greenish white, but much covered with red, which is mottled with fawn-colored dots. Flesh whitish, very juicy, with a rich and luscious flavor. Middle of August. Freestone.

SCOTT'S MAGNATE.

A noble variety of the Red Rareripe. Glands reniform.

Fruit very large, round, depressed. Skin pale yellow, with a dark-red cheek. Flesh white, luscious, and well-flavored. Ripens early in September. (Prince's MS.)

SCOTT'S NECTAR.

Another very fine seedling from the Red Rareripe. Glands globose.

Fruit large, round, somewhat depressed. Color red shaded on pale yellow ground, and bright red next the sun. Flesh white, very sweet, and of the highest flavor. Ripens early in September. (Prince's MS.)

SCOTT'S OCTOBER.

Originated with Jacob C. Lyons, Columbia, S. C.

Fruit medium to large, pale dingy lemon yellow. Flesh firm, with a lemon flavor. Last of October. Clingstone. (Sumner, MS.)

SHANGHAE.

Trees of this variety and Chinese Cling were sent to this country by the late Mr. Winchester, while British Consul at Shanghai. Tree vigorous. Glands reniform. Flowers large.

Fruit large, oval, truncate. Suture distinct, extending from the base to beyond the apex, deepening very much at the apex, so as to form quite a cavity. Skin greenish yellow, quite downy, sometimes a little mottled or shaded with pale red. Flesh greenish yellow, very melting, juicy, adhering to the stone, with a high, vinous flavor. Ripens from first to middle of September. At the South, last of July and first of August.

SMITH'S FAVORITE.

Grown by Calvin Smith, Lincoln, Mass. Glands reniform.

Fruit large, roundish. Suture deep. Skin yellow, mostly covered with deep rich red. Flesh yellow, juicy, sweet. Freestone. Middle to last of September. (Cole.)

SMITH'S NEWINGTON.

Early Newington. Smith's Early Newington. Early Newington.

This is one of the best early Clingstone Peaches. The Early Newington of our gardens as generally known (see Early Newington Freestone), is earlier and a very much finer variety, with reniform glands; being a partial Clingstone, but most frequently parting from the flesh, has quite supplanted it. Leaves serrated, without glands. Flowers large.

Fruit middle-sized, rather oval, narrower at the top, and one half a little enlarged. Skin pale straw-color, with a lively red cheek streaked with purple. Flesh firm, pale yellow, but light red at the stone, to which it adheres closely; juicy, and of very good quality. Last of August.

SMOCK FREESTONE.

St. George.

This was originated by Mr. Smock, of Middleton, N. J. Leaves with reniform glands.

Fruit large, oval, narrowed towards the stalk, and rather compressed on the sides. Skin light orange yellow, mottled with red, or often with a dark-red cheek when fully exposed. Flesh bright yellow, but red at the stone, moderately juicy and rich. Ripens last of September and first of October.

SNOW.

The snow Peach is a remarkably fair and beautiful fruit, of American origin. The fruit and blossoms are white, and the foliage and wood of a light green. Leaves with reniform glands. Flowers small.

Fruit large, globular. Suture faintly marked, except at the top.

Skin thin, clear, beautiful, white on all sides. Flesh white to the stone, juicy and melting, with a sweet, rich, and sprightly flavor. Beginning of September. Freestone.

STEPHENSON CLING.

From Thomas Stephenson, Clark Co., Ga.

Fruit large, roundish. Suture distinct. Skin very downy, of a creamy tint, shaded with flesh-color—the tint deepening in the sun to a dark, dull, purplish red where fully exposed. Flesh white, somewhat tinged with red, and deep red at the stone. Flesh very tender, melting, juicy. September first.

STETSON'S SEEDLING.

Raised by N. Stetson, Bridgewater, Mass. Globose glands. Flowers small.

Fruit large, roundish. Suture indistinct. Skin greenish white, marbled and shaded with crimson in the sun. Flesh white, pink at the stone, very melting, juicy, brisk, rich. Freestone. Ripens from middle to last of September. (Hov. Mag.)

STRAWBERRY.

Rose.

The Strawberry Peach we received from the late Thomas Hancock, of Burlington, N. J. It is esteemed one of the very finest early varieties for orchard culture in that State. It is quite distinct from the Early York. Leaves with reniform glands. Flowers small.

Fruit of medium size, oval, the cavity at the stem deeply sunk, the suture extending half round. Skin marbled with deep red over almost the whole surface. Flesh whitish, melting, juicy, rich, and of very delicious flavor. Middle of August.

STUMP THE WORLD.

A native of New Jersey, large and showy, and profitable for market growing. Flowers small. Glands globose.

Fruit very large, roundish, a little oblong. Skin creamy white, with a bright red cheek. Suture shallow, rather more than half round. Flesh white, juicy, and high-flavored. Last of September. Freestone.

STURTEVANT.

Raised from seed by E. T. Sturtevant, Cleveland, O., in 1826. It is one of, if not the, best yellow-fleshed Peaches grown.

Fruit medium or above, roundish, compressed. Broad shallow suture half round, followed by a dark line. Skin downy, rich yellow, mostly covered with dark rich red, very dark in the sun. Flesh yellow, red at the stone. Stone very small. Freestone. Last of August to first of September. (Elliott.)

SUMNER'S EARLY.

Fruit medium to large, beautiful blush. Flesh white, firm, bears

transportation well. Early and valuable for market. Freestone. (Sumner's MS.)

SUMNER'S WHITE FREE.

From South Carolina. Flowers large.

Fruit large, nearly round, slightly depressed. Sides unequal. Suture large, half round. Skin whitish green, a shade of red in sun, downy. Flesh white to the stone, juicy, sweet. Last of August, early September.

SUSQUEHANNA.

Griffith Malacotune.

Griffith.

Griffith Mammoth.

Originated with Mr. Griffith, on the banks of the Susquehanna. A large, handsome fruit, and a favorite in that section.

Fruit large, nearly globular. Suture half round. Skin rich yellow, with a beautiful red cheek, nearly covering the whole surface. Flesh yellow, sweet, juicy, with a rich vinous flavor. Ripens from the first to the middle of September. Freestone.

TINLEY'S OCTOBER.

Origin, Macon, Ga. Glands reniform. Flowers large.

Fruit medium, slightly oblong, white, with a light wash of red. Flesh white, juicy, vinous, very good. Ripe middle of October. (P. J. B., MS.)

TIPPECANOE.

Hero of Tippecanoe.

A large and handsome Clingstone, originated by George Thomas, of Philadelphia. Its lateness and beauty render it a valuable kind. Leaves with reniform glands. Flowers small. The shoots dark purplish red.

Fruit very large, nearly round, a little compressed on the sides. Skin yellow, with a fine red cheek. Flesh yellow, juicy, with a good vinous flavor. It ripens from the 20th to the last of September.

TITUS.

Originated with Mrs. Sarah Titus, Philadelphia.

Fruit large, roundish. Skin fair yellow, with a rich cheek. Flesh yellow, red next the stone, juicy. Maturity middle to last of September. Freestone.

TROTH'S EARLY RED.

A New Jersey Peach, valued as an early sort, profitable for market. Glands globose. Flowers small.

Fruit medium, roundish. Skin whitish, bright red in the sun. Flesh white, red at the stone, juicy, sweet. Freestone. Ripens early in August.

TUFTS' RARERIPE.

Originated with Bernard Tufts, Billerica, Mass. Very hardy, vigorous, and productive. Glands globose.

Fruit medium, roundish. Skin yellowish, with a bright red cheek. Flesh yellow, melting, very sweet and luscious. Freestone. Middle to last of September. (Cole.)

VAN BUREN'S GOLDEN DWARF.

An accidental seedling found in the grounds of J. Van Buren, Clarks-ville, Ga. The habit of this is somewhat dwarfed, and it is well suited for pot culture. Flowers small.

Fruit medium, roundish ovate, pointed at apex. Skin golden yellow, with a crimson cheek in sun. Flesh yellow, firm, juicy, sprightly. Clingstone. September to early October.

VAN ZANDT'S SUPERB.

Originated in the garden of R. B. Van Zandt, Long Island. Flowers small.

Fruit medium size, oval. Skin nearly smooth, white, delicately marbled with red, giving it a waxen hue; the beauty and smoothness of the skin approximate in appearance to that of a nectarine. Flesh melting and delicious; separates from the stone. Ripens in August.

WALBURTON ADMIRABLE.

An English variety, which is found very good here. Flowers small.

Fruit large, roundish. Suture medium. Skin greenish white, finely shaded with dark red in the sun. Flesh white, a little stained at the stone, juicy, melting, with a rich sweet flavor. Middle and last of September. Freestone.

WALTER'S EARLY.

Walter's Early is esteemed as one of the most popular early varieties for orchards in New Jersey, where it originated. It is remarkably well adapted to the light sandy soil of that State, bearing abundant crops of excellent fruit. Leaves with globose glands. Flowers small.

Fruit large, roundish. Skin white, with a rich red cheek. Flesh whitish, a little touched with red at the stone, melting, juicy, sweet, and of very agreeable flavor. Ripens about the 20th of August.

WARD'S LATE FREE.

A fine late American variety, vigorous and productive, valuable for market. Glands reniform. Flowers small.

Fruit rather large, roundish, inclining to oval. Skin white, with a beautiful crimson cheek. Flesh white, slightly tinged with red at the stone, juicy, melting, rich, and excellent. Freestone. First of October.

WASHINGTON.

Washington Red Freestone.

The Washington is a handsome and very delicious Peach, of American origin. It was named and first introduced to notice by Michael Floy,

New York. The fruit ripens late ; the tree is vigorous, hardy, and productive, and it is altogether a valuable variety. Leaves with globose glands. Flowers small.

Fruit large, broad, depressed, with a broad, deep suture extending nearly round it. Skin very thin, yellowish white, with a deep crimson cheek. Flesh pale yellowish white, very tender, juicy, and melting, with a sweet, rich, and luscious flavor. It often adheres slightly to the stone, which is quite small. Middle of September. Freestone

WASHINGTON CLINGSTONE.

An American variety, juicy and sweet. It is neither handsome nor prepossessing externally. Leaves with reniform glands. Flowers small.

Fruit of medium size, roundish. Skin yellowish green, marked with gray specks, and with a slight tinge of red on the sunny side. Flesh very juicy, tender, and melting, with a very sweet and luscious flavor. Last of September.

WHITE BALL.

Originated in Massachusetts. Leaves with reniform glands. Flowers large.

Fruit medium, roundish, slightly depressed. Suture medium, half round. Skin greenish white, shaded and marbled with red in the sun. Flesh white to the stone, juicy, melting, sweet. Early September. Freestone.

WHITE-BLOSSOMED INCOMPARABLE.

White Blossom.

Willow Peach.

This is a native fruit, of second quality, much inferior both in flavor and appearance to the Snow Peach. Leaves with reniform glands. Flowers large, white.

Fruit large, oval. Skin fair, white throughout. Flesh white to the stone, melting, juicy, pleasant. September.

WHITE IMPERIAL.

The White Imperial is a fruit of most estimable quality. This fine Peach originated in the garden of David Thomas, of Cayuga Co., N. Y., long known for his skill and science as an amateur horticulturist. Leaves with globose glands. Flowers small.

Fruit rather large, broad, depressed, hollowed at the summit, with a wide, deep cavity at the stem ; the suture moderately deep, and the fruit enlarged on one of its sides. Skin yellowish white, with only a slight tinge of red next the sun. Flesh nearly white, very melting and juicy, of a very delicate texture, and the flavor sweet and delicious. Ripens last of August. Freestone.

WHITE MAGDALENE.

Madeleine Blanche.

Madeleine Blanche de Loisel.

Montagne Blanche.

A foreign variety. Leaves without glands. Flowers large.

Fruit medium, roundish, flattened at base. Suture deep. Skin

slips easily from the flesh, yellowish white in the shade, marked with red in the sun. Flesh white, with yellowish veins, and red next the stone. Juicy, melting, sweet, vinous. Ripe middle August. Freestone.

WHITE NUTMEG.

Early White Nutmeg.

The White Nutmeg is the smallest of Peaches, the flavor is inferior, and it is only esteemed by curious amateurs as ripening a few days earlier than any other variety. Leaves serrated, without glands. Flowers large.

Fruit very small, rather oval, with a deep suture extending a little more than half round. Skin white, or rarely with pale blush. Flesh white to the stone, with a sweet and slightly musky, pleasant flavor. Ripens about the 10th or 15th of July. Freestone.

WHITE PACE.

A Southern Peach, a variety of the Indian or Pace Peach, but with a comparatively white skin. Flesh yellowish, juicy, sweet. August. Freestone.

VIOLET HÂTIVE.

English Galand.

Hardy Galand.

A variety of Bellegarde. Glands globose. Flowers small. Fruit similar to Bellegarde, but smaller and paler in color.

YELLOW ALBERGE.

Alberge Jaune.
Pêche Jaune.

Gold-Fleshed.
Yellow Rareripe.
Purple Alberge.

Red Alberge.
Golden Mignonne.

The Yellow Alberge is an old French variety, and one of the earliest of the yellow-fleshed Peaches. It is, no doubt, the original sort from which our Melocotons and Yellow Rareripes have sprung in this country. It has only a second-rate flavor, except in rich, warm soils, and is not comparable to the Yellow Rareripe in size or quality. Leaves with globose glands. Flowers small.

Fruit of medium size, roundish, with a well-marked furrow running half round. Skin yellow, with a deep purplish-red cheek. Flesh yellow, but deep red at the stone, soft, juicy, sweet, with a pleasant vinous flavor. Middle of August. Freestone.

The ROSANNA, *Alberge Jaune Tardif* of many French gardens, and Yellow Alberge of some gardens here, differs from the above only in having reniform glands and ripening ten or twelve days later. Flavor second-rate.

Barnard's Early and Yellow Honest John are probably identical, or, if seedlings, so near like the parent, Yellow Alberge, as to be unworthy particular attention.

YELLOW RARERIPLE.

Large Yellow Rareripe.
Red and Yellow Rareripe.

Marie Antoinette.
Cutter's Yellow.

One of the finest very early yellow-fleshed Peaches. It is an American seedling, and well deserves the extensive cultivation it receives both in the orchard and garden. Leaves with globose glands. Flowers small.

Fruit large, roundish, the suture slightly depressed, extending more than half round, the swollen point at the top small. Skin deep orange yellow, somewhat dotted with red, the cheek rich red, shaded off in streaks. Flesh deep yellow, but red at the stone, juicy, melting, with a rich and excellent vinous flavor. Ripens from the 25th to the 30th of August. Stone small. Freestone.

CURIOUS OR ORNAMENTAL VARIETIES.

DOUBLE-BLOSSOMED.

Double-Flowering Peach.
Rose-Flowering.

Pêcher à Fleurs Doubles.
Pêcher à Fleurs Semi-Doubles.

The Double-Blossomed Peach is, when in full bloom, one of the gayest and most beautiful of fruit-trees, and blooming with its lovely companion, the Double-Flowering Cherry, finds a place in all our pleasure-grounds and ornamental plantations. Its flowers are of a lively rose color, nearly full double, and so thickly disposed on the branches as to be very striking and showy. They are produced at the usual season, or a few days later. This sort is rendered more dwarf for shrubberies by budding it upon the Mirabelle or the Cherry Plum stock. The leaves have reniform glands.

The fruit, which is sparingly produced, is roundish oval, pale greenish yellow, faintly tinged with red. Freestone, and of indifferent flavor.

THE CRIMSON or CAMELLIA-FLOWERED, with large double-flowers of a rich crimson hue, especially attractive and showy, the CARNATION-FLOWERED, with flowers striped like a carnation, and the VARIEGATED-FLOWERED, with flowers of different hues on the same tree, are among the more recent introductions, and, grouped with the older varieties, are very effective.

FLAT PEACH OF CHINA.

Chinese Peach.

Java Peach.

Peen To.

A very singular variety, from China, where the gardeners affect all manner of vegetable curiosities. The fruit is of small size, about two inches in diameter, and so much flattened at the ends that only the skin and the flat stone remain, the fleshy part being crowded on either side. The tree is of rather dwarfish habit, and holds its leaves very late. The fruit is of very good flavor, and is well worthy of a place in the gardens of the curious.* Leaves with reniform glands. Flowers large.

Fruit small, so much flattened as to form a deep hollow at both ends, having at the top a singular broad, rough, five-angled eye. Skin pale

* Should any one of our amateurs now possess it, we shall be much gratified to receive buds of it.

yellowish green, mottled with red on one side. Flesh pale yellow, with a circle of red round the stone (from which it separates), sweet, juicy, with a slight noyau flavor. Beginning of September.

WEeping PEACH.

Reid's Weeping Peach.

A peculiar variety, with pendent, weeping branches, and a habit much like that of the weeping ash. It was originated by the late Wm. Reid. To display itself to advantage it should be grafted six or eight feet high, on the clean stem of a peach or plum stock. Reniform glands. Flowers large.

Selection of choice Peaches, to furnish in succession. *Freestones*: Hale's Early, Early York (serrate), Early Newington, Cooledge's Favorite, George the Fourth, Grosse Mignonne, Crawford's Early, Crawford's Late, Oldmixon Free, Morris' White, Van Zandt's Superb, Ward's Late Free, Noblesse, Late Red Rarissime, Druid Hill. *Clingstones*: Large White, Oldmixon and Heath Clings.

SELECTION OF VARIETIES FOR THE SOUTH.

With no actual personal knowledge of the success and value of varieties at the South, we have compiled the following list from a summing up of majorities of leading Southern pomologists in their favor.

FREESTONES.

Amelia
Columbia.
Crawford's Early.

Early Tillotson.
Grosse Mignonne.
Lady Parham.
Stump the World.

Picquet's Late.
President Church.
Susquehanna.

CLINGSTONES.

Chinese.
Eaton's Golden.

Heath.
Lemon.
Washington.

Oldmixon.
Tinley's October.

CHAPTER XXVII.

THE PEAR.

Pyrus communis, L. *Rosaceæ*, of botanists.
Poirier, of the French; *Birnbaum*, German; *Peer*, Dutch; *Pero*, Italian; and *Pera*, Spanish.

THE Pear is undeniably the favorite fruit of modern times and modern cultivators. Indeed, we believe the Pear of modern times,

thanks to the science and skill of horticulturists, is quite a different morsel for the palate from the pear of two or three centuries ago. In its wild state it is one of the most austere of all fruits, and a *choke-pear* of our fields, really a great improvement on the wild type, seizes one's throat with such an unmerciful gripe as to leave behind it no soothing remembrances of nectar and ambrosia.

So long ago as the earliest time of the Romans the pear was considerably cultivated. It was common in Syria, Egypt, and Greece, and from the latter country was transplanted into Italy. "Theophrastus speaks of the productiveness of the old pear-trees, and Virgil mentions some pears which he received from Cato. Pliny in his 15th book describes the varieties in cultivation in his time as exceedingly numerous; and mentions a number which were named after the countries from which they were received. Of all pears, he says, the Costumine is the most delicate and agreeable. The Falernian Pear was esteemed for its juice; and the Tibernian, because it was preferred by the Emperor Tiberius. There were 'proud pears,' which were so called because they ripened early and would not keep, and 'winter pears,' pears for baking, as at the present day." None of these old Roman varieties have been handed down to us, and we might believe some of them approached the buttery lusciousness of our modern pears, did not Pliny pithily add, most unfortunately for their reputation, "all pears whatsoever are but a heavy meat, unless they are well boiled or baked."

In fact, the really delicious qualities of this fruit were not developed until about the seventeenth century. And within the last sixty years the pear, subjected to constant production from seed by Van Mons and his followers, and to hybridizing or crossing by Mr. Knight and other English cultivators, appears at length to have reached almost the summit of perfection in beauty, duration, and flavor. Of Professor Van Mons and his labors of a whole life, almost *devoted to pears*, we have already spoken in our first chapter. From among the 80,000 seedlings raised by himself, and the many thousands reared by other zealous cultivators abroad, especially in Belgium—the Eden of the pear-tree—there have been selected a large number of varieties of high excellence. In this country we are continually adding to the number, as, in our newer soil, the pear, following the natural laws of successive reproduction, is constantly appearing in new seedling forms. The high flavor of the Seekel Pear, an American variety, as yet unsurpassed in this respect by any European sort, proves the natural congeniality of the climate of the Northern States to this fruit.

The pear-tree is not a native of North America, but was introduced from the other continent. In Europe, Western Asia, and China it grows wild, in company with the apple, in hedges and woody wastes. In its wild state it is hardier and longer lived than the apple, making a taller and more pyramidal head, and becoming thick in its trunk. There are trees on record abroad of great size and age for fruit-trees. M. Bosc mentions several which are known to be near 400 years old. There is a very extraordinary tree in Holme Lacy, Herefordshire, England—a perry pear—from which were made, more than once, 15 hogs-heads of perry in a single year. In 1805 it covered more than half an acre of land, the branches bending down and taking root, and, in turn, producing others in the same way. Loudon, in his work on trees, says that it is still in fine health, though reduced in size.

One of the most remarkable pear-trees in this country is growing in Illinois, about ten miles north of Vincennes. It is not believed to be more than forty years old, having been planted by Mrs. Ockletree, about 1805. The girth of its trunk one foot above the ground is *twelve feet*, and at nine feet from the ground, *six and a half feet*; and its branches extend over an area ninety-four feet in diameter. In 1834 it yielded 184 bushels of pears; in 1840 it yielded 140 bushels. It is enormously productive always; the fruit is pretty large, ripening in early autumn, and is of tolerable flavor.

The tree came into bearing at the fifteenth year from its planting, but grafts from it produce in about four or five years. Like the Dix, it is almost thornless, and it is remarkable that no blight of any kind has ever affected it.

The Stuyvesant Pear-Tree, which was destroyed in 1867, was originally planted by the old governor of the Dutch colony of New York, more than two hundred years ago, on what was once his farm, but is now part of the city, quite thickly covered with houses.

Along the St. Clair river, below Detroit, and on the banks of the Mississippi, near St. Louis, are found many large old pear-trees vying in health and vigor with those of recent planting.

USES. The great value of the Pear is as a dessert fruit. Next to this, it is highly esteemed for baking, stewing, preserving, and marmalades. In France and Belgium the fruit is very generally dried in ovens, or much in the same way as we do the apple, when it is quite an important article of food.

Dessert pears should have a melting, soft texture, and a sugary, aromatic juice. Kitchen pears, for baking or stewing, should be large, with firm and crisp flesh, moderately juicy.

The juice of the pear, fermented, is called *Perry*. This is made precisely in the same way as cider, and it is richer, and more esteemed by many persons. In the midland counties of England, and in various parts of France and Germany, what are called *Perry Pears*—very hardy productive sorts, having an austere juice—are largely cultivated for this purpose. In several places in our Eastern States, we understand, perry is now annually made in considerable quantities. The fruit should be ground directly after being gathered, and requires rather more isinglass (say $1\frac{1}{2}$ oz. to a barrel) to fine it, on racking, than cider. In suitable soil the yield of perry to the acre is usually about one-third more than that of cider.

The wood of the Pear-tree is heavy and fine-grained, and makes, when stained black, an excellent imitation of ebony. It is largely employed by turners for making joiners' tools. The leaves will dye yellow.

GATHERING AND KEEPING THE FRUIT. The pear is a peculiar fruit in one respect, which should always be kept in mind: viz., *that most varieties are much finer in flavor if picked from the tree and ripened in the house*, than if allowed to become fully matured on the tree. There are a few exceptions to this rule, but they are very few. And, on the other hand, we know a great many varieties which are only second or third-rate when ripened on the tree, but possess the highest and richest flavor if gathered at the proper time and allowed to mature in the house. This proper season is easily known, first, by the ripening of a few full-grown but worm-eaten specimens, which fall soonest from the tree; and, secondly, by the change of color and the readiness of the

stalk to part from its branch on gently raising the fruit. The fruit should then be gathered—or so much of the crop as appears sufficiently matured—and spread out on shelves in the fruit-room.

So important is the ripening of pears in the house, that most amateurs of this fruit find it to their advantage to have a small room set apart and fitted up with shelves in tiers, to be used solely as a *fruit-room*.

In absence of any room specially devoted to the purpose, shallow drawers, say four inches deep, and from one and a half to two feet in diameter, should be procured, and into the bottom of each lay a soft woollen cloth, then a layer of pears, but so that they may not touch each other; then over them lay another soft woollen cloth, and place the drawers in a cool dry room. In a period varying from three days to as many weeks, according to the variety, the fruit will be found to have ripened to a delicious richness, and to have taken on a high golden color, seldom or never obtained when allowed to ripen on the tree. Some persons use the common husks called “shorts,” from the flouring-mills, to cover the pears in place of the woollen cloths, and with perhaps equally good results, but it is not as neat or convenient a practice.

Many sorts which, ripened in the sun and open air, are rather dry, when ripened within doors are most abundantly melting and juicy. They will also last for a considerably longer period if ripened in this way—maturing gradually, as wanted for use, and being thus beyond the risk of loss or injury by violent storms or high winds.

Winter dessert pears should be allowed to hang on the tree as long as possible, until the nights become frosty. They should then be wrapped separately in paper, packed in *kegs*, *barrels*, or *small boxes*, and placed in a cool, dry room, free from frost. Some varieties, as the D'Arenberg, will ripen finely with no other care than placing them in barrels in the cellar like apples. But most kinds of the finer winter dessert pears should be brought into a warm apartment for a couple of weeks before their usual season of maturity. They should be kept covered, to prevent shrivelling. Many sorts that are comparatively tough, if ripened in a cold apartment, become very melting, buttery, and juicy when allowed to mature in a room kept at the temperature of 60 or 70 degrees.

PROPAGATION. The finer sorts of pears are continued or increased by grafting and budding, and the stocks on which to work are either seedlings or suckers. Sucker stocks have usually such indifferent roots, they are so liable to produce suckers continually themselves, and are so much less healthy than seedlings, that they are now seldom used by good cultivators; though, if quite young and thrifty, they will often make good stocks.

Seedlings, however, are by far the best stocks for the pear in all cases; and seedlings from strong-growing, healthy pears, of common quality—such as grow about most farmers' gardens—are preferable for stocks to those raised from the best varieties, being more hardy and vigorous.

As it is usually found more difficult to raise a good supply of seedling pear-stocks in this country than of any other fruit-tree, we will here remark that it is absolutely necessary, to insure success, that two points be observed. The first is, to clean and sow the seed as soon as may be after the fruit is well matured; the second, to sow it only in deep rich soil. It should be previously trenched—if not naturally deep—at least twenty inches or two feet deep, and enriched with manure or compost mixed

with ashes. This will give an abundant supply of nutriment to the young seedlings the first year, without which they become starved and parched, after a few inches' growth, by our hot and dry summer, when they frequently fall a prey to the aphids and other insects at the root and top. A mellow, rich soil, whose depth insures a supply of moisture, will give strong seedlings, which are always, at two years' growth, fit to go into the nursery-rows for budding; while a dry, thin soil will seldom produce good stocks, even in half a dozen years.

The seeds should be sown precisely like those of the apple, in broad drills, and the treatment of the stocks, when planted in the rows for budding, is quite similar. Budding is almost universally preferred by us for propagating the pear, and this tree takes so readily that very few failures can happen to an experienced hand. About the first of August, in this latitude, is the proper season for performing this operation.

We may add here, that one-year-old pear seedlings are often winter-killed when the autumn has not been such as to ripen the wood thoroughly. A few branches of evergreens, or some slight covering laid along the rows will prevent this. Or they may be laid in by the heels in a sheltered place.

The *thorn* makes very good stocks for the pear, except that if grafted above ground the tree is often apt to be broken off at the point of union by high winds. This is obviated by grafting a little below the surface. Grafting on the thorn is a very useful practice for strong clayey soils, as on such stocks the pear may be grown with success, when it would not otherwise thrive. It also comes rather earlier into bearing. The *mountain ash* is thought by some to be a valuable stock for light sandy soils, but care should be taken that the graft or bud be inserted low down near the crown of the stock, so that when transplanted the whole of the stock can be covered with soil, otherwise the borer will soon destroy it. The pear is sometimes budded on the apple, but it is then usually very short-lived.

For rendering the pear *dwarf*, the Quince stock is almost universally used, as the pear unites readily with it, becomes quite dwarf in habit, and bears very early. Some large-growing pears—as the Duchess of Angoulême—extremely liable to be blown off the tree, bear much better on the quince stock, and others are considerably improved in flavor by it. The dwarf pear, however, it must be confessed, rather belongs to the small garden of the amateur than to the orchardist, or him who desires to have regular large crops and long-lived trees. The dwarf tree is usually short lived, seldom enduring more than fifteen or twenty years in bearing—but it is a pretty and economical way of growing a good many sorts, and getting fruit speedily, in a small garden.*

The pear, not being very abundantly supplied with fibrous roots, should never be transplanted, of large size, from the nursery. Small thrifty plants, five or six feet high, are much to be preferred.

SOIL, SITUATION, AND CULTURE. The best soil for this fruit-tree is a *strong loam* of moderate depth on a dry subsoil. The pear will, in-

* Whether the Pear can be successfully cultivated on the Quince for market is yet a debatable question; some growers, owing perhaps to soil and climate, having succeeded satisfactorily, while others have entirely failed. That dwarfs are a great acquisition to the garden where large standards are inadmissible is unquestioned. We believe the promise of some varieties on quince warrants the expectation that they will be found profitable for general cultivation.

deed, adapt itself to as great a variety of soils as any fruit-tree, but in unfavorable soils it is more liable to suffer from disease than any other. Soils that are wet during any considerable portion of the year, are entirely unfit for the pear-tree; and soils that are over-rich and deep, like some of the Western alluvials, force the tree into such over-luxuriant growth that its wood does not ripen, and is liable to be killed by winter blight. Soils that are too light, on the other hand, may be improved by trenching if the subsoil is heavier, or by top-dressing with heavy muck and river mud if it is not.

In a climate rather cold for the pear, or on a cold soil, it is advantageous to plant on a Southern slope; but in the Middle States, in warm soils, we do not consider a decidedly Southern exposure so good as other rather cooler ones.

The Pear succeeds so well as an open standard, and requires so little care for pruning—less, indeed, in the latter respect than any other fruit-tree—that training is seldom thought of except for dwarfs, or in the gardens of the curious or skilful. The system of *quenouille* or *distaff* training, an interesting mode of rendering trees very productive in a small space, we have already fully described in p. 40, as well as root-pruning for the same purpose in p. 36.

The manner of growing and training dwarfs in this country, on a large scale, for orchards, is, however, more as bushes or low-headed trees than as pyramids, *quenouille*, or *espalier*; and while the same general principles are maintained, it is necessary to head back the leading shoot more severely; and unless time can be given in the summer season to checking the growth, and forming a thick, round, open head by means of summer pinching, then, in order to maintain health and vigor in dwarfs, they must be annually shortened back from one-half to two-thirds of the preceding year's growth. The best time for this is immediately at the close of winter.

In orchard culture the pear is usually planted about thirty feet distant each way; in fruit-gardens, where the heads are somewhat kept in by pruning, twenty feet is considered sufficient by many.

Pear-trees in a bearing state, where the growth is no longer luxuriant, should have, *every autumn*, a moderate top-dressing of manure, to keep them in good condition. This, as it promotes steady and regular growth, is far preferable to occasional heavy manuring.

DISEASES. As a drawback to the otherwise easy cultivation of this fine fruit, the pear-tree is, unfortunately, liable to a very serious disease called the *pear-tree blight* or *fire blight*, appearing irregularly, and in most parts of the country; sometimes in succeeding seasons, and again only after a lapse of several years; attacking sometimes only the extremities of the limbs, and at other times destroying the whole tree; producing, occasionally, little damage to a few branches, but often also destroying, in a day or two, an entire large tree; this disease has been, at different times, the terror and despair of pear-growers. Some parts of the country have been nearly free from it, while others have suffered so much as almost to deter persons from extending the cultivation of this fine fruit. For nearly a hundred years its existence has been remarked in this country, and all notions of its character and origin have been so vague as to lead to little practical assistance in removing or remedying the evil.

Careful observations for several years past, and repeated comparison

of facts with accurate observers in various parts of the country, have led us to the following conclusions:—

1st. That what is popularly called the pear blight, is, in fact, two distinct diseases.

2d. That one of these is caused by an insect, and the other by sudden freezing and thawing of the sap in unfavorable autumns. The first we shall therefore call the *insect blight*, and the second the *frozen-sap blight*.

1. THE INSECT BLIGHT. The symptoms of the *insect blight* are as follows: In the month of June or July, when the tree is in full luxuriance of growth, shoots at the extremities of the branches, and often extending down two seasons' growth, are observed suddenly to turn brown. In two or three days the leaves become quite black and dry, and the wood so shrivelled and hard as to be cut with difficulty with a knife. If the branch is allowed to remain, the disease sometimes extends a short distance farther down the stem, but usually not much farther than the point where the insect had made his lodgment. The insect which causes this blight was first discovered by the Hon. John Lowell, of Boston, in 1816, and was described by Professor Peck under the name of *Scolytus pyri*. It is very minute, being scarcely one-tenth of an inch long; and it escapes from the branch almost as soon as, by the withering of the leaves, we are aware of its attack; hence it is so rarely seen by careless observers. In the perfect state it is a very small beetle, deep brown, with legs of a paler color. Its thorax is short, convex, rough in front, and studded with erect bristles. The wing-covers are marked with rows of punctured points, between which are also rows of bristles, and they appear cut off very obliquely behind.

This insect deposits its egg some time in July or August, either behind or below a bud. Whether the egg hatches at once, we are not aware, but the following spring the small grub or larva bores through the sap-wood or tender albumen, beginning at the root of the bud, and burrows toward the centre of the stem. Around this centre or pith it forms a circular passage, sometimes devouring it altogether. By thus perforating, sawing off, or girdling, internally, a considerable portion of the vessels which convey the ascending sap, at the very period when the rapid growth of the leaves calls for the largest supply of fluid from the roots, the growth and the vitality of the branch are checked, and finally extinguished. The larva about this time completes both its transformation and its passage out, and, in the beetle form, emerges, with wings, into the air, to seek out new positions for laying its eggs and continuing its species. The small passage where it makes its exit may now more easily be discovered, below or by the side of the bud, resembling a hole bored with a needle or pin.

It is well to remark here that the attack of this blight insect is not confined to the Pear, but in some parts of the country we have observed it preying upon the Apple and the Quince in the same manner. In the latter tree, the shoots that were girdled were shorter, and at the extremities of the branches only; not leading, therefore, to such serious consequences as in the Pear.

The ravages of the *insect blight*, we are inclined to think, do not extend much below the point where the insect has deposited its egg,—a material point of difference from the *frozen-sap blight*, which often poisons the system of the whole tree if allowed to remain, or if originally very extensive.

The remedy for the insect blight is very distinct. It is that originally suggested by Mr. Lowell, which we and many others have pursued with entire success, when the other form of the disease was not also present. The remedy consists, *at the very first indications of the existence of the enemy*, in cutting off and burning the diseased branch, a foot below the lowest mark of discoloration. The insect is usually to be found at the bottom of this blackened point, and it is very important that the branches be removed early, as the *Scolytus* is now about emerging from his burrow, and will speedily escape us, to multiply his mischief elsewhere. If there is much appearance of the insect blight, the tree should be examined every noon, so long as there are any indications of disease, and the amputated branches carried at once to the fire.

2. THE FROZEN-SAP BLIGHT. We give this term to the most formidable phase of this disease that affects the pear-tree. Though it is by ordinary observers often confounded in its effects with the insect blight, yet it has strongly characteristic marks, and is far more fatal in its effects.

The symptoms of the *frozen-sap blight* are the following: First. The appearance, at the season of winter or spring pruning, of a *thick clammy* sap, of a sticky nature, which exudes from the wounds made by the knife; the ordinary cut showing a clean and smooth surface.

Second. The appearance in the spring, on the bark of the trunk or branches, often a considerable distance from the extremities, of black, shrivelled, dead patches of bark.

Third. In early summer months the disease fully manifests itself by the extremities shrivelling, turning black, and decaying, as if suddenly killed. If these diseased parts are cut off, the inner bark and heart-wood will be found dark and discolored some distance below where it is fresh and green outside. If the tree is slightly affected only, it may pass off with the loss of a few branches; but if it has been seriously tainted, the disease, if not arrested, may, sooner or later, be carried through the whole system of the tree, which will gradually decline or entirely perish.

To explain the nature of this disease we must first premise that, in every tree, there are two currents of sap carried on: 1st, the upward current of sap, which rises through the outer wood (or *alburnum*), to be digested by the leaves; 2d, the downward current, which descends through the inner bark (or *liber*), forming a deposit of new wood on its passage down.*

Now let us suppose, anterior to a blight season, a very sudden and early winter succeeding a damp and warm autumn.† The summer having been dry, the growth of trees was completed early, but this excess of dampness in autumn forces the trees into a vigorous second growth, which continues late. While the sap-vessels are still filled with their fluids, a sharp and sudden freezing takes place, or is, perhaps, repeated several times, followed, in the daytime, by bright sun. The descending current of sap becomes thick and clammy, so as to descend with

* Being distributed towards the centre of the stem by the medullary rays which communicate from the inner bark to the pith.

† Which always happens previously to a summer when the blight is very prevalent, and will be remembered by all as having been especially the case in the autumn of 1843, which preceded the extensive blight of the next season.

difficulty; it chokes up the sap-vessels, freezes and thaws again, loses its vitality, and becomes dark and discolored, and in some cases so poisonous as to destroy the leaves of other plants when applied to them. Here, along the inner bark, it lodges, and remains in a thick, sticky state all winter. If it happens to flow down till it meets with any obstruction, and remains in any considerable quantity, it freezes again beneath the bark, ruptures and destroys the sap-vessels, and the bark and some of the wood beneath it shrivels and dies.

In the ensuing spring the upward current of sap rises through its ordinary channel,—the outer wood or alburnum,—the leaves expand, and, for some time, nearly all the upward current being taken up to form leaves and new shoots, the tree appears flourishing. Toward the beginning of summer, however, the leaves commence sending the downward current of sap to increase the woody matter of the stem. This current, it will be remembered, has to pass downward through the inner bark or *liber*, along which still remain portions of the poisoned sap, arrested in its course the previous autumn. This poison is diluted, and taken up by the new downward current, distributed toward the pith, and along the new layers of alburnum, thus tainting all the neighboring parts. Should any of the adjacent sap-vessels have been ruptured by frost, so that the poison thus becomes mixed with the still ascending current of sap, the branch above it immediately turns black and dies, precisely as if poison were introduced under the bark. And very frequently it is accompanied with precisely the odor of decaying frost-bitten vegetation.*

The foregoing is the worst form of the disease, and it takes place when the poisoned sap, stagnated under the bark in spots, remains through the winter in a thick, semi-fluid state, so as to be capable of being taken up in the descending current of the next summer. When, on the other hand, it collects in sufficient quantity to freeze again, burst the sap-vessels, and afterwards dry out by the influence of the sun and wind, it leaves the patches of dead bark which we have already described. As part of the woody channels which convey the ascending sap probably remain entire and uninjured, the tree or branch will perhaps continue to grow the whole season and bear fruit, as if nothing had happened to it, drying down to the shrivelled spots of bark the next spring. The effect in this case is precisely that of girdling only, and the branch or tree will die after a time, but not suddenly.

From what we have said, it is easy to infer that it would not be difficult, on the occurrence of such an autumn, when sudden congelation takes place in unripened wood, to predict a blight season for the following

* We do not know that this form of blight is common in Europe, but the following extract from the celebrated work of Duhamel on fruit-trees, published in 1768, would seem to indicate something very similar a long time ago.

"The sap corrupted by putrid water, or the excess of manure, bursts the cellular membranes in some places, extends itself between the wood and the bark, which it separates, and carries its poisonous acrid influence to all the neighboring parts; like a gangrene. When it attacks the small branches, they should be cut off; if it appears in the large branches or body of the tree, all the cankered parts must be cut out down to the sound wood, and the wound covered with composition. If the evil be produced by manure or stagnant water (and it may be produced by other causes), the old earth must be removed from the roots, and fresh soil put in its place, and means taken to draw off the water from the roots. But if the disease has made much progress on the trunk, the tree is lost."—*Traité des Arbres Fruitières*, vol. 11, p. 100.

summer. Such has several times been done, and its fulfilment may be looked for with certainty in all trees that had not previously ripened their wood.*

So also it would and does naturally follow, that trees in a damp, rich soil, are much more liable to the frozen-sap blight than those upon a drier soil. In a soil over-moist or too rich, the pear is always liable to make late second growths, and its wood will often be caught unripened by an early winter. For this reason this form of blight is vastly more extensive and destructive in the deep rich soils of the Western States than in the drier and poorer soils of the East. And this will always be the case in over-rich soils, unless the trees are checked in their luxuriance by root-pruning.

Again, those varieties of the pear which have the habit of maturing their wood early, are very rarely affected with the frozen-sap blight. But late-growing sorts are always more or less liable to it, especially when the trees are young, and the excessive growth is not reduced by fruit-bearing. Every nurseryman knows that there are certain late-growing sorts which are always more liable to this blight in the nursery. Among these we have particularly noticed the *Passe Colmar* and the *Fo-relle*, though when these sorts become bearing trees they are not more liable than many others. The *Seckel* pear is less subject to blight than others, which we attribute entirely to its habit of making short-jointed shoots, and ripening its wood very early.

To distinguish the blight of the frozen-sap from that caused by the attack of the *Scolytus pyri* is not difficult. The effects of the latter cease below the spot where the insect has perforated and eaten its burrow in the branch. The former spreads gradually down the branch, which, when dissected, shows the marks of the poison in the discoloration of the inner bark and the pith, extending down some distance below the external marks of injury. If the poison becomes largely diffused in the tree, it will sometimes die outright in a day or two; but if it is only slightly present, it will often entirely recover. The presence of black, dry, shrivelled spots of bark on the branches, or soft sappy spots, as well

* Since the above was written, we have had the pleasure of seeing a highly interesting article by the Rev. H. W. Beecher, of Indiana, one of the most intelligent observers in the country. Mr. Beecher not only agrees in the main with us, but he fortifies our opinion with a number of additional facts of great value. We shall extract some of this testimony, which is vouched for by Mr. B., and for the publication of which the cultivators of pears owe him many thanks.

"Mr. R Ragan, of Putnam Co., Ind., has for more than twelve years suspected that this disease originated in the fall previous to the summer on which it declares itself. During the last winter Mr. Ragan predicted the blight, as will be remembered by some of his acquaintances in Wayne Co., and in his pear-orchards he marked the trees that would suffer, and pointed to the spot which would be the seat of the disease, and his prognostications were strictly verified. Out of his orchard of 200 pear-trees, during the previous blight of 1832, only four escaped, and those had been transplanted, and had, therefore, made little or no growth.

"Mr. White, a nurseryman near Mooresville, Ind., in an orchard of over 150 trees, had not a single case of blight in the year 1844, though all around him its ravages were felt. What were the facts in this case? His orchard is planted on a mould-like piece of ground, is high, of a sandy, gravelly soil; earlier by a week than nursery soils in this country; and in the summer of 1843, his trees grew through the summer, ripened and shed their leaves early in the fall, and during the warm spell made no second growth."

as the appearance of thick clammy sap in winter or spring pruning, are the infallible signs of the frozen-sap blight.

The most successful remedies for this disastrous blight, it is very evident, are chiefly preventive ones. It is, of course, impossible for us to avoid the occasional occurrence of rainy, warm autumns, which have a tendency to urge the trees into late second growth. The principal means of escaping the danger really lies in always studiously avoiding a wet soil for the fruit-tree. Very level or hollow surfaces, where heavy early autumnal rains are apt to lie and saturate the ground, should also be shunned. And any summer top-dressing or enriching calculated to stimulate the tree into late growth is pernicious. A rich, dry soil is, on the whole, the best, because there the tree will make a good growth in time to ripen fully its wood, and will not be likely to make second growth. A rich, wet soil will, on the contrary, serve continually to stimulate the tree to new growth. It is in accordance with this that many persons have remarked, that those pear-trees growing in common meadow land were free from blight in seasons when those in the rich garden soils were continually suffering from it.

The first point, then, should be to secure a rich, but dry, well-drained soil. Cold aspects and soils should be avoided, as likely to retard the growth and ripening of the wood.

The second is to reject, in blighted districts, such varieties as have the habit of making wood late, and choosing rather those of early habit, which ripen the wood fully before autumn.

Severe summer-pruning, should it be followed by an early winter, is likely to induce blight, and should therefore be avoided. Indeed, we think the pear should always be pruned in winter or early spring.

As a remedy for blight actually existing in a tree, we know of no other but that of freely cutting out the diseased branches at the earliest moment after it appears. The amputation should be continued as far down as the least sign of discoloration and consequent poisoning is perceptible, and it should not be neglected a single day after it manifests itself. A still better remedy, when we are led to suspect, during the winter, that it is likely to break out in the ensuing summer, is that of carefully looking over the trees before the buds swell, and cutting out all branches that show the discolored or soft sappy spots of bark that are the first symptoms of the disease.

Finally, as a preventive, when it is evident, from the nature of the season and soil, that a late autumnal growth will take place, we recommend laying bare the roots of the trees for two or three weeks. Root-pruning will always check any tendency to over-luxuriance in particular sorts, or in young bearing trees, and is therefore a valuable assistance when the disease is feared. And the use of lime in strong soils, as a fertilizer, instead of manure, is worthy of extensive trial, because lime has a tendency to throw all fruit-trees into the production of short-jointed fruit-spurs, instead of the luxuriant woody shoots induced by animal manure.

In gardens where, from the natural dampness of the soil or locality, it is nearly impossible to escape blight, we recommend that mode of dwarfing the growth of the trees—conical standards, or *quenouilles*, described in the section on pruning. This mode can scarcely fail to secure a good crop in any soil or climate where the pear-tree will flourish.

After the blight, the other diseases which affect the pear-tree are of little moment. They are chiefly the same as those to which the apple is liable, the same insects occasionally affecting both trees, and we therefore refer our readers to the section on the apple-tree.

There is, however, a *slug-worm*, which occasionally does great damage on the leaves of the pear-tree, which it sometimes entirely destroys. This slug is the *Selandria cerasi* of Harris. It appears on the upper side of the leaves of the pear-tree, from the middle of June to the middle of July. It is nearly half an inch long when fully grown, olive-colored, tapering from the head to the tail, not much unlike in shape a miniature tadpole. The best destructive for this insect is ashes, plaster, dry dust, or quicklime, sifted or sprinkled over the leaves, early in the morning.*

VARIETIES.

The varieties of pear have so multiplied within the last thirty years that they may almost be considered endless. Of the new varieties, Belgium has produced the greatest number of high quality; England and France many of excellence; and, lastly, quite a number of valuable sorts have originated in this country, to which some additions are made annually. The latter, as a matter of course, are found even more generally adapted to our climate than any foreign sorts. But we believe the climate of the Middle States is so nearly like that of Belgium, that the pear is grown here as a standard to as great perfection as in any other country.

More than one thousand kinds of pears, collected from all parts of the world, have been fruited here, but only a small proportion of these have been found of first-rate quality, and a very large number of them are of little or no value. The great difficulty seems to be, to decide which are the really valuable sorts, worth universal cultivation. We shall not, perhaps, arrive at this point, in this country, for several years, not until all the most deserving sorts have had repeated trials, and the difficulty is always increased by the fact of the difference of climate and soil, and the continuous increase of new varieties. A variety may prove of superior merit in one locality and quite indifferent in another, owing to the influence of soil and climate. This, however, is true only to a very limited extent, as the fact that most sorts of the first character receive nearly the same praise in Belgium, England, and all parts of this country, clearly proves. High flavor, handsome appearance, productiveness, and uniformly good flavor in all seasons—these are the criterions of the first class of pears.†

* Many theories and speculative opinions have been promulgated during the past twenty or more years since these remarks on blight were written, but, so far as we can learn, nothing conclusive is yet known. There are many persons holding the views here expressed, while others support a theory of atmospheric fungoid blight with equally good reasoning.

† The most successful cultivator of pears in this country, whose collection comprises hundreds of varieties, lately assured us that if he were asked to name all the sorts that he considered of *uncarying and unquestionable excellence* in all respects, he could not count more than twenty! It may, then, be asked, Why do all cultivate so large a variety? We answer, because the quality of many is yet not fully decided; again, there is a great difference in taste, as to the

Most of the finer varieties of pears have not the necessary hardihood to enable them to resist, perfectly uninjured, the violent atmospheric changes of our climate, except under favorable circumstances; consequently the fruit is more or less variable in quality; and this is more particularly true of some that come to us from abroad with promise of the highest excellence, and to pronounce an abiding judgment upon their merits requires many years' experience and careful observation under different circumstances and in various localities. And it must be borne in mind, that although young trees give fruit of nearly or quite full size and beauty, yet perfection of flavor is only to be expected from trees of more mature age. The inference is not legitimate that a variety which exhibits great excellence in Belgium, or some of the districts of France, will exhibit generally in all localities in the United States the same excellence; but the supposition is fair, and borne out by some experience, that those which possess excellence of a particular character in an eminent degree in Europe, will generally exhibit the same in particular localities in this country. We would instance such vigorous growers, with pretty solid flesh, as the following:—Belle Lucrative, Rostiezer, Duchess d'Angoulême, Beurré Hardy, &c. To produce satisfactory results in the cultivation of pears, some of its wants must always be complied with, such as good depth of soil, sufficient drainage, and proper enrichment.

In describing pears, we shall, as usual, designate the size by comparison, as follows:—Large, as the Beurré Diel or Bartlett; medium, as the Doyenné or Virgalien; small, as the Seckel.

With regard to form, these are so numerous and complicated that it is difficult to determine upon any terms that can be always preserved; but with a view to unity, and with a belief that they are the best now in use, we have adopted those established by the Massachusetts Horticultural Society. (See pages 652 and 653.)

As with apples and other fruits, we continue the alphabetical system of arrangement, it being the most readily applicable for general use; and, as with apples, have, in designating the quality of flesh, continued the terms adopted by the American Pomological Society, as "*best*," "*very good*," and "*good*." The latter term, although in many cases having reference only to the quality of the fruit as a dessert pear, may be often found attached to one of great value for cooking, or highly profitable for market.

ABBÉ DE BEAUMONT.

Originated in the commercial gardens of André Leroy, Angers, France.

Fruit medium, obtuse, pyriform. Stalk short. Calyx large, open. Skin greenish yellow, marbled with fawn-color and washed with red in the sun. Flesh white, fine, juicy, melting, rough or gritty at core, vinous, sweet. August, September. (Leroy.)

merits of a given sort; there are also some sorts so productive, or handsome, &c., that they are highly esteemed, though only second-rate. In a work like the present, we are also obliged to describe many sorts of second quality, in order to assist in identifying them, as they are already in general cultivation.

SIMPLE FORMS.

Globular.

Ovate.

Oblate.

Oblong.

COMPOUND FORMS.

Globular, obtuse pyriform.

Globular, acute pyriform.

COMPOUND FORMS—*Continued.*

Ovate, pyriform.

Obovate, acute pyriform.

Obovate, obtuse pyriform.

Oblong pyriform.

Oblong, ovate pyriform.

Oblong, obovate pyriform.

ABBÉ EDOUARD.

One of Van Mons' seedlings. Tree vigorous, spreading.

Fruit medium size, roundish obtuse pyriform, rich clear green, becoming yellow at maturity, with a russet cheek. Flesh white, half tender, melting, juicy, sweet, pleasant. Ripens in November.

ABBÉ PEREZ.

This Pear originated in Germany, and was introduced in 1862.

Fruit small to medium, oval oblate. Skin yellowish green, splashed and dotted with red, shaded with fawn-color at the apex. Flesh whitish, firm, melting, juicy, harsh at the core, vinous, sweet. November, February. (Leroy.)

ABBOTT.

Origin, Providence, R. I., on the farm of Mrs. Abbott. A vigorous grower, and the fruit, although not of first quality, is uniformly good and beautiful. Young wood reddish olive.

Fruit of medium size, oblong obovate pyriform. Skin yellowish, considerably shaded with crimson, sprinkled with gray and crimson dots, and having a few russet patches. Stalk medium, inserted by a lip or ring in a slight depression surrounded by russet. Calyx open, with segments persistent, in a broad open basin. Flesh white, granular, buttery, juicy, melting. Flavor sweet, pleasant, and perfumed. Ripens last of September.

ABERCROMBY.

Abercromby's Seedling.

An American chance seedling that was found in Tallapoosa Co., Ala. Tree a vigorous, stout grower, an early and abundant bearer.

Fruit medium size, globular obovate obtuse pyriform, greatest breadth at centre. Skin rather rough, greenish yellow, netted and patched with russet, and with a mottled red cheek. Stalk short. Calyx large and open. Flesh whitish, coarse, granular, moderately juicy, and sweet, slightly vinous. Good. Ripens early in August.

ADAMS.

Raised by Dr. H. Adams, of Waltham, Mass. Tree a vigorous grower, with an upright, erect habit, making a pyramidal head. Young wood reddish yellow brown.

Fruit large, obovate pyriform, largest at centre. Surface uneven. Skin pale yellow shaded with light crimson in the sun, with many brown, green, and reddish dots. Stalk short, often set with a russeted lip. Calyx closed. Basin very shallow. Flesh white, very juicy, melting, vinous. Very good. Ripens early September.

ADÉLAIDE DE RÈVES.

Madame Adélaïde Rêves.

From Belgium. Tree vigorous. Young shoots very stout, yellowish brown red.

Fruit large, oblong, obovate acute pyriform, yellowish green with a shade of red in the sun, and russet specks and blotches, and russet at base of stalk. Flesh white, half fine, melting, juicy, vinous, sweet. Good. October.

ADÈLE LANCELOT.

A Belgian Pear of recent introduction. Tree vigorous.

Fruit medium to large, pyriform. Skin clear green yellow, shaded with red in the sun. Flesh white, not very juicy or rich. Good. October.

ADMIRABLE.

Dana's Admirable.

Originated with Francis Dana, Boston, Mass., and first exhibited before the Massachusetts Horticultural Society in 1853. Tree a vigorous grower, somewhat irregular, and, according to Hovey, tardy in coming into bearing. Young wood olive brown.

Fruit medium to large, roundish ovate, narrowing toward the stalk. Surface uneven. Skin yellowish, partially russeted and thickly sprinkled with russet dots. Stalk medium, a little inclined, planted in a small cavity, and sometimes with a lip. Calyx open. Segments short, erect. Basin medium, rather abrupt, uneven. Flesh juicy, melting, vinous, a little astringent. Good. September.

ADMIRAL FARRAGUT.

This new American Pear originated with Dr. Shurtleff, Boston, Mass., who describes the tree as strong, vigorous, productive. Shoots long, medium size.

Fruit very large, long pyriform, green with many dots, and blush in the sun. Stalk stout, curved. Calyx medium. Basin shallow. Flesh melting, juicy, fine-grained, subacid, pleasant. Season last of September. (J. of H.)

ADOLPHE CATCHET.

Origin, gardens of M. André Leroy, Angers, France.

Fruit medium, obtuse pyriform, rich yellow, dotted and splashed with red in the sun. Flesh white, juicy, vinous, sweet, harsh and gritty at core. August, September. (Leroy.)

ADOLPHINE RICHARD.

A Belgian Pear of recent introduction.

Fruit medium, pyriform, clear yellow, with shades and patches of brown red. Flesh white, half fine, juicy, vinous, sweet. Good. November.

AGLAE GRÉGOIRE.

A Belgian variety, of vigorous and productive habit.

Fruit medium, obtuse pyriform. Skin yellow, dotted and splashed

with reddish brown. Flesh yellowish white, half fine, half melting juicy, perfumed. Good. February, March. (Jardin Van Mons.)

AH ! MON DIEU.

Poire d'Abondance.

Mon Dieu.

Beurré Sprin.

Mandieu.

The my-God Pear.

Esperine.

An old French Pear. Tree vigorous, upright, productive.

Fruit medium, obovate acute pyriform. Skin pale yellow, smooth, nearly covered with red. Flesh white, juicy, slightly vinous, and sweet. Good. October.

ALEXANDER.

Origin, town of Alexander, N. Y. Tree moderate growth. Young wood light olive brown.

Fruit medium, obovate obtuse pyriform, somewhat one-sided. Skin yellowish green, dotted, netted, and splashed with russet. Stalk slender, rather long, curved, fleshy at its insertion. Calyx large, closed. Flesh white, a little coarse and gritty, very juicy, melting, sugary, and rich. Very good. Ripe last of September and early October.

ALEXANDRE BIVORT.

A seedling of Esperen in 1848. Tree vigorous, of a bushy habit. Young wood reddish brown.

Fruit medium, obtuse pyriform. Skin pale yellow, with a few patches and traces of russet. Stalk rather long, set in a small cavity. Calyx small, open. Segments slender, partly recurved. Basin large, abrupt, corrugated. Flesh whitish, a little coarse, moderately juicy, half tender, sweet, and pleasant. Good. December to February.

ALEXANDRE LAMBRE.

One of Van Mons' seedlings. Tree vigorous, spreading. Branches long, slender.

Fruit medium, oblate obtuse pyriform, yellowish, netted and patched with russet, brown red in sun. Flesh yellowish pinkish white, juicy, sweet, a little astringent. Good to very good. October, December.

ALEXANDRINA.

Alexandrina Bivort.

A Belgian Pear, too small in size to be of much value at its season of ripening.

Fruit medium or below, oblate pyriform, light yellow, shaded with red in the sun, netted and dotted with russet. Stalk long. Calyx open. Flesh white, juicy, melting, sweet. Good to very good. September.

ALEXANDRINE DOUILLARD.

Douillard.

This comparatively new Belgian Pear has size to commend it, and may prove valuable. Tree vigorous, productive, and comes early into bearing. Young wood dull yellowish brown.

Fruit large, obovate obtuse pyriform. Skin pale yellow, slightly netted and traced with russet. Stalk varying in length, inserted in a slight cavity, sometimes with a lip. Calyx partly closed. Basin abrupt, uneven. Flesh white, juicy, melting, slightly vinous. Very good. October.

ALEXANDRINE MAS.

A seedling of M. Mas, France, from seeds of Passe Colmar in 1850.

Fruit large, obtuse pyriform, light yellowish green, with shades and patches and dots of russet. Stalk stout, set without depression. Calyx large. Segments erect. Flesh white, translucent, juicy, sweet, perfumed. Late winter. (Verg.)

ALPHA.

A Belgian seedling. Tree vigorous, productive.

Fruit medium or below, obovate, slightly oblong. Skin smooth, pale, yellowish green, dotted with reddish points, and having a thin, pale brown blush. Stalk about an inch long, inserted in a slight depression. Calyx stiff, open, set in a round basin of moderate size. Flesh white, fine-grained, buttery. Good. October.

ALPHONSE KARR.

Originated with M. Louis Berckmans. Tree vigorous. Young wood dull olive.

Fruit medium, obovate obtuse pyriform, golden yellow, netted, marbled, and dotted with russet. Flesh whitish, fine, melting, juicy, slightly vinous, sweet. November, December.

ALTHORPE CRASSANE.

Fruit medium, roundish ovate. Skin pale green. Flesh white, buttery, and quite juicy, not rich, slightly perfumed. Good. October, November.

AMADOTTE.

Madotte.	Autumn Superb.	De Graine Damadote.
Beurré Knox ?	Dame Houdotte.	Beurré Blanc des Capucins.

Fruit rather large, pyriform. Skin pale yellow. Stalk medium. Cavity small. Calyx open. Basin shallow and uneven. Flesh whitish, coarse, juicy, vinous, variable, sometimes astringent. Hardly good. Ripe October.

AMANDINE DE ROUEN.

A new French Pear, as yet little known.

Fruit medium, obtuse pyriform, greenish yellow, with splashes of fawn russet. Flesh white, half fine, melting, juicy, sweet. Good. September, October. (Leroy.)

AMBRETTE.

Ambrette d'Hiver.
 Ambre Gris.
 Ambrette Gris.
 Belle Gabrielle.

Trompe-valet
 Ambret.
 Winter Ambret.
 Cheat Servant.
 Tilton.

Thorny Ambrette.
 Ambrette avec épines.
 Ambrette épineuse
 De Chine.

A very old Pear-tree, very hardy and productive.

Fruit medium to small, roundish oval, yellowish green, with russet spots and black blotches. Flesh whitish, a little coarse, melting, sweet. Good. December to March.

AMBROSIA.

Early Beurré.

A French Pear of medium size, roundish obovate. Skin greenish yellow, a little russeted. Flesh buttery, without much flavor. Hardly good. September.

AMERICA.

An American Pear, originated with Francis Dana, Boston, Mass. Tree a strong vigorous grower.

Fruit medium to large, roundish oblate obtuse pyriform. Skin yellow, with traces, dots, and patches of russet. Stalk long, in a small cavity. Calyx open. Flesh whitish, a little coarse, half melting, sweet, sugary, pleasant. Good. November, December.

AMELIE LECLERC.

A seedling of the late Leon Leclerc, of Laval, France. Tree moderately vigorous, spreading, with long slender shoots.

Fruit medium, roundish, inclining to obtuse pyriform. Skin greenish yellow, with a shade of red in the sun, and slight nettings of russet. Flesh white, juicy, melting, sweet, slightly vinous. Good to very good. October.

AMIRAL CECIL.

Originated in France, of moderate growth, productive.

Fruit medium or below, roundish ovate, yellowish, with fawn-color marblings in the sun. Flesh whitish, juicy, melting, harsh and gritty at centre. Good. October, December.

AMIRE JOANNET.

St. Jean.
 Joannette.

St. John's Pear.
 Petit Joannet.

Amiré Joannet.
 Petit St. Jean.

This fruit is one of the earliest, ripening at the beginning of July—in France, whence it originally comes, about St. John's day, whence the name Joannet. It is a pleasant fruit, of second quality, and lasts but a few days in perfection. It opens the pear season, with the Little Muscat, to which it is superior.

Fruit below the middle size, regularly pyriform, tapering to the stalk, which is an inch and a half long, and thickest at the point of junction. Skin very smooth, at first light green, but becomes bright

lemon-color at maturity—very rarely with a faint blush. Calyx large, with reflexed segments, even with the surface. Flesh white, sugary, delicate and juicy at first, but soon becomes mealy.

AMOUR.

Trésor.
Trésor d'Amour.

Poire d'Amour.
Treasure.

Love Pear.

An old Pear, valued only for cooking.

Fruit very large, oblong obovate pyriform. Skin rough, dull yellowish green, brownish in sun. Flesh white, coarse, harsh, astringent. Good for stewing. December to March.

ANANAS DE COURTRAI.

Ananas de Courtray.

What we have received as Ananas de Courtrai from three or four sources, both here and in Europe, have proved to be Ananas d'Été; and

Ananas d'Été.

as there is said to be a distinct Ananas de Courtrai, we insert Leroy's description.

Fruit large, pyriform, slightly obtuse, surface uneven. Skin pale yellow, with a warm brown red cheek in the sun, more or less marbled, some dots and patches of russet brown. Flesh white, fine, juicy, mild, sweet, musky, delicate perfume. Very good. Last of August and early in September.

ANANAS D'ÉTÉ.

Ananas (of Manning and of Leroy).
Du Bouchet.
Favori Musqué.

Ananas Français.
Summer Pine-apple.

An old variety, from Holland, which here is one of our best late summer or early autumn Pears. Tree very vigorous. Young shoots strong, of a rich reddish-yellowish brown, with prominent sharp-pointed buds, and oblong white specks.

Fruit rather large, pyriform, or occasionally obtuse at the stalk. Skin pale yellow, with a little brown on one side, and much covered with large, rough, brown russet dots. Stalk an inch and a quarter long, inserted sometimes in a blunt cavity, sometimes without depression, by the side of a lip. Calyx open, with short divisions. Basin shallow. Flesh fine-grained, buttery, and melting, with a sweet, perfumed, and high flavor. Very good. September and October.

ANDRÉ DESPORTES.

Originated in the gardens of M. André Leroy, in France, 1854.

Fruit medium, obovate obtuse pyriform, oblique. Skin greenish yellow, with patches of fawn and bronze in the sun. Flesh yellowish white, fine, juicy, melting, granulous at the core, sugary acid. July. (Leroy.)

ANDREWS.

Beurré Oudinot?

Amory.

Gibson.

The Andrews is a favorite native seedling, found in the neighborhood of Dorchester, and first introduced to notice by a gentleman of Boston, whose name it bears. It is of excellent flavor, but variable and subject to rot at the core.

Fruit rather large, pyriform, one-sided. Skin smooth, and rather thick, pale yellowish green, with a dull red cheek, and a few scattered dots. Stalk about an inch and a quarter long, curved, and set in a very shallow, blunt depression, or often without depression. Calyx open, placed in a small basin. Flesh greenish white, full of juice, melting, with a fine vinous flavor. Good to very good. Early in September. The Beurré Oudinot, as we have received it, has always proved identical with our Andrews, but Leroy claims it a distinct sort.

ANGÉLIQUE DE BORDEAUX.

Gros Franc Real d'Hiver.
Cristalline.

St. Martial.
Molle Bouche d'Hiver.

A variety from France.

Fruit medium, obtuse pyriform. Skin yellowish green in the shade, brownish red in the sun, with brown dots. Stalk fleshy at insertion.

Calyx small. Flesh tender, juicy, buttery, melting. January to April. (Hogg.)

ANGÉLIQUE LECLERC.

Originated with Leon Leclerc, of Laval. Tree productive.

Fruit medium to large, oblong obtuse pyriform. Stalk short. Calyx small, open. Skin greenish yellow, shaded and dotted with red in the sun. Flesh white, very close, melting, juicy, rough at the core, sweet, aromatic. October, December. (Leroy.)

ANGLETERRE.

English Beurré.
Beurré d'Angleterre.
Beurré Amande.
Almond Pear.

Monkowthy.
Longue de Narkouts.
Beurré Judes.
Amande Double.

An old French fruit of unknown origin. Tree vigorous, productive.

Fruit medium, acute pyriform. Skin dull light green, slight nettings of russet. Stalk long, slender, curved, fleshy at its junction with the fruit. Flesh white, buttery, and melting, full of juice, and of pleasant though not high flavor. Good. Middle of September.

ANGLETERRE D'HIVER.

Angoisse blanche.

An old Pear of little value, except as a keeper and for cooking.

Fruit large, acute pyriform, greenish yellow, with a brownish red tint in sun, many small russet and black specks. Flesh firm, rather dry, slightly acid. February to April.

ANGLETERRE NAIN.

Angleterre Parfumé.

Origin, Paris, France.

Fruit small to medium, obovate obtuse pyriform. Stalk long. Calyx half closed. Skin rough, dull green, dotted with red in the sun. Flesh whitish, fine, juicy, harsh near the core, musky. September, October. (Leroy.)

ANGOBERT.

Mansuette.
Solitaire.

Gros Angobert.
De Sainte Catherine.

Beurré de Semur.
Double Mansuette.

Dagobert.
A. Gobeit.

A very old variety, described in 1660, and then, as now, considered one of the best of cooking Pears.

Fruit large, or very large, irregular obtuse pyriform, greenish yellow. Flesh half melting, juicy, somewhat astringent. A cooking pear, September.

ANNA AUDISSON.

Doyenné Anna Audisson.

Beurré Anna Audisson.

Originated at Angers, France.

Fruit medium, roundish obtuse pyriform, yellowish green, with patches of russet and brownish red in the sun. Stalk short and stout.

Cavity slight, sometimes a lip. Calyx open. Flesh whitish, juicy, melting, sweet, and pleasant. Good to very good. October.

APPLE PEAR.

Pomoire.

Poire-Pomme.

Beurré de Rackenheim.

Fruit below medium, round or roundish oblate. Skin covered with cinnamon russet, unless in the shade, when it is a dirty yellow green, with russet marblings. Flesh yellow, tender, melting, juicy. Good. October.

ARBRE COURBÉ.

Amiral.

Colmar Charnay.

Tree vigorous, with irregular crooked branches. Young wood yellowish brown, with many specks, angled or bent from joint to joint.

Fruit medium or large, oval pyriform. Skin greenish yellow, with patches and russet dots. Stalk large and fleshy. Calyx open. Basin broad and shallow. Flesh whitish, coarse, half buttery, melting, juicy, slightly astringent. Good. Ripe last of September.

ARLEQUIN MUSQUÉ.

An old Pear, but little known.

Fruit large, obovate pyriform. Skin yellowish green, with marblings and dots of brown. Calyx large, open. Flesh white, buttery, melting, sweet. Good. Last of September.

ARTHUR BIVORT.

One of Van Mons' seedlings. Tree vigorous.

Fruit above medium, oblong obtuse pyriform, green, becoming yellowish at maturity, dotted with red in the sun. Stalk curved in a slight cavity. Calyx open. Flesh white, half fine, melting, juicy, vinous. October. (Alb. Pom.)

ASTON TOWN

Fruit small, roundish turbinate. Skin pale yellowish, with brown specks. Flesh soft, buttery, moderately sweet, perfumed. Hardly good. Middle and last of September.

AUDIBERT.

Belle Audibert.

Fruit large, obovate obtuse pyriform, pale yellow, orange in sun. Flesh white, breaking, granulated, acidulous. Good for stewing only. November.

AUGUSTE JURIE.

A seedling of M. Fortune, Willermoz, France. Tree moderately vigorous, very productive.

Fruit small, oblate pyriform, yellow, shaded with dark red in the sun. Flesh white, half melting, juicy, slightly vinous, and slightly musky. Good. August.

AUGUSTE ROYER.

Tree very vigorous and productive, and promises to be a valuable orchard fruit.

Fruit medium, roundish. Skin greenish yellow, covered with russet-fawn. Flesh whitish, half melting, juice abundant, sugary, and pleasantly perfumed. Good. Ripe October.

AUGUSTINE LELIEUR.

Auguste Lelieur.

A variety from Belgium, but of unknown origin.

Fruit below medium, oblong ovate pyriform. Skin greenish, with patches and nettings of russet, russet dots, and a blush-red cheek in sun. Stalk long, curved. Calyx closed, basin small, corrugated. Flesh white, buttery, juicy, half-melting, sweet, and pleasant. Good. October, November.

AUGUSTUS DANA.

An American Pear, originated with Francis Dana, Boston, Mass. The tree is a good but not strong or a handsome grower. Young shoots of a light reddish brown color.

Fruit medium, varying in form from acute pyriform to obtuse pyriform. Skin yellow, netted and patched with russet, and russet dots. Stalk often one side of a true axis, curved, and set with slight depression. Calyx open. Flesh whitish, juicy, melting, sweet, slightly aromatic. Good to very good. October.

AURATE.

An old variety.

Fruit small, pyriform, pale yellowish green. Flesh juicy, rich. Very good. Last of July.

AUTUMN BERGAMOT.

English Bergamot.
Common Bergamot.

York Bergamot.
English Autumn Bergamot.

Fruit small, roundish, and flattened. Skin roughish green. Flesh greenish white, coarse-grained at the core, juicy, sugary. September.

The Bergamotte d'Automne of the French is a distinct fruit from this. Skin light yellowish green, brownish red cheek. Flesh breaking, juicy, and refreshing, but not high-flavored. A second-rate fruit.

AUTUMN COLMAR.

A French Pear, of fair quality and a good bearer.

Fruit of medium size, oblong or obtuse pyriform, a little uneven. Skin pale green, dotted with numerous russety specks. Stalk about an inch long, straight, planted in a small, uneven cavity. Calyx small, closed, set in a slight basin, a little furrowed. Flesh a little gritty at the core, buttery, with a rich and agreeable flavor. Good. October.

AUTUMN NELIS.

Graham's Autumn Nelis.

Graham's Bergamot.

An English Pear. Tree much the habit of Winter Nelis, very hardly and productive. Young wood light olive.

Fruit medium, obovate pyriform. Skin greenish yellow, mostly overspread and netted with russet. Flesh yellowish, fine-grained, melting, rich aromatic. Very good. October.

AVRIL.

D'Avril.

Poire d'Avril.

Tree a vigorous grower, productive.

Fruit large, roundish, obtuse pyriform. Skin greenish yellow, slightly shaded and somewhat spotted with russet, and thickly covered with russet dots. Stalk long and curved, inserted usually in a depression. Calyx closed, basin deep and irregular. Flesh whitish, compact, coarse, granular, juicy, half-melting, sweet, and agreeable. A good baking pear. November to February.

BARBANCINET.

Origin, Nursery of Andre Leroy, Angers, France. Tree vigorous, spreading, upright, productive. Young wood light brown.

Fruit medium oblong acute pyriform, greenish yellow, with a brownish shade in the sun, sometimes slightly netted and patched with russet, and sprinkled with dots. Stalk medium, fleshy at junction. Calyx partially open. Segments short. Basin small. Flesh white, juicy, melting, slightly vinous. Very good. September.

BARBE NELIS.

Raised by Gregoire, of Belgium. Tree very vigorous, moderately productive. Young wood stout, light yellowish brown.

Fruit small, oblate obtuse pyriform, greenish yellow, shaded and marbled with dull red in the sun, many green dots, and a few nettings and patches of russet. Stalk long, slender, curved, often with bracts in a slight cavity. Calyx open. Flesh white, buttery, juicy, half-melting, sweet, pleasant. Good. Last of August.

BARON DEMAN DE LENNICK.

A Belgian Pear, too small to be of great value at its season.

Fruit small, roundish to roundish oblate, greenish yellow, with nettings and traces of russet, especially near the calyx, and many russet dots. Calyx large, open. Flesh white, coarse at centre, juicy, half-melting. Good. November, December.

BARONNE DE MELLO.

Adèle de St. Denis.
Adèle de St. Cerras.

St. Cerran.
Beurré Van Mons.

A Belgian Pear, first described by Biyort, in Album Pomology. Tree

hardy, vigorous grower, and productive. Young wood light olive brown with many specks.

Fruit medium, irregular in form, varying from curved pyriform to long acute pyriform, occasionally roundish acute pyriform. Skin yel-

Baronne de Mello.

lowish, nearly covered with brown russet, and thickly sprinkled with russet dots. Stalk long, curved, inclined, fleshy at base, and often with a lip. Calyx partially closed. Segments short, erect. Flesh whitish, a little coarse, juicy, melting, vinous subacid. Very good. October.

BARRY.

De Lestumieres.

Doyenné Barry.

An old variety, lately introduced and renamed.

Fruit medium, oblong obovate pyriform, greenish yellow, netted and shaded and dotted with russet. Stalk short, obliquely inserted, short. Calyx large, open. Flesh whitish, juicy, sweet, pleasant. Good to very good. October.

BARTLETT, OR WILLIAMS' BONCHRETIEN.

Bartlett, of all American Gardens.
 Williams' Bonchrétien.
 Clement Doyenné.
 Poire Guillaume, of the French.

Barnett's William.
 Bonchrétien Barnett.
 Delavault.

This noble Pear is, justly, one of the most popular of all the summer varieties. Its size, beauty, and excellence entitle it to this estimation, apart from the fact that it bears very early, regularly, and abundantly. It is an English variety, originated about 1770, in Berkshire, and was afterward propagated by a London grower by the name of Wil-

Bartlett, or Williams' Bonchrétien.

liams. When first introduced to this country its name was lost, and having been cultivated and disseminated by Enoch Bartlett, Esq., of Dorchester, near Boston, it became so universally known as the *Bartlett*

Pear, that it is impossible to dispossess it now. It suits our climate admirably, ripening better here than in England, and has the unusual property of maturing perfectly in the house, even if it is picked before it is full-grown. It has no competitor as a summer market fruit. The tree grows upright, with thrifty, yellowish brown shoots, and narrow, folded leaves.

Fruit of large size, oblong, obtuse pyriform. Surface uneven. Skin very thin and smooth, clear yellow (with a soft blush on the sunny side in exposed specimens), rarely marked with faint russet. Stalk one to one and a half inches long, stout, inserted in a shallow cavity. Calyx open. Segments short, erect, set in a very shallow, obscurely plaited basin. Flesh white, and exceedingly fine-grained and buttery; it is full of juice, sweet, with a highly perfumed vinous flavor. (In damp or unfavorable soils it is sometimes slightly acid.) Ripens from last of August to middle and last of September.

BARTRAM.

Origin, an accidental seedling on the premises of the late Miss Anna Bartram, near Philadelphia, Pa. Tree an irregular grower. Young wood slender, reddish yellow brown.

Fruit medium, obovate, obtuse pyriform, pale lemon yellow, thickly sprinkled with brown gray dots and traces of russet. Stalk inclined in a narrow cavity. Calyx partially open. Flesh white, fine-grained juicy, melting, rich, slightly vinous. Very good. September.

BEADNELL.

Beadnell's Seedling.

Foreign. Tree vigorous. Shoots long, bright chestnut.

Fruit medium, pyriform, pale yellowish green, blushed red in the sun. Flesh melting, juicy. Good. Last September. (Elliott.)

BEAU PRÉSENT D'ARTOIS.

Présent Royal de Naples.

Présent Royal de Nantes.

A foreign variety, by some persons highly esteemed. Tree vigorous, with long branches. Young wood dull brown, with white oblong specks.

Fruit large, oblong pyriform, greenish yellow, dotted and patched with russet. Stalk long, rather stout, inclined, little or no depression. Calyx partially closed. Basin shallow, uneven. Flesh buttery, juicy, melting. Good to very good. September.

BEAUVALOT.

Augière.

Augert.

Auger.

A foreign variety of indifferent quality.

Fruit medium or above, obovate obtuse pyriform, greenish yellow, sprinkled and patched with russet and many russet dots. Flesh juicy, vinous, pleasant. November, December.

BELLE DE BRUXELLES.

Belle d'Août.	Gros Muscadille.	Beurré de Bruxelles.
Petit Certean.	Bellissime d'Automne.	Muscat Rouge.
Beauty of Brussels.	Muscadille.	Vermillon des Dames.
De Coq.	Vermilion	Vermillon d'Automne.
	Des Dames.	

A large and handsome fruit, of poor quality.

Fruit medium, acute pyriform. Skin pale yellow, with a soft red cheek when fully exposed. Flesh white, sweet, and slightly perfumed. Middle of August.

BELLE DE FIGUIER.

Originated at Angers, France, in 1860.

Fruit medium to large, globular obtuse pyriform. Skin rough, greenish red, with fawn-colored spots. Stalk short. Calyx large, open. Flesh white, juicy, melting, sweet aromatic acid, gritty at core. December, January. (Leroy.)

BELLE DE L'ORIENT.

A foreign variety, showy but of poor quality.

Fruit large, oblong obtuse pyriform, greenish yellow, netted and dotted with russet. Flesh white, tender, rots at core before ripe. October.

BELLE DE THOUARS.

Coulon de Saint Marc.	Belle de Thouarse.
Belle de Troyes.	Saint Marc.
Belle de Prague.	Belle de Jersey.

A foreign variety, of indifferent or poor quality.

Fruit medium to large, oblong obtuse pyriform, yellow, covered with a thin cinnamon russet. Flesh white, dry, sweet. December, January.

BELLE ÉPINE DUMAS.

Duc de Bourdeaux.	Beurré Rochechourt
Épine du Rochoir.	Beurré St. Louis.
Épine de Limoges.	Colmar de Lot.
Épine Dumas.	Comte de Limoges.
Beurré de Rochoir.	Emile de Rochois.

Beurré d'Elberg.

Tree vigorous, pyramidal form, good bearer. Young wood dull yellow brown, with sharp-pointed buds.

Fruit medium, obovate obtuse pyriform. Skin green, becoming greenish yellow when ripe, with small russet brown dots. Stalk long, set in a very small depression. Calyx partially closed, in a shallow, regular basin. Flesh white, buttery, half melting, juicy, sweet, and of a peculiar flavor. Very good. November and December.

BELLE JULIE.

Tilloy —.	St. Germain Dutilleul.
Alexandre Helie.	St. Germain du Tillay.
St. Germain du Tilloy.	St. Germain de Graines.

A Belgian Pear. Tree very vigorous, and productive. Young wood rather slender, light yellowish brown.

Fruit medium, globular obtuse pyriform, sometimes inclined. Skin rather rough, greenish yellow, considerably netted and patched with russet, especially around the stalk and calyx. Stalk generally curved, set in a slight depression, often without and sometimes with a lip. Calyx open. Flesh whitish, buttery, juicy, melting, slightly vinous. Good to very good. October.

BELLE MOULINOISE.

Originated at Moulins, France, and introduced in 1864.

Fruit large, oblong obtuse pyriform. Skin rough, greenish, dotted and marbled in the sun, with fawn-color near the stalk. Stalk long, large, curved. Calyx large, open. Flesh whitish, fine, firm, juicy, crisp, sweet, musky. February, March. (Leroy.)

BELLE ROUENNAISE.

A French Pear, introduced in 1856.

Fruit medium, roundish oblique acute pyriform. Skin lemon yellow, covered with russet dots. Calyx large, half open. Stalk stout. Flesh white, tender, melting, juicy, rich, sugary, with a delicate aroma. Early in October. (Hogg.)

BELLE WILLIAMS.

A foreign variety little known. Tree a very erect, vigorous grower. Young wood olive, slightly yellow, glossy.

Fruit medium to large, oblong pyriform, with a groove or sunken line from stem to calyx, yellowish, with traces and nettings of russet. Stalk long, curved, set in a slight depression by a lip. Calyx partially closed. Flesh whitish, not juicy or rich. Good for cooking. December to March.

BELLISSIME D'HIVER.

Vermillon d'Hiver des Dames.
Bellissime du Bur.

Du Bur.
Belle Noisette.

An old Pear, valuable only for cooking.

Fruit large, obovate obtuse pyriform, greenish yellow, with shade of red in the sun, and many russet dots. Flesh white, fine, sweet, breaking, not gritty. November, January.

BELMONT.

An English kitchen Pear.

Fruit rather large, obtuse pyriform. Skin yellowish green, a little brownish next the sun. Flesh rather coarse, juicy, and sweet. October.

BERGAMOTTE BOUSSIERE.

One of Van Mons' seedlings.

Fruit below medium, roundish oblate pyriform, yellowish green. Flesh white, juicy, harsh at centre. Good. October, December.

BERGAMOTTE BUFO.

Bergamotte Capraud.

Crapaud.

An old French Pear, heretofore confounded with Bergamotte Cadet. Tree vigorous, productive. Young wood light reddish yellow brown.

Fruit medium, roundish oblate, greenish yellow, netted and patched with russet, and thickly sprinkled with russet dots. Stalk long, in a broad, rather shallow cavity. Calyx open. Flesh yellowish, juicy, melting, sweet, slightly vinous. Good. October.

BERGAMOTTE CADET.

Poire de Cadet.

De Cadet.

Milan de Bourdeaux.

A good Bergamot from France. Productive. Young wood clear light yellowish brown.

Fruit middle-sized, roundish inclining to oblate. Skin smooth, pale yellow, rarely with a pale red cheek. Stalk an inch long, thick set in an angular, shallow cavity. Calyx small, open. Basin nearly flat. Flesh buttery and juicy, sweet and rich. Good. October and November.

BERGAMOTTE D'ESPERÉN.

A seedling of Esperin, in 1830. Tree vigorous, productive. Young wood warm rich dark yellow brown, with small white specks.

Fruit medium, oblate, exceedingly depressed, sides often unequal. Skin greenish yellow, thick and rough, covered with russet dots and patches. Stalk long and stout, thickened at its insertion in a small cavity, at an inclination. Calyx small, closed in a rather deep slightly furrowed basin, surrounded by russet. Flesh greenish yellow, juicy, buttery, sweet, and rich. Good. December to February.

BERGAMOTTE DE MILLIPIEDS.

Said to have originated by Goubalt, at Millipieds, France, and first fruited in 1852.

Fruit medium, roundish ovate, ribbed at apex, pale yellow, moderately sprinkled with small brown dots. Stalk long, stout. Cavity small. Calyx open. Segments erect. Basin deep, abrupt, uneven. Flesh white, a little coarse, juicy, half melting, sweet. Good to very good. November.

BERGAMOTTE DUSSART.

A Belgian variety, described by various authors.

Fruit medium, obovate pyriform, greenish yellow, with gray dots and traces of russet. Flesh half melting, juicy, sweet, vinous. Good. December, January.

BERGAMOTTE GAUDRY.

Gaudry.

A foreign Pear of little value.

Fruit small, roundish oval oblate, greenish yellow, partially netted

and patched with russet, and many russet dots. Stalk long. Flesh whitish, coarse, breaking, gritty at core, pleasant, vinous. Hardly good. October.

BERGAMOTTE HEIMBOURG.

Raised by M. Bivort. Tree vigorous and very productive.

Fruit large, Bergamotte-shaped. Skin rough, green, changing to lemon-yellow when ripe, dotted with brown, and tinged with red next the sun. Flesh white, very fine, somewhat buttery, juice abundant, sugary, perfumed. Ripe early in October. (Gard. Chron.)

BERGAMOTTE LESEBLE.

A Pear of French origin, only good in quality. Tree vigorous and productive.

Fruit medium, oblate, or Bergamotte-shaped. Skin yellow, with a sunny cheek, numerous small dots, and russeted patches. Stalk long, curved, inserted in a depression. Calyx open, broad. Basin irregular. Flesh juicy, buttery, melting, sweet, and pleasant. October.

BERGAMOTTE PARTHENAY.

Bergamotte de Parthenay.
Beurré Parthenay.

Poire Poriault.
Bergamotte Stoffels.
Bergamotte Poireau.

Parthenay.
Poireau.

An old French Pear, large, and valuable only for cooking.

Fruit large, oblate obtuse pyramidal, olive yellow, with fawn-colored specks. Flesh white, firm, juicy, subacid, astringent. January to May.

BERGAMOTTE PIQUOT.

Origin unknown. Tree vigorous, productive.

Fruit medium, roundish, broad obtuse pyriform, pale yellow, tinge of red in the sun, traces of russet and russet dots. Flesh white, juicy, melting, sweet, slightly vinous. Good. Rots at core. September.

BERGAMOTTE SAGERET.

Sageret.

A French Pear, of vigorous growth of tree.

Fruit medium, roundish, greenish, very thickly sprinkled with brown and russet dots. Stalk fleshy at insertion. Calyx large, open. Flesh white, juicy, melting, sweet, pleasant. Good. October.

BERGAMOT SECKEL.

Raised by William Pitmaston, England. Tree moderately vigorous, productive.

Fruit medium or below, roundish, regular. Skin reddish-brown, russet specks. Stalk short, thick, inclined without depression. Calyx short, stiff. Basin shallow. Flesh white, juicy, sugary, with all the spicy flavor of the Seckol. (Gard. Chron.)

BERGEN.

A chance seedling found in a hedge on land formerly belonging to

Simon Bergen, of New Utrecht, Long Island. Tree moderately vigorous, upright. Young wood reddish, an early and good bearer, but not profuse.

Fruit large, elongated, obtuse pyriform, often with sides not symmetric, angular. Skin waxen, lemon yellow, finely shaded with crimson and fawn where exposed to the sun, and thickly sprinkled with brown and crimson dots. Stalk long, rather stout, curved, inserted in a moderate depression by a fleshy ring. Calyx small, open. Segments stiff. Basin small, surrounded by a wavy border. Flesh whitish, veined with yellow, a little coarse and gritty, buttery, juicy, melting, with a sweet aromatic flavor, delicately perfumed. Good to very good. Ripe last of September and beginning of October.

BERRIAYS.

Poire de Berriays.

This is a new French variety, obtained from seed in 1861, by M. Boissunel. Tree moderately vigorous, productive. Young shoots reddish.

Fruit medium, surface a little uneven, roundish obovate obtuse. Skin pale greenish yellow, sometimes a shade of brown in the sun, and thickly sprinkled with brown and green dots. Stalk long, set in a small cavity. Calyx closed. Segments short. Basin small, uneven. Flesh white, a little coarse at the core, juicy, melting, refreshing, slightly vinous. Good to very good. September.

BEURRÉ ANTOINE.

Saint Germain Fondant.

Originated in 1822, and was rebaptized in 1849, under name of the present synonym. Tree vigorous.

Fruit medium or above, oblong pyriform, sometimes with a suture one side. Skin pale greenish yellow, sprinkled with green and brown dots. Stalk long, curved, inserted in a small cavity. Calyx large, open. Flesh white, buttery, not very juicy or melting, but sweet. Good. Last September.

BEURRÉ ANTOINETTE.

A Belgian Pear, originated in 1846. Tree vigorous and productive.

Fruit medium, roundish acute pyriform. Skin greenish yellow, slightly netted with russet, and thickly sprinkled with russet dots. Stalk long, slender, inserted generally with a lip. Calyx open. Flesh yellowish, juicy, buttery, sweet, pleasant, a little perfumed. Slightly vinous. Good. September.

BEURRÉ ASSOMPTION.

Beurré de l'Assomption.

Originated near Nantes, in France. Tree vigorous, very productive.

Fruit large, irregular, generally oblong pyriform, obtuse, yellow, dotted, marbled, and splashed with red in sun. Stalk short. Calyx large, open. Flesh white, half fine, melting, juicy, rough next the core, acid sweet. July, August. (Leroy).

BEURRÉ AUNENIERE.

Origin, supposed France. Tree vigorous, productive. Young wood dull yellowish brown.

Fruit medium, roundish oblong pyriform, pale yellow, with a few traces of russet, and sprinkled with brown dots. Stalk stout. Calyx partially open. Segments short, erect. Flesh white, juicy, melting, sweet, aromatic. Good. Last September.

BEURRÉ BACHELIER.

Bachelier.

Chevalier.

A French Pear, introduced in 1845. Tree vigorous. Young wood rich dark brown.

Fruit medium or above, obovate obtuse pyriform. Skin greenish yellow, with brown dots and patch of russet next the stalk. Stalk shortish, very much inclined in a moderate depression by a lip. Calyx partially closed, set in a shallow basin. Flesh buttery, juicy, melting, with a brisk, vinous, aromatic flavor. Very good. November and December.

BEURRÉ BAILEY.

A variety that originated in France, and first fruited in 1848.

Fruit large, irregular, elongated pyriform, yellow, dotted with greenish gray, and with fawn color next the calyx. Flesh white, fine, half melting, juicy, sugary, rough near the core. October, November. (Leroy.)

BEURRÉ BEAUCHAMPS.

Beauchamps.
Biemont.Haghens d'Hiver.
Bergamotte Beauchamp.

One of Van Mons' seedlings. Tree vigorous. Young shoots stout, dark dull olive yellow, many long white specks, and patches of whitish gray.

Fruit medium, roundish obovate. Skin rough, light yellow, slightly netted and patched with russet, and with many brown and crimson dots. Stalk pretty stout, long and curved, set in a moderate cavity, sometimes by a lip. Calyx open. Basin rather narrow, abrupt, and uneven. Flesh white, juicy, melting, a little buttery, very sweet, gritty, pleasant. Good. November.

BEURRÉ BEAULIEU.

Fruit medium, roundish pyriform. Skin greenish yellow, mostly covered with russet. Stalk short, inclined, without cavity. Calyx open. Basin shallow. Flesh whitish, somewhat coarse, buttery, melting, with a brisk vinous flavor, resembling Brown Beurré. Good. October.

BEURRÉ BEGUINES.

A small but very rich Pear, one of Van Mons' seedlings, too small for the season.

Fruit small, obovate oblate. Skin rough, nearly covered with dull russet. Stalk long. Calyx open. Flesh whitish, juicy, coarse, melting, sweet. Good. October.

BEURRÉ BENNETT.

From Belgium.

Fruit small, roundish oblate pyriform, pale yellow, sometimes shaded and mottled with fawn and crimson in the sun, and often netted and patched with russet. Stalk long, slender. Calyx open. Flesh whitish or light rose color, juicy, melting, a little coarse, sweet, perfumed. Good. November, December.

BEURRÉ BENOIST.

Beurré Auguste Benoit.

Benoist.

Beurré Benoist Nouveau.

Tree moderately vigorous, spreading, very productive. Young wood reddish, with sharp spur-like buds.

Fruit medium, roundish inclining to acute pyriform. Skin yellow, spotted and shaded with brown russet, red cheek in sun. Stalk of moderate length, inserted by a fleshy ring or lip. Calyx open, in a regular basin. Flesh white, fine, melting, juice abundant, sugary, and well perfumed. Very good. Ripe end of September.

BEURRÉ BERCKMANS.

Alexandre Berckmans.

One of Major Esperen's seedlings, dedicated to M. Louis Berckmans, once a collaborer in pomology. Tree vigorous, upright, very productive. Young wood very stout, blunt at ends, yellowish olive.

Fruit medium or above, obovate pyriform, sometimes obovate acute pyriform. Skin yellowish, rough, chiefly covered with russet. Stalk of medium length, fleshy, very much inclined. Calyx small, open, in a shallow furrowed basin. Flesh white, juicy, very buttery, melting, with a rich, highly perfumed flavor. Very good. October, November.

BEURRÉ BOISBUNEL.

Originated with L. M. Boishunel, at Rouen, France, in 1835. Tree moderately vigorous and productive. Young wood dull yellowish brown.

Fruit medium, obovate pyriform. Skin greenish yellow, with traces of russet, and thickly sprinkled with russet dots. Stalk long, slender, curved, set in a small cavity, sometimes by a lip. Calyx small, open. Flesh whitish, rather coarse, juicy, melting, sweet, slightly perfumed. Good. September.

BEURRÉ BOLLWILLER.

A winter cooking Pear, of good quality.

Fruit large, obovate obtuse pyriform. Skin yellowish, with spots of grayish brown and russet near the calyx, shade of red in the sun. Flesh white, half fine, juicy, sweet, agreeable. Good. January, March.

BEURRÉ BOSC.

Bosc's Flasch mbrime.

Calebasse Bosc.

Cannelle.

The Beurré Bosc is a Pear to which we give our unqualified praise.

It is large, handsome, a regular bearer, always perfect, and of the highest flavor. It bears singly, and not in clusters, looking as if thinned on the tree, whence it is always of fine size. It was raised in 1807, by Van Mons, and named *Calebasse Bosc* in honor of M. Bosc, a distinguished Belgian cultivator. Having also been received at the garden of the

Beurré Bosc.

Horticultural Society of London under the name of *Beurré Bosc*, Mr. Thompson thought it best to retain this name, as less likely to lead to a confusion with the *Calebasse*, a distinct fruit. The tree grows vigorously. Shoots long, brownish olive.

Fruit large, pyriform, a little uneven, often tapering long and gradually into the stalk. Skin pretty smooth, dark yellow, a good deal covered with streaks and dots of cinnamon russet, and slightly touched with red on one side. Stalk one to two inches long, rather slender,

curved. Calyx short, set in a very shallow basin. Flesh white, melting, very buttery, with a rich, delicious, and slightly perfumed flavor. Best. Ripens gradually from the last of September to the last of October.

BEURRÉ BRETTOUNEAU.

Docteur Brettouneau.

Brettouneau.

One of Major Esperen's seedlings, originated in 1818. Tree vigorous, but comes late into bearing. Young wood yellowish brown.

Fruit large, variable in form, generally obovate pyriform. Skin rough, light green, golden yellow at maturity, reddish brown in the sun. Flesh fine, yellowish white, not juicy, half melting, sugary, vinous, pleasantly perfumed. Good. March and April.

BEURRÉ BRUNEAU.

Crassane d'Hiver de Bruneau.

De Saint Herblain.

Bergamotte Crassane d'Hiver.

Crassane Bruneau.

Crassane d'Hiver.

Bergamotte Crassane de Bruneau.

This variety, we believe, was originally figured and described in the Annals of Pomology as Bergamotte Crassane d'Hiver, but having received it as Beurré Bruneau, we prefer to continue that name as the most simple. It is not a variety of much excellence, although the tree is hardy and productive.

Fruit medium, short obtuse pyriform, dull yellow, spotted and shaded with grayish brown. Flesh white, juicy, vinous a little acid. Good November, December.

BEURRÉ BURNICQ.

Originated and first fruited with Major Esperen, in 1846. Tree vigorous, spreading, irregular, productive. Young wood reddish brown.

Fruit medium, globular acute pyriform. Skin yellowish, partially netted and patched with russet, and sprinkled with russet dots. Stalk medium, fleshy at insertion. Calyx generally open. Basin small, uneven. Flesh whitish, juicy, melting, vinous, slightly astringent. Good. October.

BEURRÉ CHARRON.

Originated at Angers, France, in 1838.

Fruit medium, roundish, yellowish, with many gray dots. Stalk long. Calyx small, closed. Basin deep. Flesh juicy, melting, buttery. Very good. October.

BEURRÉ CHATENAY.

A French Pear, too small for profit, but very good in quality.

Fruit small, varying in form from obovate to ovate pyriform, pale yellow, netted and patched with russet, occasionally a red cheek in the sun. Stalk rather short. Calyx partially open. Flesh white, half fine, juicy, sweet, vinous. October.

BEURRÉ CITRON.

From Belgium, one of Van Mons' seedlings. Tree vigorous. Young wood reddish brown.

Fruit medium or below, obovate oblate. Skin whitish yellow, shade of red or crimson in the sun, traces of russet and many russet dots. Stalk long, a little curved, set in a small cavity, sometimes with a slight lip. Calyx open. Flesh white, half melting, juicy, sweet, a little perfumed. Good to very good. Last September and October.

We have received another and quite different pear under this name, the wood of which is yellowish brown.

Fruit medium or below, irregular, sometimes obovate obtuse pyriform, and again ovate acute pyriform. Skin pale yellow, slightly netted with russet, and with small brown or russet dots. Stalk medium, fleshy at insertion. Calyx open. Flesh yellowish, coarse, not juicy or melting. Hardly good. November, December.

Leroy makes General Lamoricière identical with Beurré Citron, but as we have received them they are quite distinct.

Beurré Clairgaut.

BEURRÉ CLAIRGEAU.

Clairgeau.

Clairgeau de Nantes.

Raised by Pierre Clairgeau, of Nantes, France. Tree very vigorous, forming a beautiful pyramid. Young wood reddish brown, very productive.

The size, early bearing, productiveness, and beauty of this Pear render it a profitable market sort.

Fruit large, pyriform, but with unequal sides. Skin warm yellow, inclining to fawn, shaded with orange and crimson, thickly covered with russet dots, and sometimes sprinkled with russet. Stalk short, stout, and fleshy, inserted by a lip at an inclination almost without depression; when the lip is absent the cavity is uneven. Calyx open. Segments stiff, in a shallow furrowed basin. Flesh yellowish, buttery, juicy, somewhat granular, with a sugary, perfumed, vinous flavor. Good. October to January.

BEURRÉ COLMAR.

Beurré Colmar d'Automne.

Beurré d'Enghien of France.

It is one of Dr. Van Mons' seedlings, and is quite distinct from the Autumn Colmar.

Fruit of medium size, oval obovate, regularly formed. Skin smooth, pale green, becoming yellowish at maturity, with a blush next the sun, and thickly sprinkled with dots. Stalk an inch long. Calyx expanded, and set in a very shallow, narrow, irregular basin. Flesh very white, slightly crisp at first, but becoming very juicy and melting, with a slightly perfumed flavor. Good. October.

BEURRÉ COLOMA.

Beurré du Coloma.

Capucine d'Automne Coloma.

The trees of this foreign Pear are good growers.

Fruit small to medium, long oval pyriform, greenish yellow, with a tinge of red in the sun, and many green and brown dots. Stalk medium, inserted without cavity. Calyx open. Flesh whitish yellow, juicy, melting, slightly astringent. Good. October.

BEURRÉ D'ALBRET.

Poire d'Albret.
Dalbret.Beurré Delbret.
Calebasse d'Albret.

A foreign variety. Tree vigorous and productive. Young wood reddish.

Fruit medium or above, elongated pyriform, angular, often with a suture on one side. Skin yellow, mostly covered with cinnamon russet. Stalk short, thick, and fleshy, much inclined at its insertion by a lip. Calyx small, open, or partially closed. Basin small and uneven. Flesh greenish white, exceedingly juicy, buttery, melting, with a rich vinous flavor, highly perfumed. Very good. October.

BEURRÉ D'AMANLIS.

Hubard.
Beurré d'Amanlis.Beurré d'Amalis.
Kessoise.Kaissoise.
Thiessoise.

A Belgian Pear, very productive, variable. Succeeds best in cold latitudes.

Fruit large, obovate, not very regular, a little swollen on its sides. Skin rather thick, dull yellowish green, with a pale reddish brown cheek,

Beurré d'Albret.

overspread with numerous brown dots and russet streaks and patches. Stalk a little more than an inch long, set rather obliquely in a shallow, irregular cavity. Calyx open, with broad divisions. Basin shallow. Flesh yellowish, somewhat coarse, but buttery, melting, abundant, rich, with slightly perfumed juice, often astringent and poor. September.

Beurré d'Amanlis Panachée differs from the above only in its skin, having green and greenish yellow shades and stripes.

BEURRÉ D'ANJOU.

Ne Plus Meuris of the French.

A noble fruit, said to be of French origin. Tree vigorous. Young shoots yellowish brown, very productive.

Fruit large, obtuse pyriform. Stem short, thick, and fleshy, inserted in a cavity, surrounded by russet. Calyx very small, open, stiff, in an exceedingly small basin, surrounded by russet. Skin greenish, sprinkled with russet, sometimes shaded with dull crimson, and sprinkled thickly with brown and crimson dots. Flesh whitish, not very fine, melting, juicy, with a brisk vinous flavor, pleasantly perfumed. Very good to best. October, November.

This is one of the most profitable varieties for orcharding, bearing abundantly and evenly, whether grown on quince or pear stocks.

Beurré d'Anjou.

BEURRÉ D'AREMBERG.

Duc d'Aremberg.
Deschamps.
Colmar Deschamps.
D'Aremberg Parfait.
L'Orpheline.

Beurré des Orphelines.
Beurré Burchardt.
Orpheline d'Enghien.
Beurré Deschamps.
Délices des Orphelines.

The Beurré d'Aremberg is a fine fruit, high-flavored, bears most abundantly, and always keeps and matures with perhaps less care than most other winter fruits in the house.

The Beurré d'Aremberg was raised by the Abbé Deschamps, in the garden of the Hospice des Orphelines, at Enghien. The Beurré d'Aremberg of many French catalogues is the Glout Morcean. The two sorts are easily distinguished. The fruit of the d'Aremberg has a short, or thicker stalk, usually bent to one side; its flavor is virous instead of

sugary, and its wood not so strong, with more deeply serrated leaves. Branches clear yellowish brown, dotted with pale specks. Tree unhealthy and subject to canker.

Fruit obovate, but narrowing a good deal to the stalk. Skin thick, rather uneven, pale greenish yellow, becoming yellow at maturity, with many tracings and spots of light russet. Stalk short, half an inch to an inch long, thick, and very fleshy, especially where it joins the fruit, and usually planted very obliquely. Calyx short and small, set in a deep basin. Flesh white, buttery, and melting, with an abundant, rich, delicious vinous juice. Very good. December.

BEURRÉ D'AVOINE.

A variety of comparatively recent introduction from Belgium.

Fruit medium, obovate. Skin greenish yellow, with a few patches and nettings of russet, and some russet dots. Stalk medium. Calyx closed. Flesh whitish, juicy, melting, sweet, and pleasant. Good to very good. October.

Beurré de Brignais.

BEURRÉ DE BRIGNAIS.

Des Nonnes. Poire des Nonnes. Nun's Pear. De Nonne.

A valuable variety, the origin of which we cannot learn. Tree

vigorous, hardy, and productive. Young wood rich dark yellowish brown.

Fruit medium, roundish oblate. Skin greenish, with numerous gray dots. Stalk long, curved, inserted in a narrow, uneven cavity. Calyx closed. Basin shallow, corrugated. Flesh white, juicy, melting, with a brisk, perfumed, high flavor. Very good. Ripe middle and last of September. Core small, continues a long time ere it decays.

BEURRÉ DE CAPIAUMONT.

Capiumont.
Aurore.

Beurré Aurore.
De la Glacière.

Calebasse Vasse.

A Flemish Pear, very fair and handsomely formed, and a capital bearer, hardy in all soils and seasons; sometimes first-rate; but when the tree is heavily laden, it is apt to be slightly astringent. It grows freely. Branches a little pendent, grayish yellow.

Fruit of medium size, long turbinate, very even, and tapering regularly into the stalk. Skin smooth, clear yellow, with a light cinnamon-red cheek, and a few small dots and streaks of russet. Calyx large, with spreading segments prominently placed, and not at all sunk. Stalk from three-fourths to an inch and a half long, curved. Flesh fine-grained, buttery, melting, sweet, and, when not astringent, of high flavor. September and October.

BEURRÉ DEFAIS.

Beurré Audusson d'Hiver.

Beurré Defays.

A French Pear. Tree productive, and a strong, vigorous grower. Young shoots rich clear reddish brown, with a large pointed bud at end.

Fruit rather large, oblique obtuse pyriform. Skin fine yellow, slightly netted with russet, and a few russet dots. Stalk varying in length, set in a narrow cavity. Calyx small, partially open. Flesh white, juicy, melting, sweet, slightly aromatic. Good. October.

BEURRÉ DE FÉVRIER.

This winter Pear originated in Rouen, France, and is classed as a superior variety; we have not fruited it, and give our description from Leroy.

Fruit medium, oblong obtuse pyriform. Skin greenish yellow, with clear spots of red in the sun. Flesh white, half fine, melting, slightly granulous, juicy, sweet with a vinous perfume. January, February.

BEURRÉ DE GHELIN.

Beurré Fromentel.

Raised by M. Fontaine de Shelin, near Mons, Belgium. Tree vigorous, productive.

Fruit large, very irregular in its outline, often roundish oblong oval, yellowish, with some few marblings of russet. Stalk short. Cavity irregular. Flesh yellowish white, half fine, juicy, sweet, agreeable October, December. (Leroy.)

BEURRÉ D'HARDENPONT D'AUTOMNE.

Wilfred ?

Tree upright, vigorous. Young wood grayish reddish brown.

Fruit rather large, oblong obovate obtuse pyriform. Skin pale yellow, netted and patched with russet, and many large russet dots. Stalk long, curved. Calyx open. Basin narrow, abrupt. Flesh yellowish, juicy, sweet, slightly aromatic. Good to very good. October.

BEURRÉ DE JOHNGE.

Originated in the garden of M. Gambier, near Brussels. Tree hardy, productive.

Fruit medium to large, obovate acute pyriform, fleshy next the stem. Skin pale yellow, a tinge of red in the sun, considerably netted and patched with russet, and many russet dots. Stalk short, inclined, lip at base. Calyx open. Segments short. Basin rather small and

Beurré de Koning.

uneven. Flesh whitish, juicy, melting, sweet, rich, a little perfumed. Good to very good. December, January.

BEURRÉ DE KONING.

Beurré Koninck.

Beurré de Conick.
Auguste de Maraise?

Beurré Conning.

A Belgian Pear. Tree moderately vigorous. Young shoots slender, olive reddish yellow.

Fruit medium, obovate, slightly obtuse pyriform. Skin yellowish green, with russet and brown dots and marblings. Stalk medium, stout. Calyx open, in a broad basin. Flesh white, juicy, melting, vinous. Good to very good. October.

BEURRÉ DELANNOY.

De Launay.

Originated with Alexander Delannoy, of Tournai. Tree vigorous, productive. Young shoots dull reddish-yellowish brown.

Fruit large, obovate obtuse pyriform. Skin greenish yellow, a little brownish in the sun, with patches and traces of russet and many russet dots. Stalk varying, a little curved and inclined. Calyx open. Flesh whitish, melting, refreshingly sweet. Very good. October, November.

BEURRÉ DELBECQ.

Delbecque.
Fondante Delbecq.Fleur de Mars.
Beurré Delberg.

A Belgian variety. Tree vigorous and productive.

Fruit medium, oval obovate, golden yellow, splashed and dotted with red in the sun. Flesh white, fine, melting, juicy, sweet. Good. September, October.

BEURRÉ DELFOSSE.

Beurré Philippe Delfosse.
Delfosse.Delfosse Bourgmestre.
Philippe Delfosse.

Bourgmestre Delfosse.

Raised by M. Gregoire, of Belgium. Tree vigorous, productive. Young shoots very stout, rich warm yellow brown.

Fruit medium to large, obovate obtuse pyriform, sometimes only obovate, greenish yellow, netted and patched with russet, and many russet dots. Stalk curved, set in a small cavity. Calyx open. Flesh white, juicy, melting, sweet, pleasant. Good. October, November.

BEURRÉ DE MONS.

Beurré de Mans.

A foreign Pear of little value, as it rots at the core.

Fruit small, roundish obovate, yellowish, with a shade of brownish red in the sun, many green and gray dots. Stalk long, slender. Calyx open. Flesh whitish, coarse, juicy, astringent. Poor. August.

BEURRÉ DE MONTGERON.

New Frederick of Wurtemberg.

De Montgeron.

Beurré de Montigeron.

A variety obtained by M. Guyot, of Villeneuve, in 1830. Tree vigorous, moderately productive. Young wood dull yellow brown.

Fruit medium, broad pyriform. Skin yellow, shaded with fine rich red in the sun, and sprinkled with minute light brown dots. Stalk long, curved. Calyx open. Basin furrowed. Flesh whitish yellow, juicy, melting, with a pleasant vinous flavor. Good to very good. August.

BEURRÉ DE NANTES.

Beurré Nantais.

Beurré Blanc de Nantes.

Raised by François Maisonneuve, at Nantes, France. Tree very vigorous, upright, healthy, and comes early into bearing. Young wood olive.

Fruit large, elongated pyriform or pyramidal. Skin greenish yellow, with a red cheek and minute dots. Stalk rather long and large, inserted by a lip almost without cavity. Calyx large, open. Basin broad and furrowed. Flesh juicy, sweet, melting, and pleasantly perfumed. Very good. October.

BEURRÉ DE NIVELLES.

A Belgian Pear, as yet but little known.

Fruit medium, obtuse pyriform. Skin yellow, with brownish red in the sun, netted, patched, and dotted with russet. Stalk set in a small cavity. Calyx small, nearly closed. Basin small, narrow, abrupt. Flesh whitish, juicy, melting, vinous. Good. October.

BEURRÉ DE QUENAST.

We have received several Pears under this name, one of which has proved identical with Louise Bon de Jersey, and as we have doubts of the others, we copy description from the Annals of Pomology, as follows:—

Fruit medium, roundish oblong pyriform, slightly acute, greenish yellow, with patches of russet, and russet next the stalk and calyx. Flesh white, melting, juicy, sweet, and pleasantly perfumed. October.

BEURRÉ DEROUINEAU.

A French Pear of small size and poor quality.

Fruit small, obovate, yellowish, sprinkled with russet patches. Flesh white, sweet. October, November.

BEURRÉ DE SAINT ARNAUD.

Beurré de Saint Arnaud.

A Belgian Pear, originated in 1853. Tree vigorous.

Fruit below medium, roundish obovate, yellow, becoming brownish red in the sun. Flesh white, fine, buttery, juicy, agreeable. Good. October.

BEURRÉ DES MOUCHOUSES.

Origin, France.

Fruit large, roundish obtuse obovate, yellow, with many gray dots. Flesh white, fine, melting, juicy, vinous. July, August. (Leroy.)

BEURRÉ DE WETTEREN.

This Pear was discovered by Louis Berckmans, in his garden at

Heyst-op-den-Berg, among a number of wild pear-trees of his sowing. Tree vigorous, very thorny, suitable for a pyramid.

Fruit middle size, turbinate. Stalk medium, with some small plaits around its insertion. Eye in a wide even cavity. Skin completely covered with russet, and slightly colored next the sun. Flesh fine, yellowish white, half melting, buttery, with an abundant sugary, agreeably perfumed, musky juice. February. (An. Pom.)

Beurré Diel.

BEURRÉ DIEL

Diel's Butterbirne.
Diel.
Dorothée Royale.
Grosse Dorothée.
Sylvanghe vert d'hiver.
Beurré Royale.
Dorothée Royale.
Gros Dillen

Dillen.
Des Trois Tours.
Mabille.
Beurré d'Yelle.
De Melon.
Melon de Kops.
Beurré Magnifique.
Beurré Incomparable.

Beurré de Gella.
Dillen d'Hiver.
Dry Toren.
Gracioli d'Hiver.
Fourcroy.
Guillaume de Nassau.
Beurré Vert.

A chance seedling near Brussels, Belgium, dedicated by Van Mons,

and named in honor of his friend Dr. Augustus Frederick Adrien Diel, a distinguished German pomologist. Its vigor, productiveness, and beauty have made it already a general favorite with our planters. It is in every respect a first-rate fruit in favorable situations, but on very young trees and in cold soils it is apt to be rather coarse and astringent. The tree has long, very stout, twisting branches, and is uncommonly vigorous. Young shoots reddish yellow grayish brown.

Fruit large, varying from obovate to obtuse pyriform. Skin rather thick, lemon yellow, becoming orange yellow, marked with large brown dots, and marblings of russet. Stalk an inch to an inch and three-quarters long, stout, curved, set in a rather uneven cavity. Calyx nearly closed, and placed in a slightly furrowed basin. Flesh yellowish white, a little coarse-grained, especially at the core, but rich, sugary, half melting, and, in good specimens, buttery and delicious. Very good. In eating, in this country, from September to December, if picked and ripened in the house.

BEURRÉ DU CERCLE.

Beurré de Cercle.

Pratique de Rouen.

A new French Pear little known. Tree moderately vigorous.

Fruit medium or below, very irregular in form, varying from obovate to oblong acute pyriform. Skin yellow, mostly covered with golden russet, and shade of red in sun, and many russet dots. Stalk rather short. Calyx open. Flesh yellowish, coarse, juicy, melting, sweet, slightly vinous. Good. October.

BEURRÉ DUHAUME.

Tree a moderate grower, productive. Young wood yellowish brown.

Fruit medium, oblate turbinate, very much depressed, with a suture along one side. Skin rough, covered with thin russet, and thickly sprinkled with russet dots. Stalk short, thick, and fleshy, inserted by a lip at an inclination. Calyx open. Segments stiff. Basin irregular. Flesh coarse, buttery, juicy, melting, with a pleasant vinous flavor. Good. November to February.

BEURRÉ DUMONT.

Beurré Dumon.

A Belgian variety, raised by Joseph Dumont. Tree a vigorous grower, with rather slender branches.

Fruit rather large, obovate pyriform obtuse. Skin pale yellow, with a shade of red in the sun, and a few nettings and patches of russet and russet dots. Stalk rather stout, set in a slight cavity. Calyx open. Flesh white, a little coarse, juicy, melting, refreshing, sweet. Good. September and October.

BEURRÉ DUMORTIER.

Du Mortier.

Dumontier.

Dumoustier.

A Belgian Pear.

Fruit medium, roundish obovate pyriform, often with unequal

sides. Skin rough, greenish, partially netted and patched with russet, and many russet dots. Stalk generally inclined and without depression. Calyx open. Segments long, recurved. Flesh greenish white, juicy, sweet, melting, a little vinous. Good to very good. October.

BEURRÉ DURAND.

Originated at Angers, France, and introduced in 1855.

Fruit medium, oblong obtuse pyriform, yellow, dotted and marbled with fawn-color and splashed with red in the sun. Stalk short. Calyx half closed. Flesh white, fine, melting, sugary, vinous. September, October. (Leroy.)

BEURRÉ DUVAL.

Duval.

Dwael.

Roi Louis Nouveau.

Audibert.

A Belgian Pear, raised by M. Duval. Tree vigorous, productive. Young wood pretty stout, grayish olive brown.

Fruit medium to large, varying in form from obovate to oblong obtuse pyriform. Skin warm yellow, dull brown in the sun, and with patches and nettings of russet and many brown dots. Stalk moderately stout, with little or no depression. Calyx open. Flesh whitish, juicy, melting, sweet, pleasant. Good to very good. October.

BEURRÉ DUVIVIER.

Duvivier.

Général Duvivier.

A coarse, poor French Pear.

Fruit small, obovate, greenish with russet. Flesh white, coarse, sweet, pleasant, hardly good. Rots at core. September.

BEURRÉ FLON.

Originated near Angers, France, in 1852.

Fruit large, oblong obovate obtuse pyriform. Sides unequal. Skin rough, thick, citron yellow, mostly overspread, marbled, splashed, and dotted with red. Stalk short, set in a shallow cavity. Calyx open. Flesh white, half fine, tender, juicy, a little rough, sweet, aromatic. September, October. (Leroy.)

BEURRÉ FOUGIERE.

A foreign Pear, introduced by J. C. Lee.

Fruit of medium size, obovate. Skin greenish yellow, with patches and points of light russet, and some dark green spots. Flesh yellowish white, coarse-grained, a little gritty at the core, melting, juicy, sweet, and good. October. (Rob. Manning's MS.)

BEURRÉ GENDRON.

Poire Gendron.

A large foreign Pear, fine for cooking.

Fruit large, irregular, oblong obovate obtuse pyriform, yellowish, with a shade of brownish red in the sun. Flesh white, coarse, breaking, juicy, sweet, vinous. January, March.

BEURRÉ GENS.

A Belgian Pear. Tree vigorous and productive. Young wood yellowish brown.

Fruit medium, roundish obovate, obscurely pyriform. Skin yellow, shaded with bright red and sprinkled with russet dots, and netted and patched with russet. Stalk short. Calyx small, partially closed. Basin narrow. Flesh white, fine, juicy, melting, sweet, vinous, aromatic, a little gritty at the core. Very good. October.

BEURRÉ GIFFARD.

Poire Giffard.

Giffard.

A chance seedling, originated with M. Giffard, Angers, France. Tree of moderate growth, with slender reddish-colored shoots.

Beurré Giffard.

Fruit medium in size, pyriform, tapering to the stem, which is rather long. Skin greenish yellow, marbled with red on the sunny side. Calyx closed. Segments stiff, set in a very small basin. Flesh white, melting, juicy, with an excellent vinous flavor, delightfully perfumed. An early Pear of value, but requires to be gathered early, and does not continue long. Very good. Ripening middle of August.

BEURRÉ GOUBALT.

Poire Goubalt.

Originated in France, in 1842. Tree vigorous, an early bearer, and productive.

Fruit small, irregularly obovate. Skin greenish yellow, with gray lines. Stalk long. Calyx large. Flesh juicy, melting, pleasant, but not rich. Good. September.

BEURRÉ GRIS D'HIVER NOUVEAU.

Beurré Gris d'Hiver.
 ————— de Luçon.
 ————— Supérieur.

Beurré de Fontenay.
 ————— d'Hiver.
 ————— de Luçon.

Tree moderately vigorous, productive. Young wood dark yellowish reddish brown.

Fruit medium, roundish obtuse pyriform. Skin golden russet, with a fine sunny cheek, and sprinkled with dots. Stalk very stout, rather

Beurré Gris d'Hiver Nouveau.

short, inclined, sometimes inserted in a large cavity, at others with a lip. Calyx very small and open. Segments small, slightly recurved. Basin shallow, uneven. Flesh somewhat granular, juicy, buttery, melting. Flavor rich and sugary, with a very peculiar aroma. Very good. November, February.

BEURRÉ HAFFNER.

A Belgian Pear, by some confounded with Flemish Beauty, from which it is entirely distinct. Tree vigorous, productive. Young wood clear reddish yellow brown.

Fruit medium, obovate pyriform. Skin greenish yellow, often with a shade of red, netted and patched with russet, and many russet dots. Stalk rather long, curved, set in a small cavity, sometimes with a lip. Calyx large and open. Flesh whitish, a little coarse, juicy, melting, sweet, pleasant. Very good. September, October.

BEURRÉ HAMECHER.

A Pear from Belgium.

Fruit medium, roundish pyriform. Skin pale yellow. Stalk large, long, curved. Calyx small and closed. Flesh dry, sugary. Poor. October, November.

BEURRÉ HARDY.

Tree vigorous, productive. Young wood dark grayish olive brown. Fruit large, obovate obtuse pyriform. Skin greenish, covered with

Beurré Hardy.

light russet, considerably shaded with brownish red, and sprinkled with brown dots. Stalk about an inch long, a little swollen at its insertion, at an inclination, in a small, rather uneven cavity. Calyx open. Seg-

ments long, recurved in a broad, shallow basin. Flesh buttery, melting, juicy, brisk, vinous, and highly perfumed, slightly astringent next the skin. Very good. September and October.

BEURRÉ JALAIS.

Originated in 1848 with M. Jacques Jalais, of Nantes. Tree very productive.

Fruit large, roundish obovate pyriform, golden yellow, with marblings and veins of reddish brown in the sun. Stalk short, curved. Calyx small, half closed. Flesh whitish, fine, melting, rough at the core, juicy, sweet, perfumed. September, October. (Leroy.)

BEURRÉ JEAN VAN GEERT.

Originated in Belgium with M. Jean Van Geert, and introduced in 1864.

Fruit large, oblong pyriform. Skin yellow, dotted and marbled with fawn, and washed with vermilion red in the sun. Stalk short. Calyx half closed. Flesh white, half fine, melting, juicy, rough at the core, sweet, aromatic. October, November. (Leroy.)

BEURRÉ KENNES.

A Belgian Pear, a seedling of Van Mons, introduced and described by Bivort in 1846. Tree vigorous, productive. Young wood brownish red.

Fruit medium, roundish acute pyriform. Skin greenish yellow, mostly covered with thin russet, shaded with crimson, and thickly sprinkled with russet and crimson dots. Stalk of medium length, thick, and inclined, fleshy at its insertion, by a large ring or lip. Calyx partially closed, set in a broad, shallow basin. Flesh whitish, buttery, juicy, melting, with a very sweet, rich, perfumed flavor. Very good. October.

BEURRÉ KENRICK.

No. 1599 of Van Mons.

A Flemish seedling, of medium size. Skin greenish yellow, russet spots. Flesh juicy, sweet, and buttery. Poor. September.

BEURRÉ KNOX.

A Flemish variety, of vigorous growth, productive.

Fruit large, oblong obovate. Skin pale green, russet on one side. Flesh tender and soft, juicy and sweet, but not high-flavored, hardly good. Last of September.

BEURRÉ KOSSUTH.

A variety from Belgium. Tree of moderate vigor, productive.

Fruit large, very variable in form, generally pyriform obtuse. Surface uneven. Stalk long, curved. Calyx small. Basin moderately deep and

round. Skin dull yellowish green, traced and freckled with gray or bronze, dotted with specks of the same color, shade of red in the sun. Flesh very fine, melting, buttery, sugary, a little vinous. Good. September, October.

BEURRÉ LANGELIER.

Langelier's Beurré.

Raised by M. Langelier of Jersey. Tree vigorous, productive. Young wood dull yellow brown.

Fruit medium, obovate obtuse pyriform. Skin pale yellow, slightly shaded with crimson and blotched with russet, and covered with russet dots. Stalk short and fleshy, inserted often by a lip without depression. Calyx open or partially closed. Segments persistent. Basin somewhat irregular, shallow, and open. Flesh white, juicy, melting, somewhat granular, with a very brisk, rich, vinous flavor. Very good. November to January.

BEURRÉ LE FEVRE.

Beurré de Mortefontaine. Lefevre.

A French Pear of large size, roundish or roundish obovate, greenish yellow, with brownish orange in the sun. Flesh white, gritty, coarse. October.

BEURRÉ LEON LE CLERC.

Tree vigorous, upright, productive. Young wood yellow brown.

Fruit medium or above, roundish oblong obtuse pyriform. Skin pale yellow, partially netted and patched with russet, and many russet dots. Stalk rather long, curved. Cavity small. Calyx open. Segments broad. Basin abrupt, furrowed. Flesh whitish, juicy, buttery, melting, sweet, pleasant, aromatic. Very good. October.

BEURRÉ LUIZET.

Originated with M. Luizet, France, in 1847. Tree very productive.

Fruit above medium, oblong obtuse pyriform. Skin greenish yellow, shades of red in the sun, fawn-color next the stalk. Flesh white, fine, juicy, melting, sweet, vinous. October, November. (Leroy.)

BEURRÉ MAUXION.

Tree vigorous. Young wood grayish yellowish brown.

Fruit medium, roundish, inclining to pyriform. Skin yellow russet, with a bright red cheek. Stalk short, moderately stout, swollen at the extremities, inserted in a shallow cavity. Calyx open, stiff, set in a very shallow basin. Flesh fine, buttery, melting, abounding in juice, sugary, with a spicy vinous flavor, pleasantly perfumed. Very good. Ripe in September.

BEURRÉ MENAUD.

Beurré Menand.

A French Pear of recent origin.

Fruit medium to large, long obovate. Skin pale lemon yellow.

Stalk stout. Calyx open. Flesh tender, buttery, melting, very juicy, brisk. October. (Hogg.)

BEURRÉ MILLET OF ANGERS.

Origin, Angers, France. Tree vigorous and very productive. Young wood yellowish brown.

Fruit medium, roundish obovate. Skin greenish, covered with russet and thickly sprinkled with minute russet dots. Stalk medium, stout, curved, inserted in a rather abrupt cavity. Calyx open, set in a deep irregular basin. Flesh whitish, somewhat buttery, juicy, melting, with a brisk vinous flavor. Good to very good. November to January.

Beurré Moire.

BEURRÉ MOIRE.

Beurré Moiret.

Moire.

Belle de Moire.

A French Pear of vigorous and productive habit. Young wood reddish yellow olive brown.

Fruit large, oblong obtuse pyriform. Skin greenish yellow, profusely sprinkled with yellow dots, sometimes a tinge of red in the sun. Stalk medium, stout, curved, inserted in an uneven depression. Calyx small. Basin shallow. Flesh yellowish, a little granular, buttery, melting, with a fine rich brisk flavor, highly perfumed. Good to very good. October.

BEURRÉ MONDELLE.

A Belgian Pear, but little known.

Fruit medium, roundish oblate obovate, or pyriform. Skin greenish yellow, netted and patched and mostly covered with cinnamon russet, and many russet dots. Stalk long, curved, sometimes set in a small cavity, sometimes by a lip. Calyx open. Basin broad, uneven. Flesh yellowish, coarse, juicy, melting, aromatic. Good. October.

BEURRÉ NAVEZ.

Beurré de Wael.
Colmar Navez.

Beurré Noisette.
Duc de Nemours.

One of Van Mons' seedlings, introduced first by M. Bouvier. Tree vigorous and productive.

Fruit large, obovate acute pyriform. Skin yellow, inclining to cinnamon, with numerous gray dots. Stalk long, thick, fleshy, inserted in an inclined cavity. Calyx small, open, set in a shallow basin. Flesh white, juicy, melting, pleasant. Good. October.

BEURRÉ PAIMPOL.

A French Pear, recently introduced, of only good quality. Tree vigorous and productive.

Fruit medium, obtuse pyriform, greenish yellow, patches nettings and dots of russet. Flesh white, juicy, half melting, sweet. Good. September.

BEURRÉ POINTELLE DE ROUX.

A Belgian Pear, showy, but of second quality.

Fruit medium, ovate obtuse pyriform. Skin greenish, dotted, splashed, and shaded with red in the sun. Flesh white, half tender, melting, juicy, sweet. Good. October. (Leroy.)

BEURRÉ PREBLE.

A Pear named by Mr. Manning in honor of Commodore Edward Preble, U.S.N., and raised from seed by Elijah Cooke, of Raymond, Me.

Fruit medium, oblong obovate. Skin greenish yellow, mottled with russet and green spots. Stalk about an inch long, very stout, set in a moderate hollow. Flesh white, buttery, and melting, with a rich, high flavor. Good. October and November.

BEURRÉ PRECOCEE.

Precocee Goubault.

Bezi Precocee.

Raised by Mr. Goubault, Angers, France. Tree moderately vigorous, productive.

Fruit medium, obovate, inclining to pyriform. Skin greenish yellow, slightly netted and patched with russet. Stalk long, curved. Calyx nearly closed. Basin abrupt, corrugated. Flesh whitish, juicy, melting, vinous, a little astringent. Good. Middle of August.

BEURRÉ RANCE.

Beurré Rance.
Hardenpont du Printemps.
Beurré Épine.
Beurré de Flandre.
Josephine, incorrectly of some.
Beurré de Ranz.
Noirchain.
Beymont.

Bon Chrétien de Rans.
Beurré de Noirchain.
Beurré de Rhin.
Beurré d'Hiver.
Beurré Bon Chrétien.
Gastelier.
Jenart.

The Beurré Rance is considered by all English cultivators the best very late Pear yet generally known. The wood is dull grayish brownish yellow, straggling in growth, and rather pendulous when in bearing, and when the tree has attained a moderate size it bears well.

Fruit of medium size, obtuse pyriform. Skin dark green, even at maturity, rather thick, and dotted with numerous russet specks. Stalk rather slender, an inch and a half long, set in a slight blunt depression, or often without any cavity. Calyx quite small, and set in a basin very little sunk. Flesh greenish white, melting, a little gritty at the core, full of sweet, rich juice, of excellent flavor. Succeeds in England, Belgium, and France, but does not in this country, except at the South, or in warm soils and particular localities.

Beymont is doubtless a seedling of Beurré Rance, but so identical in every respect except its wood as to make a second description unnecessary.

BEURRÉ RICHELIEU.

Tree vigorous. Young shoots dull olive reddish brown.

Fruit large, obtuse pyriform truncate. Skin greenish, inclining to yellow, sprinkled with dots. Stalk short, inserted by a slight lip in a broad depression. Calyx firmly closed, set in a broad, shallow furrowed basin. Flesh buttery, juicy, melting, with a fine sweet, aromatic flavor, sometimes astringent. Good to very good. December.

BEURRÉ ROBERT.

Originated near Angers, France, in 1860 or 1861. The tree is vigorous and promising of considerable value.

Leroy describes the fruit as large, oblong obtuse pyriform. Skin greenish yellow, covered with small gray dots, and with a brownish red next the stalk and calyx. Flesh white, melting, fine, juicy, sweet, vinous, delicate perfume. November, December.

BEURRÉ ROMAIN.

Fondante de Rome.

Beurré de Rome.

La Reine.

An old variety, variable in quality. Tree moderately vigorous.

Fruit of medium size, obovate pyriform. Skin pale yellowish green. Flesh white, juicy, sweet, and agreeable. Good. September to October.

BEURRÉ ROUGE D'ANJOU. •

Rouge d'Anjou.

A French Pear. Tree a good grower and productive. Young wood dull olive brown.

Fruit medium or below in size, roundish obovate pyriform. Surface uneven. Skin yellow, partially netted and patched with russet, a tinge of crimson in the sun, sprinkled with many green and brown dots. Stalk medium, set in an acute cavity, sometimes with a lip. Calyx open. Basin uneven. Flesh whitish, half melting, not juicy, sweet. Good. October.

BEURRÉ SCHEIDWEILER.

Grosse Sucre.

Tree stout and vigorous, inclining to a pyramid, good bearer.

Fruit medium, obovate pyriform. Skin green or dull green, with a few traces of russet, changing very little at maturity. Flesh buttery, sweet, and pleasant. Good. September and October.

BEURRÉ SEUTIN.

Fruit medium, pyriform, inclining to oval, irregular or angular. Color green, sprinkled with russet, sometimes shaded with dull crimson. A late-keeping, dry, cooking pear.

BEURRÉ SIX.

Poire Six.

Originated in Belgium. Tree vigorous and productive.

Fruit below medium, pyriform, pale greenish yellow, sprinkled with green and brown dots. Stalk long, rather stout, little or no depression. Calyx open. Basin small. Flesh whitish, juicy, melting, vinous. Good. September.

BEURRÉ SOULANGE.

Size medium to large. Form acute pyriform. Stalk an inch or more in length, fleshy at its junction. Color pale clear yellow, with occasional traces of russet. Flesh melting and very juicy, flavor rich, sugary, with a peculiarly pleasant aroma. Season—October, November. (Wilder's Rep.)

BEURRÉ SPAE.

A Belgian Pear, figured and described in the *Illustration Horticole*, from which we copy. Tree vigorous, productive.

Fruit large, roundish pyriform, pale yellowish, spotted and mottled with brown in the sun. Stalk curved, inserted in a furrowed cavity. Flesh very juicy, fine, sugary, melting, perfumed. Very good. November.

BEURRÉ SPENCE.

Many varieties having been received from Europe for Beurré Spence and proved incorrect, we give description of one which we have received,

and presume to be the true variety, originated by Van Mons. Tree moderately vigorous. Young shoots reddish. Very productive.

Fruit medium, short pyriform, inclining to turbinate. Skin greenish, becoming yellow at maturity, shaded with dull crimson, thinly sprinkled with russet, and thickly covered with russet dots. Stalk long, fleshy at its insertion, which is often at an inclination by a lip. Calyx small, closed, in a deep, rather abrupt basin. Flesh juicy, melting, with a fine rich, vinous flavor. Good to very good. Core small. September

BEURRÉ STERKMANS.

Doyenné Sterkmans.

Belle Alliance.

Calebasse Sterkmans.

A Belgian Pear. Tree vigorous, with stout yellowish-brown shoots, productive.

Fruit medium, oblate, remotely pyriform. Skin green, speckled with russet, and shaded with crimson. Stalk about an inch long, stout,

Beurré Sterkmans.

inserted in a small, uneven cavity. Calyx open. Segments stiff, set in a broad, uneven basin, slightly russeted. Flesh yellowish white, fine, very melting, juicy, sugary, vinous, pleasantly perfumed. Good to very good. October and November.

BEURRÉ SUPERFIN.

This really good Pear originated in France, in 1837. The tree is

very healthy, hardy, and moderately vigorous, not an early, but a good bearer when at full age. Young shoots slender, light yellow brown.

Fruit medium, roundish pyriform. Skin yellow, slightly shaded with crimson on the sunny side, and partially covered with russet, and

Beurré Superfin.

thickly sprinkled with minute dots. Stalk stout, rather long, inserted without depression by a fleshy enlargement. Calyx partially closed, in an abrupt, small basin. Flesh exceedingly juicy, buttery, melting, with a brisk vinous or subacid flavor. Very good to best. Ripe all of October.

BEURRÉ VAN DRIESSCHE.

Originated in Belgium, and but recently introduced. We find no description of it except in Leroy, which we copy.

Fruit above medium, oblong obtuse pyriform, dull yellow, dotted with clear brown, and shaded with the same next the stem. Flesh whitish, half fine, half melting, rough at centre, juicy, sweet, vinous. Excellent. February, May.

BEZI DE CAEN.

This Pear is of recent introduction, and promises to be valuable as a midwinter variety. Young wood dull yellow brown.

Fruit medium, pyriform. Skin dull brown, with smooth russet on greenish yellow. Stalk set without depression. Calyx open. Segments short. Flesh white, fine-grained, melting, juicy, sweet, vinous. Very good. December, January.

BEZI DE CAISSOY.

Bezy de Quessoy.
Roussette d'Anjou.
Petite Beurré d'Hiver.
Wilding of Caissoy.
Terreneuvaise.

Nutmeg Pear.
De Quessoy.
Small Winter Beurré.
Besi de Quassoy.
Besi de Bretagne.

An old Pear, said to have been discovered in the forest of Caissoy, in Bretagne. Tree hardy and very productive. Young wood slender, dull olive yellow.

Fruit small, roundish pyriform. Skin yellow, reddish brown in sun and numerous russet specks. Stalk short, set in a rather deep cavity. Calyx open. Flesh white, tender, buttery, sweet and aromatic. Very good. November to February.

BEZI DE CAISSOY D'ÉTÉ.

Bergamotte Quessoy d'Été.

Besi Quessoy d'Été.

This variety resembles in all respects the preceding Bezi de Caissoy, only in maturing its fruit early in September instead of winter.

BEZI D'HERI.

Bezi Royal.
Französische Rumelbirne.
Besidery.
Bezi de Hery.

Wilding of Hery.
Besi d'Airy.
De Henri.
De Bordeaux.

This is a very excellent winter stewing pear, which bears most abundantly. It is of no value for the dessert.

Fruit medium, roundish. Skin greenish yellow, with a reddish blush. Flesh tender, juicy, free from grit, with an anise-like flavor. Fit for cooking from October to January.

BEZI DE LA MOTTE.

Bein Armudi.

Beururé blanc de Jersey.

The tree is exceedingly vigorous and productive, and the grayish olive shoots, like the fruit, have a peculiarly speckled appearance. It ripens gradually, and may be kept a good while.

Fruit of medium size, bergamot-shaped, roundish, flattened at the eye. Skin pale yellowish green, thickly sprinkled with conspicuous russet green dots. Stalk about an inch long, green, slightly curved, and inserted in a slight flattened hollow. Calyx small, open, set in a shallow, rather abruptly sunken basin. Flesh white, very fine-grained, but tery, juicy, with a sweet, delicate perfumed flavor. Good. October.

BEZI DE LA PIERRE.

Besi de la Pierre.

Originated at Auvergne, France. Introduced in 1862. Tree productive.

Fruit small to medium, oval, citron-yellow, marbled, dotted, and splashed with fawn-color. Stalk short, curved. Calyx half closed. Flesh whitish, half fine, melting, juicy, rough at core, vinous. October, November. (Leroy.)

BEZI* DE MONTIGNY.

Trouvé de Montigny.
Doyenné Musque.
Louis Bose.

Beurré Cullem.
De Montigny.
Comtesse de Lunay.

A pleasant juicy fruit, with a musky flavor, but not first-rate. The skin is remarkably smooth, and the pear is evenly formed. It is a good bearer. Young wood olive brown.

Fruit of medium size, very regularly obovate. Skin pale yellowish green, with numerous gray dots. Stalk stout, thickest at the point of insertion, an inch long, inserted in a small shallow cavity. Calyx small, half open, reflexed, in a very smooth basin, scarcely sunk. Flesh white, melting, juicy, half buttery, with a sweet, musky flavor. Good. First of October.

BEZI DES VÉTÉRANS.

Banuean.

Des Vétérans.

A Belgian Pear, of vigorous thrifty habit, and productive. Young wood olive brown, with many specks.

Fruit large, obtuse pyriform. Skin light yellow, thickly sprinkled with gray dots, and slight patches of russet. Flesh firm, not tender; chiefly for cooking. December to February.

BEZI ESPEREN.

Bezy d'Esperen.

Besi Esperen.

Raised by Major Esperen. Tree a moderate grower and good bearer. Young wood olive brown.

Fruit large, roundish obtuse pyriform. Skin dull yellow, sprinkled and patched with russet, and thickly covered with russet dots. Stalk rather long, stout, inserted by a ring or lip, at an inclination, in a small, irregular cavity. Calyx open, set in a deep, acute basin, surrounded by russet. Flesh juicy, with a sprightly vinous flavor. Good. October, November.

BEZI GOUBAULT.

A French Pear, originated in 1845.

Fruit medium size, irregular in form, generally roundish obovate. Skin yellow, mostly covered with cinnamon russet, and many russet dots. Flesh tender, half melting, gritty at core. Good. February, March.

* *Bezi* signifies *wildling*, i. e., natural seedling found near Montigny, a town in France.

BEZI MAI.

Besi de Mai.

Raised by J. De Jonghe, Brussels, and first fruited in 1856. It is a winter fruit, said to mature from April to May. As yet it has not fruited here. The tree is hardy, a good grower, and described as productive. Young wood yellow brown.

Fruit large, obtuse oval, dull yellowish green, with brown dots. Stalk nearly an inch long. Calyx small, with short, stiff, erect segments. Flesh buttery, juicy, sugary, rich, very firm. February, April.

BEZI VAET.

Beurré de Beaumont.
Besi Vaet.

Besi Va.
Besi Vath.
Besi de St. Waast.

De Saint Waast.
Besi Waet.

The Bezi Vaet has been considerably cultivated in this country, but is not generally considered more than a good second-rate Pear. The young shoots are reddish olive brown.

Fruit of medium size, obovate, narrowing to the stalk. Skin roughish, pale green, becoming yellowish, with many russety spots and a brownish cheek. Stalk an inch or more long, inserted in a slight cavity. Calyx set in a small basin. Flesh yellowish white, melting, juicy, with a sweet, somewhat perfumed flavor. Good. November to January.

BEZY SANSPAREIL.

Bergamotte Sanspareil.
Besi Incomparable.

Nonpareille.
Sans Pair.

Sans Pareille.

An old French Pear, of little value and only good for cooking.

Fruit large, obscurely pyriform. Skin yellowish green, covered with numerous brown dots. Stalk fleshy at its insertion, in a slight cavity, at an inclination. Calyx open in a moderate uneven basin. Flesh coarse and granular, buttery, juicy, melting, with a brisk vinous flavor. October to December.

BISHOP'S THUMB.

A long, oddly shaped English Pear.

Fruit rather large, oblong and narrow, and tapering irregularly. Skin dark yellowish green, having a russet red cheek. Flesh juicy, melting, with a vinous flavor, somewhat astringent. Good. October.

BLACK WORCESTER.

Black Pear of Worcester.

Parkinson's Warden.

Iron.

A market fruit esteemed for cooking. The branches incline downwards with the weight of the fruit. Young shoots dark yellow olive, diverging.

Fruit large, obovate or oblong pyriform. Skin thick, rough, green, nearly covered with dark russet. Flesh hard and coarse, but stews and bakes well. November to February.

BLANQUET ANASTERE.

Blanquet Anasterque.

Blanquet d'Austrasia.

A French Pear, of poor quality.

Fruit small, pyriform, yellowish green, with a tinge of brown in the sun. Flesh white, coarse, breaking, rots easily. August.

BLEECKER'S MEADOW.

Large Seckel.
Feaster.

Heidelberg.
Spice Butter.

Meadow Feaster.
Frankford.

A native fruit, said to have been found in a meadow in Pennsylvania. It is a handsome, hardy fruit, and bears large crops, but it has been overpraised as to quality.

Fruit small, roundish. Skin bright clear yellow, with crimson dots on the sunny side. Flesh very white, firm, with a peculiar musky or wasp-like aroma and spicy taste, but mostly remains crisp and hard. Stalk straight and stiff. Basin shallow. Calyx open and reflexed. Good. October and November.

Bloodgood.

BLOODGOOD.

Early Beurré.

The Bloodgood is the highest flavored of all early Pears, and de-

serves a place even in the smallest garden. It was named from the circumstance of its having been brought into notice, about 1835, by the late James Bloodgood, nurseryman, Flushing, L. I. The sort was brought to that nursery as a new variety, without a name, however, by some person on Long Island, unknown to Mr. B., who was never able afterward to trace its history further. The tree is rather short-jointed, with deep reddish brown wood, grows moderately fast, and bears early and regularly. The fruit, like that of all early pears, is better if ripened in the house. It surpasses every European variety of the same season, and together with the Dearborn's Seedling, another native sort, will supplant all inferior early pears.

Fruit of medium size, turbinate, inclining to obovate, thickening very abruptly into the stalk. Skin yellow, sprinkled with russet dots and network markings, giving it a russety look on one side. Calyx strong, open, set almost without depression. Stalk obliquely inserted, without depression, short, dark brown, fleshy at its base. Flesh yellowish white, buttery, and melting, with a rich sugary, highly aromatic flavor. The thin skin has a musky aromatic perfume. Very good. Core small. Ripe from the 5th of July to the 10th of August.

BON CHRÉTIEN FONDANTE.

Bon Chrétien de Bruxelles.

Pionlice.

Bon Chrétien Fondante Musqué.

Bon Chrétien d'Été Musqué.

Bon Chrétien Musqué Fondante.

Bugiarda.

Petit Musqué.

A Flemish Pear, abounding with juice, and having a refreshing, agreeable flavor. In good seasons it is first in quality, and it bears early and abundantly. Young shoots slender, diverging, olive gray.

Fruit pretty large, roundish obovate, regularly formed. Skin pale green, sprinkled with small russet dots, and considerably covered with russet. Stalk three-fourths of an inch long, curved, inserted in a slight depression. Calyx small, set in a narrow hollow. Flesh yellowish white, gritty round the core, exceedingly juicy, tender, and melting, with a rich and pleasant flavor. Very good. October.

BON CHRÉTIEN JOSEPH LAMARQUE.

Originated in Liege, Belgium. Tree very vigorous and productive.

Fruit large, oblong obtuse pyriform. Skin rough, yellowish, with a shade of brown red, and spotted and dotted with black and dark brown specks. Stalk rather stout, curved, set in deep furrowed cavity. Calyx open. Flesh white, buttery, melting, juicy, delicate perfume. October. (An. Pom.)

BON GUSTAVE.

Raised by Major Esperen. Tree very vigorous, with stout shoots.

Fruit middle size, regular, pyriform. Stalk medium. Calyx open. Basin shallow. Skin light green, covered with russet. Flesh white, fine, buttery, juicy, sugary, and perfumed. Ripe December, January (Gard. Chr.)

BONNE ANTOINE.

Fruit very large, conical or pyriform obtuse, yellowish green, with spots, marblings, and patches of brown. Flesh white, fine, slightly granulous, juicy, sweet, perfumed. First quality. October, November. (Leroy.)

BONNE CHARLOTTE.

Tree vigorous and productive.

Fruit of moderate size, variable in form, generally resembling Doyenné. Skin smooth, pale yellow, with green dots. Stalk long. Calyx open. Flesh moderately fine, more buttery than melting, sugary, and strongly perfumed. Good. Should be gathered early. Middle of August.

BONNE D'EZÉE.

Bonne des Haies.
Bonne de Z'es.

Bonne de Longueval.
Belle et bonne d'Ezée.

A French Pear. Tree moderately vigorous, productive. Young wood dull yellow brown.

Fruit large, oblong obtuse pyriform. Skin light yellowish green, with russet patches and dots. Stalk large, long, curved, inserted in a broad cavity. Calyx small, open. Basin narrow, of little depth. Flesh white, juicy, melting, sugary, brisk, rich. Good to very good. September and October.

BONNE DE JALAIS.

Beurré de Jalaise.

A French Pear, originated at Nantes in 1857.

Fruit medium, roundish pyriform. Skin golden yellow, washed, splashed, and dotted with red. Stalk rather long, largest at junction with the tree, inclined, and set in a shallow cavity. Flesh white, fine, melting, juicy, aromatic, sweet. Good. October.

BONNE DE LA CHAPELLE.

Beurré de la Chapelle.

This variety was found by a gardener in the wood of La Chapelle-sur-Erdre, near Nantes, in 1845. Tree moderately vigorous and productive.

Fruit medium, varying in form from roundish oblate to oblate pyriform. Skin greenish yellow, with nettings and patches of russet, and distinct brown dots. Stalk long, slender, curved. Calyx open. Flesh yellowish, moderately juicy, rather coarse. Good. November, December.

BONNESERRE DE SAINT DENIS.

Originated with André Leroy, Angers, France, in 1863. Tree very productive. Young wood reddish brown grayish.

Fruit medium to large, roundish obovate, yellowish green, dotted and splashed with red. Stalk short. Calyx large, half closed. Flesh white, fine, melting, juicy, rough at the core, sweet, vinous, delicious perfume. December, January. (Leroy.)

BONNE DE SOULERS.

De Soulers.
Beurré de Soulers.

Bergamotte de Soulers.
Soleure.

An old variety, described in 1675. Tree moderately vigorous, productive.

Fruit medium, oval. Skin pale greenish yellow, dull red in the sun. Flesh white, juicy, half melting, sweet, slightly vinous. Good. January to March.

BONNE SOPHIA.

Bonne Saplier.

Fruit medium, acute pyriform. Skin pale greenish yellow, with a shade of crimson, a few patches and nettings of russet, and many small

Bonne Sophia.

brown dots. Stalk long, inclined, fleshy at insertion. Calyx open. Flesh white, fine, juicy, melting, sweet, slightly perfumed. Very good. New and promising. October.

BONNE THÉRÈSE.

Originated in Maînes, France.

Fruit medium, roundish oval. Skin greenish yellow, marbled with red at the stalk. Stalk short, straight. Calyx small, open. Flesh very white, fine, melting, juicy, sweet, perfumed. October. (Leroy.)

BOUCQUIA.

Bourré Boucquia.

A Flemish Pear.

Fruit rather large, oval turbinate. Skin pale yellow. Flesh yellowish white, rather astringent, and liable to rot at the core. October.

BOURGEMESTER.

Bouvier Bourgemestre.

Fruit large, pyriform. Skin pale yellow, with large gray dots, russeted around the eye. Flesh tender, juicy, and astringent. November. Wood cracks and cankers badly.

BRACONOT.

Poire Braconot d'Épinal.

Originated in 1840 or 1841, with M. Leclerc-Épinal, France. A new Pear, very showy and promising. Young wood yellow brown.

Fruit very large. Skin pale yellow, washed with a brown shade in sun. Stalk long and stout. Calyx large, open. Flesh yellowish white, fine, crisp, juicy, sweet, perfumed. October.

BRANDE'S SAINT GERMAIN.

Brande's.

Bran de St. Germain.

Origin uncertain, said to be a seedling of Van Mons. Tree a slow grower, with slender branches, spreading.

Fruit of medium size, oval, narrowing towards both ends. Skin yellowish green. Flesh melting, juicy, with a rich and excellent flavor. Good. November and December.

BRANDYWINE.

Found on the farm of Eli Harvey, on the banks of the Brandywine, Delaware Co., Pa. Tree vigorous, upright, uniformly productive. Young wood dull yellow brown.

Fruit medium, varying in form from oblate depressed pyriform to elongated pyriform. Skin dull yellowish green, considerably dotted and somewhat sprinkled with russet, having a warm cheek on the side of the sun. Stalk is fleshy at its junction with the fruit, and generally surrounded by folds or rings. Calyx open. Basin smooth and shallow. Flesh white, juicy, melting, sugary, and vinous, somewhat aromatic. Good to very good. Ripe last of August and first of September.

BREWER.

Fruit medium, obovate pyriform. Skin lemon-yellow, thickly sprinkled with minute brown dots. Stalk very long, curved, set in a small cavity. Calyx open. Basin rather small, slightly corrugated. Flesh white, coarse, not juicy or melting, but sweet and pleasant. Good October.

Brandywine

BRIALMONT.

A Belgian Pear, of recent introduction and good promise. Young wood olive brown.

Fruit medium, ovate, greenish yellow, with traces of russet and many green and brown dots. Stalk rather short, set in a small cavity. Calyx open, with long recurved segments. Flesh white, juicy, buttery, melting, pleasant. Very good. October.

BRIFFAUT.

Originated with M. Briffaut of Sèvres. Tree very productive.

Fruit large, oblong acute pyriform. Skin greenish, with fawn colored shades, especially around the stalk, bright red cheek in sun. Stalk long, straight, without depression. Calyx large and open. Flesh white, juicy, melting, rough at the core. July, August. (Leroy.)

Brialmont.

BRINDAMOUR.

An old variety, which originated in Vienne, France. Tree vigorous and productive.

Fruit medium, roundish pyriform. Skin bronzed, marbled, and shaded with fawn and green. Stalk short, set without depression. Calyx large, open. Flesh whitish, fine, fibrous, melting, watery, sugary acid, perfumed. November, December. (Leroy.)

BRINGEWOOD.

A foreign Pear, described in Hovey's Magazine, from which we copy, not having seen the fruit:—

"Fruit medium, pyriform, yellowish brown and russet. Stalk long and slender. Calyx open. Flesh yellowish white, gritty at core, the rest buttery. Very good. November."

BRITISH QUEEN.

An English Pear, raised at Frogmore, supposed from seed of Marie Louise. Tree a vigorous grower. Young wood very strong, clear rich reddish brown. It is described in Hogg as follows:—

"Fruit large, obovate pyriform, the outline undulating and bossed. Skin smooth, and almost entirely covered with a thin coat of cinnamon-colored russet, but on the side next the sun it has a blush of rosy crimson. Calyx rather small, with short, narrow segments. Stalk stout, obliquely inserted in a round, narrow cavity. Flesh yellowish white, very fine-grained, buttery, melting, rich, sugary. October, November."

BRONX.

A new American Pear, raised in 1850, by James P. Swain, of Bronxville, N. Y. The tree is an upright pyramidal grower, with reddish brown young shoots.

Fruit medium, obovate pyriform. Skin dull greenish yellow, partially netted and patched with russet, and thickly sprinkled with russet and brown dots. Stalk long, rather slender, curved, and set in a small cavity. Calyx small, open. Segments short, erect. Basin small, uneven, and much russeted. Flesh whitish, juicy, melting, sweet, a little perfumed. Good to very good. Early September.

BROUGHAM.

An English variety.

Fruit roundish oblate. Skin greenish yellow, some russet. Flesh coarse, astringent. November.

BROWN BEURRÉ.

Beurré Gris.	Red Beurré.
Beurré Rouge.	Badham's.
Beurré d'Or.	Gray Beurré.
Beurré Doré.	Beurré Vert.
Beurré d'Amboise.	Red Butter.
Beurré d'Ambleuse.	Beurré Rousse.
Beurré du Roi.	Beurré Roux.
Poire d'Amboise.	Gisambert.
Isambert.	Beurré d'Isambert le Bon.
Isambert le Bon.	Beurré Gris d'Automne.
Beurré.	Eisenbart.
Golden Beurré.	Beurré de Caen.

The Brown Beurré, almost too well known to need description, was for a long time considered the prince of Pears in France, its native country, and for those who are partial to the high vinous flavor—a rich mingling of sweet and acid—it has, still, few competitors. It is, however, quite variable in different soils, and its variety of appearance in different gardens has given rise to the many names—gray, brown, red, and golden—under which it is known. Shoots diverging, dark reddish brown.

Fruit large, oblong obovate, tapering convexly quite to the stalk. Skin slightly rough, yellowish green, but nearly covered with thin russet, often a little reddish brown on one side. Stalk from one to one and a half inches long, stout at its junction with the tree, and thickening obliquely into the fruit. Calyx nearly closed in a shallow basin. Flesh greenish white, melting, buttery, extremely juicy, with a rich subacid flavor. Very good. September.

BUFFUM.

Buffam.

The Buffam is a native of Rhode Island, and from its general resemblance to the Doyenné, it is, no doubt, a seedling of that fine sort. It is an *orchard* Pear of the first quality, as it is a very strong, upright grower, with reddish or reddish brown young shoots, bears large, regular crops, and is a very handsome and salable fruit. It is a little variable in quality. We have frequently eaten them so fine as scarcely to be distinguished from the Doyenné, and again when rather insipid. It may be considered a beautiful and good, though not first-rate variety.

Fruit of medium size, oblong obovate, a little smaller on one side. Skin fair, deep yellow (brownish green at first), finely suffused over

Buffum.

half the fruit, with bright red, sprinkled with small brown dots, or a little russet. Stalk an inch long, inserted in a very slight cavity. Calyx with small segments, and basin of moderate size. Flesh white, buttery, not so juicy as the Doyenné, but sweet, and of excellent flavor. The strong upright reddish brown shoots, and peculiar brownish green appearance of the pear before ripening, distinguish this fruit. Very good. September.

BURLINGAME.

A Pear of quite indifferent quality that originated in Ohio.

Fruit small or medium, roundish oblate, yellow, shaded with red in the sun. Flesh coarse, not juicy, sweet. Poor. September.

BURNETT.

Raised by Dr. Joel Burnett, of Southborough, Mass.

Fruit large, obtuse pyriform. Skin pale yellow. Flesh greenish white, a little coarse-grained, but juicy, sweet. Good. First of October.

CABOT.

Originated from the seed of the Brown Beurré, by J. S. Cabot, Esq., of Salem, Mass. It has a good deal of the flavor of its parent, and is an agreeable subacid fruit. The tree grows upright and very strong, and produces amazing crops.

Fruit small to medium, roundish turbinate, narrowing rather abruptly to the stalk, which is bent obliquely, and inserted on one side of a tapering summit. Skin roughish, bronze yellow, pretty well covered with cinnamon russet. Calyx small, open, set in a round, smooth basin. Flesh greenish white, breaking, juicy, with a rich subacid flavor. Good to very good. Middle and last of September.

CADET DE VAUX.

Origin unknown. Tree very productive. Young wood yellow brown.

Fruit large, obtuse pyriform, irregular. Skin ochre yellow, dotted with brown, and shaded with fawn and pale red in the sun. Stalk short, large, curved. Calyx large. Flesh yellowish white, fine, almost melting, sweet, juicy, perfumed. Good. December to March.

CAEN DE FRANCE.

Doyenné de Bruxelles, erroneously.

A foreign Pear promising great value. Tree vigorous, productive.

Fruit medium, regular, ovate obtuse pyriform. Skin rough, yellow, overspread with a dull russet, and with many rough russet dots. Stalk rather short and stout, a little inclined, and set in a small cavity. Calyx closed, or partially open. Segments short. Basin rather small, uneven. Flesh whitish, fine-grained, juicy, melting, vinous, slightly aromatic. Very good. December, February.

CALEBASSE.

Calebasse Double Extra.

Calebasse d'Hollande.

Calebasse Musquée.

The Calebasse is a very grotesque-looking Belgian fruit, named from its likeness to a calabash or gourd.

Fruit of medium size, oblong, a little crooked and irregular or knobby in its outline. Skin rough, dull yellow, becoming orange russet

on the sunny side. Flesh juicy, crisp, a little coarse-grained, but sugary and pleasant. Good. Middle of September.

Caen de France.

CALEBASSE D'ÉTÉ.

Belle de Forêts.

A variety raised from seed by Major Esperen. Tree moderately vigorous. Not desirable.

Fruit medium, oblong acute pyriform, greenish yellow, mostly covered, netted, and patched with russet, and many russet dots. Stalk long, stout, fleshy at base. Calyx large, open. Flesh whitish, vinous, astringent. Poor. Early September.

CALEBASSE DELVIGNE.

Origin uncertain. Tree vigorous and productive.

Fruit medium, pyriform, broad at calyx. Skin yellow, slightly russeted, sometimes shaded on the sunny side. Stalk short, thick at its junction with the fruit. Calyx open. Segments stiff, in a very shallow, uneven basin. Flesh white, coarse, buttery, juicy, melting, perfumed, slightly astringent. Good. October.

CALEBASSE TOUGARD.

A Belgian Pear raised by Van Mons. Tree vigorous, productive

Fruit medium, oblong pyriform, sometimes acute, sometimes obtuse. Skin greenish yellow, mostly covered with rough russet, and thickly sprinkled with russet dots. Stalk curved. Calyx open. Basin small, uneven. Flesh yellowish, rather coarse, juicy, melting, sweet, aromatic. Good to very good. October.

CALHOUN.

Raised by the late Governor Edwards, New Haven, Conn.

Fruit medium, roundish, obliquely oblate. Skin yellowish, shaded with dull crimson, sprinkled with russet, russet dots. Stalk short. Calyx open. Flesh white, coarse, granular, buttery, melting, pleasant. Good. October.

CAMERLING.

Camerlyn.

Camerlingue.

Camerling d'Allemagne.

A Flemish Pear. Tree vigorous and productive.

Fruit medium, pyriform. Skin yellow, with numerous brown dots and a slightly marbled cheek. Stalk long, slightly inclined, in a small cavity surrounded by russet. Calyx open. Flesh juicy, melting, sugary, with a peculiar aroma. Good. September, October.

CAMILLE DE ROHAN.

Prince Camille de Rohan.

A foreign Pear, with thorny yellow olive brown shoots, hardy.

Fruit medium, roundish obovate. Skin yellow, considerably netted and patched with russet, and sprinkled with large russet dots. Stalk long, slender. Calyx partially closed. Basin medium. Flesh white, fine-grained, melting, vinous. Good. November, January.

CANANDAIGUA.

Catherine.

Origin uncertain, supposed to have been brought from Connecticut to Canandaigua about the year 1806, vigorous and productive.

Fruit rather large, irregular, elongated acute pyriform. Surface uneven, resembling Bartlett. Skin lemon-yellow, sometimes a shade of red in the sun. Stalk medium, or rather short, inclined. Calyx open. Basin narrow and deep. Flesh whitish, coarse, melting, vinous. Good. September.

CANTELOPE.

A seedling of the late Gov. Edwards. Not valuable.

Fruit below medium, nearly globular, pale yellow, sometimes a blush in the sun. Flesh whitish, coarse, breaking, dry. Good only for cooking. October.

CAPSHEAF.

Cops Heat.

A native of Rhode Island. It is a very agreeable fruit. Young shoots stout, upright, yellowish brown.

Fruit of medium size, oblong obovate pyriform. Skin deep yellow, with patches and traces of cinnamon russet. Stalk an inch long, stout, inclined, inserted in a shallow hollow. Calyx small. Basin slightly sunk. Flesh white, juicy, and melting, very sweet and pleasant. Good. October.

CAPUCIN.

Capuchin.

Capucin Van Mons.

One of Van Mons' seedlings. Tree a moderate grower.

Fruit medium, oval pyriform, greenish yellow, marbled and shaded in the sun with fawn and red, slightly netted with russet, and with many russet crimson dots. Stalk slender, set in a slight depression by a lip. Calyx open. Flesh whitish, melting, juicy, vinous. Good to very good. October to December.

CASSANTE DE MARS.

A variety from Malines, said to be a seedling of Major Esperen. It may be a distinct sort, but as we have received, it has proved identical with Winter Nelis. We copy description from the Album Pomology :—

“Tree vigorous.

“Fruit, which is borne in clusters, resembles Doyenné blanc. Skin smooth, bright green, becoming golden yellow at maturity, striped and shaded with fawn. Flesh when in full perfection is half melting, juicy, sugary, vinous, and well perfumed. Ripe December to April.”

CASSERULE.

Of foreign origin. We have fruited it but once.

Fruit medium to large, oblong obovate pyriform. Skin rough. Color yellowish, covered with a dull yellow brown russet. Stalk short, without depressions, often oblique. Calyx large, open, round, with connected segments. Basin medium, regular. Flesh whitish, coarse, granulated, especially next the core, dry, and without flavor. Good. December, January.

CASTELLINE.

A Belgian Pear, described by foreign authors as first quality, here it has only proved good.

Fruit medium, roundish obtuse pyriform, pale greenish yellow, with slight nettings and patches of russet, and sprinkled with dots. Stalk long, largest at junction with the tree, curved, set in a shallow cavity. Calyx open, with long recurved segments. Basin shallow, uneven. Flesh yellowish, juicy, buttery, melting, sweet. Good. November, December.

CATHARINE GARDETTE.

Raised by Dr. W. D. Brinckle, of Philadelphia. Young shoots short-jointed, yellow brownish olive.

Fruit medium, roundish obovate. Skin fair, yellow, with numerous

small carmine dots on the exposed side. Stalk curved, inserted by a fleshy termination into a slight depression. Calyx small, set in a rather deep basin. Flesh yellowish, coarse, juicy, sweet. Good. September.

CATHERINE LAMBRE.

One of the new Belgian Pears that promises to sustain here its foreign reputation. It originated with Van Mons, and was named and introduced by Bivort. The tree is very vigorous and hardy, and a good bearer, with long, strong, dark rich yellow brown shoots.

Fruit medium or above, oblong obtuse pyriform. Skin smooth, greenish yellow, shaded in the sun with red, and dotted with bronze specks. Stalk medium, set without depression, inclined. Calyx large, open. Flesh whitish, half fine, juicy, melting, sweet. Very good. October, November.

CATILLAC.

Grand Monarque.	Grand Mogol.
Cadillac.	Gros Thomas.
Katzenkop.	De Bell Argentine.
Groote Mogul.	Tête de Chat.
40 Ounce.	Gros Rateau.
Bon Chrétien d'Amiens Chartreuse.	Grand Tamerlan.
Monstrueuse de Landes.	De Gros Rateau Raisenette ?
Cotillard de Livre.	Roi de Louvain.
Besi de Maraise.	Gros Rateau gris.
De Citrouille.	Misporde Benoist ?
De Tout Temps.	

The Catillac is an old French baking and stewing Pear, of very large size, and of good quality for these purposes. In rich soil the fruit is often remarkably large and handsome.

Fruit very large, broadly turbinate (flattened-top shaped). Skin yellow, dotted with brown, and having sometimes a brownish red cheek at maturity. Stalk stout, about an inch long, curved, and placed in a very narrow, small cavity. Calyx short and small, and set in a wide, rather deep plaited basin. Flesh hard and rough to the taste. November to March.

CATINKA.

Raised by Major Esperen. Tree of vigorous growth. Branches rather slender, productive. Young wood dull yellow brown.

Fruit small to medium, obovate pyriform. Stalk very long, inserted by a ring in an uneven cavity. Calyx large and open, with segments persistent. Basin shallow. Skin pale yellow, netted, patched, and thickly sprinkled with russet dots. Flesh coarse, granular, buttery, melting, juicy, with a refreshing vinous flavor. Good to very good. October to December.

CEDARMERE.

Originated in the grounds of W. C. Bryant, Roslyn, Long Island.

Fruit small, nearly globular. Skin pale greenish yellow, with russet nettings and dots. Stalk rather short, curved. Calyx open. Flesh white, juicy, melting, sweet. Good. August.

CERTEAU D'ÉTÉ.

Gros Certain d'Été.
Rouges des Vierges.
Emmanuel.

Courte de Ersol.
Colorée d'Août.
De Champagne d'Été.

This showy Pear is by some authors attributed to Van Mons. Others say it was described in 1540. Tree vigorous and productive. Young wood reddish yellow brown.

Fruit medium, oblong acute pyriform. Skin smooth, almost waxen yellow, shaded with bright crimson over most of the surface, and sprinkled with light dots. Stalk long, curved, fleshy at its insertion. Calyx small, open. Basin small. Flesh white, juicy, melting, pleasant, sweet. Good to very good. Last of August.

CHANCELLOR.

Supposed to be a native of Germantown, Penn., on the grounds of Mr. Chancellor. Branches horizontal, not very vigorous, spreading. Young wood reddish brown.

Fruit rather large, obovate obtuse pyriform. Skin greenish yellow, sometimes red in sun, rough, somewhat inclining to russet, thickly covered with dots. Stem medium, curved, rather stout, fleshy at its insertion by a lip, inserted in a rather broad cavity. Calyx small, set in a moderate basin. Flesh whitish, juicy, buttery, melting, sugary, perfumed. Good. October, November.

CHAPMAN.

An American Pear of poor quality, unworthy.

Fruit medium, obovate pyriform, yellow, dotted with brown and green. Flesh white, half melting, astringent. September.

CHAPTAL.

Beurré Chaptal.

An old French Pear, that sometimes is very good but often only good.

Fruit medium to large, oblong obovate obtuse pyriform, greenish yellow. Stalk stout, in a slight cavity. Calyx large, open. Flesh white, breaking, juicy. December.

CHARLES BASINER.

A foreign Pear which we have not yet fruited. Young wood light yellow. Buds projecting, prominent. Hogg describes it as:—

“Fruit obovate, pale yellowish green. Stalk long, slender. Calyx small, open. Flesh white, juicy, sweet. October.”

CHARLES BIVORT.

A Belgian Pear, an early bearer, but only good in quality. Young shoots dark rich yellow brown.

Fruit medium, obovate obtuse, pale whitish yellow, with a few

patches and nettings of russet, and conspicuous russet dots. Stalk rather short, curved, set in a small cavity. Calyx open. Flesh white, coarse, juicy, half melting, sweet, and pleasant. Good. October.

CHARLES FREDERICK.

One of Van Mons' seedlings. Tree vigorous and productive.

Fruit medium, roundish obovate pyriform, sometimes obtuse oblong. Skin pale yellow, shaded and mottled with red in the sun, patches, nettings and dots of russet. Stalk short to medium, sometimes in a small cavity, others without. Calyx open. Basin shallow. Flesh white, buttery, sweet, slightly vinous. Good. September.

CHARLES SMET.

Charles Smith.

One of Van Mons' seedlings. Tree a vigorous grower. Young wood dull olive grayish brown.

Fruit medium, pyriform, broad at the crown. Skin yellowish, considerably russeted. Stalk long, curved, fleshy at its insertion. Calyx open, small. Basin narrow. Flesh juicy, sweet, and highly perfumed. Good to very good. January, February.

CHARLES VAN HOOGHTEN.

Fruit large, varying in form from obovate acute pyriform to roundish obtuse obovate. Skin yellow, netted and patched with russet, and with many russet dots. Stalk varying, always fleshy at insertion. Calyx open. Basin shallow. Flesh rather coarse, sweet. Good. Early October.

CHARLOTTE DE BROWER.

One of Esperen's seedlings. Tree of moderate vigor, and of great productiveness.

Fruit medium or above, obovate roundish pyriform. Skin yellow, slightly netted and patched with russet, and with many russet dots, and slightly shaded in the sun with crimson. Stalk stout and fleshy at its insertion. Calyx open. Basin medium. Flesh whitish, juicy, melting, vinous. Good. October.

CHAUMONTEL.

Bezi de Chaumontelle.
Winter Beurré.
Beurré d'Hiver.
Shaumontel.

Oxford Chaumontel.
Bon Chrétien de Chaumontel.
Beurré de Chaumontel.
Shaw-montel.

This old French Pear takes its name from the village of Chaumontelle, in France, and succeeds well in Europe, but has not proved good here, except in very favorable situations. It may be valuable South. Tree a good and vigorous grower. Young shoots yellow brown grayish olive.

Fruit large, pyriform. Skin a little rough, yellowish in the shade, dotted with many brownish russet dots, and brownish red or rich deep

red in the sun. Stalk about an inch long, inserted moderately deep, in an angular basin. Flesh buttery and melting, sugary, with a peculiar and agreeable perfume. Good. November to February.

CHELMSFORD.

Tynsboro'.

Mogul Summer.

Origin, Chelmsford, Mass. Tree vigorous, productive.

Fruit large, roundish obtuse pyriform, yellow, red cheek. Flesh coarse, sweet, good for cooking. Last of September.

CHOISNARD.

Originated with M. Choisnard, Ormes, France.

Fruit medium to large, oblong obtuse pyriform. Skin rough, dull yellow brown in the sun, and with many fawn-colored dots. Stalk rather long. Calyx large, open. Flesh yellowish white, half crisp, half fine, rough at centre, juicy, delicate musky flavor. January, March. (Leroy.)

Church.

CHURCH.

Clarke ?

This really good Pear originated on land belonging to the Trinity Church, at New Rochelle, N. Y.; hence its name. The habit of the Church Pear is somewhat spreading in its growth, uniformly productive,

and the fruit unvarying in its quality. Young wood dull yellow, or brown.

Fruit rather below medium size, generally depressed, somewhat angular. Stalk rather long, stout at its insertion, in a small cavity surrounded by russet. Calyx small and closed, in a broad, rather shallow basin. Skin green, becoming yellow at maturity. Flesh white, very buttery, juicy, melting, with an exceedingly rich, sweet, and highly perfumed flavor. Very good. Core small. Ripens slowly, and continues in use all of September.

CITRINA.

Originated with Dr. — Shurtleff, Boston, Mass., first fruited in 1862. Tree productive. Wood slender, grayish.

Fruit medium, pyriform, bright yellow. Surface slightly knobby and uneven. Stalk medium. Calyx small. Basin corrugated. Flesh nearly white, rather coarse. Gritty at the core. September. (Journal of H.)

CITRON.

A seedling of the late Governor Edwards, a vigorous, upright grower, producing large crops, but inclined to rot at the core.

Fruit small, nearly globular, approaching turbinate. Stalk short, rather stout, set in an abrupt, uneven cavity. Calyx closed. Basin broad, shallow, irregular. Skin greenish, slightly shaded with dull crimson. Flesh greenish, rather coarse, juicy, melting, sugary, vinous, with a musky perfume. Good. Ripe from middle of August to middle of September.

CLARA.

Claire.

One of Van Mons' seedlings. It is of medium size, oval pyriform. Skin clear yellow, dotted with red. Flesh white, melting, very juicy, and sweet, relieved by a slight acid. Hardly good. September and October.

CLAP.

This variety was raised from seed, by Capt. William Clap, of Massachusetts.

Fruit below medium, acute pyriform, yellowish green, with a brownish blush in the sun. Flesh whitish, buttery, juicy, aromatic. Middle of August. (Prince.)

CLAPP'S FAVORITE.

This extremely fine and valuable Pear was raised from seed by the late Thaddeus Clapp, of Dorchester, Mass. The tree is an upright spreading, vigorous grower, forming an open, well-shaped head, on which the fruit is evenly distributed and almost uniform in size. Very productive. Young shoots dark reddish brown.

Fruit large, obovate ovate, slightly obtuse pyriform. Surface uneven. Skin thin, pale lemon yellow, marbled and faintly splashed with crimson and fawn when fully exposed to the sun, thickly sprinkled with brown dots, and sometimes patches and traces of russet. Stalk nearly

Clapp's Favorite.

an inch long, a little inclined, stout, and somewhat fleshy, inserted in a slight depression. Calyx partially closed. Segments stiff, erect. Basin shallow, slightly corrugated. Flesh white, fine-grained, juicy, buttery, melting, rich, sweet, vinous, a little perfumed. Very good. Last of August or early September.

CLAY.

Sponge.

Raised by the late Governor Edwards.

Fruit medium, roundish oblate, sometimes pyriform. Skin waxen yellow, shaded with crimson, and sprinkled with brown or crimson dots. Stalk medium. Calyx closed. Flesh whitish, rather coarse, granular, juicy, sweet. Good. October.

THE PEAR.

CLEMENTINE.

Clementine.

A seedling of Van Mons, originated in 1833. Young wood olive brown.

Fruit medium, acute pyriform, sometimes obovate acute pyriform, pale yellow, shaded and mottled with crimson, and patched and netted with russet, few brown dots. Stalk short, curved, fleshy at insertion. Calyx open. Basin shallow, uneven. Flesh white, fine, juicy, sweet, melting, pleasant. Very good. September.

CLEMENT BIVORT.

A Belgian Pear that we have not yet fruited. Young shoots smooth, short-jointed, yellow brown. It is described by the Société Van Mons as:—

“Fruit medium, roundish oblate. Skin golden yellow, shaded with red in the sun. Flesh white, fine, melting, juicy, sweet, perfumed. November.”

CLINTON.

Van Mons, No. 1238.

A poor fruit, of medium size, light yellow skin. Flesh soft, buttery, and good, but not high-flavored. Middle of November.

COIT'S BEURRÉ.

Beurré Coit.

Originated with Col. Coit, Collamer, near Cleveland, O. Tree a healthy, good grower, productive. Young wood brownish olive, with rough specks.

Fruit medium, obtuse pyriform. Skin yellow, inclining to russet, sometimes with a sunny cheek, thickly covered with dots, which become crimson on the exposed side. Stalk short, rather stout, set in a small cavity, sometimes inclined by a lip. Calyx large, open. Flesh white, a little coarse, juicy, melting, rich, vinous. Very good. September, October.

COLLINS.

Watertown.
Charbonnière.

Colin Noir.
Malconnaître.

Méconnaître.

Raised by A. Collins, of Watertown, Mass., and first exhibited before the Massachusetts Horticultural Society in 1848. Tree of moderate growth, with reddish brown shoots.

Fruit medium, roundish, slightly acute pyriform. Skin greenish yellow, with russet spots, and frequently a blush on the sunny side. Stalk short, thick, inserted at an inclination without cavity. Calyx small, and very little sunk. Flesh fine, melting, juicy, with a brisk,

sugary flavor, resembling white Doyenné. Very good. Ripens first of October.

Coit's Beurré.

COLMAR.

De Maune.
Incomparable.
Winter Virgalieu.
Bergamotte Tardive.
Colmar Dorée.

Belle et Bonne d'Hiver.
Colmar d'Hiver.
Commodore.
Bergamotte Royal d'Hiver.

An old Belgian Pear. The tree hardy, vigorous, and productive. Valuable for cooking, often very good in quality.

Fruit medium or large, obtuse pyriform. Skin light yellow. Flesh melting, half buttery, juicy, sweet. December, February.

COLMAR ARTOISENET.

A Belgian Pear of vigorous growth, and a good bearer. Young shoots reddish olive brown.

Fruit large, irregularly oblate obtuse pyriform. Skin pale yellow, often with a brownish cheek, netted and patched with cinnamon russet, and with many russet dots. Stalk short, inserted in a slight depression,

often with a lip. Calyx small, closed. Basin furrowed. Flesh whitish, coarse, juicy, melting, brisk, vinous. Good. September, October.

COLMAR D'ALOST.

Délices d'Alost.

A Belgian Pear, said to have originated with M. Hellinck in 1840. Young wood dark olive brown.

Fruit large, roundish oblong obtuse pyriform, greenish yellow, brownish in the sun. Flesh white, half melting, juicy, gritty at core, sweet, vinous. Good. October, November.

COLMAR D'AREMBERG.

Kartofel.

Cartofel.

A large Belgian Pear, mainly to be valued for its size and for cooking.

Fruit large to very large, roundish obtuse pyriform. Skin green, becoming yellow at maturity, with nettings of russet and dots. Flesh whitish, half fine, granulous, sweet, vinous. Good. November, December.

COLMAR D'AUTOMNE NOUVEAU.

Received from France. Tree vigorous. Young shoots light yellow brown.

Fruit medium, obtuse pyriform, sometimes inclined. Skin pale yellow, sometimes a shade of crimson in the sun, partially patched and netted with traces of russet, and russet brown dots. Stalk long, inclined, set in a small cavity, often by a lip. Calyx open. Segments long, recurved. Basin rather abrupt. Flesh whitish, juicy, melting, rich, vinous. Very good. Last September.

COLMAR D'ÉTÉ.

Colmar Précoce.

Autumn Colmar.

A Belgian Pear, originated in 1825, and ranked high among foreign pomologists; here it proves only good, or rather poor, and rots at the core.

Fruit medium, roundish obtuse pyriform. Skin greenish yellow, sometimes a slight blush in sun, patches of russet, and brown dots. Stalk long, a little inclined, set in a small cavity. Flesh white, coarse, astringent. Early in September.

COLMAR DE JONGHE.

Originated with M. J. De Jonghe, Belgium, and not having fruited it, we copy from his description:—"Tree hardy, robust, vigorous, and productive, rather upright. Young wood nut brown, with a few gray specks.

"Fruit medium, pyriform. Skin greenish yellow, mostly covered with reddish brown blotches. Stalk thick, set without depression. Calyx open. Flesh white, fine, juicy, vinous, sweet, and aromatic. September."

COLMAR DE MEESTER.

Demeester.

Originated in Belgium.

Fruit medium, roundish obtuse pyriform. Skin pale yellow, a few nettings of russet, and sprinkled with many brown and green dots. Stalk long, a little inclined. Calyx large, open. Flesh white, coarse, juicy, half melting, slightly vinous. Scarcely good. October.

COLMAR DES INVALIDES.

Poire des Invalides.

Va Deux Ans.

Beurré de Printemps.

Colmar Van Mons.

Gros Colmar Van Mons.

This Belgian Pear is said to have been raised at Enghien in 1808. It is large and showy, but only valuable for cooking. Young wood reddish olive yellow brown.

Fruit large, obtuse pyriform. Skin yellow, slightly marbled with crimson in the sun, and sprinkled with russet and brown dots and traces. Stalk rather short, set in a small cavity. Calyx large and open. Segments long, recurved. Flesh whitish, coarse, juicy, breaking, sweet. November to February.

COLMAR ÉPINE.

An agreeable juicy Pear, sent to this country by Van Mons, and originated by him. Young shoots stout, upright, brown.

Fruit large, roundish oblong, tapering gradually to an obtuse point at the stem, which is one inch long. Color greenish yellow. Flesh white, sweet, melting, juicy, and good. Middle of September.

COLOREE DE JUILLET.

Originated in Rouen, France.

Fruit below medium, obovate obtuse pyriform. Skin yellowish, with a shade of brownish red in the sun, and small patches and dots of brown russet. Stalk medium or stout, set in a shallow cavity. Flesh white, half tender, juicy, a little gritty at core, sweet, perfumed. Good. July.

COLUMBIA.

Columbian Virgalieu.

Columbia Virgalouse.

The original tree grows on the farm of Mr. Casser, in Westchester Co., N. Y. The tree grows upright. Young wood stout, upright, olive brown.

Fruit large, regularly formed, obovate, usually a little oblong, and always broadest in the middle. Skin smooth and fair pale green in autumn, but when ripe of a fine golden yellow, with occasionally a soft orange tinge on its cheek, and dotted with small gray dots. Stalk rather more than an inch long, slightly curved, placed towards one side of a narrow depression. Calyx of medium size, partially open, set in a very shallow basin. Flesh white, not very fine-grained, but melting, juicy, with a sweet aromatic flavor. Good. November to January. Very apt to drop from the tree previous to ripening.

COMMISSAIRE DELMOTTE.

Originated in Belgium by Gregoire.

Fruit medium, obtuse pyriform. Skin greenish yellow, sometimes a shade of crimson in the sun, netted, patched, and dotted with russet. Stalk medium, curved, set in a small cavity. Calyx open, or partially closed. Basin rather abrupt, uneven. Flesh whitish, juicy, half melting, sweet. Good. January to March.

COMPRETTE.

A Flemish seedling of little value.

Fruit small, obtuse pyriform. Skin yellowish green. Flesh white, buttery, with a sugary perfumed juice. October, November.

COMTE D'EGMONT.

Fruit small, obovate, lemon yellow, covered with dots of reddish brown russet, forming almost a patch. Stalk stout, inserted without depression. Calyx small, open. Flesh yellow, melting, slightly gritty, very rich, sugary, and delicious. Last of October. (Hogg.)

Comte de Flandre.

COMTE DE FLANDRE.

St. Jean Baptiste.

St. Jean Baptiste d'Hiver.

One of Van Mons' seedlings. Tree vigorous, productive. Young wood reddish yellow brown.

Fruit large, elongated pyriform, obtuse. Skin yellowish, considerably covered with russet. Stalk long, much inclined, and inserted by a lip in a small cavity. Calyx open, set in a shallow, corrugated basin. Flesh very buttery, melting, juicy, granular, sweet, and rich. Good to very good. October, November.

COMSTOCK.

Comstock Wilding.

A coarse cooking Pear that originated in Dutchess Co., N. Y.

Fruit of medium size, regularly formed, obovate. Skin smooth and glossy, bright yellow, with a crimson cheek. Flesh white, crisp, and, if well ripened, with a sweet and sprightly flavor. November.

COMTE DE LAMY.

Beurré Curtet.
Dingler.Beurré Quitelet.
Bis Curtet.Comte Lamay.
Beurré Cutter.

Henri Van Mons, erroneously.

Originated in Belgium in 1828. Tree vigorous, spreading.

Fruit of medium size, oblate pyriform. Skin yellow, with a brownish red cheek, and sprinkled with patches and small russety dots. Stalk an inch long, straight, obliquely inserted under a lip, or planted in a slight cavity. Calyx open, set in a shallow basin. Flesh white, fine-grained, buttery, melting, sweet. Good. Last of September to middle of October.

COMTE DE PARIS.

One of Van Mons' seedlings. Tree pyramidal, very vigorous. Young shoots reddish brown grayish.

Fruit medium, obtuse pyriform, often elongated. Skin greenish yellow, a little netted and patched with russet, and dotted with conspicuous russet and green dots. Stalk long, slender, curved, set in a shallow cavity, sometimes by a lip. Calyx large, open. Segments long. Basin small. Flesh whitish yellow, juicy, melting, brisk, slightly vinous, musky. Good to very good. September.

COMTE LELIEUR.

Frederick Lelieur.

Of Belgian origin. Tree vigorous, upright, moderately productive. Young wood reddish olive brown.

Fruit large, pyriform. Skin yellowish green, with a brownish-red cheek, speckled with gray, netted and patched with russet. Stalk short, curved, inclined, set by a lip. Flesh yellowish white, a little coarse-grained, melting, juicy, sweet. Good to very good. September.

COMTESSE D'ALOST.

A Belgian Pear, highly commended abroad, but here proves only good. Tree vigorous. Young wood dull reddish yellow brown.

Fruit large, oblong ovate pyriform, sometimes acute. Skin pale yellow, slightly netted and patched with russet, and many brown dots, shade of red in the sun. Flesh yellowish, juicy, half melting, vinous, astringent. Scarcely good. November.

COMTESSE DE CHAMBORD.

Originated at Poitiers, France. Tree moderately vigorous. Young wood olive yellow brown. Leroy describes the fruit as follows:—

“Fruit small to medium, obtuse pyriform. Skin yellowish green in the shade, bright golden in the sun, veined, dotted, and marbled with yellowish gray. Stalk short. Calyx large, half closed. Flesh yellowish white, melting, rough at centre, sweet, vinous, delicate aroma.” November, December.

CONGRESS POMOLOGIQUE.

Triomphe de Pomologie.

Originated with M. Boisbunel, at Rouen, in 1856. Tree a vigorous grower, with moderate-sized young shoots, long-jointed, and of a dull yellowish-brown color, with many rough specks. Productive.

Fruit medium, obtuse pyriform. Skin rather rough, greenish yellow, with traces of yellow, and sprinkled with brown dots. Stalk long, slender, with bracts, set in a shallow cavity. Calyx large, open. Segments long, recurved. Basin broad, shallow, uneven, russeted. Flesh whitish, buttery, juicy, melting, sweet, pleasant. Good to very good. October, November.

CONKLIN.

Originated in Westchester Co., N. Y. Tree vigorous and productive.

Fruit rather large, oblate obtuse pyriform. Skin greenish or pale yellow, netted and patched with russet, and dotted with green and brown dots. Stalk medium, fleshy at insertion. Calyx partially closed in a deep, abrupt basin. Flesh yellowish, coarse, juicy, half melting, sweet. Good. September.

CONSEILLER RANWEZ.

One of Van Mons' seedlings. Tree vigorous, very productive. Young wood dull olive reddish brown.

Fruit large, very irregular in form, obovate obtuse, obscurely pyriform. Skin greenish yellow, rough, with a few patches of russet, and many brown dots. Stalk inserted in a broad cavity, by a slight lip or fleshy ring. Calyx open, stiff, set in a furrowed basin. Flesh coarse, a little granular, juicy, melting, perfumed, sweet, vinous, slightly astringent. Good. October.

COPIA.

A Philadelphia seedling.

Fruit large. Skin yellow. Flesh rather coarse, but sugary. Poor. September to October.

CORNWELL.

Cluster?

An old Pear, origin unknown, transferred by travelling grafters from the New England States, and may yet prove some named sort.

Fruit small, nearly globular, greenish yellow, netted and patched with light russet. Flesh yellowish white, juicy, vinous, a little astringent. Good. Early September.

COTER.

One of Van Mons' seedlings, of moderate growth and productive.

Fruit medium or below, irregular in form, varying from obtuse to acute pyriform. Skin yellowish, with numerous russet dots, some patches of russet, and russet around the calyx and stem. Stalk slightly curved, and enlarged at its insertion, without cavity, and inclined. Calyx open, set in an abrupt, not very deep basin. Flesh whitish, not very fine, juicy, vinous. Good. December.

CRASSANE.

Bergamotte Crassane.
Beurré Plat.

Crésane.
Flat Butter.

Bergamotte Crassane d'Automne.
Crassane d'Automne.

An old variety, cultivated as long ago as 1667. Tree hardy, vigorous, and productive. Young wood light reddish.

Fruit medium to large, roundish oblate. Skin yellow, rarely with a blush, dotted with russet dots. Flesh coarse, rather dry, sweet, pleasant. Good. October, November.

CRAWFORD.

Bancrief.

Lammas of the Scotch.

A Scotch fruit, of second quality; the chief merit of which is its hardness in a cold climate.

Fruit middle-sized, obovate. Skin light yellow, tinged with brown in the sun. Flesh white, buttery, sweet, and of a tolerably pleasant flavor. August.

CROFT CASTLE.

An English variety, peculiar in its shape, and especially so in its flavor; very productive.

Fruit medium. Skin pale greenish yellow. Flesh juicy, crisp, and sweet. Scarcely good. October.

CROSS.

Originated on the premises of Mr. Cross, of Newburyport, Mass. Branches rather slender, of slow growth.

Fruit of medium size, roundish oblate. Skin smooth, deep yellow, with a red cheek, and marked with numerous russet dots, and patches of russet around the eye. Stalk planted in a slight depression. Flesh coarse, white, melting, juicy, and sweet. Good. In eating from the last of November to the middle of January, but chiefly in December.

CROUCH.

Originated at Colchester, Conn. Tree vigorous. Young wood dull yellow brown.

Fruit below medium size, roundish inclining to oblate. Skin pale yellow, considerably netted and patched with russet, many russet dots. Stalk slender, curved. Calyx open. Flesh whitish, juicy, melting, sweet, pleasant. Good. Early September.

CUMBERLAND.

A native fruit, in Cumberland, Rhode Island.

Fruit rather large, obovate pyriform. Skin orange yellow, pale red cheek. Flesh white, buttery, and tolerably juicy. Good. September and October.

CUSHING.

The Cushing is a native of Massachusetts, having originated on the grounds of Colonel Washington Cushing, of Hingham, about forty years ago. It is a very sprightly Pear, and, like many of our native varieties, it produces most abundant crops. Branches rather slender, diverging, olive yellow brown.

Fruit medium size, obovate, tapering rather obliquely to the stem. Skin smooth, light greenish yellow, sprinkled with small gray dots, and occasionally a dull red cheek. Stalk an inch long, planted in an abrupt cavity. Calyx rather small, set in a basin of moderate size. Flesh white, fine-grained, buttery, melting, sweet, sprightly, perfumed. Good. Middle of September.

DALLAS.

Raised by Governor Edwards, of New Haven, Conn. Tree upright, vigorous. Young wood reddish brown. A profitable Pear to grow, as it produces abundantly and keeps long after gathering.

Fruit rather large, ovate obtuse pyriform. Skin yellow, with a sunny cheek, thickly sprinkled with crimson and russet dots. Stalk large, long, inserted by a slight lip in a very moderate cavity. Calyx open. Basin shallow, corrugated. Flesh buttery, juicy, with a sweet, rich, pleasant aromatic flavor. Very good. Ripe October and November.

DANA'S HOVEY.

Raised by Francis Dana, of Roxbury, Mass. Tree vigorous, hardy,

and productive. Young wood olive yellow brown, retains its foliage late in season. This is one of the highest-flavored Pears, next to the Seckle, that we have known. It lacks in size for a market variety, but as an amateur sort is one of the most desirable.

Dana's Hovey.

Fruit small, obovate obtuse pyriform, regular. Skin greenish yellow or pale yellow, considerably netted and patched with russet, and sprinkled with many brown dots. Stalk rather short, a little curved, set in a slight cavity, sometimes by a lip. Calyx open. Basin small, uneven, and slightly russeted. Flesh yellowish, juicy, melting, with a sugary, rich, aromatic flavor. Best. November to January.

DARLINGTON.

An American variety, the origin of which we have been unable to learn. Tree very vigorous, upright grower, productive. Young wood yellow brown.

Fruit large, oblate obtuse pyriform, pale yellow, with sometimes a shade of crimson in the sun, nettings and patches of russet, and russet dots. Flesh whitish, coarse, sweet. Not quite good. Rots at core. Early September.

DAVIS.

Introduced from Delaware Co., Pa. The only claim this Pear has is that some specimens are almost, or entirely, seedless.

Fruit small, obovate obtuse, yellowish, netted and patched with russet dots. Stalk short, in a small cavity. Calyx partially open.

Flesh yellowish, rather coarse, not juicy, melting, sweet. Good. September. This is similar to and may be identical with Elton.

Dearborn's Seedling.

DEARBORN'S SEEDLING.

Nones. Dearborn's Sanding.

A very admirable early Pear, of first quality, raised in 1818, by the Hon. H. A. S. Dearborn, of Boston. It bears most abundant crops, and is one of the most desirable early varieties, succeeding the Bloodgood, and preceding the Bartlett. Young shoots long, reddish brown.

Fruit scarcely of medium size, roundish pyriform, and very regularly formed. Skin very smooth, clear light yellow, with a few minute dots. Stalk slender, rather more than an inch long, set with very little depression. Calyx with delicate spreading segments, set in a very shallow basin. Flesh white, very juicy and melting, sweet and sprightly in flavor. Very good. Ripens about the middle of August.

DE BAVAY.

Poire de Bavay.

One of Van Mons' seedlings. Tree a moderate grower. Young wood dull olive brown.

Fruit medium, obtuse pyriform. Skin yellowish, netted and patched with russet, and sprinkled with large russet dots. Stalk stout, curved, a little inclined, set in a small cavity. Calyx open. Basin shallow, uneven, often russeted. Flesh yellowish, rather coarse, juicy, melting, sweet, a little aromatic. Good to very good. October.

DE DEUX FOIX LANE.

A small foreign Pear, handsome but of poor quality.

Fruit small, oblate pyriform, irregular, or a little inclined, lemon yellow, with a crimson-red cheek, fawn and russet nettings and dots. Flesh white, coarse, rather dry, sweet. Poor. August.

DÉLICES DE CHARLES.

We have received two Pears under this name, one as of Van Mons, the other of Bouvier.

The former is medium in size, irregular in form, varying from obovate to obovate pyriform. Skin greenish yellow, netted and patched

with russet, and sprinkled with russet dots. Stalk rather long, inclined, set in a slight depression, often with a lip. Calyx open. Flesh yellowish, juicy, melting, vinous, sweet. September, October.

The latter is above medium in size, obovate obtuse. Skin greenish, with traces of russet, and sprinkled with brown dots. Stalk long, curved, set in a rather large cavity. Flesh whitish, buttery, rots at core. Middle of September.

DÉLICES DE FROYENNES.

This variety was obtained by M. de Courcelle, of Lille, near Tournay.

Fruit medium, acute pyriform. Skin a little rough, clear fawn-color. Stalk straight, stout. Calyx open. Flesh white, fine, melting, juicy, sweet, perfumed. November, December. (Revue Horticole.)

DÉLICES D'HARDENPONT OF ANGERS.

Beurré des Hautes.
Beurré Lasalle.

Vignes.
Délites d'Angers.

Tree of moderate growth, productive.

Fruit medium, roundish, greenish, becoming yellowish at maturity, with a warm cheek, sprinkled and patched with russet. Stalk short and thick, inserted by a ring or lip at an inclination, in a shallow cavity. Calyx open. Segments short, stiff, in a small, uneven basin. Flesh yellowish, nearly melting, juicy, sugary, aromatic. Good to very good. October, November.

DÉLICES D'HARDENPONT OF BELGIUM.

Fondante Pariselle.
Délites d'Ardenpont.
Archduke Charles.

Charles d'Autriche.
Pariselle.

Tree moderately vigorous, upright, with long, slender shoots of dull olive brown color.

Fruit medium, truncate conic or pyramidal, angular. Skin rough, greenish, covered with small brown dots, becoming yellowish at maturity. Stalk short and thick, inserted in a small uneven cavity at an inclination. Calyx large, set in a shallow furrowed basin. Flesh white, buttery, juicy, melting, sweet, with a fine aromatic perfume. Good. November, December.

DÉLICES DE JODOIGNE.

This Belgian Pear originated in 1846, but it is yet little known. Tree moderately vigorous. Young wood reddish brown.

Fruit rather large, varying from obtuse to acute pyriform. Skin pale yellow, rich brownish crimson in the sun, netted and patched and dotted with russet. Stalk medium, sometimes with a slight depression at insertion, again fleshy, without cavity. Calyx open. Segments recurved. Basin small, shallow. Flesh white, juicy, buttery, half melting. Good to very good. October.

DÉLICES DE LA CACAUDIÈRE.

This variety originated in France, in 1846. We do not know of its being fruited in this country, but its size and period of ripening are promising of value.

Fruit large, obovate pyriform, yellow green, shaded with red in the sun and many small dots. Stalk long, stout, set without depression. Flesh white, a little coarse, half melting, juicy, sweet. Ripens early in August. (Verg.)

DÉLICES DE LOUVENJAL.

Jules Bivort.

An old variety, yet little known in this country. Tree moderately vigorous and very productive.

Fruit medium or above, obovate obtuse pyriform, greenish yellow, with patches of russet and many small green and russet dots. Stalk rather stout, curved. Calyx small. Basin shallow. Flesh juicy, melting, sweet, rich, vinous. Good to very good. October, November.

DÉLICES VAN MONS.

Délices de Mons.

Délices de la Meuse.

The date of origin of this Pear is unknown. So far as we can learn, it was first described simply as Délices. The tree is a healthy free grower, with young wood of a dull grayish yellow brown.

Fruit medium, ovate obovate pyriform. Surface somewhat uneven. Skin pale yellow, with a shade of crimson in the sun, nettings of russet, and numerous brown dots. Stalk rather long. Cavity small, russeted. Calyx small, closed. Segments short. Basin small, slightly russeted. Flesh white, coarse at the core, juicy, melting, sweet, pleasant, slightly vinous. Good or very good. October.

DE LOUVAIN.

Poire de Louvain.
Bezy de Louvain.

Gros Quere.
Parabelle Musqué.

Valandrée.

Raised by Van Mons in 1827.

Fruit of medium size, obovate, inclining to pyriform, and tapering to the stalk. Skin rather uneven, clear light yellow, a little marked with russet, and dotted with brown points, which take a ruddy tinge next the sun. Stalk about an inch long, stout, inserted obliquely without depression, or by the side of a fleshy lip. Calyx placed in a very narrow, shallow basin. Flesh white, buttery, and melting. Good. October.

DEMOCRAT.

Originated in Pennsylvania. Tree a vigorous grower and productive.

Fruit medium or below, obovate roundish. Skin greenish yellow, nettings and patches of russet, and dotted with conspicuous russet and brown dots. Stalk long, slender, curved, set in a small cavity. Calyx large, open. Basin abrupt, uneven. Flesh half melting, juicy, sweet, pleasant. Good. September.

DES CHASSEURS.

Chasseurs.
Poire des Chasseurs.

Sportsman.
Hunter.

This Belgian Pear is supposed to be one of Van Mons' seedlings. The tree is moderately vigorous, somewhat spreading, productive. Young shoots warm yellow brown.

Fruit medium, pyriform, sometimes obtuse. Skin greenish yellow, covered with minute dots, and a few patches of russet. Stalk long, enlarged at its junction, without depression. Calyx small. Basin shallow. Flesh buttery, juicy, slightly granular, perfumed. Good to very good. October.

DÉSIRÉE CORNELIS.

Cornelis.

Raised by M. Bivort. Tree vigorous, productive. Young wood cinnamon russet brown.

Fruit medium to large, oblong obovate pyriform, slightly obtuse. Skin greenish yellow, with nettings of russet and irregular conspicuous brown dots. Stalk curved, set in a slight cavity. Calyx partially closed. Basin small. Flesh whitish, juicy, half melting, sweet. Very good. Early September.

DÉSIRÉE VAN MONS.

One of Van Mons' seedlings, originated in 1836.

Fruit medium to large, obtuse pyriform. Skin dull greenish, with a few traces and patches of russet, especially around the stalk, minute marblings and dots of black. Stalk slender, curved, set in a very slight depression. Flesh white, half melting, juicy, sweet, perfumed. Good. September, October.

DE SORLUS.

One of Van Mons' seedlings. Tree vigorous, very productive.

Fruit medium or above, oblong obtuse pyriform. Skin greenish yellow, slightly netted and patched with russet, and sprinkled with minute green and brown dots. Stalk rather long, generally straight, set with little or no cavity, sometimes by a ring or enlargement at base. Calyx open. Basin small, uneven. Flesh whitish, a little coarse, not juicy or melting. Good. November.

DE TONGRES.

Poire Durandean.

This fine fruit was raised by M. Durandean, of Tongres, France. Tree vigorous, with long slender branches, pyriform, bears young and abundantly. Young shoots olive yellow brown.

Fruit large, obovate acute pyriform, slightly irregular. Skin pale yellow, covered with rich cinnamon russet, which becomes crimson on

the sun-exposed side. Sprinkled with russet and brown dots. Stalk long, curved, inserted without depression, often by a lip. Calyx small, open, or partially closed. Segments short, erect. Basin shallow, abrupt, uneven. Flesh white, fine, melting, juicy, vinous, rich saccharine. Very good. October.

DEUX SŒURS.

Des Deux Sœurs.

The Two Sisters.

A chance seedling found near Malines, France, and named by Major Esperen. Tree vigorous, thorny, hardy, productive.

Fruit medium, oblong oval, irregular. Skin greenish yellow, sprinkled with brown dots. Stalk rather short, set in a slight depression or by a lip. Calyx open. Flesh white, coarse, moderately juicy, sweet. Good. October, November.

DEVERGNIES.

Belle du Vernis.

Duvernay.

Belle du Vernie.

Duvernais.

Beurré Duvernay.

A Belgian Pear, originated at Hainault in 1817.

Fruit medium, roundish short pyriform. Skin dull yellow, shaded and blotched with brownish red in the sun, dark russet dots and specks. Stalk curved, set in furrowed cavity. Calyx large. Basin furrowed. Flesh whitish, half fine, sweet. Good. December.

DICKERMAN.

Pardee's No. 2.

Raised by S. D. Pardee, New Haven, Conn. Tree vigorous and productive. Young wood dark rich brown.

Fruit medium, roundish oblate. Skin yellowish, shade of bright cinnamon in the sun, thickly covered with minute dots. Stalk curved, fleshy at its insertion, in a moderate cavity. Calyx nearly closed. Segments persistent. Basin broad and uneven. Flesh whitish, buttery, juicy, melting, perfumed. Good to very good. Ripe from the middle of September to the middle of October.

DIEUDONNÉ ANTHOÏNE.

A variety from Enghien, Belgium. Tree vigorous, moderately productive.

Fruit medium, roundish obtuse pyriform. Skin light yellow, varying to a cinnamon yellow, with occasionally a flush of red in the sun. Flesh whitish, melting, juicy, sugary, vinous, perfumed. October. (An. Pom.)

DILLER.

A Pennsylvania Pear. Tree a slow and poor grower. Young wood light brownish yellow.

Fruit below medium, nearly globular. Skin yellowish, sprinkled

and patched with russet. Stalk long, inserted in a very slight cavity by a fleshy ring. Calyx closed, set in a rather broad, shallow basin. Flesh whitish, coarse, and granular, juicy, buttery, melting, with a very sweet, aromatic perfumed flavor. Good to very good. Ripe last of August and first of September.

DIX.

Lewis, erroneously of the French.

The Dix is, unquestionably, a fruit of the highest excellence, and deserves the attention of all planters. It is one of the hardiest of pear-trees, but the tree does not come into bearing until it has attained considerable size. The young branches are dull olive yellow brown, upright, and slender. The original tree stands in the garden of Madam Dix, Boston. It bore for the first time in 1826.

Fruit large, oblong, or long pyriform. Skin roughish, fine deep yellow at maturity, marked with distinct russet dots, and sprinkled with russet around the stalk. Calyx small for so large a fruit. Basin narrow, and scarcely at all sunk. Stalk rather stout, short, thicker at each end, set rather obliquely, but with little or no depression. Flesh not very fine-grained, but juicy, rich, sugary, melting, and delicious, with a slight perfume. Very good to best. October and November.

DOCTEUR BOUVIER.

A vigorous tree, forming a beautiful pyramid, very productive. Young wood yellow reddish brown.

Fruit medium, roundish obovate pyriform. Skin greenish, becoming slightly yellow at maturity, sprinkled, shaded, and dotted with russet, sometimes slightly crimson and fawn in the sun. Stalk curved, set without depression. Calyx open. Flesh a little coarse, juicy, melting, brisk, vinous, slightly perfumed. Good to very good. December.

DOCTEUR CAPRON.

One of Van Mons' seedlings, originated in 1842.

Fruit medium, regular, ovate pyriform. Skin pale yellow, a little brownish in the sun, with nettings, patches, and dots of russet. Stalk medium, inclined, set in a slight depression, russeted. Calyx open. Flesh yellowish, juicy, half melting, sweet, pleasant. Good. October, November.

DOCTEUR LENTIER.

Doctor Lenthier.

A Belgian Pear, originated about 1847, and named after M. Lentier, a physician. Tree vigorous, productive. Young shoots olive brown.

Fruit medium, obovate, sometimes acute pyriform. Skin greenish or pale yellow, with traces and patches of russet, especially next the stalk, sometimes a shade of crimson in the sun, and sprinkled with minute brown dots. Stalk varying, set without depression. Calyx partially closed. Basin small. Flesh yellowish, juicy, melting, sweet, pleasant. Good. September, October.

DOCTEUR TROUSSEAU.

Raised from seed at Saint Remy, France, in 1848. Tree a vigorous grower, with long, strong, rather spreading branches. Young wood dull dark red brown.

Fruit medium to large, roundish obtuse pyriform. Skin greenish yellow, partially netted and patched with russet, and thickly sprinkled with russet dots. Stalk variable, curved, set in a slight depression or cavity, sometimes by a lip. Calyx open. Flesh yellowish, juicy, melting, vinous, a little astringent. Good to very good. November.

DOCTOR NELIS.

Another Belgian variety, originated in 1847, and named and de-

dicated to a physician. Tree moderately vigorous and productive. Young wood olive yellow brown.

Fruit medium, roundish pyriform, slightly obtuse. Skin greenish yellow, with a shade of red in the sun, somewhat patched and netted

Doctor Nelis.

with russet, and sprinkled with russet green dots. Stalk short, a little inclined, set in a small, russeted cavity. Calyx large, open. Flesh whitish, juicy, melting, sweet, pleasant, slightly vinous. Very good. Last of September.

DOCTOR REEDER.

Reeder's Seedling.

Raised from seed of the Winter Nelis by Dr. Henry Reeder, Varick, Seneca Co., N. Y. Tree very hardy, healthy, vigorous, spreading, open form, an excellent bearer. Young shoots warm olive brown.

Fruit small to medium, roundish ovate obtuse pyriform, compressed, often apparently slightly furrowed on one side. Skin yellow, netted and patched with russet nearly over the whole surface, and thickly sprinkled with russet dots. Stalk long and slender, slightly curved, a little inclined, in a small cavity. Calyx large and open. Segments large, lying flat on the fruit. Basin medium, nearly regular. Flesh fine, juicy, melting, buttery, a little granular, very sugary, vinous, with a high musky perfume. Very good to best. November.

Doctor Reeder.

DOCTOR TURNER.

A Connecticut Pear, origin unknown. Tree a moderate spreading grower. Young wood a dark olive brown.

Fruit large, acute obtuse pyriform. Skin pale yellow, sometimes with a slight blush, and thickly sprinkled with green and brown dots, a few traces of russet. Stalk long, curved, set in a slight depression by a ring or lip. Calyx closed. Basin rather small. Flesh white, juicy, half melting, slightly vinous, somewhat astringent. Good. August.

DOROTHÉE ROYALE NOUVELLE.

Fruit about medium, pyriform, uneven. Skin smooth, clear deep lemon yellow, with here and there a patch of cinnamon russet. Calyx open. Stalk stout. Flesh very fine, melting, juicy, rich. Last of October. (Hogg.)

DORSORIS.

American Beauty.

Origin unknown. Introduced by Isaac Coles, of Glen Cove, Long Island. Tree a vigorous, upright, spreading grower, and an early bearer. Young wood reddish yellow brown.

Fruit medium, roundish pyriform. Skin pale yellow, shaded with

bright rich crimson in the sun, and sprinkled with brown and green dots. Stalk medium. Calyx nearly closed. Flesh white, buttery, sweet, pleasant. Good. August.

Dow.

Raised by Dr. Eli Ives, New Haven, Conn. Tree upright, vigorous, productive.

Fruit rather above medium, obovate, acutely pyriform, sometimes turbinate. Skin rough, yellowish green, sprinkled with russet dots, and a few small patches of russet. Stalk long, inserted at an inclination in a very slight cavity. Calyx large, open, set in a very small basin. Flesh white, buttery, juicy, melting, with a good vinous flavor, sometimes slightly astringent. Good. September, October.

DOYEN DILLEN.

Deacon Dillen.

Doctor Dillen.

One of Van Mons' Pears. Tree vigorous, productive. Young wood olive yellow brown.

Fruit rather large, oblong pyriform. Skin fine yellow, inclining to russet, thickly sprinkled with russet specks. Stalk short, thick, and fleshy, strongly fixed, without any depression. Calyx small, rarely open. Basin of moderate depth. Flesh juicy, buttery, sweet, and rich. Very good. October, November.

Doyenné Boussock

DOYENNÉ BOUSSOCK.

Doyenné Boussock Nouvelle.	Beurré Boussock.
Beurré de Merode.	Albertine.
Double Philippe.	Beurré de Westerloo.
Bossoch.	Beurré Magnifique.

Doyenné de Merode.

This Belgian Pear proves one of the most vigorous of trees, and profitable as a market sort. Tree vigorous, upright, spreading. Young wood dull reddish brown.

Fruit varying in form, obovate inclining to pyriform, or roundish obtuse obovate. Skin rough, deep yellow, netted and clouded with russet, with a warm cheek. Stalk rather short and stout, inserted in a round cavity. Calyx open. Basin shallow. Flesh buttery, juicy, melting, sweet, aromatic, and excellent. Very good. September and October.

DELPIERE, as we have received it, proves identical with the above.

DOYENNÉ D'ALENÇON.

Doyenné d'Hiver d'Alençon.	Doyenné Marbré.
Doyenné Gris d'Hiver Nouveau.	Doyenné d'Hiver Nouveau.
St. Michael d'Hiver.	

A foreign Pear, of unknown origin. Tree moderately vigorous and productive. Young shoots dull olive brown.

Fruit medium, roundish oval, inclining to obovate or pyriform. Skin rough, yellow, shaded with dull crimson or carmine, sprinkled, netted, and patched with russet brown dots. Stalk of moderate length, pretty large, inserted in a medium cavity. Calyx open. Segments persistent. Basin deep, round, upright. Flesh somewhat granular, buttery, juicy, sugary, very rich, sprightly, and highly perfumed. Very good. December to April.

DOYENNÉ DE CERCLE.

Doyenné de Cercle Pratique de Rouen.

Fruit medium, nearly round, inclining to pyriform. Sides unequal. Skin greenish yellow, with a blush of crimson in the sun, a few traces and nettings of russet, and thickly sprinkled with large brown dots. Stalk varying, set in a small cavity. Calyx open. Basin uneven, slightly russeted. Flesh whitish, juicy, melting, slightly vinous. Good. October.

DOYENNÉ D'ÉTÉ.

Summer Doyenné.	Jolliemont.
Doyenné de Juillet.	Roi Jolimont.
St. Michael d'Été.	Jolimont.

♥Jolivet.

One of Van Mons' seedlings, obtained in 1823. Tree vigorous, upright, an early and abundant bearer. Young shoots reddish yellow brown.

Fruit small, roundish obovate, slightly pyriform. Skin smooth, fine yellow, often shaded with bright red, and covered with numerous

gray or russet dots. Stalk rather short and thick, fleshy at its junction with the fruit, almost without depression. Calyx small and open, in a

Doyenne d'Été.

very shallow, slightly corrugated basin. Flesh white, melting, juicy, with a sweet, pleasant flavor. Good to very good. Last of July.

DOYENNÉ DEFAIS.

Defays.

Doyenné d'Affay.

Originated at Angers, France. Tree moderately vigorous. Young wood dull olive brown, with many white specks.

Fruit medium or below, roundish oblate. Skin pale yellow, sometimes a slight shade of red in the sun, traces of russet and sprinkled with brown dots. Stalk short, a little curved, in a broad cavity. Calyx open. Basin abrupt, furrowed. Flesh white, juicy, melting, sweet, pleasant, slightly aromatic. Good to very good. October.

DOYENNÉ DE SAUMUR.

Tree vigorous. Young wood grayish olive.

Fruit medium or below, roundish ovate. Skin pale whitish yellow, thickly sprinkled with large green and brown dots. Stalk medium, curved. Calyx open. Flesh white, juicy, melting, sweet, pleasant. Good to very good. September.

DOYENNÉ DOWNING.

Raised by André Leroy, and dedicated to the late A. J. Downing. Tree moderately vigorous. Young wood slender, dark rusty brown.

Fruit medium, obovate obtuse pyriform, inclining to turbinate. Skin greenish yellow, sprinkled and netted with russet, very slightly shaded with crimson, and thickly covered with russet dots. Flesh fine, buttery, juicy, melting, with a sweet, vinous, rich, perfumed flavor, somewhat aromatic. Good to very good. October.

DOYENNÉ DU COMICE.

A French Pear, of comparatively recent introduction, which promises to be of much value. Tree moderately vigorous, upright. Young wood rich warm reddish yellow brown.

Doyenné du Comice.

Fruit large, varying, roundish pyriform or broad obtuse pyriform, sometimes obtuse. Skin greenish yellow, becoming fine yellow at maturity, often lightly shaded with crimson and fawn in the sun, slight net-

tings and patches of russet, and thickly sprinkled with russet dots. Stalk short, stout, inclined and set in a shallow cavity, often russeted. Calyx small, open. Basin large, deep, and uneven. Flesh white, fine, melting, a little battery, juicy, sweet, rich, slightly aromatic. Very good or best. Core small. October, November.

DOYENNÉ GOUBAULT.

Origin, Angers, France. Of slow growth, and rather slender branches. An unprofitable sort.

Fruit medium, occasionally large, obovate acute pyriform. Stalk short. Calyx small. Skin dull pale yellow, with a few traces of russet, particularly around stem and calyx. Flesh melting and juicy, sweet, aromatic. Good to very good. Ripe December to February.

Doyenné Gray.

DOYENNÉ GRAY.

Gray Butter Pear.

Gray Deans.

Gray Doyenné.

Red Doyenné.

St. Michel Doré.

Doyenné Galeux.

Doyenné Boussouck, of some.

Doyenné Gris.

Doyenné Rouge.

Doyenné Roux.

Doyenné d'Automne.

Red Beurré, } incorrectly

Beurré Rouge, } of some.

Le Beurré.

The Gray Doyenné strongly resembles the White Doyenné in flavor and general appearance, except that its skin is covered all over with a

fine, lively cinnamon russet. It is a beautiful Pear, usually keeps a little longer, and is considered by many rather the finer of the two. Shoots upright, grayish brown.

Fruit of medium size, ovate obovate, but usually a little rounder than the White Doyenné. Skin wholly covered with smooth cinnamon russet (rarely a little ruddy next the sun). Stalk half to three-fourths of an inch long, curved, set in a narrow, rather deep and abrupt cavity. Calyx small, closed, and placed in a smooth, shallow basin. Flesh white, fine-grained, very buttery, melting, rich, and delicious. Best. Middle of October, and will keep many weeks.

DOYENNÉ ROBIN.

Beurré Robin.

Raised by M. Robin, Angers, France. Tree vigorous. Young wood olive brown.

Fruit medium, roundish oblate. Skin greenish yellow, netted, patched, and thickly sprinkled with russet and gray dots. Stalk long, stout, inserted in a broad deep cavity. Calyx partly closed. Flesh whitish, rather coarse, juicy, melting, somewhat granular, vinous, perfumed. Good. September.

DOYENNÉ ROSE.

Fruit above medium, obovate, obscurely pyriform. Skin yellow, beautifully shaded with crimson. Stem short. Cavity small. Calyx small; deep, regular basin. Flesh white, coarse, granular, with very little flavor. Rots at the core. Poor. Last of October.

DOYENNÉ SANTELLET.

A fine handsome Pear from Flanders.

Fruit above medium, obtuse pyriform, greenish yellow, with marblings and specks of gray russet. Flesh white, a little gritty, tender, musky perfume. October. (Lindley.)

DOYENNÉ SIEULLE.

Sieulle.

Beurré Sieulle.

Bergamotte Sieulle.

A hardy tree, and a profitable market Pear in some sections. Raised by M. Sieulle. Tree vigorous and productive. Young wood olive yellow brown.

Fruit medium, roundish oblate. Skin greenish yellow, thickly sprinkled with green or brown dots, shaded with crimson and fawn in the sun. Stalk curved, stout, inserted in a broad cavity by a ring or lip. Calyx open in a small shallow basin. Flesh white, coarse, very buttery, juicy, with a rich vinous, slightly aromatic flavor. Good. October, November.

DU BREUIL PÈRE.

A seedling grown by M. Alphonse Du Breuil.

Fruit medium, roundish oblate pyriform. Skin greenish, with marblings and rays of brown in sun. Flesh white, fine, melting, juicy, sweet, vinous. Middle September. (Leroy.)

DUC ALFRED DE CRUY.

Fruit large, obtuse pyriform. Skin smooth, greenish yellow, with a thin crust of brown russet over the surface; on the side next the sun it is tinged with pale brown. Stalk fleshy at base, set without depression. Calyx open. Flesh yellowish, not very juicy, buttery, rich, spicy, November, December. (Hogg.)

DUC D'AUMALE.

Gèdeon Paridant.

A seedling of Van Mons', of vigorous growth and productive habit. Young wood reddish yellow brown.

Fruit medium, slightly obtuse pyriform. Skin pale yellow, shaded and marbled with brownish red in the sun, slight netting and patches of russet, and many russet dots. Stalk rather long, a little curved. Calyx large, open. Flesh whitish, juicy, sweet, aromatic. Good to very good. September.

DUC DE BRABANT.

Fondante des Charneuse.
Miel d'Waterloo.

Jamin.
Beurré Charneuse.
Beurré d'Waterloo.

Waterloo.
Belle Excellente.

A Belgian Pear. Tree hardy, vigorous, productive. Young wood olive brown grayish.

Fruit large, oblong pyriform, sometimes acute, sometimes obtuse. Skin greenish, shaded with crimson on the sunny side, and thickly sprinkled with greenish dots. Stalk long, curved, and twisted, somewhat fleshy at its insertion, in a very small cavity. Calyx large and open. Segments persistent, in an irregular ribbed basin. Flesh whitish green, very juicy, buttery, melting, with a refreshing vinous flavor. Very good. October, November.

DUCHESSÉ D'ANGOULÊME.

Beurré Soule.

A magnificent large dessert Pear, sometimes weighing a pound and a quarter, named in honor of the Duchess of Angoulême, and said to be a natural seedling, found in a forest hedge near Angers. When in perfection, it is a most delicious fruit of the highest quality. We are compelled to add, however, that the quality of the fruit is a little uncertain on young standard trees. The tree is a strong grower, the shoots upright, reddish yellow brown.

Fruit very large, oblong obovate, with an uneven, somewhat knobby surface. Skin dull greenish yellow, a good deal streaked and spotted with russet. Stalk one to two inches long, very stout, bent, deeply planted in an irregular cavity. Calyx set in a somewhat knobby basin. Flesh white, buttery, and very juicy, with a rich and very excellent flavor. Very good. October.

DUCHESSÉ D'AREMBERG.

A French Pear, the fruit of which we have seen but once. Tree a vigorous grower and early bearer.

Fruit medium, roundish obtuse pyriform, dull greenish. Stalk long, slender, curved, set in a broad, rather deep cavity. Calyx partially

closed. Basin shallow. Flesh whitish, rather coarse, tender, juicy Good. . September.

DUCHESS DE BERRY D'ÉTÉ.

Duchesse de Berry.

Duchesse de Berry de Nantes.

Originated at Nantes, France. Tree vigorous, upright. Young wood dark reddish.

Fruit small, roundish oblate, obscurely pyriform. Skin yellow, shaded with light red, nettings and patches of russet. Stalk short, in

Duchesse de Berry d'Été.

serted in a small cavity. Calyx partially open, set in a broad shallow basin. Flesh juicy, melting, with a good vinous flavor. Good to very good. Ripens last of August.

DUCHESS DE BOURDEAUX.

Beurré Perrault.

Originated with M. Secher, near Angers, France, in 1850. Tree moderately vigorous. Young wood dull olive brown.

Fruit medium, roundish, inclining to obtuse pyriform. Skin yellow, netted and traced with russet, and sprinkled with russet dots. Stalk long, stout, fleshy at insertion, often by a lip. Calyx open. Basin medium, uneven. Flesh white, moderately juicy, sweet, pleasant. Good. December to February.

DUCHESS DE BRABANT. (Durieux.)

Tree very vigorous.

Fruit of good size, turbinate pyriform, sometimes elongated. Skin rough, bright green, becoming moderately yellow at ripening, much shaded with bright russet. Flesh whitish yellow, fine, melting, juice

abundant, sugary, vinous, finely perfumed. Fruit of the first quality, ripening at the end of October. (An. Pom.)

DUCHESSE DE BRABANT. (Capenick.)

Tree vigorous and productive.

Fruit medium, roundish, depressed at crown, clear yellow, tinged with bright red in the sun. Stalk long, inserted in a small contracted cavity. Calyx open. Flesh white, rather firm, but melting, juicy, rich, sweet. October. (Hovey Mag.)

There is also another Duchesse de Brabant, the origin of which is unknown. We have fruited, but are in doubt of the correctness of our tree.

DUCHESSE D'HIVER.

Tardive de Toulouse.

Winter Duchess.

Originated with M. Barthere, at Toulouse, France. Tree a vigorous handsome grower, and an early bearer. Young wood olive yellow brown.

Fruit large, obovate pyriform, uneven surface, dull greenish, with brownish dull russet shades and spots. Stalk stout, set in a slight uneven cavity. Flesh white, juicy, pretty fine-grained, mild, sweet, pleasant. Very good. December to April.

DUCHESSE DE MARS.

Comtesse de Lumay.

A French Pear, first described in 1850, by M. Prevost, in *Album Pomologie*. Tree hardy, branches rather slender. Young wood very dark reddish yellow brown.

Fruit medium or below, oblong obovate, obtuse pyriform, yellowish brown, with considerable russet and russet specks. Stalk short, set in a rather deep cavity. Flesh whitish, melting, juicy, sweet, vinous. Very good. Core small. October, November.

DUCHESSE D'ORLEANS.

Beurré St. Nicholas.

St. Nicholas.

Duc d'Orleans.

A French Pear, of which the precise location of origin is unknown. Tree a good grower, upright, with long jointed wood. Young shoots dull olive brown, slightly grayish.

Fruit rather above medium, elongated pyriform, narrowing towards the basin. Skin yellowish green, sometimes a sunny cheek, with brown dots. Stalk long, pretty large, curved. Calyx nearly closed, set in a shallow uneven basin. Flesh juicy, melting, slightly aromatic, with a very good flavor. Very good. September, October

DUCHESSE HÉLÈNE D'ORLEANS.

Princess Helen d'Orleans.

Reine de Vierge.

According to the *Album Pomologie* this variety was first described in 1847. It has been, by some, confounded with *Maréchal de la Cour*, and also with *Duchesse d'Orleans*, but is found by its growth of wood, more than by its fruit, to be distinct. The tree is a vigorous grower, with long jointed, stout wood, the young shoots of a rich warm reddish

brown color, with scattered, nearly oblong, light gray specks. Buds sharp pointed.

Fruit large, varying from oblong pyriform to oblong obovate pyriform, whitish yellow, considerably netted and patched with russet, and thickly sprinkled with russet dots. Stalk medium or rather stout, a little inclined, set in a small cavity, sometimes with a lip. Calyx open, or partly so. Segments short, erect. Basin small, corrugated. Flesh white, juicy, melting, sweet, pleasant, a little vinous. Good to very good. September, October.

DUMONT DUMORTIER.

This is a Belgian variety. Not having fruited it, we copy description from Hovey. "Tree a moderate grower and a good bearer.

"Fruit large, roundish obovate, rounding to an obtuse point at stem. Dull green, nearly covered with dark russet, reddish in sun, and dotted with russet specks. Stalk rather short, straight. Cavity moderately deep. Calyx large, open. Basin shallow. Flesh white, melting, juicy, pleasant, slightly vinous. Good. Core large. October."

DUNDAS.

Elliott Dundas.
Rousselet Jamin.

Félicité Dundas.
Rousselet de Jamin.

A Belgian variety, sent to this country by Van Mous, in 1834. Tree an upright, vigorous grower, an early and good bearer.

Fruit medium size, roundish obovate pyriform, yellow, shaded with crimson in sun, thickly sprinkled with brown russet dots, and a few nettings and patches of russet. Stalk medium, curved. Cavity small, sometimes a lip. Calyx open. Segments small, persistent. Flesh white, juicy, melting, sweet, agreeable. Good to very good.

DUNMORE.

The Dunmore is a large Pear, raised by Knight. It is a strong-growing tree, and bears exceedingly well. Young wood grayish.

Fruit large, oblong obovate, rather swollen on one side, greenish, dotted and speckled with smooth brownish-red russet, and nettings and patches of russet. Stalk rather long, curved, inserted in a slight depression by a lip. Calyx open, with reflexed segments. Basin shallow. Flesh yellowish white, juicy, melting, rich, vinous, sometimes gritty, and rots at core unless gathered early and carefully ripened. Very good. September.

DUPUY CHARLES.

A variety produced by Louis E. Berckmans, in 1847, and by him dedicated to Charles Dupuy, Loches, France. By description, in 1850, the tree is vigorous, half upright in growth, and productive.

Fruit below medium, acute pyriform, yellow, netted and patched with russet, and sprinkled with russet dots. Stalk varying in length, curved, set without depression. Calyx open. Basin small, shallow, uneven. Flesh yellowish, juicy, melting, sweet, pleasant. Good. October.

DURÉE.

Durée's Seedling.

The original tree of this variety was found on the farm of Whitehead Durée, Westbury, Long Island, N. Y., by Isaac Hicks, and by him introduced. Tree a vigorous, spreading grower, and an early bearer. Young wood dull dark olive brown.

Fruit medium, oblong acute pyriform, pale yellowish, considerably netted and patched with russet, and thickly sprinkled with russet dots. Stalk long, curved, without depression. Calyx open. Basin uneven. Flesh whitish, half melting, juicy, vinous, sweet, slightly musky. Good to very good. October.

EARLY BERGAMOT.

A second-rate French sort.

Fruit medium, roundish. Skin pale yellowish green. Flesh quite juicy, crisp, with a pleasant, sweet flavor. Ripe about the 20th of August.

EARLY BUTTER (OF CININNATI).

Early Summer Butter.

Mear's Summer Butter.

A variety somewhat grown around Cincinnati, O. Origin unknown. Tree upright, and a good grower.

Fruit small, oval, inclining to obovate, light yellow, with a tinge of red in the sun, brown and green dots. Stalk rather long, curved. Calyx large, with long recurved segments. Flesh white, juicy, buttery. Good. Last of July.

EASTER BERGAMOT.

Bergamotte de Pâques.
Bergamotte d'Hiver.
Bergamotte de Bugi
Bergamotte de Toulouse.
Robert's Keeping.
Winter Bergamotte.
Paddrington.
Royal Tairling.
Terling.

St. Herblain d'Hiver.
Bergamotte de la Grillière.
Bergamotte de Carême.
Bergamotte Ronde d'Hiver.
Bergamotte Soldat-Nabours.
Anderson's Favorite.
Cape May.
Bonner's Pope's Pear.

An old French variety. Tree vigorous and productive, keeps well, and a good cooking fruit. Young wood olive, with round white specks.

Fruit medium, roundish obovate, narrow at the stalk. Skin smooth, pale green, thickly speckled with conspicuous light gray dots, and becoming pale yellowish at maturity. Flesh white, crisp, juicy, with a sprightly flavor. Good for cooking. February to May.

EASTER BEURRÉ.

Bergamotte de la Pentecôte.
Beurré de la Pentecôte.
Beurré d'Hiver de Bruxelles.
Doyenné d'Hiver
Doyenné du Printemps
Beurré Roupé.
Du Pâtre.
Merveille de la Nature.

Pastorale d'Hiver.
Beurré de Pâques.
Philippe de Pâques.
Bezi Chaumontelle très-gros.
Chaumontelle très-gros.
Canning.
Seigneur d'Hiver.
Canning d'Hiver.

The Easter Beurré is considered abroad one of the very best late

winter or spring Pears. It seems to require a rather warmer climate than that of the Eastern States to arrive at full perfection, and has disappointed the expectations of many cultivators. It bears well here, but

Easter Beurré.

is rather variable in quality. In good seasons, if packed away in boxes and ripened off in a warm room, it is a delicious, melting, buttery fruit. The tree grows upright, and thriftily, with reddish yellow shoots. It requires a warm exposure and a rich soil to give fine fruit as an open standard tree. It is said to succeed well at the South.

Fruit large, roundish obovate obtuse, often rather square in figure. Skin yellowish green, sprinkled with many russety dots, and some russet, which give it a brownish cheek in some specimens. Stalk rather short, stout, planted in an abruptly sunken obtuse cavity. Calyx small, closed, but little sunk among the plaited folds of the angular basin. Flesh white, fine-grained, very buttery, melting and juicy, with a sweet and rich flavor. January to March.

EASTNOR CASTLE.

Fruit medium, roundish. Skin green and thick. Flesh greenish white, juicy, melting. December.

ECHASSERIE.

Bezi d'Echassey.
 Bezi l'Echasserie.
 Jagdbirne.
 Bezi de Chasseray.

L'Echasserie.
 Verte Longue d'Hiver.
 Besidery Sandry.
 Echassery.

Winter Long Green.
 Winter Green Long.
 Landry Wilding.

A French Pear of second quality, productive.

Fruit of medium size, roundish oval. Skin smooth, pale green, yellowish at maturity, slightly dotted with gray. Flesh melting, buttery, with a sweet perfumed flavor. January to April.

EDMONDS.

Origin, town of Brighton, N. Y. A chance seedling on the farm of

Edmonds.

Eliphalet Edmonds. Tree a strong grower. Young shoots yellowish reddish brown, with large spots.

Fruit large, obovate obtuse pyriform. Surface uneven, yellow,

bronzed red in sun, and slight nettings of russet and russet dots. Stalk long, inclined, curved, fleshy at insertion. Cavity broad, uneven. Calyx open. Segments short, erect. Basin abrupt, corrugated. Flesh fine-grained, whitish, juicy, half melting, sweet, with a peculiar flavor. Very good. September.

EDWARD MORREN.

A foreign variety, the origin of which we have not traced. Tree vigorous and productive. Young wood rich brownish olive.

Fruit small, roundish, greenish, with brownish cheek, sprinkled with green and brown dots. Stalk long. Cavity small, often a lip at base of stem. Calyx open. Basin shallow. Flesh white, juicy, half melting, sweet, pleasant. Good to very good. November.

EDWARDS.

Raised by Governor Edwards. A very good baking fruit.

Fruit medium, obovate obtuse pyriform, yellow, sometimes shaded with crimson. Stalk short and thick. Calyx closed. Basin deep, uneven. Flesh coarse, granular, not tender. September.

EDWARDS' ELIZABETH.

Edwards' Elizabeth is a seedling raised by Ex-Governor Edwards, of New Haven, Conn.

Fruit of medium size, often large, oblate obtuse pyriform, angular, and oblique at the base, the stalk frequently planted in a fleshy protuberance like a fold, yellowish green, very fine, and a peculiar waxy appearance. Flesh white, buttery, slightly subacid, and good. October.

EDWARDS' SEEDLING ST. GERMAIN.

Raised by Dr. W. D. Brinckle.

Fruit medium, globular pyriform, yellow, with nettings and patches of russet, russet green dots. Stalk rather stout, set often with a lip. Calyx open. Basin medium. Flesh whitish, rather coarse, juicy, half melting, sweet, pleasant. Good. October to December.

ELEONIE BOUVIER.

A Belgian variety, as yet little known. Tree vigorous, productive.

Fruit medium or below, oblong obovate pyriform, clear yellow, shaded with crimson and fawn, patches and nettings of russet, and many russet dots. Stalk medium, fleshy at insertion. Cavity slight. Calyx open. Flesh white, rather coarse, sweet. Good. September.

ELIZA D'HEYST.

A French variety, introduced and described by Major Esperen in 1844. Tree a good grower. Young wood olive yellow brown.

Fruit medium size, obtuse pyriform, greenish yellow, shade of brown in sun, nettings and patches of russet, many brown russet dots. Stalk rather stout, often curved, set in a slight cavity with a lip. Calyx open. Segments short, erect. Basin small. Flesh whitish, juicy, melting, sweet, pleasant, aromatic. Good to very good. January to March.

ELLIOTT'S MELTING.

Raised by Betsey Elliott, Carlisle, Pa., some sixty years since. Tree vigorous, spreading.

Fruit below medium, nearly globular, oblique, greenish, netted with russet, especially at the ends. Stalk short. Cavity narrow, small. Basin small, regular. Flesh whitish, juicy, melting, sweet, aromatic, pleasant. Good to very good. September.

ELLIS.

Raised from seed of the Seckel, by Mrs. Ellis, of New Bedford, Mass., in 1843. The tree is a vigorous grower, hardy, and prolific. Young shoots dull yellow brown, with long gray specks.

Ellis.

Fruit large, oblong obovate obtuse pyriiform. Surface somewhat uneven, greenish yellow, patched and mottled with russet, and sometimes a shade of crimson in the sun, many russet dots. Stalk rather large,

long, curved, and set in a small cavity. Calyx open. Segments long, recurved. Basin uneven. Flesh whitish, juicy, melting, sweet, slightly vinous, aromatic. Very good. September and October.

There is another Pear under the name of Ellis, grown in Western New York, entirely distinct.

Fruit medium, acute pyriform, greenish yellow, shaded with crimson red in sun, many small brown dots. Flesh white, juicy, melting, vinous, and often astringent, and disposed to rot at the core. Good. August and early September.

ELLSWORTH.

Origin unknown.

Fruit medium, globular pyriform, greenish yellow. Flesh whitish, coarse, sweet. Only to be valued for cooking. October.

ELTON.

According to Lindley, the original tree of this variety grew in Herefordshire, England, and must be now nearly two and one-half centuries old. The fruit is stated by Hogg to be frequently without core or seeds, the flesh being solid throughout.

Fruit medium, oval obovate, greenish, with russet, shaded with orange red in sun. Flesh firm, crisp, juicy. Very good. September.

EMERALD.

A Belgian variety, variable, sometimes good.

Fruit medium size, obtuse pyriform, oblique. Surface uneven, yellowish, with a brown cheek in sun, and brown dots. Stalk rather stout, curved. Calyx partially closed. Flesh white, melting, rather coarse, juicy, subacid, vinous. Good. November, December.

EMERANCE.

Emerance Bivort.

A foreign variety, the tree of which grows strong but somewhat rambling.

Fruit large, obovate acute pyriform, greenish yellow, shaded with reddish crimson in the sun, patches and nettings of russet, and many brown dots. Stalk curved, inserted with a knob or rim, fleshy. Calyx partially open. Basin medium. Flesh white, juicy, melting, sweet, pleasant. Good. September.

EMILIE BIVORT.

Emily Bivort.

A Belgian variety, dedicated by its first describer, Bouvier, to the daughter of the distinguished pomologist, A. Bivort. Young wood olive brown.

Fruit medium or below, roundish irregular, sometimes oblate, yellow, blotched and patched with russet, and many russet dots; sometimes nearly the whole surface is covered with cinnamon russet. Stalk medi-

um. Cavity shallow. Calyx partially open. Basin abrupt, deep, furrowed. Flesh whitish, juicy, melting, sweet, rich, slightly aromatic. October. Very good.

EMILE D'HEYST.

This fruit was dedicated by Major Esperen to the son of his friend L. E. Berekmans, of Georgia. It is of Belgian origin, and is one of the very best. The tree is hardy and productive, so much so as to require thinning to obtain full-sized fruit. It holds its foliage quite late in autumn, and holds its fruit well. Tree vigorous, spreading. Young wood olive color.

Fruit large, oblong obovate pyriform, angular and irregular. Skin clear yellow, with brownish orange cheek in sun, netted and patched with

Emile d'Heyst.

russet, and thickly sprinkled with large russet dots. Stalk medium to long, inclined, curved. Cavity slight, often with a lip or fleshy ridge at base of stem. Calyx small, closed. Segments short. Basin medium, somewhat furrowed. Flesh yellowish white, fine-grained, juicy,

melting, sweet, slightly vinous and aromatic, rich and excellent. Very good to best. November, December.

ENGLISH JARGONELLE.

Epargne.	Sweet Summer.
Grosse Cuisse Madame.	Chandelle.
Beau Présent.	Chopine.
Poire de tables des princes.	Certeau Madam.
Saint Sampson.	Beurré de Paris.
Saint Lambert.	Espargne.
Belle Verge.	Reserve Pear.
Sparbirne.	Jargonelle de Knoop.
Frauenschinkel.	Sicile.
Real Jargonelle.	Long Island Summer.

An old variety, variable in quality and decays at the core soon after maturity. If gathered early is very good. Tree a strong grower, with a rather straggling, pendent habit.

Fruit pretty large, long pyriform, tapering into the stalk. Skin greenish yellow, smooth, with a little brownish color on the sunny side. Stalk nearly two inches long, rather slender, curved, obliquely set. Calyx open, with quite long projecting segments, and sunk in a small and furrowed basin. The flesh is yellowish white, rather coarse-grained, juicy, with a sprightly refreshing flavor. Good. August.

ÉPINE D'ÉTÉ.

Summer Thorn.	Petite Epine d'Été.
Fondante Musquée.	Bugiarda.
Satin Vert.	Bugiarda des Italiens.

Tree moderately vigorous, spreading, productive.

Fruit medium, pyriform. Skin greenish yellow. Flesh tender, melting, with a sweet, musky, peculiar flavor. Good. Last of August and first of September.

ÉPINE ROYALE.

A French Pear. Tree vigorous, very productive.

Fruit medium, pyriform, yellowish, with bright red in the sun. Flesh fine, melting, juicy, sweet, vinous. October. (S. V. M.)

ERMESINDE.

A French variety.

Fruit large, oblong ovate pyriform, dull greenish, mostly covered and netted with russet, few dark blackish dots. Flesh white, fine, melting, juicy, sweet, agreeable. October. (Alb. Pom.)

ERNESTINE AUZOLLE.

Of French origin.

Fruit small, roundish pyriform, sometimes acute pyriform, greenish yellow, with a shade of brown in sun, often netted and patched with russet. Flesh rather coarse, yellowish, moderately juicy, half melting, sweet. Good. September, October.

ESPERINE.

This variety originated with Van Mons, and by him was dedicated to Major Esperin, of Malines. Tree vigorous, productive.

Fruit large, pyriform, greenish yellow, red in the sun, and shaded and specked with cinnamon russet. Stalk medium, set with a lip or inclined. Calyx with open, short, half erect segments. Flesh white, buttery, melting, very juicy, and sweet. Good to very good. October. (S. V. M.)

ESSEX.

Introduced by Jonathan Batty, from the garden of Wm. Flack, Essex, Essex Co., N. Y. Tree vigorous and healthy.

Fruit below medium, oblong obtuse pyriform, greenish yellow, with many brown and green dots, marbled with carmine in the sun. Stalk long. Cavity large. Basin russeted. Flesh whitish, juicy, melting, granular, sweet. Good. September.

ESTURION.

A foreign variety.

Fruit small, obovate pyriform, yellow, shaded with crimson in the sun, russet around the calyx. Flesh white, coarse, not juicy, hardly good. September.

EXCELSIOR.

Dana's Excelsior.

A seedling of Francis Dana, Boston, Mass. Tree a strong upright grower, and good bearer. Young wood rich olive brown.

Fruit medium, obovate obtuse pyriform, sometimes irregular, greenish yellow, with traces of russet and many brown dots. Stalk long, curved, rather slender. Cavity small, russeted. Calyx open. Segments a little recurved. Basin small. Flesh juicy, melting, sweet, pleasant. Good to very good. September.

EYEWOOD.

A seedling of Mr. Knight's. Tree vigorous and hardy.

Fruit of medium size, oblate or flattened. Skin much covered with russet. Flesh buttery, rich, and excellent.

FAMENGA.

A foreign variety.

Fruit medium, obovate, greenish yellow. September. (Elliott.)

FEAST.

Feast's Seedling.

Originated with Samuel Feast, of Baltimore, from seed of Seckel.

Fruit medium, obovate pyriform, greenish yellow, with brown dots. Flesh whitish, juicy, sweet. Good. September.

FELIX DE LEIM.

A Belgian variety, but little known.

Fruit medium, roundish obovate pyriform, often inclined, yellowish

green or pale yellow, marblings and traces of russet, many small russet green dots. Stalk medium, rather slender, set inclined in a small cavity with a lip. Calyx with long reflexed segments. Flesh whitish, juicy, melting, sweet, aromatic. Good. October.

FIGUE.

Figue d'Alençon.
Verte longue de la Mayenne.
Verte longue d'Angers.
Figue d'Hiver.
Bonniseme.
Bonnissima de la Sartha.
Sylvange d'Hiver.

Petaless.
Figue d'Hiver d'Alençon.
Pettalless.
Figue d'Alençon d'Hiver.
Pistolette.
Grosse Figue ?

Originated in the town of Alençon, France. Tree vigorous, productive. Young wood reddish or reddish brown on the upper side, olive yellow brown underneath, prominent pointed buds.

Fruit large, oblong ovate acute pyriform, inclining by a lip over the stalk, greenish yellow, sometimes with a brownish cheek, partially netted and patched with russet, and thickly sprinkled with russet green dots. Stalk short, stout, fleshy at insertion by a lip, often russeted. Calyx open. Segments stiff, long, recurved. Basin small, shallow, uneven. Flesh greenish white, juicy, half melting, sweet, slightly vinous. Very good. October to December.

FIGUE DE NAPLES.

Beurré Bronzée.
Comtesse de Frenol.

Fig Pear of Naples.
De Vigne Pelone.

Fourcroy ?

A Belgian Pear. Tree vigorous, with upright brown shoots.

Fruit medium, obovate pyriform, greenish yellow, shaded and marbled with red in the sun, netted and patched with russet, many russet-green dots. Stalk long, slender, generally curved and enlarged at junction of fruit, and a little inclined. Calyx open. Basin small, shallow, and uneven. Flesh yellowish, juicy, melting, sweet, pleasant. Good or very good. October.

FINE GOLD OF SUMMER.

Fin Or d'Été.

Fruit small, roundish, yellow, with a beautiful red cheek. Flesh juicy, good flavor, not rich. Very productive. Good. Middle of August.

FLEMISH BEAUTY.

Belle de Flandres.
Bosch Nouvelle.
Bosch.
Bosc Sire.
Poire Davy.
Impératrice de France.
Fondante du Bois.
Boschpeer.
Beurré Spence (erroneously).
Brilliant.
Brillante.

Bergamotte de Flandre.
Beurré Foidard.
Petersilie Peer.
Beurré de Bourgogne.
Beurré St Amour.
Belle des Bois.
Beurré de Delftinge.
Beurré Delftinghem.
Beurré Davy.
Poire de Persil.
Molle Bouche Nouvelle.

An old Pear, supposed of Belgian origin, although foreign authors

conflict in regard thereto. The tree is very luxuriant, hardy and bears early and abundantly; the young shoots upright, reddish olive brown. The fruit requires to be gathered sooner than most pears, even before it parts readily from the tree. If it is then ripened in the house it is always fine, while, if allowed to mature on the tree, it usually becomes soft, flavorless, and decays soon.

Fruit large, obovate obtuse pyriform. Surface a little rough, the ground pale yellow, but mostly covered with marblings and patches of

Flemish Beauty.

light russet, becoming reddish brown at maturity, on the sunny side. Stalk rather short, from an inch to an inch and a half long, and pretty deeply planted in a peculiarly narrow, round cavity. Calyx short, open, placed in a small round basin. Flesh yellowish white, not very fine-grained, but juicy, melting, very saccharine and rich, with a slightly musky flavor. Very good. Last of September.

FLEMISH BON CHRÉTIEN.

Bon Chrétien Turc.

Turkish Pear.

Bonchrétien Vernois.

Turkish Bonchrétien.

The Flemish Bon Chrétien is an excellent cooking Pear, not very productive.

Fruit of medium size, obovate pyriform, yellow, russeted near the calyx, and with many large russet dots. Flesh whitish, coarse, juicy; stews very tender. November to March.

FLORENT SCOUMAN.

Fruit large, pyriform, clear green, striped and spotted with brownish red. Flesh very fine, melting, juicy, sweet. October to December. (S. V. M.)

FLORIMOND PARENT.

One of Van Mons' seedlings. Tree of moderate vigor and fertility.

Fruit very large, pyramidal, swelled towards its centre, green, pointed and striped with brown russet, becomes deep yellow at maturity. Flesh coarse, melting, juicy, sugary, and agreeably perfumed. Good. Ripe at the end of September.

FONDANTE AGRÉABLE.

Fruit medium, roundish obovate. Color dull yellowish green, slightly russeted. Stalk planted at an inclination, and fleshy at its junction with the fruit. Flesh juicy and melting. Flavor very pleasant and refreshing, with a delicate aroma. Ripe last of August. (Wilder in Hort.)

FONDANTE D'ALBRET.

Received from France. Tree a vigorous upright grower, productive. Young wood yellow brown.

Fruit above medium, nearly globular, a little oblique, pale yellow, slightly netted and patched with russet, thickly sprinkled with green and russet dots, a bronzed red cheek in sun. Stalk rather short, stout. Cavity broad. Calyx large, open. Basin large. Flesh whitish, a little coarse, juicy, half melting, sweet, pleasant, vinous, slightly musky. Good to very good. September.

FONDANTE D'AUTOMNE.

Belle Lucrative.
Seigneur d'Esperin.
Bergamotte Fiévée.
Gresillier.
Du Seigneur.
Beurre Lucrative.
Seigneur.

Arbre Superbe.
Lucrate.
Fondante de Maubege.
Autumn Melting.
Esperin's Herreubirne.
Bergamotte Lucrative.

This Flemish Pear is, when grown in perfection, one of the very best; but if the trees are overloaded, soil unsuited, or a dull, cloudy, rainy season, it is only second-rate. The tree is moderately vigorous, healthy and productive. Young shoots yellowish brown.

Fruit medium size, variable in form, from obovate obtuse pyriform to globular. Pale yellowish green, slightly russeted. Stalk little more

than an inch long, stout, often fleshy, obliquely inserted in a slight, irregular cavity. Calyx very short, open, with few divisions, set in a

Fondante d'Automne.

basin of moderate depth. Flesh juicy, melting, sugary, rich, and delicious. Very good to best. Last of September.

FONDANTE DE CUERNE.

A French variety, said to be superior to, and ripening with, Beurré Giffard. We have not fruited it, and therefore copy description:—

Fruit medium, oblong obovate pyriform, pale greenish yellow, with traces of russet and russet brown in the sun. Stalk rather short, varying. Calyx small, open. Flesh white, juicy, melting, buttery, sweet, agreeable. August. (An. Pom.)

FONDANTE D'INGENDAL.

Fruit small, acute pyriform, greenish yellow, a little brownish in sun, with green and gray dots. Stalk long, curved, fleshy where joined to the fruit. Calyx open. Segments long. Flesh whitish, juicy, melting, sweet, a little vinous, perfumed. Very good. September.

FONDANTE DE LA MAÎTRE D'ÉCOLE.

A foreign variety.

Fruit medium, pyriform, yellow, dotted with green. Flesh yellow, half melting. December, January. (Hov. Mag.)

FONDANTE DE MALINES.

One of the seedlings of Major Esperen, of Belgium. Tree vigorous, somewhat irregular in habit. Young wood dull yellow brown.

Fruit medium, obovate pyriform, lemon yellow, with a tinge of crimson and fawn in the sun, sometimes russet patches and thickly sprinkled with brown russet dots. Stalk long, often curved, set in a shallow cavity by a lip. Calyx large, open, stiff segments. Basin rather abrupt, uneven. Flesh white, a little coarse, juicy, melting, sweet, a little aromatic. Good to very good. September, October.

FONDANTE DE NEES.

Fruit large, deep yellow, mottled and dotted with pale brown russet. Flesh yellowish, buttery, not juicy. Second-rate. October. (Hogg.)

FONDANTE DE NOËL.

Belle de Noël.

Belle après Noël.

Of French origin. Tree vigorous and a good bearer. Young wood olive brown.

Fruit large, obovate obtuse pyriform. Surface uneven, fine yellow, mostly covered with cinnamon russet, and a brownish cheek in the sun, many russet dots. Stalk short, fleshy at insertion. Calyx open. Flesh yellowish, coarse, juicy, melting, brisk, a little astringent. Good. September.

FONDANTE DES PRÉS.

A seedling of Van Mons'. Tree vigorous, productive. Young wood rich warm brown.

Fruit medium, varying from obovate obtuse to obovate acute pyriform, pale yellow, often with red cheek in sun, many brown dots. Flesh buttery, melting, agreeable. Only good. October.

FONDANTE DU COMICE.

Originated at Angers, France, about 1849. The tree is a good grower, with olive brown young shoots.

Fruit large, ovate pyriform, sometimes obovate pyriform, yellow, with a warm cheek, inclining to russet, with russet dots. Stalk varying, sometimes curved, inserted in a depression. Calyx open, set in a rather deep, open basin. Flesh juicy, buttery, with a rich, sugary, vinous flavor. Good to very good. October, November.

FONDANTE VAN MONS.

Raised by Dr. Van Mons, and first introduced by Mr. Manning. It bears abundantly. Young wood brick red.

Fruit nearly of medium size, roundish, a little depressed. Skin pale yellow. Stalk stout, an inch and a half long, planted in a rather deep cavity. Calyx set in a pretty deep basin. Flesh white, juicy, melting, sweet, and of very agreeable flavor. Only good. First of November.

FOOTE'S SECKEL.

Raised by Asahel Foote, of Williamstown, Mass., from seed of the Seckel. A very promising new variety, ripening a week or two later than its parent, and a little more vinous. Tree healthy, vigorous, more spreading than Seckel. Young wood dark rich brown.

Fruit small, oblate obtuse pyriform, yellow, shaded with brownish crimson in the sun, nearly covered with rich crimson russet. Stalk short, fleshy.

Foote's Seckel.

Cavity small. Calyx open. Basin medium, rather deep. Flesh whitish, fine, juicy, melting, sugary, slightly vinous. Very good. September.

FORELLE.

Forellen-birne.
Grave de Corail.

Corail.
Poire Truite.

Petit Corail.
Trout Pear.

This exquisitely beautiful German Pear—called in that language *Forellen-birne*, *i. e.*, *trout pear*, from its finely speckled appearance—is one of the most attractive dessert fruits. Young shoots long, with few and dark-colored branches.

Fruit oblong ovate, inclining to pyriform, smooth, at first green, but when fully ripe lemon yellow, washed with rich deep red on the sunny side, where it is marked with large, margined, crimson specks. Stalk rather slender, slightly curved, shallow, uneven cavity. Calyx rather small. Basin abruptly sunk. Flesh white, fine-grained, buttery, melt-

ing, slightly vinous. Good. Beginning of November, and may be kept, with care, till Christmas.

FORME DE BERGAMOTTE CRAESANE.

One of Van Mons' seedlings.

Fruit medium, oblong ovate pyriform, pale yellow, a tinge of red in sun, slightly netted and patched with russet, many small russet dots. Stalk rather stout, inclined, curved, set in a depression, often with a lip. Calyx large, open. Flesh whitish, juicy, pleasant, a little astringent. Good. January to April.

FORME DE DÉLICES.

A Flemish Pear, received from the London Horticultural Society.

Fruit medium, obovate. Skin rough, yellowish, with dull russet. Flesh buttery, melting, somewhat dry, but sweet. Good. Last of October.

FORTUNÉE.

Episcopal.

La Fortunée de Paris.

La Fortunée de Parmentier.

Bergamotte Fortunée.

Surpasse Fortunée.

Fortunée de Remme.

Beurré de Remme.

An old variety, raised by M. Parmentier, of Enghien, and valuable and profitable to grow for sale as a cooking Pear.

Fruit medium or below, roundish oblate, greenish yellow, slightly netted and patched with russet, many russet dots. Stalk short. Calyx open. Flesh whitish, melting, sweet. November, December.

FOSTER'S ST. MICHAEL.

Fruit medium, roundish ovate. Stalk medium, in a small cavity. Calyx nearly closed, stiff. Basin shallow. Skin yellow. Flesh coarse, sweet. Good. September.

FRANCHIMONT.

Supposed French origin.

Fruit below medium, roundish oblate, yellow, shade of red in sun, netted and patched with russet, many russet dots. Flesh yellowish, juicy, half melting, sweet, slightly aromatic. Good or very good. September, October.

FRANÇOIS BERGIA.

A new French sort.

Fruit medium, obtuse obovate, golden yellow, with large russet dots. Flesh coarse-grained, not very juicy, brisk, and not good. October. (Hogg.)

FRANC FÉAL D'HIVER.

Franc Réal.

Fin Or d'Hiver.

Fine Gold of Winter.

Gros Micet.

Golden End of Winter.

The Winter Franc Réal is a good cooking Pear, bears well, and grows upright.

Fruit of medium size, roundish, slightly pyriform. Skin yellow, speckled with russet brown, and having a brownish cheek. Flesh crisp and firm. In use from December to March.

FRANGIPANE.

Franchipane.

An old variety.

Fruit small, roundish pyriform, yellow, with some light russet. Stalk short, fleshy at base. Flesh whitish yellow, juicy, melting, sweet. Good. September, October.

FRÉDÉRIC DE WURTEMBERG.

Frederick of Wurtemberg.	Roi de Wurtemberg.	Médaille d'Or.
Vermillon d'Été.	King of Wurtemberg.	

Origin disputed by authors. A very handsome and sometimes very good fruit, but often poor.

Fruit large, one-sided, pyriform, rather uneven in its surface. Skin deep yellow at maturity, with a remarkably rich crimson cheek. Flesh white, juicy, melting, and sweet, and when in perfection, buttery and good. September.

FREDERICK LECLERC.

A French Pear, described in the Album Pomologie by L. E. Berckmans, and dedicated to Doctor Leclerc. Tree moderately vigorous. Young wood olive.

Fruit medium or above, oblong obovate pyriform, greenish yellow, with thin traces of russet. Stalk slender. Cavity narrow, acute. Flesh whitish yellow fine, melting, juicy, sweet, perfumed. November, December.

FREDERIKA BREMER.

Introduced by J. C. Hastings, of Clinton, Oneida Co., N. Y. Tree vigorous.

Fruit medium, irregularly obtuse pyriform, sometimes Bergamotte-shaped, greenish yellow. Flesh whitish, melting, buttery, sweet, and vinous, slightly perfumed. Good. October.

FRENCH JARGONELLE.

Bellissime d'Été.	Saint Laurent.
Bellissime Suprême.	Muscadet d'Été.
Bellissime Jargonelle.	Bassin.
Vermilion d'Été.	Just.
Red Muscadet.	Belle Comelie.
Sabine d'Été.	Butler's Harvest.
Summer Beauty.	Cuisse Madame.
English Red Cheek.	Summer Jargonelle.
Red Cheek.	Cuisse Dame d'Été.
Udal.	Fusée d'Été.
Laurentienne.	

This, which Mr. Thompson calls, by way of distinction, the *French Jargonelle*, because it is most commonly received under that name

from France, is a higher colored and handsomer fruit than the English Jargonelle, though much inferior in quality, and, in fact, lasts only a day or two in perfection, and is often mealy and overripe, while the exterior is fair and tempting. The tree is of very strong, upright growth.

Fruit of medium size, obovate in form, light green, becoming lemon color, with a very rich, deep red cheek. Flesh white, coarse, breaking, sweet, and soon rots at the core. Ripens the last of July and first of August.

FULTON.

This American Pear is a native of Maine, and is a seedling from the farm of Mrs. Fulton, of Topsham, in that State. It is very hardy, and bears every year abundantly. Tree moderately vigorous. Young shoots rather slender, and yellowish reddish brown.

Fulton.

Fruit below medium size, roundish, flattened. Skin at first entirely gray russet in color, but at maturity of a dark cinnamon russet. Stalk one to two inches long, slender, planted in a narrow cavity. Calyx with long segments sunk in an uneven hollow. Flesh half buttery moderately juicy, with a sprightly, agreeable flavor. Very good. October and November.

GANSEL'S BERGAMOTTE.

Brocas Bergamot.
Ives's Bergamot.
Staunton.

Bonne Rouge.
Gurle's Beurré.
Diamant.

Gansel's Bergamotte is an old Pear, raised from seed of the Autumn Bergamotte, by the English Lieutenant-General Gansel, of Donneland Hall. Tree moderately vigorous, spreading in habit, and productive. Young wood dull grayish brown.

Fruit large, roundish obovate, but much flattened. Skin roughish brown, becoming yellowish brown at maturity, tinged sometimes with a

Gansel's Bergamotte.

russet red cheek, and sprinkled with spots of russet. Stalk short, fleshy at both ends. Cavity moderate. Calyx short and small, placed in a smooth, moderate hollow. Flesh white, melting, very juicy, rich, sweet, and aromatic. Very good. Ripens during all September.

GANSEL'S LATE BERGAMOTTE.

Raised by Mr. Williams, of Pitmaston, England. Of vigorous growth. Young wood grayish yellow brown.

Fruit roundish oblate. Skin greenish, rough, sprinkled with russet. Stalk much enlarged at its insertion in a pretty deep cavity. Calyx large, open. Basin broad and shallow. Flesh juicy, granular, melting, sugary, and rich, vinous, highly perfumed with musk. Good to very good. December, January.

GANSEL'S SECKEL.

Raised by Mr. Williams, of Pitmaston, England. Growth much like Seckel, although with a more rough bark. Young shoots dull olive brown.

Fruit medium or small, oblate, much depressed. Skin yellow, rough, and uneven, mostly covered with thin russet. Stalk short and stout, inserted in a broad, shallow cavity. Calyx closed, set in a broad, deep basin. Flesh coarse, buttery, juicy, melting, slightly vinous, with a rich aromatic perfumed flavor. Very good. November.

GARDEN PEAR.

Poire du Jardin.

An old variety, valued for cooking.

Fruit large, roundish obovate, yellow or yellow green, with a blush of broken stripes, red in sun. Flesh rather coarse, gritty at the core, sweet. December.

GENDESHEIM.

Verlaine.

Verlaine d'Été.

Gendebien.

A Flemish Pear, of not very good quality.

Fruit small, obovate obtuse pyriform, pale greenish yellow, a little russet. Flesh rather gritty near the core, elsewhere buttery. Hardly good. October and November.

GENERAL BOSQUET.

Of French origin.

Fruit medium size, ovate acute pyriform, greenish, thickly sprinkled with green and brown dots. Stalk long, rather slender, curved, set without cavity. Calyx with stiff, erect segments. Basin small, corrugated. Flesh white, tender, juicy. Good. September.

GENERAL CANROBERT.

A French Pear.

Fruit medium size, ovate acute pyriform, greenish, with traces of russet and many brown dots. Stalk inclined, fleshy at junction. Calyx open. Flesh yellowish, buttery, not juicy or melting, without flavor. Hardly good. November.

GENERAL DE LOURMEL.

Of French origin.

Fruit small to medium, roundish, greenish brown in sun, with patches and traces of russet, especially at apex, and many brown dots. Stalk variable, sometimes stout, and again long and curved. Calyx open. Segments long, recurved. Basin uneven. Flesh juicy, half melting, sweet. Good. November.

GENERAL DUTILLEUL.

Of Belgian origin.

Fruit below medium or small, oblong ovate pyriform, pale yel-

low, shade of crimson in the sun, nettings and patches of russet. Stalk short, moderately stout. Calyx open. Basin shallow. Flesh yellowish white, juicy, melting, sweet. Good. November.

GENERAL LAMORICIÈRE.

A French Pear, the tree very vigorous, very productive. Young wood dark dull olive brown.

Fruit medium size, irregular pyriform, inclined. Sides often unequal. Surface rough greenish yellow, considerably netted and patched with russet, especially at base of stalk, and thickly sprinkled with large russet dots. Stalk rather stout, sometimes curved, set inclined in a small cavity. Calyx open. Segments recurved. Basin small and uneven. Flesh whitish, buttery, juicy, melting, slightly vinous. Good to very good. October.

GENERAL TAYLOR.

Homewood.

Keyports.

We have no doubt of this being a native American seedling. It was first introduced by L. N. Rogers, of Baltimore, who found it in the town of Franklin, Md. Afterwards it was said to have been brought from Germany by a man named Keyports, but we can find nothing resembling it in any foreign pomological work. Tree vigorous, upright. Young wood reddish brown grayish.

Fruit medium, obovate obtuse pyriform, sometimes oblate obtuse pyriform, yellow, shaded in the sun with thin light rich crimson, partially netted and patched with russet, much russet near the calyx, and many russet dots. Stalk medium length and thickness, a little inclined in a small cavity. Calyx partially open. Basin lightly corrugated. Flesh whitish, a little coarse, juicy, melting, sweet. Good to very good. October.

GENERAL TOTLEBEN.

General Todleben.

Raised by M. Fontaine, of Gheling. First fruited in 1855, and first described by M. Adolphe Papeleu, in 1858. Tree a vigorous grower, irregular, spreading, productive. Young wood reddish yellow brown.

Fruit above medium or large, obovate obtuse pyriform, greenish yellow, patched and netted with russet, and many russet brown dots. Stalk rather stout, often curved. Cavity small. Calyx small, closed, with short segments. Basin large, deep, uneven. Flesh whitish yellow, a little coarse, juicy, melting, sweet, slightly vinous, and aromatic. Very good. October and early November.

GERANDO.

Poire Gerando.

A foreign variety. Tree vigorous, spreading.

Fruit above medium, roundish obtuse pyriform. Surface knobby,

yellow, mostly overspread with cinnamon russet, dull red in the sun. Flesh yellowish, rather coarse, granular, buttery, sugary, vinous, slightly astringent. Good. October.

GERARDIN.

Girardin.

Gerardine.

Girardon.

La Girardin.

A foreign variety. Tree a vigorous grower. Young wood dull grayish brown.

Fruit medium, roundish, somewhat irregular. Skin yellow, with many spots and patches of rough russet, and a reddish tint towards the sun. Flesh coarse, buttery, astringent, granular. Tolerably good. September.

GERMAN MUSCAT.

Muscat d'Allemagne.

Muscat Allemand.

Muscat Lallemand.

Almain.

Muscat l'Allemand.

Colmar Boise.

Muscat l'Alleman.

Muscat of Germany.

Muscat l'Aleman.

An old variety, described by La Quintinge in 1690. Tree vigorous, spreading. Young wood yellowish brown.

Fruit medium, obovate obtuse pyriform, pale yellow, partially netted and patched with russet. Flesh whitish, a little coarse, juicy, sweet, slightly astringent. Good. October to December.

GILOGIL.

Bergamotte Geerard.

Gros Gilot

Bellegarde.

Gros Gobet.

Beurré Geerards.

Téton de Vénus.

Cir e d'Hiver.

Fontarabie acure.

Garde Ecorce.

Girogille.

Gile-o-gile.

Gros Franc Réal.

Poire à Gobert.

Gros Guy Grillaud.

Garde d'Écosse.

Livre de Burgoyne.

Jilogil.

Péquini.

Gilot.

Poire de 16 Ounces.

Gobert.

Ris de Loup.

A large showy French Pear, only fit for cooking.

Fruit large, roundish. Skin thickly covered with russet, with a reddish russet cheek. Flesh very firm and crisp. November to February.

GLORY OF COMBRONE.

Supposed of French origin. Tree a fine grower, healthy, and hardy and productive.

Fruit above medium, or nearly large, oblong pyriform, yellowish, mostly overspread, marbled, and dotted with warm brownish yellow russet. Stalk moderately stout. Cavity slight. Calyx medium. Segments open, reflexed. Basin medium, regular. Flesh whitish yellow, granulated, almost buttery, melting, juicy, sugary, delicious. Last of September and early October. (Elliott.)

GLOU-MORCEAU.

Gloux Morceaux.	Trimble.
Beurré d'Hardenpont.	Gouluc Morceau de Chambron.
Hardenpont d'Hiver.	Beurré de Kent.
Linden d'Automne.	Glou Morceau de Chambron.
Beurré d'Arenberg.	Beurré d'Hardenpont de Chambron.
Gouluc Morceau.	Beurre Lombard.
Kronprinz Ferdinand.	Beurré d'Ardenpont.
———— von Oestreich.	Glout Morceau.
Beurré de Chambron.	Hardempont.
Got Luc de Chambron.	Victoria.
Woolaston.	Langlier's Victoria.
Potts.	

An old Flemish Pear, originated with M. d'Ardenpont, canon of Tournay. The growth of the tree is distinct, having dark olive shoots, spreading in habit.

Fruit rather large, varying in form, but usually obovate ovate obtuse pyriform, smooth, thin, pale greenish yellow, marked with small green dots, and sometimes with thin patches of greenish brown. Stalk rather slender and straight, an inch or more long, planted in a small, regular cavity. Calyx usually with open divisions, set in a moderately deep basin. Flesh white, fine-grained, and smooth in texture, buttery, very melting, with a rich, sugary flavor, with no admixture of acid. Sometimes astringent in heavy soils. Good to very good. December.

GOLDEN BEURRÉ OF BILBOA.

Hooper's Bilboa.	Beurré Dore de Bilboa.
Driver ?	Beurré Gris de Bilboa.
Beurré Gris de Portugal.	

The Golden Beurré of Bilboa was imported from Bilboa, Spain, about 1827, by Mr. Hooper, of Marblehead, Mass. Its European name is unknown. The tree is healthy, hardy, and a vigorous grower, forming a beautiful upright, round head, and producing abundantly. It is a profitable orchard sort. Shoots stout, upright, light yellowish brown.

Fruit medium, regular obovate pyriform, golden yellow, evenly dotted with small brown dots, and a little marked with russet, especially round the stalk. Stalk about an inch and a half long, rather slender, set in a small cavity. Calyx small, closed, placed in a slight basin. Flesh white, very buttery and melting, and fine-grained, with a slightly vinous flavor. Very good. First to the middle of September.

GOODALE.

Goodale's Seedling.

Saco.

Raised from seed of the McLaughlin, by Enoch Goodale, Saco, Me. Its size and period of ripening make it promise of high value as a market sort. The tree is very hardy, a vigorous, thrifty grower, spreading upright in habit, and uniformly productive. Young wood very stout, olive.

Fruit large, oblong obovate obtuse pyriform, light yellow, shaded with crimson and fawn in the sun, slightly netted and patched with rus-

set, and thickly sprinkled with small russet brown dots. Stalk rather short and set in an inclined cavity of considerable depth, sometimes a projection one side. Calyx small, closed. Segments thick. Basin

Goodale.

rather deep and uneven. Flesh whitish, juicy, melting, a little gritty at the core, sweet, slightly vinous, with a brisk refreshing musky perfume. Very good. October.

GRAND BRETAGNE.

Great Britain.

Supposed of Belgian origin.

Fruit medium or below, obovate acute pyriform, pale yellow, shaded and mottled with red in the sun, nettings and patches of russet, and russet dots. Flesh yellowish, coarse, gritty, juicy, sweet. Not quite good. January, February.

GRAND SOLEIL.

Introduced by Major Esperen, of Malines. Tree vigorous and productive. Young wood dull dark yellow brown.

Fruit medium, roundish pyriform, pale yellow, mostly covered with cinnamon russet and fawn, and a red cheek in sun, many russet dots. Stalk medium, in a small cavity. Calyx small, nearly closed. Basin abrupt, deep, a little furrowed. Flesh whitish, a little coarse, juicy, half melting, sugary, slightly vinous. Very good. October, November

GRASLIN.

Of French origin. Tree vigorous. Young wood olive yellow brown, very productive.

Fruit medium, obovate ovate obtuse pyriform, greenish yellow, sprinkled with brown dots and sometimes traces of russet. Stalk rather long and stout, set in a slight cavity, sometimes by a lip. Calyx open. Segments large, reflexed. Basin small, slightly furrowed. Flesh yellowish, juicy, buttery, sweet, slightly vinous. Good. October, November.

GREAT BLANQUETTE.

Blanquet de Florence.

Musette d'Anjou.

Grosse Blanquet.

Grosse Blanquette.

Roi Louis.

Great Blanket.

Grosse Roi Louis.

Bagpipe of Anjou.

An old French Pear, of little value.

Fruit small, ovate acute pyriform, yellowish green. Flesh melting, juicy, sweet. Good. August.

GREAT CITRON OF BOHEMIA.

Citronenbirne Böhmische grosse, punctirte.

Fruit small, oblong, yellow. Flesh sugary, juicy, a little coarse-grained, and not much flavor. Ripens the last of September.

GREEN CHISEL.

Madeleine Vert.
Hativeau.

Guenette.
Petit muscat batard muscade.

An old English Pear. The tree is very productive, erect, fruiting in clusters.

Fruit small, roundish ovate, greenish. Flesh white, melting, juicy, sprightly. Good. Middle August.

GREEN MOUNTAIN BOY.

An American variety.

Fruit medium, roundish obovate or obovate pyriform, golden yellow, with russety brown specks. Flesh yellowish, melting, juicy, sweet. Very good. October. (Elliott.)

GREEN PEAR OF YAIR.

Green Yair.

The Green Pear of Yair is a European fruit, which proves but little worthy of cultivation here.

Fruit of medium size, obovate. Skin green. Flesh juicy, but not high-flavored or rich. Good. September.

GROOM'S PRINCESS ROYAL.

Matthews Eliza. Princess Royal. Bergamotte Matthews Eliza.

An English fruit, raised by Mr. Groom, the famous tulip-grower. Young wood olive yellow brown.

Fruit of medium size, roundish. Skin greenish brown, with a tinge of brownish red, and some russet tracings. Stalk short and thick, set in a very trifling depression. Calyx small, open, set in a shallow basin. Flesh buttery, melting, a little gritty near the core, but sweet and high-flavored. Very good. January and February.

GROS ROUSSELET D'AOÛT.

A seedling of Van Mons. Catalogued in 1823. Tree vigorous, or pyramidal form, very productive.

Fruit medium, pyriform. Skin green, becoming golden yellow at maturity, shaded with russet and spotted with fawn. Flesh whitish, fine, melting, very juicy, sugary, vinous, deliciously perfumed. Ripens in August. (Al. Pom.)

GRUMKOWER.

Grumkower Winterbirnie.

This variety is described by Lindley as of middle size, in shape like a Bon Chrétien, with obtuse angles or ribs. Flesh melting, juicy, sweet, musky. November, December.

GUSTAVE BIVORT.

A French variety.

Fruit medium, roundish, pale yellow, patches and nettings of russet, shade of red in sun. Flesh white, juicy, half melting, sweet, slightly perfumed. Good or very good. August.

GUSTAVE BURGOYNE.

Fruit large, oblong obovate obtuse pyriform, greenish yellow, a little brownish in the sun, slightly netted and patched with russet, sometimes nearly covered, and thickly sprinkled with russet dots. Stalk set in a shallow cavity. Calyx open. Flesh whitish, juicy, melting, sweet, pleasant. Good. September, October.

GUSTIN'S SUMMER.

An American variety, of little value. Originated in New Jersey.

Fruit small, roundish. Skin yellow. Flesh white, sweet, without much flavor. First of September.

HACON'S INCOMPARABLE.

Celestus.

Downham Seedling.

An English fruit, raised by Mr. Hacon, of Downham Market, Norfolk. It is a hardy, productive tree, with rather depending branches. Young shoots rather slender, diverging, olive-colored.

Fruit rather large, roundish, inclining to turbinate. Skin slightly rough, pale, and dull yellowish green, mixed with pale brown, sprinkled with numerous greenish russet dots and russet streaks. Flesh white, buttery, melting, with a rich vinous flavor. Good. October and November.

HADDINGTON.

Raised by J. B. Smith, Philadelphia. Tree vigorous, spreading.

Fruit above medium, obovate or pyriform. Color greenish yellow, with a brownish cheek. Stalk slender, inserted in a small cavity. Calyx small, in a round, shallow basin. Flesh yellow, crisp, juicy, with an aromatic flavor. Good. January till April.

HAGAR.

A French Pear, of poor quality. Tree very vigorous, upright.

Fruit medium, obovate obtuse pyriform, pale yellow, shade of red in sun, some russet. Flesh coarse, dry, sweet. October.

HAIGHT.

An American variety. Tree moderately vigorous, spreading.

Fruit of medium size, roundish pyriform, yellow, shaded and mottled with red in the sun, small brown dots and traces of russet. Stalk long, a little curved, fleshy at insertion, set in a small cavity. Calyx open. Basin broad and uneven. Flesh white, pink at centre, a little coarse, breaking, juicy, sweet, and pleasant. Good. October.

HAMILTON.

Hamilton Seedling.

An American Pear, originated in South Carolina, where it is said to be of very good quality, but here at the North it is astringent and poor.

Fruit medium, oblate. Surface rough, yellowish, slightly patched and blotched with russet, and many russet dots. Flesh yellowish, coarse, not juicy, slightly astringent. November.

HAMON.

Besi Fondante.

Besi Hamon.

Beurré Seringe?

Originated by M. Nerard, Lyons, France, in 1837. Tree vigorous, productive.

Fruit medium or below, irregular, oval, dull pale green, tinged with yellow. Stalk long, curved. Flesh white, half melting, juicy, sweet. Good. August.

According to Leroy, Beurré Seringe should be a synonym of Doyenné de Saumur; but our trees received of these varieties are not identical. According to the Jardin Fruiterer, Beurré Seringe is identical with Hamon. Not having trees of that variety with which to compare it, we for the present place it here.

HAMPDEN'S BERGAMOT.

Bergamotte d'Angleterre.
Fingal's.
Scotch Bergamot.
Ellanrioch.
Milan Vert.
Longueville d'Écosse.
Hampden.
Beuzard.
Belle et Bonne.
Belle sans Pepins
Belle de Luxembourg.

Bergamotte de Bruxelles.
Bergamotte d'Été Grosse.
Bergamotte de Paysans.
Gracieuse.
Fanfareau.
Great Bergamotte.
Deutsche National Bergamotte
Poire sans Pepins.
Belle de Bruxelles.
Sans Pepins.
Schöne and Gute.

An old variety, the origin of which is unknown.

Fruit large, roundish oblate, a little rising at the stalk end, greenish yellow, with traces and patches of thin russet, and greenish russet dots. Flesh white, a little coarse, tender, half buttery, sweet, agreeable. Good. September.

HAMPTON'S BERGAMOT.

Originated with W. C. Hampton, Mt. Victory, Ohio.

Fruit small, roundish oblate, yellow, netted and sprinkled with russet and green dots. Flesh whitish, coarse, juicy, half melting, vinous. Good. September.

HAMPTON'S CLUSTER.

Hampton.

Cluster Pear.

Raised by W. C. Hampton, Ohio.

Fruit borne in clusters, very small, roundish, greenish yellow, shaded with dull red in the sun, and netted with russet. Flesh juicy, melting, sweet. Very good. September.

HAMPTON'S VIRGALIEU.

A seedling of W. C. Hampton, Ohio.

Fruit medium, roundish pyriform. Surface uneven, green, slightly yellow at maturity, sometimes with a warm cheek in sun, patches, nettings, and dots of russet. Flesh yellowish, slightly gritty, juicy, melting, brisk, vinous. Very good. October.

HANNERS'.

Hannas.

Originated in the garden of Mr. Hanners, Boston, Mass. Tree an upright good grower and bearer. Young shoots dull olive.

Fruit large, oblong, very obtuse pyriform, greenish yellow, slightly netted and patched with russet, and many green and russet dots. Stalk varying, sometimes long, pretty stout, set in a cavity, often with a lip. Calyx open. Segments long, slender, recurved. Basin shallow, uneven, slightly russeted. Flesh whitish, juicy, melting, pleasant, sweet, a little perfumed. Very good. September.

HANOVER.

From Hanover Furnace, N. J.

Fruit below medium, roundish obovate. Skin green, with dull green russet markings, and a brown cheek. Stalk medium. Cavity shallow and angular. Calyx open, in an irregular basin. Flesh greenish yellow, exceedingly melting and juicy. Flavor pleasant. Good. Ripe October. (Ad. Int. Rep.)

HARRIS.

Speckled Harris?

Received from Georgia. Tree vigorous, productive.

Fruit medium, obovate obtuse to obovate acute pyriform, pale yellow, deep red in the sun, many green and brown dots. Flesh whitish, buttery, not juicy, sweet. Good. September.

HARRISON'S LARGE FALL.

Rushmore's Bon Chrétien.
Large Swan's Egg.

Richmond.
Lott's Pear.

Englebert Lott.

An American variety, a strong, rapidly-growing tree, comes early into bearing, and produces abundantly.

Fruit large, irregular, inclined, obovate obtuse pyriform, pale yellow, with a red cheek. Valued as a cooking fruit. August, September.

HARVARD.

Boston Epame.

Cambridge Sugar Pear.

Belle de Flushing.

The Harvard produces enormous crops, of fair quality. The tree is remarkably hardy and vigorous, with upright shoots forming a fine head. It originated at Cambridge, Mass.

Fruit rather large, oblong pyriform, russety olive yellow, with a brownish-red cheek. Stalk rather stout, inserted rather obliquely on the narrow summit or in a small cavity. Calyx set in a narrow basin. Flesh white, tender, juicy, and melting, of excellent flavor, but liable, if not picked early, to rot at the core. Beginning of September.

HARVEST.

Early Sugar.

Sugar Pear.

Wolcott's Early?

An American variety. Tree an upright round spreading head, a good grower and bearer. Young wood olive yellow brown.

Fruit below medium, or small, roundish, pale yellow, brown tinge of red in the sun, and sprinkled with brown and green dots. Flesh whitish, not very juicy or melting, but sweet, pleasant. Good. July.

HAWES' WINTER.

Morgan.

Hewes' Winter.

Origin, King and Queens Co., Va., on the farm of the Hawes family. Tree vigorous, productive.

Fruit medium or below, roundish, greenish yellow, with traces and spots of russet. Flesh whitish, buttery, half melting, juicy, sweet. Good. November.

HEATHCOT.

Gore's Heathcot

The Heathcot originated on the farm of Governor Gore, in Waltham, Mass., by Mr. Heathcot, then a tenant; the original tree came into bearing in 1824. Tree moderately vigorous. Young shoots upright, reddish brown.

Fruit of medium size, regularly obovate, pale greenish yellow, with a very few dots, and a few russet streaks. Stalk an inch long, planted in a very small cavity. Calyx closed, and set in a rather narrow and shallow basin. Flesh white, buttery, and melting, moderately juicy, with an agreeable vinous flavor. Good to very good. Middle and last of September.

HEBE.

Raised by William Sumner, Pomaria, S. C. Tree thrifty, thorny, hardy, productive, and retains its foliage late. Young wood slender, grayish.

Fruit large, round, obovate, with irregular protuberances, greenish lemon yellow, dotted with russet specks and blotches. Flesh sprightly, melting, buttery, slightly vinous. Seldom forms seeds. December. (Hort.)

HEGEMAN.

Hegerman.

Heggerman.

Hampton.

Originated on the farm of Andrew Hegerman, North Hempstead, Long Island. Tree vigorous, upright in habit, not an early bearer, but when mature bears heavily. Young wood olive brown.

Fruit medium, roundish ovate, variable in form, greenish yellow, netted and dotted with russet. Stalk short. Cavity shallow, uneven. Calyx large, open. Basin shallow. Flesh yellowish, juicy, melting, sweet. Good to very good. October.

HÉLÈNE GRÉGOIRE.

Raised by M. Grégoire, of Jodoigne, Belgium. Tree vigorous and productive. Young wood dull reddish brown.

Fruit large, ovate, light greenish yellow, slightly colored in the sun, russet patches and spots. Stalk short, set in a narrow cavity. Calyx large. Basin furrowed. Flesh fine, melting, half buttery, juicy, sweet, perfumed. October. (An. Pom.)

HENKEL.

Cumberland of Belgium.

One of Van Mons' seedlings. Growth vigorous, upright, productive. Young wood dull grayish brown.

Fruit rather large, broad obtuse pyriform, greenish yellow, netted and patched with russet, and sprinkled with green and brown dots. Stalk

Henkel.

inclined, rather stout, fleshy at insertion by a ring or lip. Calyx partially open. Segments short, stiff, sometimes reflexed. Basin rather large, slightly uneven, russeted. Flesh whitish, juicy, melting, with a rich, slightly vinous flavor. Very good to best. September.

HENRI BIVORT.

Henri (Bivort.)

A Belgian variety. Tree vigorous.

Fruit medium, obovate pyriform, greenish yellow, few patches of

russet, and many green and brown dots. Flesh whitish, juicy, half melting, sugary. Good. September.

HENRI DESPORTES.

A seedling of André Leroy's.

Fruit large, pyriform. Flesh white, juicy, one of the best summer Pears. (Leroy.)

HENRIETTA.

Raised by Gov. Edwards, of New Haven, Conn. Tree a free grower, of upright form, a good bearer. Young wood reddish brown.

Fruit medium, roundish oval, greenish or greenish yellow, a little netted and patched with russet, tinge of red in the sun. Flesh whitish green, juicy, half melting, sweet. Good. September.

HENRIETTE.

Belle Henriette.

Henriette Bouvier.

Henriette d'Orleans.

Raised by M. Simon Bouvier, of Jodoigne, Belgium. Tree a fine grower. Young wood reddish.

Fruit medium, oblate, nearly globular, pale greenish yellow, a little shaded with fawn or dull red in the sun, thinly netted with russet, and thickly sprinkled with russet dots. Stalk long, slender, a little inclined, fleshy at insertion, or with a mamelon neck. Calyx open. Segments long, slender, often recurved. Basin very shallow, slightly uneven. Flesh a little coarse, whitish, juicy, half melting, sweet, perfumed. Good to very good. November.

HENRI VAN MONS'.

Bergamotte Rouge Tardif.
Beurré Rouge Tardif.

Fleur de Neige.
Snow Flower.

One of Van Mons' earliest seedlings. Tree very vigorous, hardy, holding its foliage late in the season, and an abundant bearer. Young wood clear olive.

Fruit medium to large, elongated acute pyriform, pale yellow, shaded and mottled with brownish red or crimson in the sun, netted and patched with russet, and thickly sprinkled with russet dots. Stalk long, rather slender, curved, without cavity. Calyx open. Segments long, generally recurved. Basin small, uneven. Flesh yellowish, juicy, melting, sweet. Good to very good. October.

HENRY THE FOURTH

Henri Quatre.
Favori Musqué du Conseiller.
Ananas.

Jaquin.
Beurré Ananas.

The tree of this French Pear is a good grower, hardy and productive. Young wood dull yellow brown, with many specks.

Fruit below medium size, roundish pyriform, pale greenish yellow, dotted with small gray specks. Stalk rather more than an inch long, slender. Calyx small, placed in a shallow abrupt basin. Flesh whitish,

not very fine-grained, but unusually juicy and melting, with a rich, delicately perfumed flavor. It should always be ripened in the house. Good to very good. Early in September.

HERICART.

A second-rate Belgian Pear, with a pleasant, perfumed juice, ripening early in autumn. Tree very vigorous and productive.

Fruit of medium size, obovate, often rather oblong and irregular, yellow and russety. Stalk an inch or more long, rather slender, set in a small cavity. Calyx set in a shallow basin. Flesh white, fine-grained, buttery, not rich, but with a delicate, peculiar aroma, gritty, and slightly astringent. Good. The fruit ripens the last of September.

HERICART DE THURY.

Raised by Van Mons. A good grower, of peculiar habits and appearance, rather pyramidal, but with diverging crooked limbs. Not an early nor a very profuse bearer. Young wood dull reddish olive brown.

Fruit medium or above, obtuse ovate pyriform, yellow, thinly shaded with red in the sun, slightly netted, and thickly sprinkled with russet dots. Stalk long, rather slender, curved. Cavity small. Calyx closed. Segments short. Basin small, uneven. Flesh white, not very juicy, and slightly astringent. Good. December.

HERKIMER.

Earl Pear.

Originated on the farm of S. Earl, Herkimer, N. Y. The tree is a vigorous grower, hardy and productive. Young wood warm reddish brown.

Fruit medium or above, roundish oblate. Surface a little uneven, pale greenish yellow, clouded with dull red in the sun, and many green dots. Stalk pretty stout, curved. Cavity deep, round. Calyx with flat reflexed segments. Basin varying from shallow to moderately deep. Flesh white, a little coarse-grained at the core, juicy, sweet, melting, and agreeable. Good. September, October.

HESSEL.

Hazel.

Hasselbirm.

A Scotch Pear, very productive.

Fruit small, obovate. Skin yellowish green. Flesh whitish, juicy, of little or no value. First of September.

HINGHAM.

Originated in Hingham, Mass. Tree vigorous, spreading.

Fruit medium, obovate acute pyriform, pale yellow, shaded with red in the sun, many brown dots. Stalk long. Calyx partially closed. Flesh whitish, juicy, melting, vinous. Good. October.

HOLLANDE BERGAMOTTE.

Holland Bergamot.
 Beurré d'Alençon.
 Bergamotte d'Alençon.
 Jardin de Jougers.
 Bergamotte de Fougère.
 Amoselle.
 Lord Cheeney's.

Hollandische Bergamotte.
 Bergamotte d'Holland.
 Sarah.
 Bergamotte d'Hiver d'Holland.
 Beurré Extra.
 Lord Cheney.
 Musquine de Bretagne.

An old variety, the origin unknown. An excellent kitchen fruit, which will keep sound till May or June. Shoots stout, diverging, olive brown.

Fruit rather large, roundish, green, much marbled and covered with thin brown russet, but becoming yellowish at maturity. Flesh white, crisp, with an abundant, sprightly, agreeable juice.

HOLLAND GREEN.

An old variety, described by Coxé, and sometimes called Holland Table Pear.

Fruit large, irregular, green, with spots of russet. Flesh juicy, melting, delicate, delicious. September. (Coxé.)

HONEY.

European Honey.

This Pear is considerably grown in many parts of the country, and although an old sort, its origin seems unknown, and to our knowledge is not noted by any American author. The tree is an upright, good grower, and a great bearer.

Fruit medium or below, roundish, sometimes roundish pyriform, pale yellow, shaded and mottled with red in the sun, with many light russet dots, and sometimes patches of russet. Stalk short, rather stout. Calyx open. Basin broad, shallow. Flesh whitish, coarse, breaking, moderately juicy, sweet, pleasant. Good. August.

HOSENSCHENCK.

Hosenshenck.
 Shenk's.
 Watermelon.
 Smokehouse.
 Butter Pear.

Queen of August.
 Moore's Pound.
 Eshleman.
 Moore's Pear.

This Pear originated on the farm of John Schenck, Weaver Township, Pa. Tree vigorous, productive. Young wood grayish olive brown.

Fruit of medium size, roundish oblate. Skin light yellowish green, rarely with a blush. Stalk about an inch long, rather stout, inserted without much depression, sometimes by a lip. Calyx small. Basin deep. Flesh rather coarse, tender, juicy, slightly vinous, melting, with a pleasant flavor. Good to very good. Ripens the last of August.

HOVEY.

Doyenné Hovey.

Raised by André Leroy, and dedicated to C. M. Hovey, of Boston,

Mass. Tree a vigorous, upright grower. Young shoots clear yellow brown.

Fruit medium or above, varying in form from oblong oval to obovate obtuse pyriform, yellow or greenish yellow, slightly sprinkled, netted, and patched with russet. Stalk medium, moderately stout, inserted without cavity. Calyx with short, stiff segments. Basin shallow, lightly furrowed and slightly russeted. Flesh yellowish, buttery, juicy, melting, sweet, aromatic. Very good. October, November.

HOWARD.

Received from D. W. Coit, Norwich, Conn. Tree vigorous, upright, productive, with olive yellow brown young shoots.

Fruit medium, roundish obovate, pale yellow, patches and traces of russet, and thickly sprinkled with russet dots. Stalk long, curved. Cavity small. Calyx open. Basin uneven, slightly russeted. Flesh white, juicy, melting, sweet, rich, slightly perfumed, pleasant. Very good. September.

Howell.

HOWELL.

Raised by Thomas Howell, of New Haven, Conn. A valuable

variety. Tree an upright and free grower. Young shoots reddish yellow brown, an early and profuse bearer.

Fruit rather large, roundish pyriform, light waxen yellow, often with a finely shaded cheek, thickly sprinkled with minute russet dots, and some russet patches. Stalk medium, inserted without cavity, sometimes by a ring or lip, sometimes in a small cavity. Calyx open. Segments recurved. Basin rather large and uneven. Flesh whitish, juicy, melting, brisk, vinous. Very good. September, October.

HUGUENOT.

A fruit originated by Mr. Johonnot, of Salem, Mass. It bears abundantly, but is rather dry, and not worthy of general cultivation.

Fruit medium, roundish, pale yellow, sprinkled with large spots of bright red. Flesh white, fine-grained, half breaking, sweet, but wanting in flavor and juice. Good. October.

HULL.

Originated in the town of Swanzey, Mass. Tree vigorous, somewhat rambling in habit, with long shoots of a rich reddish yellow brown.

Fruit medium, oblong obovate obtuse pyriform, greenish yellow, netted and patched with russet, especially near the stalk, thickly sprinkled with russet dots. Stalk long, rather stout, inserted by a ring in a shallow cavity. Calyx partially closed. Segments short, erect. Basin small, uneven. Flesh white, juicy, melting, slightly vinous. Very Good. September.

HUNGERFORD'S OSWEGO.

Received from Oswego, N. Y.

Fruit medium, roundish, yellow, with brown dots. Flesh white, buttery, juicy, melting, gritty, sweet. Good. October.

HUNTINGTON.

Origin, New Rochelle, and brought to our notice by S. P. Carpenter. It was found by Mr. Huntington, and now stands on his grounds. Tree vigorous, forming a pyramid, an early and profuse bearer. Young shoots olive color.

Fruit nearly medium in size, roundish oblate, rough yellow, often shaded with crimson, thickly covered with gray and crimson dots, and russet patches. Stalk medium or long, nearly straight. Cavity broad and uneven. Calyx open. Segments stiff. Basin broad and open. Flesh white, very juicy, melting, buttery, with a very sweet, vinous flavor, delicately perfumed. Very good. September.

HUNT'S CONNECTICUT.

An American fruit for kitchen use. Medium, oblate, yellowish green, coarse, dry, and sweet.

HUYSHE'S PRINCE CONSORT.

Raised by Rev. John Huyshe, of Clythesdon, Devon, England, from seed of *Beurré d'Aremberg*, fertilized by *Passe Colmar*. This is one of

a series of four new Pears, originated by Mr. Huyshe, all of which are said to be of superior excellence. The tree is a vigorous grower, with short-jointed young shoots of a dark dull reddish brown, and indistinct white specks. Hogg describes the fruit as large, oblong obovate pyriform, grass green, much covered with russet and russet dots. Stalk long, stout. Calyx small, open. Basin deep, uneven. Flesh yellowish, coarse-grained, juicy, melting, sweet, vinous, with a peculiar flavor unlike any other pear. November.

HUYSHE'S PRINCE OF WALES.

Huyshe's Bergamot.

Originated at Clythedon, England, by Rev. John Huyshe, from seed of Marie Louise crossed with Gansel's Bergamot. Tree vigorous, spreading. Young wood reddish brown.

Fruit large, roundish oval, lemon yellow, mostly covered with cinnamon-colored russet. Stalk stout and woody, somewhat obliquely inserted in a round and rather open cavity. Calyx small, open, with erect tooth-like segments. Flesh yellowish white, tender, melting, juicy, and richly flavored. November to January. (Hogg.)

HUYSHE'S PRINCESS OF WALES.

Origin, Clythedon, England, by the Rev. John Huyshe.

Fruit medium, oblong, abrupt at stalk, lemon yellow, with patches, veins, and dots of cinnamon-colored russet. Stalk long, stout, woody, somewhat obliquely inserted in a round and rather wide cavity. Calyx small, open, with narrow, erect segments. Flesh deep yellow, fine-grained, very melting, juicy, rich, and highly aromatic. Last of November. (Hogg.)

HUYSHE'S VICTORIA.

This Pear is of the same origin as Huyshe's Prince of Wales. It has fruited in several collections in this country. Tree a good grower, spreading. Young wood dull brown.

Fruit medium size, ovate pyriform or ovate acute pyriform, yellow, considerably patched and netted with russet, and thickly sprinkled with green and brown dots. Stalk medium length, stout, inclined, and joined to the fruit without depression. Calyx open. Basin medium, uneven. Flesh yellowish, juicy, melting, a little vinous. Good to very good. November.

INCOMMUNICABLE.

A Flemish Pear.

Fruit above medium, obtuse pyriform, grass green, with russety specks. Flesh yellowish white, a little gritty, melting, sweet. October. (Lind.)

INCONNUE VAN MONS.

L'Inconnue.

One of Van Mons' seedlings. Tree hardy, vigorous, upright, very productive.

Fruit medium or below, broad oval pyriform, light yellow, netted and patched with russet, and many russet dots. Stalk long, curved, inclined, and set in a slight depression, sometimes by a lip. Calyx open. Segments long, recurved. Basin shallow, uneven. Flesh white, juicy, melting, very sweet, rich, and pleasant. Good to very good. December to March.

INCONSTANT.

L'Inconstant.

Fruit medium, ovate obovate acute pyriform, pale yellow, slight traces and patches of russet, shade of red in the sun, many dots. Flesh white, juicy, half melting, a little astringent. Good. October.

IRIS GRÉGOIRE.

A Belgian Pear, as yet little known in this country. Tree moderately vigorous, productive.

Fruit medium to large, oblong acute pyriform, clear light yellow, with shades and marblings of red russet. Stalk short, with two or more fleshy rings at its connection with the fruit. Flesh white, fine-grained, melting, buttery, sweet, perfumed. December, January. (An. Pom.)

ISABELLA.

Raised by Dr. S. A. Shurtleff, Brookline, Mass. Tree thrifty, upright.

Fruit medium size, pyriform, light green, red in sun. Flesh white, juicy, sprightly, agreeable. October. (J. of H.)

ISLAND.

Originated at New Utrecht, Long Island. Tree moderately vigorous, upright. Young wood olive yellow brown.

Fruit medium, roundish pyriform, pale yellow, netted, sprinkled, and patched with russet. Stalk short. Calyx open. Flesh white, a little granular, juicy, melting, sweet, slightly perfumed. Good. October.

IVES' AUGUST.

Originated with Dr. Eli Ives, New Haven, Conn.

Fruit medium, oblong obtuse pyriform, greenish, with a brownish red cheek. Flesh short and thick. Flesh rather coarse, buttery, melting. Good. August.

IVES' BERGAMOTTE.

Raised by Dr. Eli Ives, New Haven, Conn. Tree closely resembles the Seckel, and is very productive.

Fruit medium or small, roundish, greenish yellow, with slight traces of russet. Stalk short and thick. Flesh rather coarse, buttery, melting, juicy, vinous. Good. Ripens first of September.

IVES' PEAR.

Raised by Dr. Eli Ives, New Haven, Conn. Tree vigorous and very productive.

Fruit small, oval oblong pyriform, greenish, with a brownish-red cheek. Stalk long. Calyx open. Basin very small. Flesh juicy, melting, sugary, and good. Ripens first of September.

IVES' SEEDLING.

Raised by Dr. Eli Ives, New Haven, Conn.

Fruit nearly medium, somewhat globular, greenish yellow, shaded with crimson. Stalk short and thick. Calyx small, nearly closed. Basin shallow and irregular. Flesh whitish, coarse, and granular, juicy, melting, with a refreshing sugary flavor, well perfumed. Good. Ripe about the first of September.

IVES' VIRGALIEU.

Raised by Dr. Eli Ives, New Haven.

Fruit below medium, acute pyriform, broad at calyx, greenish, shaded with dull crimson. Stalk inserted by a lip. Calyx open. Basin shallow and irregular. Flesh whitish, rather coarse and granular, buttery, juicy, and melting, with a sweet vinous flavor. Good. October.

IVES' WINTER.

Raised by Prof. Ives, New Haven.

Fruit medium, depressed pyriform, yellowish, sprinkled with russet. Stem large and long, in an abrupt cavity. Calyx open, in a large basin. Flesh white, coarse, and granular. Cooking. December.

IVES' YALE.

Raised by Dr. Eli Ives, New Haven, Conn.

Fruit medium, roundish, mamelon at base of stem, dull greenish yellow, brownish crimson in the sun. Flesh greenish white, moderately juicy. Good. Early August.

JACKSON.

Origin, New Hampshire. Tree vigorous and productive. Young wood dull reddish brown.

Fruit medium, obovate, short pyriform, pale yellow, somewhat russeted. Stalk long and curved, fleshy at its junction, inserted in a slight cavity. Calyx small and open, set in a rather deep abrupt basin. Flesh white and juicy. Flavor brisk and vinous. Good to very good. Ripens the last of September.

JACKSON'S ELIZABETH.

Mrs. Jackson.

Jackson.

Originated with S. S. Jackson, of Cincinnati, O. Tree moderately vigorous, very productive. Young wood reddish brown.

Fruit medium size, roundish obovate pyriform. Skin greenish yellow, shaded with crimson in the sun, and thickly sprinkled with russet dots. Stalk medium, set in a slight depression. Calyx small, partially closed. Basin small, regular. Flesh whitish, juicy, melting, sweet, pleasant, slightly aromatic. Good to very good. Last of September.

JALOUSIE.

De Pucelle.

An old Belgian Pear.

Fruit rather large, roundish to obovate, and more frequently pyriform. Skin rough, of the deepest russet, ruddy in the sun. Flesh a little coarse-grained, soft, sweet, and of pleasant flavor. Good. Last of September.

JALOUSIE DE FONTENAY VENDÉE.

De Fontenay Vendée. Jalousie de Fontenay. Belle d'Esquermes.

The tree of this French Pear is vigorous, and an early and abundant bearer. Young shoots a dull olive brown color.

Fruit medium, oblong obovate, slightly acute pyriform, dull yellow and green, considerably marked with russet patches and dots, and tinged with a red cheek. Stalk about an inch long, set obliquely, without depression, on an obtuse point. Calyx with stiff segments, set in a shallow, round basin. Flesh white, buttery, melting, with a rich-flavored juice. Very good. First of October.

JAMINETTE.

Sabine.	Wilhelmine.	Bergamotte Cheminette.
D'Austrasie.	Josephine.	Sabine Van Mons.
Beurré d'Austrasie.	Colmar Jaminette.	Beurré Saint Helier.
Belle d'Austrasie.	Crassane d'Austrasie.	Tyrolle.

Raised by M. Jaminette, of Metz, very productive, and in favorable seasons an excellent winter fruit. Young wood dull yellow brown.

Fruit of medium or large size, varying in form, but mostly obovate, a good deal narrower at the stalk, clear green, paler at maturity, considerably marked with russety brown, especially near the stalk, and sprinkled with numerous brown dots. Stalk scarcely an inch long, rather thick, and obliquely planted, without any depression. Calyx open, set in a basin of moderate depth. Flesh white, a little gritty near the core, but very juicy and buttery, sweet. Good to very good. November to January.

JAPAN.

This peculiar Pear originated with Gideon Ross, of Westfield, N. J., from seeds brought from Japan, and is similar to Chinese sand pear. The tree is a very vigorous grower, with very large thick leaves, an early and abundant bearer. Young wood rich clear brown, with long white specks. It has a hard flesh, with a peculiar quince-like aroma, and is only valued for cooking.

Fruit medium, oblate, cinnamon yellow russet, with many large light-colored specks. Stalk very long. Cavity open, deep. Calyx inconspicuous. Basin deep, open, broad. Flesh coarse, gritty, firm, in consistence and flavor much like a delicate quince. Very fine for cooking. October, December.

JEAN BAPTISTE BIVORT.

A new Belgian Pear. Tree vigorous.

Fruit large, oblong pyriform, yellowish, nearly overspread with

cinnamon red and reddish specks. Stalk long, slender. Cavity narrow small. Flesh white, melting, buttery, juicy, sweet, slightly perfumed November. (An. Pom.)

JEAN DE WITTE.

Dial.

Beurré de Hamptienne.

Passe Colmar François.

Tree vigorous, upright grower. Young shoots very dark olive.

Fruit medium, roundish obovate pyriform, yellowish green, dotted sprinkled, and netted with russet, and slightly shaded with fawn or crimson in the sun. Stalk long, curved, inclined, set in a small cavity. Calyx open. Segments stiff. Basin rather abrupt. Flesh white, juicy, melting, sweet, pleasant. Good to very good. November, December.

JEFFERSON.

Origin, Mississippi. Tree very vigorous, an early bearer, and very productive.

Fruit large, roundish obtuse pyriform, straw color, shaded with red in the sun, and dotted with small green dots. Flesh white, not juicy, sweet, coarse, decays quickly at core, not high-flavored. August.

JERSEY GRATIOLI.

Gracioli of Jersey.

Bedminster Gratioli.

Norris Pear.

Originated in the Isle of Jersey. Tree a moderately vigorous grower and a good bearer. Young wood short-jointed, dull reddish brown.

Fruit medium, roundish obovate pyriform, greenish yellow, netted and patched with russet, many brown russet dots. Stalk short, rather stout, inclined, in a small cavity, russeted. Calyx, open. Segments rather long and slender, recurved. Basin abrupt, deep, uneven. Flesh whitish, juicy, melting, rich vinous. Very good. September.

JOHN GRIFFITH.

Originated in Westchester Co., N. Y.

Fruit medium, roundish obovate obtuse pyriform, greenish yellow, with many brown dots, and some nettings and patches of russet. Flesh whitish, coarse, not very juicy, melting, sweet, pleasant. Good. September.

JOHONNOT.

Franklin.

Originated in the garden of George S. Johonnot, Esq., of Salem, Mass.

The fruit is of medium size, of a roundish and peculiar irregular form, dull yellowish. Stalk short and thick, planted by the side of a swollen protuberance. The flesh is melting, buttery, and good. September, October.

JOLIE FILLE DE GUST.

This "pretty girl of Gust" is of Belgian origin.

The fruit is small, roundish acute pyriform, pale yellow, shaded with crimson in the sun. Stalk long. Calyx open. Flesh white, coarse, dry; its beauty its only value. September.

JOLY DE BONNEAU.

Fruit above medium size, obovate, pale green, with spots and veins of brown russet. Stalk long, obliquely inserted, stout, woody, and inserted without depression. Calyx open. Flesh white, with a pink tinge, fine-grained, melting, juicy, sweet, vinous. December. (Hogg.)

JONES.

Jones's Seedling.

Origin, Kingsessing, near Philadelphia. This is one of the good Pears, and, were it a little larger, would be one of the most valuable. The tree is vigorous and upright in growth, and productive. Young shoots of a dull olive brown.

Jones.

Fruit medium or below, pyriform, broad at calyx, tapering to the stem, which meets it by a fleshy junction. Skin yellow, shaded with russet, bright cinnamon on the sunny side. Calyx open, in a broad, shallow, uneven basin. Flesh coarse, granular, buttery, sugary, brisk, and vinous. Very good. October.

JOSEPHINE BOUVIER.

Fruit medium, ovate, green, with a few patches and nettings of russet, and many brown dots. Stalk medium length, curved. Cavity shallow. Calyx partially open. Segments recurved. Flesh white, coarse, juicy, melting, sweet, without flavor. January.

JOSEPHINE DE MALINES.

Raised by Major Esperen, of Malines, and proves one among the best of winter varieties. Tree moderately vigorous and productive. Young wood olive yellow brown, very short-jointed. Buds round, projecting.

Fruit medium, roundish oblate, slightly pyriform, pale greenish yellow, netted and patched with russet, especially around the stalk, and

Josephine de Malines.

with many minute brown dots, particularly around the calyx. Stalk enlarged at both ends, curved, sometimes set in a small cavity. Calyx small, open. Segments short, stiff, nearly erect. Flesh pinkish white, juicy, melting, sweet, with a delicate aroma. Very good. January, February.

JOSEPH STAQUET.

A new variety, from Belgium.

Fruit above medium, oblong pyriform, pale yellow, with patches and

dots of green and russet. Stalk fleshy at insertion, set without depression. Flesh white, melting, buttery, very juicy, sweet, with a musky perfume. September, October. (An. Pom.)

JUDGE ANDREWS.

Andrews' Kingssessing.

Originated in Pennsylvania.

Fruit medium, oblong obovate pyriform, yellowish, traced and mottled with red in the sun. Flesh coarse, breaking, dry. Poor. September.

JULIENNE.

A handsome summer Pear. It is a productive fruit, and comes into bearing very early. It is often of excellent flavor, and of the first quality; but, unfortunately, it is variable in these respects, and some seasons it is comparatively tasteless and insipid. In the Southern States, and in rich, warm, and dry soils at the North, it is almost always fine. The tree is of thrifty, upright growth, with light yellowish-brown shoots.

Fruit of small size, but varying in different soils; obovate, regularly formed, clear bright yellow on all sides. Stalk light brown, speckled with yellow, a little more than an inch long, pretty stout, inserted in a very shallow depression. Calyx open, set in a basin slightly sunk, but often a little plaited. Flesh white, rather firm at first, half buttery, sweet, and moderately juicy. Ripens all the month of August.

KEISER.

Fruit medium size, pyriform, yellowish green, with small gray russet specks, and russet round the stalk. Flesh greenish white, a little gritty, melting, sweet. October. (Lind.)

KELSEY.

Originated in the garden of Wm. Kelsey, Columbus, O. Tree upright, partially spreading, vigorous. Young wood dull yellow brown.

Fruit medium, roundish obovate, dull green, becoming yellowish when well ripened, marblings of russet near the calyx. Dots of russet. Stalk slender. Calyx small, open. Segments short, erect. Basin slightly furrowed. Flesh greenish yellow, melting, sweet, buttery, vinous, slightly aromatic. October to February. (Hort.)

KING.

Originated at Oswego, N. Y.

Fruit medium or below in size, roundish oblate pyriform, greenish brown in the sun, with many green and brown dots. Flesh whitish, coarse, half melting, sweet. Good. September, October.

KING EDWARD'S.

Jackman's Melting.

Fruit large, pyriform, tapering gradually to the stalk, yellow, red

cheek. Flesh yellowish, buttery, melting, and good, when the season is favorable. Good. October.

KINGSESSING.

Leech's Kingsessing.

Originated in the family burying-ground of Isaac Leech, near Philadelphia. Tree upright and of vigorous growth, with dark olive yellow brown shoots. Buds broadly shouldered, prominent.

Fruit large, obtuse pyriform, greenish yellow, thickly sprinkled with minute green or gray dots. Stalk medium or long, curved, and fleshy at its insertion in a broad, uneven cavity. Calyx set in a large, irregular, corrugated basin. Flesh whitish, somewhat coarse and granular, juicy, buttery, and melting, with a sweet perfumed flavor. Good to very good. September.

KING.

King's Seedling.

Medium size, oblate uneven, yellowish green, rough. Stalk in a cavity. Calyx open. Basin shallow. Flesh greenish white, granular, juicy, sugary, aromatic, perfumed. Good. October.

Kirtland.

KIRTLAND.

Kirtland's Seedling. Hadley. Kirtland's Seckel. Kirtland's Beurre.

Raised by H. T. Kirtland, Poland, O. Tree moderately vigorous. Young wood olive yellow brown.

Fruit medium or below, obtusely obovate, sometimes obscurely pyri-

form, fine yellow, mostly covered with bright cinnamon russet, occasionally mottled and streaked with red on the sunny side. Stalk rather short and stout, inserted in a small cavity, often by a ring or lip. Calyx partially open, persistent. Basin shallow and broad. Flesh melting, juicy, sweet, aromatic. Very good. Ripe first of September.

KNIGHT'S MONARCH.

Monarch.

An English Pear, raised by Thomas Andrew Knight, which has not proved of much value at the North. In the Southern States it promises well. Tree vigorous, hardy, and productive.

Fruit medium, roundish, yellowish green, with brown russet and many gray russet specks. Flesh yellowish, melting, sweet, agreeable. Good. December, January.

KNIGHT'S.

Knight's Seedling.

Raised by Mr. Knight, of Rhode Island. Tree vigorous, productive.

Fruit medium, oblate pyriform, yellowish green, rough. Stalk long, inserted by a slight cavity. Calyx closed, in a shallow basin. Flesh juicy and sweet. Good. October.

KOPERTSCHER.

Kossertscher.
Princièrre de Kopertsh.

Beurré Prince de Schwarzenberg.
Supreme Coloma.

A foreign Pear, of uncertain origin. Tree vigorous and productive.

Fruit medium or below, nearly globular, greenish yellow, with a few patches of russet, and many green and brown dots. Stalk short. Calyx large, open. Flesh whitish, juicy, buttery, melting, sweet, pleasant. Good. October.

LAFAYETTE.

Origin, Connecticut.

Fruit small, roundish pyriform, pale yellow, with light russet, and dotted with brown russet dots. Flesh yellowish, buttery, juicy, half melting, sweet, lacking flavor. Good. November.

LA HÉRARD.

One of Van Mons' seedlings, originated in 1825.

Fruit medium, oblong obovate pyriform, pale yellowish green, with reddish cheek in sun, and sprinkled with many brown dots. Stalk rather long, curved. Cavity small. Calyx partially closed. Segments short, erect. Basin small, slightly furrowed. Flesh whitish, juicy, melting, sweet, a little perfumed. Very good. September.

LA JUIVE.

Juive.

Jewess.

One of Major Esperen's introduction. Tree vigorous and productive. Young wood yellow brown.

Fruit medium, ovate obovate, pale yellow, considerably russeted, netted, and patched, and with many brown russet dots. Stalk short, stout, fleshy at base. Cavity small. Calyx open. Segments persistent, often a little recurved. Basin shallow, uneven. Flesh yellowish, a little coarse at the core, juicy, half melting, sweet, a little aromatic. Good to very good. October.

LAMARTINE.

De Lamartine.

Of foreign origin.

Fruit small, roundish oblate. Surface rough, greenish yellow, mostly covered with a light thin russet, and with many brown dots. Stalk short and small. Cavity small. Calyx small and open. Basin rather deep. Flesh whitish, a little coarse, juicy, melting, rich, sweet. Very good. November.

LAMMAS.

Huntingdon.

An old variety, described by Lindley as an erect, strong grower, hardy, good bearer, and profitable for the market. We do not know of its ever fruiting in this country.

Fruit small, pyriform, pale yellow, tinged with red in the sun. Flesh juicy, melting, agreeable. Good. August.

LA MOULINOISE.

A foreign variety, that we have fruited but once.

Fruit large, oblong pyriform, greenish yellow, partially netted and patched with russet, and thickly sprinkled with brown russet dots. Stalk long, rather stout, inserted by a lip. Calyx partially open. Segments erect. Flesh yellowish, juicy, melting, sweet, slightly vinous. Very good. September.

LANSAC.

De Lansac.

Dauphine.

Satin.

This Pear is described by Lindley as below medium size, nearly globular, yellowish green. Flesh yellowish, melting, sugary, slightly perfumed. November and December.

LARGE ROUND BLANQUET.

Grosse Blanquette Ronde.

Gros Blanquet Rond.

An old fruit of little value, small size, round, yellowish, shade of red in the sun. Flesh white, half breaking, sweet. Last of July.

LA SAVOURESE.

Probably of German origin.

Fruit below medium, roundish oblate, green, with some marblings and patches of russet. Stalk long, slender. Flesh greenish white, buttery, sweet, agreeable. Early winter. (Verg.)

LAS CANAS.

Bon Parent.

Bouvier.

Bow Parent.

A Belgian Pear, possessed of many of the best qualities that make up a good fruit. The tree is a good grower, an early bearer, and the fruit keeps well.

Fruit medium or below, ovate acute pyriform, pale or greenish yellow, netted and patched with golden russet, and thickly dotted with russet gray dots. Stalk medium, inclined, fleshy at base, or inserted by a lip without depression. Calyx small, open. Basin shallow, russeted. Flesh yellowish white, buttery, melting, juicy, slightly astringent, and aromatic. Very good. October.

LA SŒUR GRÉGOIRE.

Sœur Grégoire.

Raised by M. Grégoire.

Fruit large, oblong. Surface uneven, rich golden yellow, mostly overspread with dull brick red. Flesh fine, yellowish white, melting, buttery, juicy, sweet, with a delicate aroma. November, January. (An. Pom.)

LAURE DE GLYMES.

A seedling of Van Mons'. Tree of moderate growth, very productive.

Fruit medium or below, roundish oval, inclining to obovate. Surface rough, yellow, nearly covered, netted, and patched with russet, many russet dots. Stalk rather stout, fleshy at insertion. Calyx partially open. Segments recurved. Basin shallow, corrugated. Flesh yellowish, a little coarse, buttery, not very juicy, slightly vinous, and a little astringent. Good. September, October.

LAWRENCE.

Originated at Flushing, Long Island. Tree hardy, a moderate grower, an early and abundant bearer. Young shoots dull yellow brown. A valuable sort for orcharding, and unsurpassed in its many good qualities among our early winter Pears.

Fruit medium size, obovate obtuse pyriform, nearly regular. Color lemon yellow, with traces and occasional patches of russet, and thickly dotted with minute brown dots. Stalk of medium length and rather stout, set in an irregular russeted cavity. Calyx open. Segments short, persistent. Basin broad, shallow, uneven, or slightly corrugated, and thinly russeted. Flesh whitish, juicy, melting, sweet, and aromatic. Very good or best. December.

LE BRETON.

The origin of this Pear is unknown.

Fruit medium size, irregular, obovate obtuse pyriform, yellow, netted and patched with russet, and many russet dots. Flesh yellowish,

rather coarse at the core, melting, juicy, sweet, aromatic. Good to very good. November to January.

Lawrence.

LE BRUN.

Originated in Troy, France.

Fruit of medium size, oblong ovate pyriform, yellowish, with brown and fawn shades. Flesh white, melting, juicy, sweet, with a musky perfume. September, October. (Leroy.)

LEE.

Lee's Seedling.

Originated at Salem, Mass.

Fruit small to medium, roundish oval, greenish, russet brown in sun. Flesh white, juicy, coarse. Poor. September. (Elliott.)

LEFEVRE.

Beurré le Fevre.

Beurré de Mortefontaine.

An old French Pear, originated about 1740.

Fruit very large, roundish oval, dull green, dull brown in sun, with numerous conspicuous large gray dots. Stalk stout. Calyx with reflexed segments. Flesh greenish white, fine, melting, juicy, vinous, perfumed. October. (Jar.)

LENAWEE.

Origin unknown. Received from Dr. D. K. Underwood, of Adrian, Michigan. Tree at first upright, becoming straggling, and twisting irregular.

Fruit medium, oblong pyriform. Surface uneven, light yellow, with a crimson cheek in sun, dotted with small russet specks. Flesh buttery, not very juicy, slightly aromatic. Good. September.

LENT SAINT GERMAIN.

Easter Saint Germain.

Fruit pretty large, oblong oval obovate, pale green, full of small white specks. Flesh firm, breaking, with a very good flavored juice. March, April. (Lind.)

LEOCHINE DE PRINTEMPS.

This is one of the new foreign varieties, which we have fruited but once.

Fruit medium, obovate pyriform, yellow, netted and patched with russet, and sprinkled with russet dots. Stalk short. Calyx open. Flesh white, firm, not very juicy. Good. Late Winter.

LÉON GRÉGOIRE.

This new Pear is described in the Annals of Pomology as:—

Fruit large, oblong, obtuse pyriform, greenish yellow, marbled, mottled, and shaded with reddish brown, and reddish gray dots. Flesh yellowish white, melting, buttery, sweet, vinous, agreeable. December, January.

LÉONIE PINCHART.

A new Belgian variety.

Fruit of medium size, roundish obovate, greenish yellow, much covered, netted, and patched with yellow russet, and minute russet dots. Stalk short, stout. Calyx open. Segments recurved. Basin rather shallow, uneven. Flesh whitish, juicy, sweet, melting. Very good. September, October.

LÉON LE CLERC LAVAL.

Blanc-per-ne.

One of Van Mons' seedlings. A good cooking Pear, large size, and very distinct from the celebrated "Van Mons Léon le Clerc." In favorable seasons it is of tolerable quality for the table.

Fruit large, obovate pyriform, yellow, tinge of red in the sun, with russet spots at either end, and some large dots. Calyx large, with long, straight, narrow divisions, and placed in a broad shallow basin. Stalk an inch and a half long, pretty stout, swollen at its point of insertion. Flesh yellowish white, juicy, crisp, and rather firm, sweet, pleasant. Good. December to April.

LÉON LE CLERC LOUVAIN.

A seedling of Van Mons', Belgium. Tree of moderate growth, very productive.

Fruit large, pyriform, russet, on greenish yellow ground. Stalk long and curved, inserted in a slight cavity by a lip. Calyx open. Basin shallow. Flesh white, juicy, buttery, melting, rich, and exceedingly sugary. October, November.

LÉON REY.

Beurré Léon Rey.

A new variety, obtained by Rey at Toulouse.

Fruit medium size, roundish pyriform. Flesh melting, juicy. August. (Leroy.)

LEOPOLD I.

A Belgian Pear, little known, and, so far as we have fruited it, not specially valuable. Tree moderately vigorous.

Fruit medium, oblate obtuse pyriform, yellow, partially netted and patched with russet. Many russet dots. Stalk stout. Cavity small. Calyx open. Basin small, uneven. Flesh yellowish, juicy, melting, sweet. Good to very good. (Dec.)

LEOPOLD RICHÉ.

One of M. de Jonghe's seedlings.

Fruit rather large, obtuse obovate pyriform; yellow, thickly dotted with large cinnamon russet dots. Stalk slender. Calyx open. Basin shallow. Flesh rather coarse-grained, crisp, very juicy, rich, sweet, with a fine almond flavor. November. (Hogg.)

LEPINE.

De Lepine.

Delepine.

Poire de Lepine.

Tree of moderate growth, very productive.

Fruit small, oblate, yellowish, shaded with crimson, slightly russeted. Stalk long. Cavity broad and shallow. Calyx small, open, in a corrugated basin. Flesh coarse, granular, melting, juicy, brisk, vinous. Good. November, December.

LEWIS.

This Pear originated on the farm of John Lewis, of Roxbury, Mass. It bears enormous crops. The tree grows vigorously, and has long, drooping branches of olive brown color.

Fruit scarcely of medium size, obovate, dark green in autumn, pale green at maturity, with numerous russety specks. Stalk long and slender, inserted nearly even with the surface. Calyx large, with white spread divisions. Basin almost level. Flesh yellowish white, rather coarse-grained, melting, juicy, and rich in flavor, with a slight spicy perfume. Good. November to February.

LIBÉRALE.

Of Belgian origin. Tree a vigorous grower. Young wood dull brown

Fruit medium, obovate obtuse pyriform, greenish yellow, shade of brown in the sun, sprinkled with brown or russet dots, and with patches of russet. Stalk long, curved, inserted in a cavity at an inclination. Calyx large and open. Basin broad and shallow. Flesh yellowish, juicy, melting, sweet, rich, and peculiarly aromatic. Very good. October.

LIEBART.

Chamoisine.

Beurré Liebart.

A foreign variety, the origin of which is unknown. Tree a very vigorous grower, and an early bearer.

Fruit large, obovate obtuse pyriform, pale yellow, shade of red in the sun, a few large patches of russet and russet dots. Stalk rather stout. Cavity slight. Calyx open. Basin shallow. Flesh white, coarse, breaking, not juicy. Poor. September.

LIEUTENANT POITEVIN.

Lieutenant Poidevin.

A French Pear, introduced in 1853. Tree vigorous, and an early bearer, valuable as a cooking fruit.

Fruit large, broad at calyx, obtuse pyriform, yellow, overspread, netted and patched with cinnamon russet, many russet dots, sometimes shade of crimson in sun. Stalk short. Calyx small, closed. Flesh white, rather firm, juicy, breaking, rather coarse. November to March.

LIMON.

No. 10. Van Mons.

Beurré Haggerston.

Bergamotte Louise.

A fine sprightly Belgian Pear, originated by Van Mons. The young shoots are long, slender, reddish brown.

Fruit rather small, obovate, yellow, with a faint red cheek. Stalk an inch and a half long, rather stout, set in a moderately depressed round cavity. Calyx set in a rather shallow round basin. Flesh white, buttery, melting, and juicy, with a sprightly high flavor. Very good. Middle of August.

LITTLE BLANQUET.

Petite Blanquette.
Petit Blanquet.
Poire à la Perle.
Blanquet Petit.
Pearl Pear.

Little Blanket.
Musk Blanquet or Blanquette.
Small Blanquet.
White Pear.

An old variety, superseded.

Fruit small, pyriform, yellowish white. Flesh half-breaking, pleasant. Good. Early August.

LITTLE MUSCAT.

Little Musk.
Petit Muscat.

Primitive.
Muscat Petit.

Sept-en-gueule.
Chiot.

This very little French Pear, well known in many of our gardens, is

allowed a place there, chiefly because it is the earliest of all Pears, ripening at the beginning of July.

Fruit very small, turbinate, yellow, with a dull red cheek. Flesh breaking, sweet, with a slight musk flavor. Good. Very productive.

LIVINGSTON VIRGALIEU.

An old variety, somewhat grown along the Hudson River, origin unknown.

Fruit medium, roundish obovate, greenish yellow, patched and dotted with russet. Stalk short. Calyx small, open. Flesh whitish, juicy, nearly melting, sweet, pleasant. Good. September.

LOCKE.

Locke's New Beurré.

This is a native fruit, originated by James Locke, West Cambridge, Mass.

Fruit medium, roundish obovate, dull yellowish green, slightly mottled with spots of darker green and bits of russet. Flesh greenish white, melting, and juicy, with a sprightly vinous flavor. Good. November and December.

LODGE.

Smith's Bordenave.

The Lodge Pear is a native of Pennsylvania, and is understood to have originated near Philadelphia. It is a very agreeable subacid Pear, and has so much of the Brown Beurré character, that we suspect it is a seedling of that fine old variety.

Fruit of medium size, pyriform, tapering to the stem, and one-sided, greenish brown, the green becoming a little paler at maturity, and much covered with patches of dull russet. Stalk an inch and a fourth long, obliquely planted at the point of the fruit, which is a little swollen there. Flesh whitish, a little gritty at the core, which is large, juicy, and melting, with a rather rich flavor, relieved by pleasant acid. Very Good. September and October.

LONDON SUGAR.

An English Pear, described by Lindley.

Fruit small, pyriform, pale yellow with a brownish tinge in sun. Flesh tender, melting, sweet. Good. Last of July.

LONG GREEN.

Verte Longue.

Monille Bouche.

Mouthwater.

An old variety, described by Duhamel. Tree very vigorous and productive.

Fruit small, obovate acute pyriform. Stalk of medium length, nearly perpendicularly inserted. Calyx small, almost without basin. Skin remains green when fully ripe. Flesh melting, juicy, with a pleasant spicy flavor. Good. September.

LONG GREEN OF AUTUMN.

Verte longue d'Automne.
Mouille bouche d'Automne.

Autumn Mouthwater.
Coule Soif d'Automne.

The Long Green of Autumn is said to be even an older variety than Long Green. The fruit of this sort is later in maturing.

Fruit medium, oblong ovate acute pyriform, smooth, pale green, with occasional patches of russet, and thickly sprinkled with small brown dots. Stalk long, slender, curved. Calyx open. Segments almost joined, short, persistent. Basin shallow, uneven. Flesh greenish white, buttery, juicy, half melting. Good. October.

LONG GREEN OF ESPERIN.

Verte Longue of Esperin.

We received this variety from L. E. Berckmans. It is of Belgian origin.

Fruit medium, oblong ovate pyriform, greenish yellow, with a shade of crimson in the sun, and patches and nettings of russet, and many brown dots. Stalk rather short, moderately stout, set in a small cavity. Calyx open. Segments recurved. Basin shallow, furrowed. Flesh yellowish white, juicy, half melting, vinous. Good. September.

LONG GREEN PANACHE.

Culotte de Suisse.

Verte longue panache.

This differs from Long Green only in being striped with yellow.

LONG-STALKED BLANQUET.

Blanquette à longue queue.
Blanquette à longue queue.
Long-Tailed Blanquette.

Long-Stalked Blanket.
Sucrée blanche.
Gillette longue.

Suchrin blanc d'Été.

A very old variety, now entirely superseded.

Fruit small, roundish, greenish or greenish yellow. Flesh white, half breaking, delicate, sweet, vinous. Good. Early August.

LOUISE BONNE.

Louise Bonne Réal.

St. Germain Blanc.

An old French winter Pear.

Fruit large, pyriform, a little rounded towards the stalk, smooth, pale green. Flesh white, rather coarse-grained, melting, sweet. Good. December.

LOUISE BONNE DE PRINTEMPS.

This variety was raised by M. Boisbunel, of Rouen, France, as he supposed, from seed of Louise Bonne de Jersey, which in appearance the fruit much resembles. The tree is a vigorous grower and productive. Young wood olive yellow brown.

Fruit large, oblong ovate pyriform, rich clear yellow, with a red cheek in sun, and a little of russet, especially near the stalk. Stalk short, set in a narrow, furrowed cavity. Calyx with short persistent segments. Basin rather deep, furrowed. Flesh white, melting, juicy, but tery, sweet, and slightly perfumed. February, March. (An. Pom.)

LOUISE BONNE OF JERSEY.

Bonne de Longueval.
 Louise Bonne d'Avranches.
 Louise Bonne de Jersey.
 Beurré or Bonne Louise d'Araudoré.
 William the Fourth.
 Bergamotte d'Avranches.
 De Jersey.

Beurré d'Araudore.
 Bonne Louise d'Araudore.
 Beurré d'Avranches.
 Bonne d'Avranches.
 De Louise.
 William.

Originated in France, near Avranches, succeeds admirably on the quince, forming a fine pyramid—not of the first quality, but profitable. Tree vigorous, upright, very productive. Fruit of better quality on the quince than on the pear. Young wood dull olive brown.

Louise Bonne of Jersey.

Fruit large, oblong pyriform, a little one-sided, glossy, pale green in the shade, but overspread with brownish red in the sun, and dotted with numerous gray dots. Stalk about an inch long, curved, rather obliquely inserted, without depression, or with a fleshy, enlarged base. Calyx open, in a shallow, uneven basin. Flesh greenish white, very juicy and melting, with a rich and excellent flavor. Good to very good. September and October.

LOUISE OF BOULOGNE.

Of Belgic origin.

Fruit medium size, roundish obovate, greenish yellow, sprinkled with brown dots. Stalk long, a little curved, rather slender. Cavity small, russeted. Calyx open. Basin small and uneven. Flesh whitish, light pink at centre, juicy, melting, sweet. Good to very good. October, November.

LOUIS GRÉGOIRE.

A seedling raised in 1832 by M. Grégoire, of Jodoigne. Tree a vigorous, somewhat upright grower, and productive. Young wood dull yellowish olive brown.

Fruit medium size, roundish obovate pyriform, greenish yellow, considerably covered with russet, and thickly dotted with russet dots. Stalk varying, set with little or no depression. Calyx open. Segments large, persistent. Basin small and rather shallow. Flesh yellowish white, juicy, melting, sweet, slightly vinous. Good. October, November.

Lycurgus.

LUCIEN LECLERCQ.

A seedling of Van Mons' that first fruited in 1844.

Fruit medium size, ovate, pale green, with russet patches and russet near the stalk, distinct rough dots. Flesh fine, white, melting, sweet. November. (Alb. Pom.)

LYCURGUS.

Originated with George Hoadley, of Cleveland, O., from seed of Winter Nelis. It is one of the best in quality of late Winter Pears. The tree is a moderate, rather spreading grower, productive. Young wood dark rich olive brown.

Fruit small, oblong pyriform, greenish yellow, mostly covered with a thin brownish russet, many large grayish dots. Stalk medium length, a little curved, set with little or no depression. Calyx open. Segments short, erect. Basin small, uneven. Flesh yellowish, juicy, melting, sweet, rich, a little aromatic, and slightly perfumed. Very good. December to February.

LYDIA THIÉRARD.

Raised by M. Jules Thiérard, Bethel, France. Tree very vigorous, productive.

Fruit is of Bergamotte shape. Stalk of medium size, curved, a little fleshy at the base, in a large and uneven depression. Calyx small, open. Basin large, deep, regular. Skin thin, clear green, thickly

sprinkled with small brown dots, and russet spots near the calyx. Flesh fine, melting, juicy, sugary, and highly perfumed. Core large. Season, December to January. (Revue Horticole.)

LYON.

Originated at Newport, R. I. Tree upright, vigorous, hardy, and productive.

Fruit medium, oblong obovate, yellow, with a crimson blush on one side, minute dots, russet near the stalk. Calyx small. Segments persistent. Basin narrow, shallow. Flesh white, coarse, gritty at the core, melting, moderately juicy, sweet. Good to very good. October. (Hov. Mag.)

McLAUGHLIN.

A native of Maine, introduced by S. L. Goodale, of Saco. Tree hardy and vigorous. Young wood light dull red.

Fruit large, obtuse pyriform, greenish, mostly covered with russet,

McLaughlin.

which becomes yellowish at maturity, with a warm sunny cheek. Stalk short, inserted at an inclination, with some appearance of a lip. Calyx open, set in a shallow corrugated basin. Flesh whitish, not very fine, juicy, and melting. Flavor sweet, rich, and perfumed. Good to very good. November to January.

McVEAN.

Origin, Monroe Co., N. Y. Tree very vigorous, very productive. Young wood grayish light yellow brown.

Fruit large, obovate acute pyriform, yellow, with nettings and patches of russet, and numerous green and brown dots. Stalk short, rather stont, fleshy at insertion, and often set inclined, and with a lip. Calyx partially closed. Basin slightly corrugated. Flesh coarse, not juicy, or melting, sweet. Good. September.

MADAME DURIEUX.

A Flemish variety.

Fruit medium or below, obovate acute pyriform, yellowish, netted and patched and dotted with russet. Stalk long or very long, and slender. Flesh white, buttery, melting, juicy, sweet. Very good. October.

MADAME DUCAR.

Introduced by M. Esperen. Tree vigorous, productive.

Fruit medium, obovate pyriform, pale lemon yellow, with a few russet dots. Stalk long, fleshy at insertion. Cavity medium, somewhat

Madame Eliza.

ribbed. Calyx open. Basin abrupt, uneven. Flesh white, juicy, melting, pleasant, slightly vinous. Very good. September.

MADAME ELIZA.

One of Bivort's seedlings, and named in honor of the wife of the well-known pomologist, L. E. Berckmans. The tree is vigorous, rather open and irregular in form, productive. Young wood dull olive yellow brown. It is a Pear described as excellent in Belgium, and so far here sustains its foreign character.

Fruit large, oblong ovate acute pyriform, pale whitish yellow, a few traces of russet, and thickly sprinkled with small russet dots. Stalk long, inclining, fleshy at insertion, or by a lip. Calyx small, partially closed. Segments small, erect. Basin abrupt, uneven, russeted. Flesh white, fine, juicy, melting, sweet, delicately perfumed. Very good. October.

MADAME MILLET.

Tree moderately vigorous. Young wood olive brown.

Fruit medium, obovate pyriform, pale yellow, much covered, netted, patched, and dotted with light russet. Stalk long, stout, curved, set in a slight cavity with a lip. Calyx open. Segments short, erect. Basin rather small, uneven. Flesh whitish, juicy, not melting, slightly vinous, a little aromatic. Good. November to April.

MADAME GRÉGOIRE.

Of Belgian origin, seedling of Grégoire of Jodoigne, and dedicated to his wife.

Fruit large, oblong obtuse pyriform, greenish yellow, netted, patched, and dotted with brown russet. Stalk rather long, fleshy at base. Cavity rather deep. Flesh white, tinted with rose, half melting, sweet, vinous, perfumed. November, December. (An. Pom.)

MADAME HENRI DESPORTES.

Fruit roundish, obovate, yellow, mostly covered with dark cinnamon-colored russet. Stalk short, stout. Calyx large, open. Flesh yellow, buttery, rich, sweet, juicy. October. (Hogg.)

MADAME TREYVE.

Souvenir de Madame Treyve.

Raised by M. Treyve, of Trevons, France, and dedicated to his wife. Tree vigorous.

Fruit medium, obovate pyriform, pale yellow, with a red cheek in the sun, some russet, and dotted with minute brown dots. Stalk slender. Cavity narrow. Calyx small, open. Basin narrow, round, regular. Flesh white, melting, juicy, rich, sweet, with a delicate aroma. September. (Verg.)

MADELEINE, OR CITRON DES CARMES.

Madeleine.

Citron des Carmes.

Early Chaumontelle.

Magdalen.

Sainte-Madelaine.

Grune Sommer Magdalena.

Grune Magdalena.

The Madeleine is one of the most refreshing and excellent of the

early Pears. It takes its name from its being in perfection, in France, at the feast of Ste. Madeleine. Citron des Carmes comes from its being first cultivated by the Carmelite monks. The tree is fruitful and vigorous, with long, erect, olive-colored branches.

Fruit of medium size, obovate pyriform. Stalk long and slender, often nearly two inches, set on the side of a small swelling. Pale yellowish green (very rarely with a little brownish blush and russet specks around the stalk). Calyx small, in a very shallow furrowed basin. Flesh white, juicy, melting, with a sweet and delicate flavor, slightly perfumed. Good to very good. Middle and last of July.

MALCONNAÎTRE D'HASPIN.

Fruit large, form roundish obovate. Stalk one inch long, inserted in a slight depression. Calyx closed, set in a rather deep irregular basin. Skin dull yellow, with a brownish red cheek, stippled with coarse dots, and russeted at the calyx. Flesh juicy, tender, and melting. Flavor rich subacid, perfumed. Tree vigorous, hardy, and productive. October, November. (Wilder's Rep.)

MANCHESTER.

Manchester Late.

Manchester October.

A native variety, originated in Providence, R. I.

Fruit medium, obovate pyriform, yellow, with a blush of crimson in the sun, traces and many dots of russet. Stalk rather long. Calyx open. Flesh white, moderately juicy, half melting, sweet, pleasant. Good. October.

Manning's Elizabeth.

MANNING'S ELIZABETH.

Van Mons. No. 154.

Elizabeth Van Mons.

Manning's Elizabeth, a seedling of Dr. Van Mons', named by Mr. Manning, is a very sweet and sprightly Pear, with a peculiar flavor. A beautiful dessert fruit, productive, growth moderate, shoots dull reddish. One of the most desirable Pears of its season, for amateur growing.

Fruit below medium, obovate obtuse pyriform, bright yellow, with a lively red cheek, dotted with brown and red dots. Stalk one inch long, set in a shallow, round cavity. Calyx open, set in a broad shallow basin. Flesh white, juicy, and very melting.

with a saccharine but very sprightly aromatic character. Very good or best. Last of August.

MANSFIELD.

A native variety, origin uncertain. Tree vigorous and productive. Young wood reddish brown.

Fruit medium, roundish oblate, yellowish green, with considerable russet and many green and brown dots. Stalk rather long. Cavity narrow, small. Calyx open, with recurved segments. Basin broad, uneven. Flesh whitish, coarse, buttery, melting, sweet, a little astringent. Good. September.

MARASQUINE.

A Belgian Pear, obtained of Major Esperen.

Fruit medium, oblong oval, light pale yellow, greenish in shade, with fawn russet in the sun. Stalk long, slender. Calyx open. Basin shallow. Flesh white, fine, melting, slightly sweet, perfumed. August. (Verg.)

MARCH BERGAMOTTE.

One of Mr. Knight's seedlings.

Fruit small or medium. Color green, with small gray dots, and large patches of russet. Stalk long, straight, in a cavity like that of an apple. Flesh coarse, greenish, of no decided excellence.

MARÉCHAL DE LA COUR.

B. O. de la Cour.
Conseiller de la Cour.

Baud de la Cour.
Grosse Marie.

Maréchal Decours.

One of Van Mons' seedlings. Dedicated to his son in 1845. Tree moderately vigorous, holding its foliage late in season. Young shoots olive reddish brown, with many specks.

Fruit medium to large, oblong obovate pyriform. Skin greenish yellow, with a slight netting and few patches of russet, and russet dots. Stalk rather long, sometimes inclined, set in a moderate cavity, somewhat russeted. Calyx open, in a narrow basin, russeted. Flesh yellowish white, buttery, juicy, melting, rich vinous, very good. October.

MARÉCHAL DILLEN.

Dillen d'Automne.

One of Van Mons' seedlings. Tree vigorous and productive.

Fruit large or very large, oblong obtuse pyriform, dull greenish yellow, mottled with fawn, shades and traces and dots of russet. Stalk short, set in a broad shallow cavity. Flesh white, melting, buttery, juicy, sweet. October, November. (An. Pom.)

MARGARET.

Raised by Christopher Wiegel, Cleveland, O. Tree a vigorous, upright grower, productive, and an early bearer. Young wood dull reddish.

Fruit small to medium, oblong obovate, yellow, mostly overspread with deep dull red, small russet dots. Stalk medium, inserted with-

out depression. Calyx large, open. Segments long, reflexed. Flesh white, juicy, vinous, sweet, good, early. August. (Hort.)

Maréchal de la Cour.

MARIANNE DE NANCY.

Raised by Van Mons.

Fruit medium or above, oblong obovate pyriform, yellowish green, netted and dotted with fine dull russet. Stalk short, stout. Calyx open. Flesh white, buttery, half melting, juicy, vinous, sweet. October. (Alb. Pom.)

MARIE DE NANTES.

A French Pear, originated by M. Garnier, in 1853. Tree moderately vigorous. Young wood olive brown.

Fruit small, obovate acute pyriform, yellow, shade of brownish red in sun, and partially netted and patched with russet, especially near

the base. Stalk short, set in a narrow, furrowed, shallow cavity. Calyx small, open, with short segments. Basin small. Flesh whitish, juicy, melting, sweet. Very good. November, December.

MARIE GUISSÉ.

This variety is said to have been grown from seed of St. Germain, in 1834, near the town of Metz, France. It was twenty years before it fruited.

Fruit medium size, obovate oblong pyriform. Surface uneven, yellow, with shades of red in sun, and large, dull, dark specks. Stalk rather long and moderately stout, set in a narrow furrowed cavity. Flesh yellowish white, granular, melting, sweet, vinous. December, February. (Verg.)

MARIE LOUISE.

Forme de Marie Louise.
Marie Chrétienne.
Princesse de Parme.
Braddick's Field Standard.
Marie Louise d'Elcourt.
Van Donckelaar.

Marie Louise Donckelar.
Marie Louise Nouvelle.
Marie Louise de Jersey.
Corchorus.
Marie Louise Delacourt.
Van Donckelaer.

A Belgian variety, of first quality in its native country, and here, in some seasons, fully sustains that character; but it is so uncertain, so variable in seasons, as greatly to detract from its value. Tree a vigorous but straggling grower. Young wood reddish olive brown.

Fruit pretty large, oblong pyriform, rather irregular or one-sided in figure, pale green, but at maturity rich yellow, a good deal sprinkled and mottled with light russet on the exposed side. Stalk an inch and a half long, obliquely planted, sometimes under a slightly raised lip, sometimes in a very small one-sided cavity. Flesh white, exceedingly buttery and melting, with a rich, saccharine, and vinous flavor. Very good. Last of September and middle of October.

MARIE LOUISE D'UCCLE.

This variety was raised from a seed of the Marie Louise, by M. Gambier, in a village (Uccle) near Brussels. Tree a vigorous, upright grower. Young wood dark brown.

Fruit above medium, roundish obovate pyriform. Surface rough, yellow, with a shade of brown in the sun, considerably netted, patched, and numerous dotted with russet. Stalk medium, inclined, curved, set in a small cavity, sometimes by a lip. Calyx large, partially open, with persistent segments. Basin large, uneven. Flesh white, juicy, melting, vinous, a little astringent. Good to very good. September, October.

MARIE LOUISE NOVA.

This variety was sent by Van Mons to Mr. Manning. It will by no means bear a comparison with the Marie Louise, though in some seasons a very good fruit. The wood is very strong and dark colored.

Fruit medium, regular acute pyriform, yellow, with a brownish-red cheek. Flesh at first melting, juicy, but quickly decays. Good last of September.

MARIE PARENT.

Sophia Beekmans.

Roussellet le Meester.

Ferdinand de Meester.

Raised by M. Bivort, in 1844, from seeds of the last generation of Van Mons' seedlings. It first fruited in 1851. Tree moderately vigorous. Young wood dull grayish-reddish brown.

Fruit medium, obovate pyriform to obovate acute pyriform, greenish yellow, with shade of red in the sun, and traces of russet, and many minute brown dots. Stalk medium, generally inserted without cavity. Calyx large, open. Flesh whitish, juicy, vinous. Good. September.

MARQUISE DE BEDMAN.

Of foreign origin.

Fruit medium or below, roundish pyriform, pale greenish yellow, with a few traces and patches of russet, and many green and brown dots. Stalk long, slender. Cavity small. Calyx open. Flesh white, sweet, rather firm. Good. September.

MARMION.

A Belgian variety.

Fruit small, roundish pyriform, pale yellow, some russet. Flesh whitish, coarse, sweet, dry and poor. November.

MARTHA ANN.

Dana's No. 1.

Raised by Francis Dana, of Roxbury, Mass.

Fruit medium, obovate obtuse pyriform, yellowish green, with patches and dots of russet. Flesh coarse, juicy, astringent. Poor. October.

MARTIN SEC.

Rousselette d'Hiver

Martin Sec d'Hiver.

Dry Martin.

Troken Martin.

Winter Rousselette.

Martin Sec de Champagne.

An old variety, of which the origin is unknown. Tree vigorous, very productive.

Fruit small, ovate, yellow, shaded with crimson in the sun, some russet. Flesh coarse, granular, juicy, half breaking, agreeable. Chiefly valued for cooking. Winter.

MARTIN SIRE.

Certean Musqué d'Hiver.

Sire Martin.

A very old sort, valued only for cooking.

Fruit large, pyriform, greenish yellow, with a shade of red in the sun. Flesh crisp, gritty near the core, juicy, sweet. December to February.

MARULIS.

Marcellis.

Foreign.

Fruit small, roundish, greenish yellow. Poor. September. (Elliott.)

MARY.

Originated in the grounds of William Case, Cleveland, O. Tree an upright, vigorous grower, with brownish, short-jointed young wood. An early and productive bearer.

Fruit small to medium, roundish pyriform, yellow, mostly overspread with rich red, a little russet, and many gray dots. Stalk short. Calyx large. Erect segments. Flesh white, juicy, almost buttery, sweet. Very good. Last of July. (Hort.)

MATHER.

Originated with John Mather, near Jenkinstown, Montgomery Co., Pa. Tree a moderate grower. Young wood olive grayish brown.

Fruit below medium, roundish ovate, greenish yellow, slight blush in sun, and many minute brown dots. Stalk short, stout. Calyx open. Flesh white, a little coarse, not juicy, sweet, pleasant. Good. August.

MAYNARD.

Origin unknown, grown in Lancaster Co., Pa.

Fruit medium, obovate pyriform. Skin yellow, with russet dots and a crimson cheek. Stalk obliquely inserted, fleshy at its junction. Calyx open, in a slight depression. Flesh white, juicy, and sugary. Scarcely good. Ripe last of July.

MELLISH.

Fruit below medium, roundish pyriform, pale yellow, netted, patched, and dotted with russet. Stalk long, slender. Calyx partially closed. Flesh whitish, juicy, melting, sweet, pleasant. Good to very good. October.

MERRIAM.

Origin, Roxbury, Mass. Tree vigorous and very productive. Young wood reddish yellow brown; a good market sort.

Fruit medium, roundish oblate, dull yellow, covered with pale russet around the stem and calyx, and entire surface somewhat netted with russet. Stalk short, moderately stout, in a small cavity, with one protuberant side. Calyx closed. Basin shallow and furrowed. Flesh yellowish, coarse, melting, and juicy, slightly vinous, musky. Good to very good. October.

MESSIRE JEAN.

Chaulis.

Enmilacour.

Marion.

Monsieur Jean.

Messire Jean Gris.

Messire Jean Blanc.

Messire Jean Doré.

Mr. John.

John.

Communauté.

Coulis.

Couvent.

An old French Pear, but rather coarse-grained and gritty.

Fruit of medium size, turbinate, yellow, nearly covered with brown russet. Flesh gritty, white, crisp, juicy, and breaking, with a very sweet flavor. Good. November and December.

Merriam.

MICHAUX.

Comte de Michaux.

Fruit of medium size, nearly round pyriform, light yellowish green, with a faint blush on the sunny side. Flesh white, coarse, half buttery, juicy, sweet, but second-rate. Poor. September and October.

MIGNONNE D'HIVER.

An old Belgian variety, often very good.

Fruit medium, ovate obovate to oblong ovate pyriform, light yellow, mostly covered with thick rough russet, and veined with crimson and fawn. Stalk rather stout. Calyx open. Flesh yellowish, a little granular, juicy, melting, sweet, vinous, aromatic. Good. November, December.

MILAN DE ROUEN.

A Flemish Pear, little known and not of much value.

Fruit medium, roundish, greenish yellow, with nettings, patches, and dots of russet. Flesh white, coarse, juicy, melting, vinous. September.

MILLOT DE NANCY.

One of Van Mons' seedlings, named after M. Millot, a resident of Nancy, France. Tree productive. Young shoots reddish brown.

Fruit medium, oblong obovate, greenish yellow, with many brown dots. Stalk medium, curved, often inclined, and set in a small cavity. Calyx partially open. Segments short, erect. Flesh yellowish, not juicy melting, sweet. Good. November.

MITCHELL'S RUSSET.

Origin, Belleville, Ill.

Fruit medium or small, roundish, slightly pyriform, rough, yellow brown russet, thickly covered with gray dots. Stalk long. Calyx open. Flesh juicy, melting, astringent. Scarcely good. October.

MOCCAS.

Originated by Mr. Knight. A good grower, productive, but not of good quality.

Fruit medium, obovate, green, sprinkled with small dots. Flesh juicy. Poor. December.

MOLLET'S GUERNSEY BEURRÉ.

Mollet's Guernsey Chaumontelle.

An English variety, raised by Charles Mollet, Esq., of the Island of Guernsey.

Fruit of medium size, oval pyriform. Skin rather uneven, yellow and yellowish green, nearly covered on one side with dark cinnamon brown russet, in stripes and tracings. Flesh yellowish, melting, and buttery, with a rich vinous flavor. Good. December.

MONSEIGNEUR AFFRE.

One of Bivort's introducing. Tree hardy, vigorous, and productive. Young wood dull olive brown.

Fruit below medium, roundish, greenish, considerably covered with thick russet, and thickly sprinkled with russet dots. Stalk long, curved, inserted in a moderate cavity. Calyx small, open, persistent. Basin broad. Flesh white, rather coarse, melting, sweet, pleasant. Good. November.

MONSEIGNEUR DES HONS.

A new summer Pear, from Troyes, France. Tree vigorous, spreading. Young wood reddish brown.

Fruit medium, oblong ovate pyriform, rich warm yellow, veined with green, and shaded with a warm red cheek in the sun. Stalk medium, inserted without depression. Calyx open. Basin shallow. Flesh half fine, melting, aromatic, sweet. Early August. (An. Pom.)

MONSEIGNEUR SIBOUR.

A new French Pear, described in the Annals of Pomology:—

“Fruit medium, obtuse pyriform, pale yellow, with greenish shades, mottled, shaded, and dotted with warm red or crimson. Stalk long,

slender. Calyx large, open. Flesh yellowish white, half fine, melting, juicy, sweet. November."

MOREL.

An English Pear, mainly valued for cooking.

Fruit medium, obovate, yellow, freckled with large russet spots. Flesh yellowish white, crisp, juicy, and sweet. December to April. (Hogg.)

MOUNT VERNON.

Walker's Seedling.

A chance seedling, originated in the grounds of Samuel Walker, Roxbury, Mass., and by him named Mount Vernon. The tree is a vigorous grower, and an early bearer. Young wood yellow reddish brown.

Fruit medium or above, varying in form, but generally roundish obtuse pyriform, light russet on a yellow ground, brownish red in the sun. Stalk short, inserted by a lip, with little or no depression. Calyx small, closed, with short segments. Flesh yellowish, granulated, juicy, melting, slightly vinous and slightly aromatic. Very good. November, December.

MOYAMENSING.

Smith's Early Butter.

Origin in the garden of J. B. Smith, Philadelphia, Moyamensing District. Tree vigorous and productive.

Fruit medium, roundish oblate, lemon or greenish yellow, with patches, marblings, and dots of russet. Stalk short. Calyx nearly closed. Flesh whitish, coarse, juicy, melting, sweet, pleasant. Good. August.

MUSCADINE.

The Muscadine is remarkable for its high musky aroma. Its history is uncertain, and it is believed to be a native. It bears very heavy crops, and if the fruit is picked early, and ripened in the house, it is a good Pear of its season. Tree vigorous, upright in growth. Young shoots stout, dark gray brown.

Fruit of medium size, roundish obovate, regularly formed, pale yellowish green, a little rough, thickly sprinkled with brown dots. Stalk about an inch long, set in a well-formed small cavity. Calyx with reflexed segments, set in a shallow basin. Flesh white, buttery, half melting, with an agreeable, rich, musky flavor. Good to very good. Last of August and first of September.

MUSCAT ROBERT.

Poire à la Reine.
D'Ambre.
St. Jean Musquée Gros.
Musk Robine.
Early Queen.
Queen's Pear.
Beurré à la Reine.
Robine.
Muscat Robine.

Queen's Amber.
Virgin of Xaintonge.
Muscat d'Ambre.
The Princess.
Great Musk Pear of Cone.
Maiden of Flanders.
Maiden of Xaintonge.
Robert's Muskateller.

An old Pear, of unknown origin. Tree very productive.

Fruit small, roundish pyriform, inclining to ovate, greenish yellow, with a dull crimson. Stalk long, sometimes inserted by a lip, and sometimes in a slight cavity. Calyx large, open. Flesh breaking, juicy, sweet. Good. Last of July.

MUSKINGUM.

Origin, supposed Ohio. Tree very vigorous, upright, hardy, and productive. Young wood dull reddish olive brown.

Fruit medium, roundish, greenish yellow, much dotted with russet and green. Stalk long. Cavity small. Calyx open. Basin very shallow. Flesh melting, with a pleasant, brisk flavor. Good. Ripe middle and last of August.

NAPOLEON.

Médaille.	Melon.
Sucrée Dorée.	Benrré d'Autien.
Poire Liard.	Liart.
Roi de Rome, erroneously.	Mabille.
Bonaparte.	Mailanderin Grosse Grune.
Belle Canaise	Napoleon d'Hiver.
Charles.	Bois Napoleon.
Poire Napoleon.	Napoleon Vrai.
Gloire de l'Empereur.	Bon Chrétien Doré.
Captif de Sainte Hélène.	

The Napoleon is hardy, thrifty, and bears abundant crops, even while very young. In poor soils, or unfavorable exposures only, it is astringent. The tree is thrifty, and a vigorous grower. Shoots upright, olive colored. It was raised from seed, in 1808, by M. Liard, gardener at Mons.

Fruit pretty large, obtuse pyriform, clear green at first, but becoming pale yellowish green at maturity. Stalk varying from half an inch to an inch long, pretty stout, set in a slight depression or under a swollen lip. Calyx set in a basin of moderate depth. Flesh white, melting, juicy, sweet, sprightly. Good. September.

NAPOLEON SAVINIEN.

This is a new French variety, resembling Napoleon in appearance but maturing later in the season.

Fruit medium, obovate acute pyriform, yellow, partially netted and patched with russet, and thickly sprinkled with russet dots. Stalk short. Calyx large, open. Segments reflexed. Basin large, uneven. Flesh whitish, rather coarse, juicy, half melting. Good. January.

NAUMKEAG.

A native of Salem, Mass.

Fruit medium, roundish. Skin yellow russet. Flesh juicy, melting, but rather astringent in flavor. Good. October.

NAVEZ PEINTRE.

Fruit medium, ovate, yellowish green, with brownish red in the sun, and bands of brown russet. Calyx open. Flesh yellowish, melting, juicy, piquant, sugary. Last of September. (Hogg.)

NEGLEY.

This is supposed to be a seedling originated near Pittsburgh, Pa. Introduced by J. S. Negley. Tree vigorous, upright, and an early bearer. Young wood reddish brown.

Fruit medium or above, obovate obtuse pyriform, waxen yellow, slightly netted with russet, beautifully shaded with bright crimson in the sun, and thickly sprinkled with minute brown russet dots. Stalk medium. Cavity deep, regular. Calyx open. Segments persistent. Basin shallow, a little russeted. Flesh white, a little coarse, juicy, half-melting, sweet, pleasant, slightly aromatic. Good to very good. Early September.

NE PLUS MEURIS.

This is a Belgian Pear, one of Dr. Van Mons' seedlings, named in allusion to Pierre Meuris, his gardener at Brussels. The tree grows upright, has short-jointed, olive-colored shoots.

Fruit medium or rather small, roundish, usually very irregular, with swollen parts on the surface, dull yellowish brown, partially covered with iron-colored russet. Stalk quite short, set without depression, in a small cavity. Flesh yellowish white, buttery, with a sugary and agreeable flavor. Good. January to March.

NEW BRIDGE.

Fruit below medium, pyriform, dull gray, covered with gray russet brown in the sun. Flesh melting, a little gritty, a sugary juice without flavor. October. (Lindley.)

NEWHALL.

Raised from seed by Thaddeus Clapp, Dorchester, Mass. Tree hardy, healthy, and prolific. Young wood quite reddish.

Fruit large, obtuse pyriform, inclining to oval. Surface a little uneven, yellow at maturity, with a few traces or blotches of russet, sometimes a blush cheek in sun. Stalk inserted without much cavity. Calyx small, partly closed, set in a corrugated basin. Flesh melting, very juicy, buttery, and tender, sweet, with a musky aroma. Very good. October. (Journ. of Hort.)

NEWTOWN.

Newtown Seedling.

Originated at Newtown, Long Island.

Fruit medium, roundish obovate, lemon yellow, netted and patched with russet. Flesh whitish, rather coarse, half melting, sweet, and pleasant. Good. September.

NICKERSON.

This variety originated in Readfield, Me., from seed planted by ex-Governor Huntton.

Fruit large, oblong pyriform, greenish yellow, with a dull red cheek in sun. Flesh white, juicy, melting, vinous, sweet. Good. October.

NIELL.

Beurré Niell.
Poire Niell.

Colmar Bosc.
Fondante du Bois, incorrectly.
Colmar Niel.

A large and handsome Belgian variety, raised by Van Mons, from seeds sown in 1815, and named in honor of Dr. Niell, of Edinburgh, a distinguished horticulturist and man of science. The tree bears plentifully.

Fruit large, obovate, inclining to pyriform, rather shortened in figure on one side and enlarged on the other, tapering to the stalk, which is about an inch long, obliquely planted, with little or no cavity, pale yellow, delicately marked with thin russet, finely dotted, and sometimes marked with faint red. Flesh white, buttery, sweet, with a plentiful and agreeable juice. Good to very good. Last of September.

NILES ?

A foreign variety, imported by John M. Niles, Hartford, Conn. The original name having been lost, it has not yet been identified. Young wood whitish gray.

Fruit large, obtuse pyriform. Color yellow at maturity, thickly covered with russet dots. Stalk long, inserted in a deep, abrupt, uneven cavity. Calyx closed, set in a deep round basin. Flesh juicy, buttery, sweet, and pleasant. December. (Ad. Int. Rep.)

NONPAREIL.

A seedling raised by Judge Livingston, of New York. Tree vigorous, productive.

Fruit small, roundish oblate, russet yellow, specked with red. Flesh fine, melting, sugary, juicy, rich vinous. December. (Hov. Mag.)

NOTARIE MINOT.

One of Van Mons' seedlings. Tree vigorous and productive.

Fruit medium, obtuse pyriform, greenish yellow, mostly overspread and shaded with red in sun, and bright fawn russet in shade. Stalk slender. Cavity rather deep, narrow. Flesh yellowish white, melting, juicy, sweet, perfumed. November. (Alb. Pom.)

NOUVEAU POITEAU.

Tombe de l'Amateur.

Choix d'un Amateur.

A seedling of Van Mons', a very vigorous grower, forming a beautiful pyramid; very productive. Young wood brownish red. An early bearer.

Fruit large, obovate, inclining to pyriform, green, with numerous russet dots, and sometimes patches of russet. Stalk rather short, curved, inserted in a small cavity. Calyx partially closed, set in a narrow basin of moderate depth. Flesh whitish, buttery, juicy, melting, with a sugary, vinous, and very refreshing flavor. Good to very good. Ripe November.

NOUVELLE FULVIE.

Fulvie Grégoire.

This new Belgian Pear is described in the Annals of Pomology as:—

Fruit very large, pyriform. Surface uneven, rich light yellow, shaded and marbled with brown red in the sun, and an occasional fawn russet patch. Stalk stout, inserted as it were by a neck. Calyx large, in a round, regular basin. Flesh yellowish white, melting, buttery, juicy, sweet, with an exquisite perfume. January and February.

As we have received and fruited this Pear it is only of medium size, roundish, slightly pyriform, and ripens in November.

OAK-LEAVED IMPERIAL.

Imperial.

Imperial Oak-leaved.

Impériale à feuilles de chêne.

Oak-leaved Imperial.

An old Pear, of unknown origin and of little value, except as a curiosity, from its peculiar foliage somewhat resembling the oak.

Fruit below medium, ovate pyriform, deep green, with some nettings and patches of russet. Flesh whitish, half melting, juicy, sweet. Good. December to March.

OAKLEY PARK BERGAMOTTE.

One of Knight's seedlings. It is described by the London Horticultural Society as:—

Fruit medium size, roundish obovate, greenish yellow, with some russet. Flesh buttery, melting. October.

CEUF.

Fruit small, oval, greenish yellow, with light red in the sun, and gray russety dots. Stalk long. Calyx small, open. Flesh whitish, tender, melting, sweet, musky. Ripe in August, and will keep three weeks without decaying. (Hogg.)

OKEN.

Oken d'Hiver
Winter Oken.Cent Couronnes.
Beurré Oken.

A Belgian Pear, of little value.

Fruit medium, roundish oblate, yellowish, with a little brown in sun. Flesh white, juicy, melting, slightly vinous. Hardly good. October.

OLIVER'S RUSSET.

Originated in the grounds of ——— Oliver, Lynn, Mass.

Fruit below medium, roundish, cinnamon russet on yellow ground, with a blush. Stalk in a cavity. Basin small. Flesh whitish, coarse, without much flavor. Last of September.

OLIVIER DE SERRES.

Originated with M. Boisbunel, Rouen, France. Tree vigorous,

rather spreading, and very productive. Young wood slender, rich yellow brown. A new sort, reputed of first quality in France. It has not yet fruited here.

Fruit medium to large, irregular in form, generally roundish. Deep yellow, with shade of rough russet, and many reddish russet dots in sun. Flesh white, fine, melting, rich, juicy, sweet, delicate perfume February, March. (Verg.)

ONEIDA.

Origin, Western New York.

Fruit medium or below; roundish, pale yellow, partially netted and patched with light russet. Flesh white, coarse, juicy, half melting, pleasant. Good. September.

Onondaga.

ONONDAGA.

Swan's Orange.

Kilmer.

Supposed to have originated in Farmington, Conn. Tree very vigo-

rous and productive. Young wood olive brown. A profitable market variety.

Fruit large, ovate obovate obtusely pyriform. Skin somewhat coarse and uneven, thickly covered with russet dots, fine rich yellow at maturity, generally with some traces of russet, and sometimes with a sunny cheek. Stalk rather stout, of medium length, inserted in a small cavity, at an inclination. Calyx small, firmly closed, set in a narrow, somewhat uneven basin. Flesh buttery, melting, abounding in juice, slightly granular, and when in perfection with a fine, rich, vinous flavor. A variable fruit. Good to very good. September to November.

ONTARIO.

Origin, Geneva, Ontario Co., N. Y. Tree vigorous and productive. Young wood light yellow, a shade of red next the buds.

Fruit medium, oblong ovate pyriform, pale yellow, thickly dotted with minute brown and green dots, and slightly netted with russet. Stalk long, inserted in a small cavity, with a ring or lip. Calyx open, with long recurved segments. Flesh whitish, slightly veined with yellow, melting, juicy, buttery, slightly granulous, sweet. Good to very good. Last September.

ORANGE.

Red Orange.

Orange d'Automne.

Orange Rouge.

An old variety of little value.

Fruit medium, nearly globular, pale yellow, with a few traces of russet and brown dots. Flesh white, half melting, sweet. Early September.

ORANGE BERGAMOTTE.

Fruit medium, obovate pyriform, yellow. Flesh firm, rather acid for eating, but excellent for baking. September.

ORANGE D'HIVER.

Winter Orange.

Fruit medium; an old Pear, very productive; not desirable for table, but a good baking Pear. November, December.

ORANGE MANDARINE.

Fruit about medium, roundish, golden yellow, with many brown russet dots, and a warm glow on the side next the sun. Flesh yellowish, very tender, melting, acidulous, sugary. October. (Hogg.)

ORANGE MUSQUÉE.

Orange Musk.

Musk Orange.

Orange d'Été.

Fruit medium, round, yellow, marbled and shaded with red in the sun. Flesh breaking, with a musky juice. Good. Last of August.

ORANGE TULIPÉE.

Poire aux Mouches.
Striped Orange.

Tuliped or Fly-Pear.
Great Orange.

Fruit pretty large, oval pyriform, green, shaded in sun with brownish red. Flesh melting, juice agreeable. September. (Lind.)

ORPHELINE COLMAR.

One of Van Mons' Belgian Pears, as yet little known in this country. Tree vigorous, very fertile. Young wood dull olive brown.

Fruit very large, pyriform, bright green, somewhat yellow, dotted with gray, brown, and black, and shaded with russet, fawn on the sunny side, and around the calyx and stem. Flesh whitish yellow, fine, melting, a little granular around the core, juicy, sweet, and perfumed. October. (An. Pom.)

OSBAND'S SUMMER.

Osband's Favorite.

Summer Virgalieu.

Origin, Wayne County, N. Y. Tree moderately vigorous, upright, an early and prolific bearer. Young wood rich yellow brown.

Fruit small, roundish ovate obovate pyriform, clear yellow, thickly dotted with small greenish and brown dots, with a warm cheek on the side of the sun, and some traces of russet, particularly around stalk and calyx. Stalk of medium length, rather strong, inserted in an abrupt cavity. Calyx open, set in a broad, shallow basin. Flesh white, juicy, melting, with a rich sugary flavor and pleasant musky perfume. Very good. Ripens early in August.

OSBORNE.

Origin, Economy, Ind. Productive and a free grower.

Fruit medium, short pyriform, yellowish green, with numerous gray dots. Stalk rather long. Basin broad and shallow. Calyx partially closed. Flesh white, juicy, brisk, vinous. Hardly good. Middle of September.

Osband's Summer.

OSWEGO BEURRÉ.

Read's Seedling.

Raised by Walter Read, of Oswego, N. Y. Tree vigorous, hardy, and productive. Young wood olive yellow.

Fruit medium, oblate, sometimes inclining to conic, yellowish green, streaked and mottled with thin russet, but becomes a fine yellow. Stalk rather short, inserted in a deep, round cavity. Calyx closed, set in an even, shallow basin. Flesh buttery, juicy, melting, with vinous, aromatic flavor. Good to very good. October, November.

OSWEGO INCOMPARABLE.

Originated at Oswego, N. Y. Tree very vigorous.

Fruit rather large, obtuse obovate pyriform, yellow, slightly netted and patched with russet, a tinge of crimson in the sun, and many russet dots. Flesh whitish, juicy, half melting, sweet, pleasant. Good. September.

OTT.

A seedling of the Seckel; originated with Samuel Ott, Montgomery Co., Pa. Tree moderately vigorous, very productive. Young wood reddish olive-brown.

Fruit small, roundish obovate, greenish yellow, partially netted with russet, reddish on the sunny side. Stalk long and curved, inserted in a slight depression. Calyx open, in a round, open basin. Flesh melting, sugary, rich, perfumed, and aromatic. Ripe middle of August. An excellent little pear, somewhat variable. Good to very good.

OTT'S SEEDLING.

Originated by Dr. W. D. Brinckle, from seed of the Ott. Tree moderately vigorous. Young wood reddish yellow brown.

Fruit small, globular obtuse pyriform, greenish, shaded with dull crimson in the sun, and thickly sprinkled with green and light dots. Stalk stout, inclined in a slight depression by the lip. Calyx small, closed. Segments short. Flesh whitish, juicy, sweet, rich. Good to very good. Last of August.

OWEN.

Originated in the garden of John Owen, Cambridge, Mass. A fine cooking Pear.

Fruit medium, roundish oval, dark green. Flesh tender, delicious, finely colored. October to December. (Cole.)

PADDOCK.

Received of Chauncey Goodrich, of Burlington, Vt. Tree vigorous, spreading.

Fruit rather below medium, oblong ovate pyriform, light yellow, sometimes with a faint blush. Stalk medium. Calyx in a rather broad, shallow basin. Flesh fine-grained, melting, sweet, but not very high flavor. Good. Ripe last of July.

PAILLEAU.

A Belgian Pear of good quality, but rather coarse-grained.

Fruit medium, turbinate, greenish yellow, with patches of russet. Flesh juicy, sweet. Good. Early in September.

PARADISE D'AUTOMNE.

Calebasse Bose.
 Maria Nouvelle.
 Princesse Marianne.
 Faux Spreceiw.

False Spreceiw.
 Marianne.
 Calebasse.
 Calebasse Princesse Marianne.

A Belgian Pear, of uncertain origin. Tree very vigorous. Shoots long and twisting, dull reddish brown, thickly sprinkled with very conspicuous dots.

Fruit large, oblong obovate acute pyriform, yellow, mottled, and often entirely overspread with bright cinnamon russet. Surface

Paradise d'Automne.

uneven. Stalk long, enlarged at both ends, and inserted without much cavity, often by fleshy wrinkles or folds. Calyx open. Basin abrupt, and surrounded by prominences. Flesh moderately fine, sometimes slightly granular, juicy, melting, with a very rich vinous, aromatic flavor. Very good. September, October.

PARDEE'S SEEDLING.

Raised by S. D. Pardee, New Haven, Conn. Tree vigorous, very productive. Young shoots slender, grayish red brown.

Fruit small, roundish, greenish yellow, chiefly covered with russet. Stalk medium. Cavity large, deep. Calyx open. Basin furrowed. Flesh coarse, granular, buttery, juicy, melting, vinous, slightly aromatic. Good to very good. October.

PARFUM D'AÔÛT.

Perfumed.

August Perfume.

An old sort, of little value.

Fruit small, pyriform, light yellow, deep red in the sun, with many dark yellow dots. Flesh white, rather coarse, musky, juicy. Hardly good. August.

PARFUM DE ROSE.

A Belgian variety, of little value.

Fruit small, oblong ovate acute-pyriform, yellow, nearly covered with light russet, and with numerous brown and gray dots. Flesh yellowish, moderately juicy, half melting, sweet, pleasant. October.

PARSONAGE.

Origin, New Rochelle, N. Y. Tree a fine healthy grower, produces large crops of perfect fruit annually, making it, although not of first quality, a profitable market sort. Young wood dull olive brown.

Fruit medium or large, obovate obtuse pyriform, often inclined, orange yellow, rough, generally shaded with dull crimson, netted and patched with russet, and thickly sprinkled with russet dots. Stalk short and thick, fleshy at its junction, inserted in a small cavity, russeted. Calyx partially open, stiff, set in a shallow, slightly russeted basin. Flesh white, slightly coarse, somewhat granular, juicy, melting, with a refreshing vinous flavor. Good. Ripe all of September.

PASSANS DU PORTUGAL.

Summer Portugal.
Miller's Early.
Butter of Michigan.

Poire Chenille.
Chenille.

A delicate and pleasant Pear, which comes early into bearing, and produces very large crops. Shoots grayish reddish brown.

Fruit small, roundish oblate, pale yellow, with a cheek of fairest brown, becoming red in the sun. Stalk nearly an inch long, inserted in a round, regular hollow. Calyx stiff. Basin moderately sunk. Flesh white, juicy, breaking, of very delicate, agreeable flavor. Good. Last of August.

PASSE COLMAR.

Ananas d'Hiver.	Gambier.
Passe Colmar Epineaux.	Cellite
Colmar Gris.	Colmar Preule.
Passe Colmar Gris	Pucelle Condésienne.
Beurré Colmar Gris, dit précel.	Bergentin.
Précel.	Colmar Épineaux.
Fondante de Mons.	Beurré Chapman.
Beurré d'Argenson.	Chapman's.
Regintin.	Colmar Bonnet.
Colmar Hardenpont.	Passe Colmar Vineux.
Présent de Malines.	Colmar de Silly.
Marotte Sucrée Jaume.	Prenl.
Souveraine d'Hiver.	Impératrice.
Colmar Souveraine.	Souveraine.

The *Passe Colmar* is a Belgian Pear, raised by the Counsellor Hardenpont. Vigorous growth, and abundant bearer. It grows indeed almost too thriftily making long bending shoots, and owing to this over-luxuriance the fruit is often second-rate on young trees, but on old trees, with high cultivation, it is sometimes of the best quality. It is a very variable fruit, and often poor. The young shoots are of a dark olive yellow brown.

Fruit rather large, varying considerably from obovate to obtuse pyriform. Skin rather thick, yellowish green, becoming yellow at maturity, a good deal sprinkled with brown russet, especially around the stalk and calyx. Stalk an inch and a half long, inserted in an obtuse, uneven cavity, or sometimes without depression. Calyx open. Basin shallow. Flesh yellowish white, buttery, and juicy, with a rich, sweet, aromatic flavor. Good to very good. December, January.

PASSE-COLMAR MUSQUÉ.

Colmar Musqué.

Passe-Colmar Musqué d'Automne.

Raised by Major Esperen of Malines.

Fruit medium size, varying from roundish oblate to roundish ovate pyriform, greenish yellow, netted and patched with russet, and thickly sprinkled with green and brown dots. Stalk rather short. Calyx small, partially closed. Basin shallow, uneven. Flesh white, very buttery, juicy, melting, pleasant perfumed. Good. October.

PASSE CRASSANE.

Surpasse Crassane.

Neue Crassane.

Originated in France. Tree moderately vigorous. Young wood yellow olive brown.

Fruit medium, obtuse pyriform, yellow, with slight nettings and patches of russet, and thickly sprinkled with russet dots. Stalk long, rather stout, inclined. Cavity medium. Calyx small and closed. Basin abrupt, uneven. Flesh yellowish, gritty near the core, juicy, melting, slightly vinous. Good. December, January.

PASSE TARDIVE.

One of Major Esperen's seedlings.

Fruit medium, obovate acute pyriform. Surface uneven, pale yel-

low, tinge of red in the sun, and thickly sprinkled with gray brown dots. Stalk stout, fleshy at insertion, and without cavity. Calyx open. Flesh white, juicy, breaking, sweet, pleasant. Good. January to March.

PATER NOSTER.

Paul Thielens, erroneously.

An old variety, of which the origin appears unknown. It was in Van Mons' catalogue in 1823.

Fruit large, variable in form, from obovate obtuse pyriform to irregular obovate acute pyriform, greenish yellow, mottled and shaded in sun with red, netted, patched, and dotted with russet brown. Stalk stout, usually planted with a lip. Basin shallow, uneven. Flesh white, juicy, melting, slightly vinous. Good to very good. October, November.

PAUL AMBRE.

The origin of this Belgian variety is unknown.

Fruit medium, roundish or roundish oval, pale greenish yellow, often shaded and mottled with crimson in the sun, sometimes netted with russet, and thickly sprinkled with russet brown dots. Stalk medium, set in a small cavity. Calyx large, open, with long, broad, recurved segments. Basin shallow, smooth. Flesh whitish, juicy, buttery, melting, sweet. Good to very good. October.

PAUL THIELENS.

One of Van Mons' seedlings, first fruited in 1844. Tree vigorous and productive. Young wood olive yellow brown.

Fruit medium or below, roundish oblate, pale yellow, slightly netted and patched with russet, and sprinkled with russet dots, light shade of crimson in the sun. Stalk medium length, pretty stout. Cavity broad, irregular. Calyx small. Segments persistent. Basin small, abrupt, uneven. Flesh whitish, coarse, juicy, melting, a little astringent. Good. October.

PAYENCHE.

Poire de Payency.
De Périgord.
Payenchi.

Paquency.
Payenchi de Périgord.
Payency.

This Pear was first discovered in the village of Payenche, in 1830. Tree a moderately vigorous grower and an early bearer.

Fruit medium size, oblong ovate pyriform, light yellow, with a rich warm red cheek in the sun, much netted and specked with rough russet. Stalk stout, curved, often a little inclined, and set with a scarcely perceptible cavity. Calyx rather large, open. Basin small, abrupt. Flesh yellowish white, a little coarse, melting, juicy, sweet, slightly aromatic. Good to very good. October.

PEACH PEAR.

Poire Pêche.

Peach.

Pfirsichbirne.

A seedling of Esperen, of moderate growth and productive. Young wood dull reddish brown.

Fruit medium, obovate pyriform, greenish yellow, netted and patched with russet, and thickly sprinkled with russet dots. Stalk rather long, curved, fleshy at insertion, by a lip. Calyx partially open. Basin small, uneven. Flesh whitish, juicy, melting, brisk, vinous, sometimes astringent. Good. August.

PEMBERTON.

General Banks.

Originated with S. A. Shurtleff, of Boston, Mass.

Fruit medium size, roundish, obtuse at the stem, nearly smooth, yellowish green, shade of red in the sun, and dotted with greenish specks. Stalk short, stout. Calyx large, open. Basin shallow, ribbed. Flesh yellowish white, fine, melting, juicy, with a rich bergamot aroma. Early September. (Hov. Mag.)

PENDERSON.

Raised by Samuel Penderson, of New Haven, Conn. Tree a great bearer.

Fruit medium, roundish, greenish yellow. Flesh white, crisp, half melting, brisk, somewhat astringent. Good. October.

PENDLETON'S EARLY YORK.

Raised by Mrs. Jeremiah York, of Pendleton Hill, Conn. Tree moderately vigorous, and very productive.

Fruit medium or below, obovate, varying to obtuse pyriform. Skin yellow, sometimes with a faint blush, a few patches and traces of russet, and many green and brown dots. Stalk inserted in a moderate cavity, Calyx, open. Basin irregular. Flesh white, not melting, sweet, slightly perfumed. Good. Ripens last of July.

PENGETHLY.

One of Mr. Knight's seedlings.

Fruit medium, inclining to oval. Stalk long, rather slender. Calyx large. Segments quite long and narrow. Skin light green, thickly sprinkled with dark dots, yellowish on the side of the sun, sometimes a red cheek. Flesh somewhat coarse, but juicy, sweet, and good. February, March. (Robert Manning's MS.)

PENN.

Fraser or Butter Pear.

Railroad Fuss.

A variety originated in Bordentown, N. J., near the old Penn Manor, hence the name. Tree vigorous, upright, an annual bearer.

Fruit medium, oblate, sometimes roundish oblate, pale lemon

yellow, thickly sprinkled with small grayish and russet dots, and sometimes a few patches and dots of russet around the calyx. Stalk rather stout, enlarged at insertion. Cavity slight, uneven. Calyx open. Segments short, erect. Basin slightly furrowed. Flesh white, a little coarse, juicy, melting, sweet, pleasant, slightly aromatic. Good to very good. October.

PENNSYLVANIA.

Smith's Pennsylvania.

The Pennsylvania is a seedling originated by J. B. Smith, Esq., of Philadelphia, a well-known amateur.

Fruit of medium size, roundish obovate, brown russet, nearly covering a dull yellow ground, and becoming russet red on the sunny side. Flesh yellowish white, not very fine-grained, juicy, half melting, sweet, perfumed, musky flavor. Hardly good. Middle and last of September.

PERPETUAL.

Origin, Long Island, N. Y. Tree vigorous.

Fruit medium, obovate obtuse pyriform, greenish yellow, slight tinge of red in the sun. Flesh whitish, firm, moderately juicy. A good cooking Pear. Keeping to May.

PETERS.

Raised in 1848, by Rev. Absalom Peters, of Williamstown, Mass. Tree vigorous grower, and an annual abundant bearer.

Fruit medium, roundish obovate obtuse pyriform, greenish yellow, shaded with brownish red in the sun. Flesh white, coarse, moderately juicy, half melting, sweet, pleasant. Good. August.

PETRÉ.

An American Pear. The original tree is growing in that interesting place, the old Bartram Botanic Garden, near Philadelphia. The tree is not a rapid grower, but produces very regular and abundant crops. Young wood slender, yellowish brown.

Fruit of medium size, or rather large obovate, pale yellow, sometimes marked with greenish russet, and sprinkled with russet about the eye. Stalk stiff and strong, about an inch long, stout at the lower end, and set in a peculiar, abruptly flattened cavity. Calyx small, set in a narrow but smooth basin. Flesh whitish, fine-grained, buttery, and very melting, with a perfumed, slightly musky, high flavor. Good to very good. October.

PHILADELPHIA.

Latch.

Orange Bergamot, erroneously.

Origin, near Philadelphia. Tree healthy, vigorous. Young shoots light yellowish brown, productive. Fruit sometimes cracks.

Fruit large, roundish obtuse pyriform, yellow, thickly sprinkled with green or gray dots, sometimes netted with russet. Stalk of medium

length, stout at its insertion, in an abrupt cavity. Calyx open, set in a broad, uneven basin. Flesh coarse, juicy, buttery, melting, with a sugary flavor, slightly perfumed. Good. September.

PHILIPPE GOES.

A Belgian variety, much resembling Baronne de Mello. Tree vigorous and productive. Young wood dark olive brown.

Fruit small to medium, roundish acute pyriform, yellow, covered with brownish russet. Stalk long, curved, fleshy at insertion. Calyx small, partially closed. Basin small. Flesh whitish, melting, juicy, vinous, slightly aromatic. Good to very good. September.

PICCIOLA.

Of Belgian origin. Tree vigorous, spreading, productive. Young wood reddish yellow brown.

Fruit small, roundish oblate, greenish yellow, sometimes a slight blush in sun, and traces of russet. Stalk long, curved, set in a cavity somewhat furrowed. Calyx small, open, with short, erect segments. Flesh whitish, very juicy, melting, with a vinous flavor. Good to very good. September.

PIE IX.

A Belgian Pear, quite variable in quality, but almost always smooth and handsome. Tree vigorous. Young wood olive yellow brown.

Fruit above medium, roundish acute pyriform, slightly inclined, yellow, netted and patched with russet, especially at each end, and thickly sprinkled with russet dots. Stalk stout, joined insensibly as it were to the fruit. Calyx open. Segments short, persistent. Basin broad, shallow. Flesh white, a little firm, juicy, melting, brisk, vinous. Good to very good. September, October.

PINNEO.

Boston.

Graves.

Silliman's Russet.

Summer Virgalieu.

Early Denzelona.

Hebron.

Lebanon.

An old American variety, said to have originated in Columbia, Tolland Co., Conn. Tree a moderately vigorous grower, a good bearer. Young wood light reddish brown.

Fruit below medium, roundish oblate, slightly pyriform, pale yellow, netted, patched, and dotted with russet, and often a warm red cheek in sun. Stalk rather long, nearly straight, sometimes curved. Cavity medium or small. Calyx partially open. Basin broad. Flesh white, fine, juicy, melting, sweet, pleasant. Good. Last of August.

PITMASTON DUCHESSE D'ANGOULÊME.

This is the unfortunate name given to a Pear raised by John Williams, of Pitmaston, England. Tree vigorous.

Fruit very large, oblong obovate, yellow, with light russet near the stalk. Flesh yellowish white, melting, buttery, juicy. October, November. (Gard. Chron.)

PITT'S PROLIFIC.

Pitt's Surpasse Marie.

Surpass Maria Louise, incorrectly.

An English fruit of medium size, oblong pyriform. Skin yellow, a little russeted. Flesh juicy, soft, sweet, rather coarse, and of indifferent quality. September.

PLANTAGENET.

A new Belgian Pear. Young wood reddish yellow brown.

Fruit medium, pyriform, greenish yellow, netted, patched, and dotted with russet. Stalk long, slender, set in slight cavity, with a lip. Calyx open. Segments partially recurved. Flesh whitish, juicy, melting. Good to very good. November.

PLATT.

Platt's Seedling.

Origin on the farm of the late Thomas Tredwell, Beckmantown, Clinton Co., N. Y. Tree vigorous, hardy, and productive. Young wood grayish reddish brown, with many specks.

Fruit medium, roundish, irregular oblate, pale yellow, netted and patched with russet and sprinkled with russet dots. Stalk medium. Calyx small, closed. Flesh whitish, juicy, buttery, half melting, pleasant. Good. October.

POCAHONTAS.

Origin, Quiney, Mass. Tree moderately vigorous. Young wood olive brown.

Fruit below medium, obovate pyriform, yellow, netted, patched, and dotted with russet, sometimes shaded in the sun with bright crimson. Stalk rather long, stout, set without cavity by a lip. Calyx open. Basin small, slightly russeted. Flesh white, juicy, melting, sweet, slightly musky, pleasant. Good to very good. September.

POLLAN.

A Pennsylvania Pear.

Fruit below medium, nearly globular, greenish yellow, with a shade of brown in the sun. Flesh whitish, a little coarse, moderately juicy, vinous, pleasant. Good. August.

POPE'S QUAKER.

Origin, Long Island, N. Y.

Fruit very fair, middle-sized, oblong pyriform, smooth, yellow russet, juicy, melting, and pleasant. Hardly good. October.

POPE'S SCARLET MAJOR.

Origin, Long Island, N. Y.

Fruit rather large, obovate, yellow, with a bright red cheek. Flesh white, breaking, and rather dry. Poor. Last of August.

POUND.

Uvedale's St. Germain.	Bolivar d'Hiver.
Winter Bell.	Comtesse de Terweuren.
Bretagne le Cour.	Duchesse de Berry d'Hiver
Belle Angevine.	Gros fin or long d'Hiver.
Belle de Jersey.	Union.
Du Tonneau.	Grosse de Bruxelles.
Royal d'Angleterre.	La Quintinye.
Beauté de Tervueren.	Grosse Dame Jeanne.
Pickering Pear.	Louise Bonne d'Hiver.
Lent St. Germain.	Bellissime d'Hiver, du Bur.
Cordelier.	Abbé Mongein.
Anderson.	Chamber's Large.
Angora ?	Dr. Udales Warden.
D'Horticulture.	German Baker.
Berthebirt.	Pickering's Warden.
Bolivar.	Piper.
Faux-Bolivar.	

The Pound, or Winter Bell Pear, valued only for cooking, is an abundant bearer, and a profitable orchard crop. The trees are strong and healthy, with very stout, upright, dark-colored wood.

Fruit large, pyriform, swollen at the crown, and narrowing gradually to a point at the insertion of the stalk. Skin yellowish green, with a brown cheek (yellow and red when long kept), and sprinkled with numerous brown russet dots. Stalk two inches or more long, stout, bent. Calyx crumpled, set in a narrow, slight basin. Flesh firm and solid, stews red, and is excellent baked or preserved.

PRAIRIE DU POND.

Introduced by A. H. Ernst.

Fruit small, nearly globular, greenish yellow, with many brown and green dots. Flesh whitish, moderately juicy, half melting, vinous, astringent. Poor. September

PRATT.

A native of Rhode Island. Tree a vigorous upright grower, very productive. Young wood olive brown.

Fruit medium, obtuse pyriform. Skin greenish yellow, shaded with crimson, and sprinkled with numerous russet and conspicuous dots, frequently patched and netted with russet. Stalk long, slender, curved, inserted in a regular cavity. Calyx open, set in a broad, shallow basin. Flesh white, juicy, melting, briskly vinous, and saccharine, variable, but when in perfection of great excellence. Good to very good. Ripens last of September.

PRECILLY.

A Belgian Pear. Tree very vigorous, productive.

Fruit medium to large, obovate acute pyriform, greenish yellow, netted and patched with russet, and sprinkled with brown dots. Flesh yellowish white, coarse, juicy, breaking. Good for cooking. October.

PRÉMIÈRES DE WAGELWATER.

Fruit below medium, roundish obovate pyriform. Sides unequal. Skin yellow, a few traces of russet, and thickly sprinkled with brown dots. Stalk long. Calyx open. Flesh whitish, juicy, melting, very sweet. Good to very good. October.

PRESIDENT.

Raised by Dr. S. A. Shurtleff, Brookline, Mass., and first described in the *New England Farmer*, 1862.

Fruit very large, roundish obovate, somewhat irregular. Skin slightly rough, greenish yellow, pale red in the sun, considerable of russet next the base of stalk, and traces of russet and conspicuous russet dots over all. Stalk short, rather stout. Calyx medium, with short, stiff, closed segments. Basin medium. Flesh yellowish white, rather coarse, juicy, slightly vinous. Good. Early November.

PRESIDENT FELTON.

Originated with Dr. W. D. Brinckle. Tree moderately vigorous. Young wood olive yellow brown.

Fruit medium, roundish oblate, pale yellow, with a crimson cheek in sun, nettings, traces of russet, and many brown and gray dots. Stalk short. Calyx open. Flesh fine, juicy, yellowish, half melting, slightly vinous, sweet. Good. October.

PRESIDENT MAS.

A new Belgian variety.

Fruit large, oblong obovate obtuse pyriform. Skin greenish yellow, with some patches and traces of russet. Flesh yellowish white, fine, juicy, melting, buttery, sweet. December, January. (Trausson's Cat.)

PREVOST.

Poire Prevost.

A French Pear. Tree vigorous, very productive. Young wood stout, olive yellow brown.

Fruit medium size, obovate pyriform. Skin pale yellow, with a tinge of red in the sun, and thickly sprinkled with minute brown dots. Stalk medium length, moderately stout. Calyx open. Flesh white, a little coarse, juicy, breaking, sweet, and pleasant. Good. February.

PRINCE ALBERT.

One of Van Mons' late seedlings. Tree very vigorous. Young wood olive yellow brown.

Fruit rather large, oblong obovate pyriform. Skin yellow, sometimes brownish yellow in the sun, nettings and patches of russet. Calyx

open. •Flesh yellowish, juicy, valuable as a cooking pear. December to March.

PRINCE DE JOINVILLE.

A Belgian Pear, first fruited in 1848.

Fruit medium, roundish, greenish yellow, with a red cheek in sun, and more or less of shades and patches of fawn russet. Stalk slender. Cavity medium. Calyx small, closed. Flesh yellowish white, half fine, melting, juicy, vinous, sweet, with a peculiar perfume. November. (Alb. Pom.)

PRINCE IMPERIAL DE FRANCE.

One of M. Grégoire's seedlings. Tree vigorous, irregular spreading, productive.

Fruit large, obovate ovate pyriform. Skin clear warm greenish yellow, becoming golden or brownish in sun, with small patches and dots of fawn russet. Stalk medium. Cavity deep, acute, furrowed. Flesh white, slightly tinged with rose, melting, juicy, sweet, with an agreeable perfume. October. (An. Pom.)

PRINCE NAPOLEON.

Introduced by M. Boisbunel, Rouen, France. Tree moderately vigorous and very productive. Young wood dull brown, slightly reddish.

Fruit medium, roundish, slightly pyriform, dull greenish, much shaded with thin brown russet, and russet patches. Stalk short, stout. Flesh greenish white, fine, juicy, sweet, perfumed. December. (Verg.)

PRINCE'S HARVEST.

Raised by William Prince, of Flushing, Long Island, N. Y. Tree vigorous, upright, and productive. Young wood reddish yellow brown.

Fruit small, ovate pyriform. Skin pale yellow, rarely a brownish blush, red cheek in sun, sprinkled with brown dots, and sometimes patched with russet. Stalk medium, fleshy at insertion, by a large lip and rings. Calyx open. Flesh white, firm, breaking, moderately juicy, sweet, slightly musky. Good. Last of July.

PRINCE'S PEAR.

Poire de Prince.

Cher Adame.

Chair a Dame.

An old variety, of unknown origin, and of little value.

Fruit small, pyriform, roundish, greenish yellow, mostly covered with dull reddish russet, with some gray specks. Flesh crisp, sweet, juicy. Last of August.

PRINCE'S ST. GERMAIN.

Brown St. Germain.

New St. Germain.

Originated with William Prince, Flushing, Long Island. Tree a

moderately vigorous grower, and an abundant bearer of fruit, in quality very good, and possessing a good keeping character. Young wood dull reddish brown.

Fruit of medium size, obovate, inclining to oval pyriform. Skin nearly covered with brownish russet over a green ground, and becoming

Prince's St. Germain.

dull red next the sun. Stalk an inch or more long, a little curved, and placed in a medium uneven cavity. Calyx large, open, firm, and nearly without divisions, set in a smooth, nearly flat basin. Flesh yellowish white, juicy, melting, with a sweet, somewhat vinous, and very agreeable flavor. Very good. November to March.

PRINCESS CHARLOTTE.

Raised by Major Esperen. A vigorous tree, productive. Young wood dull yellow brown.

Fruit medium, oblate pyriform. Color greenish. Stalk stout and long in a slight cavity. Basin broad and shallow. Flesh yellowish pinkish at centre, melting, juicy, sweet, pleasant. Good. November.

PRINCESS MARIA.

One of Van Mons' seedlings.

Fruit medium or below, ovate obovate pyriform. Skin yellow, considerably covered with rough dull russet, and thickly sprinkled with dots. Stalk long, slender. Calyx small, closed. Flesh whitish, rather coarse, juicy, melting, vinous, aromatic. Good. September.

PRINCESS OF ORANGE.

Princesse d'Orange.

Princesse Conquête.

A Flemish variety, raised by the Count Coloma, in 1802.

Fruit medium, roundish. Skin cinnamon russet in the shade, bright reddish russet in the sun. Flesh pale yellowish white, crisp, juicy, astringent. Poor. October and November.

PROFESSEUR HENNAU.

A new Flemish Pear. Tree vigorous and productive.

Fruit medium or above, ovate pyriform. Skin yellowish, mostly covered with warm reddish brown in sun, and dotted with numerous small and large dots. Stalk very short, inserted, inclined, with a ring or lip. Flesh white, half fine, melting, juicy, sweet. December. (An. Pom.)

PULSIFER.

Raised by Dr. John Pulsifer, of Hennepin, Ill. An upright and vigorous grower. Young wood light yellow brown.

Fruit small, obovate pyriform. Skin pale yellow, slightly netted and patched with russet, and thickly sprinkled with russet brown dots, sometimes shaded with crimson in the sun. Stalk medium. Cavity small. Calyx partially open. Basin small, uneven. Flesh whitish, a little coarse, juicy, melting, slightly vinous. Good. August.

PUVIS ST. GERMAIN.

Saint-Germain-Puvis.

A French Pear, as yet little known in this country.

Fruit large, oblong obovate acute pyriform, dull green or greenish yellow, with nettings, patches, and specks of dull russet. Stalk stout, curved, set with a knob or lip. Flesh greenish white, fine, half melting, juicy, vinous, sweet. September. (Verg.)

QUEEN OF THE LOW COUNTRIES.

Reine des Pays Bas.

A seedling of Van Mons'.

Fruit large, often very large, broad acute pyriform. Skin in the shade dull yellow, dotted and russeted around the eye, and overspread with fine dark red on the side next the sun. Flesh white, buttery, melting, and juicy, with a rich, subacid, vinous flavor. Variable, sometimes poor. Early in October.

QUILLETETTE.

An odd-looking, late autumn fruit, received from Van Mons.

Fruit nearly of medium size, roundish, a little flattened. Skin greenish, nearly covered with dull iron-colored russet. The flesh is white, buttery, and melting, sweet and perfumed. Scarcely good. November.

QUINN.

Knight's Seedling.

This variety was imported by Prof. Mapes, and the name being lost when the fruit was shown before the American Institute Farmers' Club, it was newly christened as above.

The fruit is below medium size, acute pyriform. Skin inclined to golden russet. Flesh juicy. Good. January. (Hort.)

RALLAY.

An old variety, of unknown origin.

Fruit small to medium, globular acute pyriform. Skin rough, dull yellow, dull reddish cheek, and over all spots of russet. Flesh yellowish white, breaking, juicy, gritty. Good. November, December. (Elliott.)

RAPELJE.

Introduced by Professor Stevens, Astoria, Long Island. Tree vigorous and productive.

Fruit medium, obovate, sometimes obtuse, and sometimes acute pyriform. Skin yellowish, covered with cinnamon russet. Stalk long, rather thick, generally inserted by a lip. Calyx large and open, set in a very shallow basin. Flesh whitish, somewhat granular, juicy, and melting, with a sweet, vinous, aromatic flavor. Variable, sometimes poor. September.

RAVENSWOOD.

Origin, Ravenswood, Long Island. Tree a vigorous grower, with grayish olive brown, young shoots.

Fruit small, obovate pyriform. Skin pale yellow, sometimes a tinge of red in the sun, and thickly sprinkled with green dots. Stalk short. Calyx partially closed, with persistent segments. Flesh whitish, slightly coarse, juicy, melting, slightly vinous. Good to very good. Early August.

RAYMOND.

The Raymond is a native of Maine, and originated on the farm of Dr. I. Wright, in the town of this name. Tree of slow growth. Young shoots slender.

Fruit of medium size, obovate pyriform. Skin yellow, marked with russet near the stalk, and tinged with a little red towards the sun, and thickly sprinkled with russet dots. Stalk an inch or more long, inserted with little or no depression. Calyx round, firm, open, set in a shallow basin. Flesh white, buttery, melting, juicy, sweet, aromatic. Good to very good. September.

READING.

Originated in Oley Township, Berks Co., Pa. Tree vigorous and productive. Young wood dull brown grayish, with conspicuous apparently rough dots.

Fruit medium to large, obovate pyriform. Skin yellow, thickly dotted with brown and gray dots and sprinkled with russet. Stalk long, curved, enlarged and ribbed at its insertion, generally in a depression. Calyx open. Segments strong, in an exceedingly shallow basin. Flesh whitish, granular, melting, with a brisk, vinous flavor. Good. January to March.

RED BERGAMOT.

Bergamotte Rouge.
Bergamotte Musqué.
De Sicile.
Petit Muscat d'Automne.

Du Colombier.
De Sicile Musquée.
Crassane d'Été.
Bergamotte Dorée.

A very old Pear, of little value.

Fruit below medium, roundish, sometimes obovate acute pyriform, pale yellow, mostly overspread with dull red in sun. Flesh soft, melting, juicy, sweet. September.

RED GARDEN.

Raised by Josiah Youngken, of Richlandtown, Pa. Tree a good grower and bearer.

Fruit medium, obovate pyriform, pale yellow, shaded and mottled with a few crimson dots in sun, netted and patched with russet, and thickly sprinkled with brown dots. Stalk rather long, slender. Calyx partially open. Segments short. Flesh whitish, a little coarse, juicy, melting, sweet, pleasant. Good or very good. September.

REGINE.

One of Van Mons' seedlings.

Fruit medium, roundish pyriform. Skin greenish yellow, with slight nettings of russet, and thickly sprinkled with green and brown dots. Stalk long, inclined. Calyx open. Flesh white, juicy, melting, sweet, pleasant. Good. September.

REINE CAROLINE.

A European Pear, only fit for cooking.

Fruit of medium size, narrow pyriform. Skin yellow, with a brownish red cheek. Flesh white, crisp, rather dry and indifferent in quality. November.

REINE D'HIVER.

Fruit small, roundish oblate. Skin yellow, with a brownish tinge in sun, and nettings, patches, and dots of russet. Flesh yellowish, juicy, melting, sweet, pleasant. Good. November.

REINE DES POIRES.

A French Pear, of poor quality.

Fruit medium or above, obovate pyriform. Skin pale yellow, shaded and mottled with crimson in the sun. Flesh white, coarse, breaking, not juicy. Scarcely good except for cooking. October.

REINE VICTORIA.

Supposed a seedling of Van Mons'.

Fruit medium, obovate acute pyriform, greenish yellow, with shades and patches of fawn. Flesh white, tinted with rose, fine, melting, juicy, sweet. December. (Alb. Pom.)

RETOUR DE ROME.

One of Van Mons' seedlings. Tree vigorous. Young wood reddish brown, with oblong white specks.

Fruit medium, roundish obovate acute pyriform. Skin yellowish, blotched with russet, and thickly sprinkled with russet dots. Stalk short, and stout at its insertion in a small inclined cavity. Calyx partially closed, in a round narrow basin. Flesh whitish, coarse, granular, melting, juicy, with a rich vinous flavor, slightly astringent. Good. September.

REYNAER BEERNAERT.

One of Van Mons' seedlings. Tree vigorous.

Fruit medium, roundish pyriform. Skin golden yellow, dotted with red. Flesh melting, juicy, sweet. December. (Soc. V. M.)

RICHARDS.

Origin, Wilmington, Del. Tree moderately vigorous. Young wood olive brown.

Fruit medium, obovate acute pyriform. Skin yellow, with numerous small russet dots, and traces and patches of russet. Stalk of medium length, curved, inserted by a fleshy ring in a slight depression. Calyx partially closed. Basin very small. Flesh buttery, melting, granulated, with a sweet, pleasant, vinous flavor. Good. Ripens first of October.

RIDELLE'S.

Poire Ritelle.

Tree of moderate vigor, productive.

Fruit medium, oblate turbinate, remotely pyriform. Skin yellow, covered nearly all over with bright red. Stalk short. Calyx open. Flesh not very fine, rather juicy, not melting or delicate in flavor. Scarcely good. September.

RIVERS' WINTER BEURRÉ.

Winter Beurré (Rivers).

Raised by Thomas Rivers, England. Tree moderately vigorous, spreading, an early and abundant bearer. Young wood dull yellow brown.

Fruit medium, roundish elongated pyriform. Skin greenish, rough, spotted, netted, and patched with russet. Stalk stout, curved, inclined at its insertion. Calyx partially closed, set in a shallow irregular basin. Flesh white, fine-grained, gritty at core, melting, buttery, vinous or subacid. Good. January, February.

ROE'S BERGAMOT.

Raised by William Roe, Newburgh, N. Y. Tree moderately vigorous, very productive. Young wood reddish yellow brown.

Fruit medium, oblate or Bergamotte-shaped. Skin smooth, yellow, with minute yellow dots in the shade, mottled and clouded with red on the sunny side. Stalk short, inserted in a narrow, abrupt cavity. Calyx small, with short stiff segments, set in a narrow basin. Flesh rather coarse, melting, with a sweet, rich, brisk, well-perfumed flavor. The flavor of this excellent new Pear is extremely like Gansel's Bergamotte, but much more sugary. Good to very good. September.

ROI D'ÉTÉ.

Gros Rousselet.
Great Rousselet.
Rousselet.

Large Rousselet.
The Rousselet.
King of Summer.

An old variety, of little value.

Fruit medium, obovate pyriform, pale green, dull red in the sun, with numerous gray russety specks. Flesh half buttery, melting, agreeable subacid. Last of August. (Lind.)

ROI DE ROME.

This variety was found in a province of Hainault, Belgium, by M. l'Abbé Duquesnes, and first fruited in 1810. Under the name of Roi de Rome, the Napoleon has been repeatedly received in this country, but, as described in the Annals of Pomology, is entirely a distinct fruit.

Fruit very large, regular, oblong ovate pyriform. Skin clear yellow, marbled with crimson in the sun, specked with russet, and dotted with many small gray dots. Stalk short, set with little or no cavity, but surrounded with slight furrows. Flesh yellowish white, half fine, melting, juicy, sweet, agreeable. October, November.

ROITELET.

A Flemish Pear.

Fruit small, roundish, yellow, netted, shaded, and sprinkled with russet. Flesh whitish, half melting, juicy, sweet. Good. September.

ROKEBY.

Raised by M. Bivort, Belgium. Tree vigorous, very prolific. Young wood dark olive brown, with narrow oblong white specks.

Fruit below medium, obovate pyriform. Skin yellowish, sometimes a tinge of red in the sun, netted, patched, and dotted with russet. Stalk short. Cavity shallow. Calyx open. Flesh white, half melting, vinous, astringent. Poor. Early September.

RONDELET.

Fruit below medium, roundish oblate. Skin greenish yellow, shaded with brown russet, tinged with red in the sun, and speckled with large gray dots. Stalk an inch long, inserted in a narrow cavity. Flesh fine-grained, buttery, melting, juicy, rich, sweet, with a musky perfume. November. (Hogg.)

RONVILLE.

Martin Sire (incorrectly).
Lord Martin Pear.

Hocrenaille.
Poire de Bunville.

An old Belgian Pear, of little value.

Fruit medium to large, ovate, yellowish green, russeted at end, dotted with gray russet specks. Flesh white, breaking, gritty at core, sweet, pleasant. October. (Prince.)

ROPES.

Origin, garden of Mr. Ropes, Salem, Mass.

Fruit medium, ovate obovate. Color cinnamon russet, slightly tinged with red on the sunny side. Stem short, in an inclined cavity. Calyx small, open. Basin shallow. Flesh whitish, coarse, melting, and juicy, sugary, and good, with a perfume. Good. October, November.

ROSLYN.

Found on the place of W. C. Bryant, of Roslyn, Long Island. Tree vigorous. Young wood reddish yellow brown.

Fruit medium, nearly globular. Skin yellow, netted, patched, and dotted with russet. Stalk long. Calyx partially closed. Flesh whitish, juicy, melting, slightly

Rostiezer.

vinous. Good or very good. Last of August.

ROSTIEZER.

A foreign variety, which is scarcely medium in size and has not generally much beauty of color, yet combines an assemblage of excellences that places it in the rank before any other of its season. The young trees produce but few shoots of strong growth, and require severe shortening to bring them into a fine symmetric form. The color of the young wood is dark olive brown. It is healthy and vigorous in its habit, an early and most profuse bearer, and in flavor is only equalled by the Seckel, which ripens six weeks later.

Fruit medium or below, obovate oblong pyriform. Skin dull yellow green, mixed with reddish brown on the sunny side. Stalk long and slender, curved, and inserted with very little depression. Calyx open, persistent. Basin small and corrugated. Flesh juicy, melting, somewhat buttery, exceedingly sugary, vinous, aromatic, and pleasantly perfumed. Best. Middle of August to middle of September.

ROUSSE LENCH.

Fruit large, oblong oval. Skin lemon yellow, with a slightly russeted covering. Flesh yellow, buttery, juicy, sugary, pretty well flavored. January, February. (Hogg.)

ROUSSELET AELENS.

A Belgian Pear of medium size, obovate acute pyriform, yellow, with shade of red in sun, patches of russet, and dots of grayish red. Stalk inserted without cavity. Flesh yellowish white, half fine, melting, juicy, sweet, perfumed. (An. Pom.)

ROUSSELET BIVORT.

A Belgian Pear, raised from seed of the Simon Bouvier in 1840.

Fruit medium, ovate obovate pyriform. Skin pale yellow, slightly netted and patched with russet, and sprinkled with brown dots. Stalk rather long, with a fleshy fold at insertion. Calyx partially open. Basin small, furrowed. Flesh yellowish, fine, juicy, buttery, melting, sweet. Good to very good. November.

ROUSSELET DECOSTER.

Rousselet de Coster.

Decoster's Russelet.

A seedling of Van Mons', dedicated to M. Decoster, of Louvain. Tree moderately vigorous. Young wood dull reddish brown.

Fruit small, roundish obovate pyriform. Skin pale greenish yellow, patched and blotched with russet, especially around the stalk and calyx, thickly sprinkled with russet dots, and sometimes a brownish cheek in sun. Stalk rather long. Cavity small. Calyx open. Segments stiff. Basin shallow, uneven. Flesh coarse, yellowish, juicy, melting, slightly vinous, aromatic. Good. September.

ROUSSELET DE JANVIER.

Of Belgian origin.

Fruit small, obovate pyriform. Skin yellowish. Flesh fine, half melting, buttery, perfumed. January. (Soc. V. M.)

ROUSSELET DE JONGHE.

Fruit small, curved obovate, uneven and irregular in its outline. Skin smooth lemon color. Calyx very large, open. Flesh yellow, fine-grained, firm, melting, juicy, rich, sugary. November, December. (Hogg.)

ROUSSELET DE RHEIMS.

Rousselet.	Rousselet Musqué.
Petit Rousselet.	Late Catherine
Spice or Musk Pear.	Autumn Catherine.

This French Pear, originally from Rheims, is supposed to have been the parent of our Seckel. There is a pretty strong resemblance in the color, form, and flavor of the two fruits, but the Seckel is much the most delicious. The growth is quite different, and this Pear has remarkably long and thrifty dark brown shoots. It is sugary, and with a peculiarly aromatic, spicy flavor, and if it were only *buttery* and melting, would be a first-rate fruit.

Fruit small, obovate, inclining to pyriform. Skin yellowish green, with brownish red and russety specks. Flesh breaking or half buttery, with a sweet, rich, aromatic flavor. Ripe at the beginning of September, subject to rot at the core.

ROUSSELET ENFANT PRODIGUE.

Nectarine ?	Enfant Prodigue.
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One of Van Mons' seedlings. Tree vigorous, productive.

Fruit medium, pyriform. Skin thick and rough, green, covered with russet, sometimes with a sunny cheek. Stalk of medium length, in an inclined cavity. Calyx large. Basin shallow. Flesh yellowish, juicy, granular, with a vinous flavor, highly perfumed with musk. Good. October, November.

ROUSSELET ESPEREN.

Rousselet Double.

Tree very vigorous, and very productive

Fruit medium, obovate pyriform. Skin yellow, with reddish gray and white dots, and covered with russet around calyx and stalk. Flesh whitish, half fine, half melting, juicy, sugary, vinous, and perfumed. Good. September.

ROUSSELET HÂTIF.

Early Catharine.	Early Rousselet.
Kattern.	Perdreau.
Cyprus Pear.	Poire de Chypre.

The Rousselet Hâtif is productive, with long slender branches, of dark dull reddish brown color.

Fruit rather small, acute pyriform. Skin, when fully ripe, yellow, with a brownish-red check. Flesh a little coarse-grained, sweet, pleasant, and slightly perfumed. Ripens the middle of August. Apt to rot at the core.

ROUSSELET ST. NICHOLAS.

A Belgian Pear, so far as we have seen it, of little value.

Fruit below medium, roundish oblate, yellow, shaded with crimson in the sun, netted, patched, and dotted with russet. Flesh whitish, juicy, melting, sweet, vinous. November.

ROUSSELET STUTTGART.

Poire de Stuttgart.
Stuttgarter Geishirtel.

Chevriers de Stuttgart.
Bellissime de Provence.

Originated in the environs of Stuttgart in 1779. Tree a vigorous, upright, healthy grower, and a good bearer. Young wood reddish purple.

Fruit below medium, pyriform. Skin greenish yellow, netted and patched with russet, and sprinkled with russet and green dots, brownish crimson in the sun. Stalk rather long, curved, enlarged at its insertion, generally without depression. Calyx open. Basin shallow. Flesh rather coarse, juicy, half melting, with a sweet, rich flavor, spicy aroma. Ripe last of August.

ROUSSELET VANDERWECKEN.

Raised by M. Grégoire, of Jodoigne, Belgium. A pyramidal tree of medium vigor, but very productive.

Fruit small, varying in form from Doyenné to Bergamotte. Skin yellow at time of maturity. Flesh white, fine, melting, juice abundant, sugary, and strongly aromatic, like that of the Rousselet. Fruit quite of first quality, and ripe first of November. (An. Pom.)

ROUSSELINE.

Russelin.

An old variety, now superseded by larger and better Pears.

Fruit small, nearly globular. Pale yellow, shaded with red in sun, and sprinkled with many russet dots. Flesh white, melting, sweet, musky. Good. November.

ROUSSELOX.

Raised by Major Esperen in 1846, and figured and described by L. E. Berkmans in 1851. Tree of medium vigor, grows well as a pyramid.

Fruit medium, shaped like a Doyenné. Skin citron yellow at maturity, dotted with russet, and highly colored on the side of the sun. Flesh fine, half melting, sufficiently juicy, sugary, vinous, with an agreeable perfume. February. (An. Pom.)

ROYAL.

Peck's Seedling.

A seedling raised by Thomas R. Peck, Waterloo, N. Y. Tree a vigorous grower, productive. Young wood yellow brown.

Fruit medium, roundish pyriform. Skin yellow, mostly covered with thin crimson russet, and a shade of crimson in the sun, sprinkled with

brown and russet dots. Stalk medium. Cavity small. Calyx partially closed. Segments short. Flesh white, juicy, melting, sweet, slightly aromatic. Good to very good. September.

ROYALE D'HIVER.

Winter Royal.

Royal Winter.

Spina di Carpi.

An old variety, of unknown origin.

Fruit rather large, obovate pyriform, or nearly pyriform. Skin yellow, with fine red in the sun, marbled with numerous brown specks and dots. Flesh yellowish, half buttery, melting, juicy, sweet, well flavored. December to February. (Lind.)

RUTTER.

Raised by John Rutter, of Westchester, Pa. Tree a moderate grower, a good bearer, with young wood of a dull olive yellow brown color.

Rutter.

Fruit medium to large, nearly globular, remotely pyriform. Skin rough, greenish yellow, sprinkled and netted with russet, and numerous russet dots. Stalk large, long, and woody. Cavity small. Calyx

small, closed. Segments narrow, nearly erect. Basin rather small, uneven. Flesh white, moderately juicy, half fine, somewhat gritty, nearly melting, sweet, slightly vinous. Very good. October, November.

SACANDAGA.

Van Vranken.

Sacandaga Seckel.

Found on the farm of Wm. Van Vranken, Edinburgh, Saratoga Co., N. Y. Tree an upright moderate grower. Young wood rich warm brown.

Fruit small, nearly globular. Skin pale greenish yellow, shaded with brownish crimson, and netted and dotted with russet. Stalk medium. Cavity small. Calyx open. Segments rather long, erect. Flesh white, juicy, melting, sweet, rich, a little perfumed. Good to very good. September.

SAINT ANDRÉ.

Imported by Mr. Manning, from the Brothers Baumann, of Bolwyl-ler. Wood often cracks and cancers.

Fruit medium, obovate. Skin light greenish yellow, somewhat dotted with red. Flesh white, fine-grained, buttery, melting, and good. Early in September.

SAINT CRISPIN.

A seedling raised by Israel Buffum, of Lynn, Mass. Tree a strong grower, and an abundant bearer. Young wood yellow brown grayish.

Fruit large, irregular in outline, generally oblong obovate pyriform. Skin a little rough. Surface uneven, greenish yellow, with tinge of red in sun, and russet patches. Stalk rather long. Calyx large, closed. Flesh yellowish white, a little coarse, melting, juicy, subacid. October. (Hov. Mag.)

SAINT DENIS.

Tree vigorous, with long dark reddish branches.

Fruit small, turbinate angular. Skin yellowish, considerably shaded with crimson, thickly sprinkled with crimson dots. Stalk long. Calyx open; broad, shallow, uneven basin. Flesh breaking, a little coarse, sweet, and aromatic, rots at the core unless gathered early. Last of August.

SAINT DOROTHÉE.

Royale Nouvelle.

Of foreign origin. Tree vigorous. Young wood grayish brown.

Fruit rather large, oblong obovate pyriform. Skin greenish yellow, netted and patched with russet, and thickly sprinkled with russet dots. Stalk long, curved, inserted by a fleshy lip in a small cavity. Calyx open. Segments rather large, recurved, set in a rather abrupt basin. Flesh whitish, fine, juicy, melting, with a sugary, vinous, peculiarly perfumed flavor. Good to very good. October.

SAINT GERMAIN.

St. Germain Gris.	Saint Germain blanc.
----- Jaune.	Arteloire.
Inconnue la Fare.	Richmond.
Lafare.	Saint Germain brun.
St. Germain Doré.	----- vert.
Franklin.	----- d'Hiver.
Hermansbirne.	

This is a well-known old French variety. The tree is rather a slow grower, with a dense head of foliage. The wood slender, and light olive colored.

Fruit large, pyriform, tapering regularly from the crown to the stalk. Skin yellowish green, marked with brownish specks on the sunny side, and tinged with a little brown when ripe. Stalk an inch long, strong, planted obliquely by the side of a small fleshy swelling. Calyx open, set in a shallow basin. Flesh white, a little gritty, but full of refreshing juice, melting, sweet, and agreeable in flavor. November and December.

The STRIPED GERMAIN (*St. Germain Panachée*) is a pretty variety of this fruit, differing only in being externally striped with yellow.

SAINT GERMAIN DE PEPINS.

A foreign variety. Tree a good grower and an early bearer.

Fruit medium, nearly globular or obovate, slightly pyriform. Skin pale yellow, lightly shaded or mottled with crimson in the sun, netted and patched with russet, and thickly sprinkled with russet dots. Stalk rather long and stout, largest at junction with the tree. Cavity small, irregular, russeted. Calyx partially closed. Basin irregular, corrugated. Flesh yellowish, coarse and gritty, with a hard core. Good. February.

SAINT GHISSLAIN.

Quinnipiac.

A most excellent Belgian Pear. When in perfection it is of the highest quality, but on some soils it is a little variable. The tree is remarkable for its uprightness, and the great beauty and vigor of its growth. Young shoots olive brown, with oblong white specks.

Fruit of medium size, pyriform, tapering to the stalk, to which it joins by fleshy rings. Skin pale clear yellow, with a few gray specks. Stalk an inch and a half long, curved. Calyx rather small, open, set in a shallow basin. Core small. Flesh white, buttery, and juicy, with a rich sprightly flavor. Good to very good. September, October.

SAINT LEZIN.

Fruit very large, pyriform. Skin dull greenish yellow, covered with flakes of russet. Stalk long. Calyx open. Flesh firm, crisp, juicy, sweet. A cooking Pear. September, October. (Hogg.)

SAINT MENIN.

Omer Pacha.	His Poiteau.	Poire His.
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'Tree a vigorous grower. Young wood grayish olive.

Fruit rather large, obovate obtuse pyriform. Skin pale yellow,

slightly brown in the sun, netted and patched with russet, and thickly dotted with conspicuous russet dots. Stalk short. Cavity deep. Calyx closed. Basin abrupt. Flesh whitish, juicy, melting, sweet, slightly aromatic. Good to very good. September.

SAINT MICHAEL ARCHANGEL.

St. Michel Archange.

Plombgastel.

Dusnas.

A French Pear, of unknown origin. Tree vigorous and productive. Young wood yellowish olive.

Fruit large, ovate obovate pyriform. Skin pale yellow, slightly netted and patched with russet, and thickly sprinkled with green and russet dots. Stalk rather stout, a little inclined in a small cavity by a fleshy ring or lip. Calyx partially closed. Segments rather short, stiff. Basin uneven, furrowed. Flesh whitish, buttery, juicy, melting, slightly aromatic. Good to very good. October.

SAINT VINCENT DE PAUL.

A new foreign Pear. Tree moderately vigorous. Young wood a very dark rich olive brown.

Fruit medium, oblate pyriform, broad at calyx. Skin light yellow, mostly covered with thin light russet, and thickly sprinkled with russet dots. Stalk long, slender. Calyx with short erect segments. Basin abrupt. Flesh firm, juicy, melting, not sweet. Good. November.

SALISBURY SEEDLING.

A native of Western New York. Tree vigorous.

Fruit obtuse pyriform. Skin rough, somewhat covered with russet, and thickly sprinkled with russet dots. Stalk short and thick. Calyx partially closed, in a deep, uneven basin. Flesh coarse, white, sweet, breaking, not juicy or melting. Scarcely good. September.

SALVIATA.

Forniquet.

Perfumed.

Épine Rose Gris.

An old variety, now superseded by better sorts.

Fruit below medium, obovate ovate obtuse pyriform, light yellow, dotted with russet. Flesh breaking, juicy, musky. Good. Last of August.

SAND PEAR.

Chinese Sand Pear.

This variety is valued mainly as a curiosity, although it is good for cooking. The tree is remarkably vigorous, with large, glossy foliage.

The fruit is of medium size, roundish pyriform, dull yellow, covered with a rough, sandy-like russet. Flesh firm, moderately juicy, cooks well, and acquires a fine color. September.

SANGUINOLE.

Sanguine d'Italie.

Bloody.

Grenade.

An ancient Pear, of unknown origin. As an amateur curiosity it is only desirable.

Fruit small to medium. Form roundish, pale yellow, brownish in sun, with irregular-shaped brown dots and specks. Flesh white, tinged with red, juicy, melting. Good. September.

SANGUINOLE DE BELGIQUE.

Fruit medium, ovate pyriform. Skin greenish, mottled and dotted with red in the sun, netted and patched with russet, and sprinkled with red and brown dots. Stalk long, curved. Flesh stained with red, which renders it a curiosity, that being its only value. September.

SARAH.

Raised by Thaddeus Clapp, Dorchester, Mass. Tree of an erect habit, hardy, healthy, and productive. Young wood rich olive yellow brown.

Fruit medium size, roundish obovate pyriform. Skin pale greenish yellow, partially netted and patched with russet, and thickly sprinkled with brown dots. Stalk medium, a little inclined, set with a slight depression by a ring or lip. Calyx partially closed. Segments short, erect. Basin shallow, uneven. Flesh white, fine, juicy, melting, sweet, rich, aromatic. Very good. October.

SCHUMAN.

A native of Buck's Co., Pa.

Fruit medium, roundish obovate. Pale yellow, shade of red in sun. Flesh coarse, pasty. Poor. September.

SEAL.

From Pennsylvania.

Fruit medium or below, roundish. Skin pale yellow, lightly shaded with crimson in the sun, and thickly sprinkled with green and russet dots. Stalk medium length, largest at ends, inserted by a ring or lip. Calyx open. Segments persistent. Flesh white, coarse, moderately juicy, melting, slightly astringent. Good. Last of August.

SEBASTOPOL.

Sebastopol d'Été.

A Belgian Pear, described by Alexander Bivort as:—

Fruit of medium size, ovate obovate, greenish yellow, dotted with grayish brown. Flesh white, half fine, melting, a little granulous, sweet, vinous, perfumed. Agreeable. August. (Jar. Van Mons.)

SECKEL.

Seckle.
Sickel.

Syckle.
Red-Cheeked Seckel.

New York Red Cheek.
Shakespeare.

We do not hesitate to pronounce this American Pear the richest

and most exquisitely flavored variety known. In its highly concentrated, spicy, and honeyed flavor it is not surpassed, nor indeed equalled, by any European variety. When we add to this, that the tree is the healthiest and hardiest of all pear-trees, forming a fine, compact, symmetrical head, and bearing regular and abundant crops in clusters at the ends of the branches, it is easy to see that we consider no garden complete without it. Indeed we think it indispensable in the smallest garden. The stout, short-jointed, olive-brown colored wood distinguishes this variety, as well as the peculiar reddish brown color of the fruit. The soil should receive a top-dressing of manure frequently, when the size of the Pear is an object. The Seckel Pear originated on the farm of Mr. Seckel, about four miles from Philadelphia.*. It was sent to Europe by the late Dr. Hosack, in 1819, and the fruit was pronounced by the London Horticultural Society exceeding in flavor the richest of their autumn Pears.

Seckel.

Fruit small, regularly formed, obovate. Skin brownish green at first, becoming dull yellowish brown, with a lively russet red cheek. Stalk half to three-fourths of an inch long, slightly curved, and set in a trifling depression. Calyx small, and placed in a basin scarcely at all sunk. Flesh whitish, buttery, very juicy and melting, with a peculiarly rich spicy flavor and aroma. It ripens gradually in the house from the end of August to the last of October.

* The precise origin of the Seckel Pear is unknown. The first pomologists of Europe have pronounced that it is entirely distinct from any European variety, and its affinity to the Rousselet, a well-known German Pear, leads to the supposition that the seeds of the latter Pear, having been brought here by some of the Germans settling near Philadelphia, by chance produced this superior seedling. However this may be, the following *morceau* of its history may be relied on as authentic, it having been related by the late venerable Bishop White, whose tenacity of memory is well known. About 80 years ago, when the Bishop was a lad, there was a well-known sportsman and cattle-dealer in Philadelphia, who was familiarly known as "Dutch Jacob." Every season, early in the autumn, on returning from his shooting excursions, Dutch Jacob regaled his neighbors with pears of an unusually delicious flavor, the secret of whose place of growth, however, he would never satisfy their curiosity by divulging. At length the Holland Land Company, owning a considerable tract south of the city, disposed of it in parcels, and Dutch Jacob then secured the ground on which his favorite pear-tree stood, a fine strip of land near the Delaware. Not long afterwards it became the farm of Mr. Seckel, who introduced this remarkable fruit to public notice, and it received his name. Afterwards the property was added to the vast estate of the late Stephen Girard. The original tree still exists (or did a few years ago), vigorous and fruitful. Specimens of its pears were quite lately exhibited at the annual shows of the Pennsylvania Horticultural Society.

SELLECK.

Origin somewhat uncertain. The oldest bearing tree stands on the grounds of Columbus Selleck, Sudbury, Vt., and is of healthy growth, and very productive. Young wood grayish olive brown.

Fruit large, obovate obtuse pyriform. Surface uneven, fine yellow, sometimes with a crimson cheek, and thickly sprinkled with russet dots. Stalk long and curved, fleshy at its insertion in a moderate cavity. Calyx nearly closed, in a rather small uneven basin. Flesh white, a little coarse, juicy and melting, sweet, aromatic. Good to very good. September, October.

SENATEUR MOSSELMAN.

A foreign variety.

Fruit medium or below, roundish, slightly obovate. Skin greenish yellow, shaded in the sun with orange and crimson, and numerous brown and russet dots. Flesh yellowish, firm, moderately juicy, sweet. Good. February, March.

SERAPHINE OVIN.

A Belgian variety, originated in 1854. Tree vigorous, making long annual shoots, pretty stout, of olive brown, with oblong white specks.

Fruit medium, roundish obtuse pyriform, pale yellow, mottled and marbled in the sun with crimson, numerous dotted with large conspicuous russet and gray dots or specks. Flesh yellowish white, half fine, half melting, buttery, juicy, sweet, slightly aromatic, musky. Good. September.

SERRURIER.

Serrurier d'Automme.

Fondante de Millot.

Fondante Serrurier de Millot.

Nouveau Maison.

Nouveau Mauxion.

A seedling of Professor Van Mons'. Tree vigorous, healthy, productive. Young wood light yellow brown.

Fruit medium, roundish obovate obtuse. Skin pale yellow, with a tinge of red in the sun, considerably netted and patched with russet, and numerous sprinkled with russet dots. Stalk medium, inserted in a small cavity, often russeted. Calyx open. Basin small. Flesh yellowish white, a little coarse, juicy, melting, vinous, slightly astringent. Good to very good. October.

SEUTIN.

Poire Seutin.

A seedling of M. Bouvier's.

Fruit medium or above, ovate, green, with a brownish shade in sun, marblings, patches, and dots of dull russet. Stalk quite long. Calyx large, with short persistent segments. Flesh half fine, white, melting, juicy, sweet, perfumed. September, October. (Alb. Pom.)

SHAWMUT.

Originated with Francis Dana, Roxbury, Mass. Tree an upright, moderately vigorous grower. Young wood grayish reddish brown.

Fruit large, obtuse pyriform. Skin nearly smooth, dull yellow, dotted with large round russet specks. Stalk long, fleshy, and wrinkled at base. Calyx open. Basin broad, deep. Flesh yellowish, coarse, melting, juicy, vinous, sprightly, musky perfume. October. (Hov. Mag.)

SHELDON.

Wayne.

Bland.

Huron.

Wisner.

An accidental seedling on the farm of Norman Sheldon, in the town of Huron, Wayne Co., N. Y. Tree vigorous, erect, hardy, and a good bearer. Young wood yellow brown.

Fruit medium, roundish obtuse obovate. Skin greenish yellow, mostly covered with thin light russet, a little brownish crimson in the

Sheldon.

sun, dotted with russet. Stalk short, stout. Cavity deep. Calyx open. Segments partly recurved. Basin broad, large. Flesh whitish, very juicy, melting, sweet, vinous, rich aromatic. Very good. October.

SHEPPARD.

Raised by James Sheppard, of Dorchester, Mass.; introduced to notice by Dr. L. W. Puffer. Tree a free grower, and very productive. Young wood grayish olive brown.

Fruit large, obovate pyriform. Skin rough, yellow, sometimes with a brownish red cheek, slightly sprinkled with russet dots, and with some patches of russet. Stalk short and stout, in a depression, often inclined, surrounded by russet. Calyx partially closed, set in a very shallow furrowed basin. Flesh whitish, coarse and granular, buttery, melting, juicy, vinous, perfumed. Good to very good. Ripens last of September and first of October.

SIMON BOUVIER.

Souvenir de Simon Bouvier.

Originated in 1833, with M. Grégoire, of Jodoigne, Belgium. Tree moderately vigorous. Young wood rich brown.

Fruit medium or above, obovate obtuse pyriform. Skin rough, yellow, netted, patched, and dotted with russet, and a few specks and marblings of crimson in the sun. Stalk short, inserted in a shallow, broad cavity. Calyx open. Segments reflexed. Flesh white, buttery, melting, juicy, sweet, perfumed. October, November. (Al. Pom.)

SKINLESS.

Poire sans Peau.
Fleur de Guignes.

Sanspeau.
Precocoe de Glad.

Frûhe Rousselet.

The Skinless is a very nice little Pear, with a remarkably thin, smooth skin, and a delicate perfumed flavor. It bears in clusters, and very regularly. It is not first-rate, but is esteemed by many.

Fruit below medium size, long pyriform. Skin very smooth and thin, pale green, becoming light yellow, speckled with light red in the sun. Stalk long, slender, curved, inserted in a very trifling cavity. Calyx closed, set in a small basin. Flesh white, juicy, half melting, with a sweet and slightly perfumed flavor. Good. Middle of August.

SOLDAT LABOUREUR.

Auguste Van Krans.

Blumenbach.

Soldat Esperen.

A seedling of Major Esperen's, produced about 1820. Tree vigorous, upright, an early and abundant bearer. Young wood dull grayish reddish brown.

Fruit rather large, roundish obovate pyriform. Skin yellow, patched, netted, and dotted with russet. Stalk rather stout, long and curved, inserted in a small, abrupt cavity. Calyx open, scarcely sunk. Basin very small. Flesh yellowish, slightly granular, melting, juicy, with a sugary, vinous, perfumed flavor. Good to very good. October, November.

SOUVENIR DU CONGRESS.

This Pear was originated by M. Morel, of Lyon-Vaise, France, and by him dedicated to the Pomological Congress of France. Tree vigorous and fertile, pyramidal in form.

Fruit large to very large, resembling in form the Bartlett. Skin smooth, of a handsome yellow at maturity, washed with bright red, or carmine, on the side exposed to the sun. Flesh much like the Bartlett, having the musky flavor, though in a less degree. Its maturity commences in August and continues in September. (Revue Horticole.)

SOUVENIR D'ESPEREN.

This seedling Pear of Major Esperen's proves one of the very best, either for amateur or market cultivation. Tree vigorous, healthy, hardy, and productive, and holds its foliage well and late. Young wood olive reddish yellow brown.

Fruit large, oblong pyriform. Surface uneven. Skin greenish yellow, mostly covered with dull rough russet, especially around the stalk

Souvenir d'Esperen.

and calyx. Stalk long, inclined, set in a slight cavity, sometimes by a lip. Calyx open. Segments medium, erect, sometimes a little recurved. Basin small, narrow, uneven. Flesh yellowish, juicy, vinous, aromatic. Very good. October, November.

SOUVENIR DE LA REINE DES BELGES.

A Belgian Pear seedling of M. Grégoire. Tree vigorous and productive.

Fruit above medium, acute pyriform, pale yellow, tinged with crimson brown in sun, patched and dotted with thin russet. Stalk short,

enlarged at end, and inserted by a ring. Flesh yellowish white, half fine, melting, juicy, sweet, perfumed. October, November. (An. Pom.)

SOUVENIR FAVRE.

A French Pear, originated with M. Favre in 1850, and first fruited in 1857. Young wood reddish olive brown.

Fruit above medium, oblong obtuse pyriform, pale yellow, deeper in the sun, and dotted with many gray dots, or reddish in the sun. Stalk rather stout, inserted with a slight cavity. Calyx open, with long half-erect segments. Flesh a little coarse, half melting, juicy, sweet, and perfumed. November, December. (An. Pom.)

SOUVERAINE D'ÉTÉ.

Fruit below medium, roundish obovate pyriform. Skin light yellow, with numerous dots, which are crimson on the sunny side. Stalk short, in a narrow cavity, frequently by a lip. Calyx partially closed. Basin medium. Flesh whitish, juicy, melting, sugary, vinous, aromatic. Good. Ripens first of September.

SOUVERAINE DE PRINTEMPS.

Poire de Printemps.

A French Pear. Young wood dark olive reddish brown.

Fruit medium, irregular in form, generally roundish obovate, slightly pyriform. Skin rough, greenish yellow, partially netted and patched with rough dark russet, and thickly sprinkled with russet dots. Stalk curved, enlarged at insertion, in a small cavity, sometimes a lip. Calyx large and open. Flesh whitish, juicy, melting, sweet, pleasant. Good to very good. October.

SPANISH BON CHRÉTIEN.

Bon Chrétien d'Espagne.	Bon Chrétien doré d'Espagne.
Spina.	Van Dyck.
De Janvry.	Compagnie d'Ostende.
Bon Chrétien d'Automne.	Janvry.
Gratiote d'Automne.	Grosse Grande Bretagne dorée.
Pr. sident d'Espagne.	Vermillon d'Espagne d'Hiver.
Safran d'Automne.	Gracioli de la Toussaint.
Safran rosat d'Automne.	Vandyck.
Bon Chrétien Jaune d'Automne.	Good Christian of Spain.
Blanche.	Spanish Warden.
Grosse Grande Bretagne.	Autumn Bon Chrétien.
Bon Chrétien Spina.	

A very old variety. Tree a good bearer, and the fruit highly valued for cooking.

Fruit large, pyriform. Skin at maturity deep yellow, with a brilliant red cheek, and dotted with reddish brown specks. Flesh white, crisp, or half breaking, good for cooking. December to January.

STEINMITZ CATHERINE.

A Pennsylvania Pear. Tree very vigorous and productive.

Fruit medium or small, oblong pyriform, greenish, with a tinge of brown in the sun. Flesh white, moderately juicy, half melting, vinous. Good. September.

STEINMITZ SPICE.

Origin, Pennsylvania.

Fruit small, roundish pyriform, greenish yellow, with nettings, patches, and dots of russet. Flesh whitish green, juicy, melting, sweet pleasant, aromatic. Good. September.

STERLING.

De Mott.

Origin, Livingston Co., N. Y.; grown from seed brought from Connecticut. Tree vigorous, upright. Young wood grayish-yellowish brown, an early bearer, and productive.

Fruit medium, nearly round, slightly oval, very obscurely pyriform.

Sterling.

Skin yellow, sometimes with a few small patches of russet, and on the sunny side a mottled crimson cheek. Stalk rather stout, inserted in a slight cavity, sometimes by a ring. Calyx open, in a medium, rather uneven basin. Flesh rather coarse, juicy, melting, with a very sugary, brisk flavor. Good to very good. Ripens last of August and first of September.

STEVENS' GENESEE.

Guernsey.
Louise de Prusse.
Crottée.
Doyenné Galeux.
Saint Michel Crotté.

Philippe Strié.
Doyenné Crotté.
Passa-tutti.
Stephen's Genesee.
Genesee.

Beurré des Belges.

This admirable Pear, combining in some degree the excellence of the

Doyenné and Bergamotte, is reputed to be a seedling of Western New York. It originated on the farm of Mr. F. Stevens, of Lima, Livingston Co., N. Y. Although placed among autumn pears, it frequently ripens here at the end of August, among the late summer varieties. Young shoots diverging, dark gray.

Fruit large, roundish, and of a yellow color. Stalk about an

Stevens' Genesee.

inch long, stout, thicker at the base, and set in a slight, rather one-sided depression. Calyx with short, stiff divisions, placed in a smooth basin of only moderate depth. Flesh white, half buttery, with a rich aromatic flavor. Good to very good. First of September.

STONE.

Origin, Ohio. Tree vigorous and productive.

Fruit large, roundish pyriform, uneven. Skin bright yellow with a sunny cheek. Stalk large, long, and curved. Calyx large. Basin open, broad, and shallow. Flesh white, somewhat buttery, slightly astringent. August.

STYER.

Origin uncertain, introduced by Alan W. Corson, of Montgomery Co., Pa. Tree a very vigorous grower. Shoots stout and short-jointed, productive. Young wood olive yellow brown.

Fruit medium or below, roundish oblate. Skin pale yellow, netted, patched, and dotted with cinnamon russet. Stalk rather short, inserted

in a small, shallow cavity. Calyx almost obsolete. Basin narrow, moderately deep. Flesh yellowish white, somewhat gritty at the core, buttery, melting. Good to very good. Ripens middle of September.

STYRIAN.

Keele Hall Beurré.

This very bright-colored and excellent Pear comes from England. Tree vigorous and productive. Young shoots dull grayish olive brown.

Fruit medium or above, obovate pyriform. Skin pale yellow, lightly shaded with crimson in the sun, traces and patches of russet, and numerous brown dots. Stalk rather long, inclined, curved, set in a small cavity, sometimes by a lip. Calyx partially closed. Segments a little recurved. Basin uneven. Flesh white, a little coarse near the core, juicy, melting, sweet, aromatic. Good. September.

SUCRE DE TERTOLAN.

Sucre d'Automne de Tertolen.

Sucre Vert d'Automne de Tolsduyn.

Originated in Holland.

Fruit below medium, roundish pyriform, pale green, mostly covered, netted, patched, and dotted with russet. Stalk rather long. Flesh white, tinged with yellow, half melting, juicy, sweet, perfumed. Last September, early October. (Verg.)

SUCRÉE DE HOYERSWERDA.

Sugar of Hoyerswerda.

Sucre Noir d'Été.

Sucre-vert d'Hoyerswerda.

A pleasant German Pear, of peculiar flavor, good when ripened in the house. It bears immense crops.

Fruit small, roundish pyriform. Skin pale yellowish green, thickly sprinkled with greenish russet dots. Flesh white, quite juicy, with a sweet and piquant flavor. Scarcely good. It does not keep long. Last of August.

SUCRÉE DU COMICE.

This Pear comes from France, and is described in the Catalogue of the Hort. Soc. of Angers as:—

Fruit of medium size, irregularly formed. Skin yellow, covered with green and russet dots. Flesh tender, sugary. Ripe in September and October.

SUCRE VERT.

Green Sugar. Bayonnaise. Gris de Chine. Verdette. Sukerey d'Automne.

An old Pear, of unknown origin.

Fruit medium or small, obovate pyriform. Skin green. Stalk medium, fleshy at its insertion in a very slight cavity. Basin shallow. Flesh juicy, melting, sweet, and pleasant. Good. October.

SUFFOLK THORN.

An English Pear, raised from seed of Gansel's Bergamot.

Fruit small, roundish pyriform. Skin yellowish, mostly covered with thin russet. Flesh rather coarse, juicy, melting. Good. October.

SUGAR TOP.

July Pear. Prince's Sugar. Prince's Sugar Top.

Fruit roundish, top-shaped. Skin smooth, yellow. Flesh white, somewhat juicy and breaking, sweet, but with little flavor. Last of July.

SULLIVAN.

Van Mons, No. 889.

Sent to this country by Van Mons, and named by Mr. Manning. Young shoots slender, diverging, reddish brown.

Fruit of medium size, oblong pyriform. Skin pale greenish yellow. Stalk an inch and a half long, stout, tapering to the stalk. Flesh juicy, melting, sweet, and pleasant. Good. September.

SUMMER ARCHDUKE.

Archiduc d'Été.	Gros Ognonet.	Archduke of Summer.
Amire roux.	Ognonet.	Brown Admired.
Amire roux de Tours.	Ognonet.	Great Onion Pear.
De-la-mi-Juillet.	Oignonet.	Oignonet Musqué.

Fruit medium, obovate pyriform. Skin smooth, yellowish green, covered with dark brownish red next the sun. Calyx open. Basin shallow. Flesh whitish, rather gritty, juicy, and sweet. Ripe early August. (Hogg.)

SUMMER BERGAMOT.

Bergamotte d'Été.

The Summer Bergamot is an old foreign variety, of small size and second quality. The tree is of feeble growth.

Fruit quite small, round. Skin yellowish green. Flesh juicy, and pretty rich in flavor, but quickly becomes mealy and dry. Last of July.

There is a *Large* SUMMER BERGAMOT, quite distinct from the above. Flesh breaking and half buttery, not rich. September. The tree grows and bears finely.

SUMMER BEURRÉ D'AREMBERG.

Raised by Thomas Rivers, of Sawbridgeworth, Herts, England. Tree hardy, moderately vigorous, upright, very productive.

Fruit medium or below, somewhat turbinate or short obovate. Skin of a lemon color, slight nettings and patches of russet, particularly around the stem. Stalk rather long, inserted in a small cavity. Calyx very small. Basin deep and narrow. Flesh tender, melting, juicy, brisk, vinous and perfumed, apt to rot at the core unless gathered early. First of September. (Gard. Chron.)

SUMMER BON CHRÉTIEN.

Bon Chrétien d'Été.	Safran d'Été.
Gratioli	Schelis
Gratioli d'Été.	Gracioli rouge.
Gratioli di Roma.	Bon Chrétien d'Été Jaune.
Summer Good Christian.	Canelle d'Été.
Musk Summer Bon Chrétien.	De Duchesse.
Sommer Apothekerbirne.	Gros Bon Chrétien d'Été.
Sommer Gute Christenbirne.	Bon Chrétien Gratioly.
Die Sommer Christenbirne.	Gros Bon Chrétien Beaulerc.
Large Sugar, of some.	William Powell.
Gros Bon Chrétien.	Stuyversant.
Beaulerc.	Richards Beurré, of some.

Endicott.

This is one of the oldest Pears, having been cultivated for the last three centuries all over Europe.

Fruit large, irregularly bell-shaped or pyriform, with swollen, *knobby* sides. Skin yellow, with an orange blush. Flesh yellowish, coarse-grained, very juicy, and of a pleasant, rich, sweet flavor. Good. Last of August, or early in September.

SUMMER CRASSANE.

Crassane d'Été.

Fruit small, roundish oblate, pale yellow, covered with crimson russet. Flesh half melting, very juicy, sweet, and aromatic. Last of August. (Hogg.)

SUMMER FRANC RÉAL.

Franc Réal d'Été.	Royale.
Fondante.	Hâtiveau Blanc.
Gros Miet d'Été.	Coule Soif.
Milan Blanc.	Gros Mouille Bouche.
Bergamotte d'Été ou Milan Blanc.	Great Mouthwater.
Milan de le Beurrière.	Beurré Blanc.

Beurré d'Été.

The origin of this Pear is unknown.

Fruit of medium size, obovate, but largest in the middle, and tapering each way. Skin pale yellowish green, dotted with small brownish green dots. Flesh white, fine-grained, buttery, sugary. Good. Ripe early in September.

SUMMER ROSE.

Épine Rose.	De Monsieur.
Caillot Rosat d'Été.	De la Montières.
Thorny Rose.	Ognon de Xaintonge.
Poire de Rose.	Rozatte du Dauphine.
Épine d'Été Couleur Rose.	Viliane d'Anjou.
Caillot Rosat.	Rozatte d'Ingrandes.
Rosenbirne, of the Germans.	Beurré Hâtif.
The Rose Pear.	D'Eau Rose.
Rose Épine Rose.	Bigarride.
De Cailleau.	Tulip'e.
De Caillot.	Brute Bonne d'Automne.
Calua Rosat.	Caillaurozat.
Caillou Rozat.	Caillorozar.

Peral del Campo.

Fruit medium, roundish. Skin faint yellow, with a red russet check. Flesh white, coarse. Last of August, not eatable.

SUMMER ST. GERMAIN.

Short's Saint Germain.
 Saint Germain de Martin.
 Saint Germain d'Été.

Joli-mont of some.
 Hoe-Langer Hoe-Liever.
 Jargonelle des Provençaux.

A pleasant, juicy summer Pear, of second-rate flavor, bearing large crops.

Fruit of medium size, obovate pyriform. Skin pale green all over the surface. Stalk an inch and a quarter long, obliquely inserted. Calyx large, in a basin scarcely sunken. Flesh juicy, tender, with a very slight acid. Poor. Last of August.

SUMMER VIRGALIEU.

Powell's Virgalieu.

Origin unknown. Tree moderately vigorous, productive.

Fruit medium, roundish pyriform. Skin yellow, slightly netted and patched with russet, and thickly sprinkled with russet dots. Stalk rather long, often curved, set in a small cavity. Calyx open. Segments recurved. Basin shallow, uneven. Flesh yellowish, juicy, melting, a little vinous. Good. August.

SUPERFONDANTE.

Fruit of medium size, obovate. Skin smooth, pale yellow, marked with russet. Flesh white, buttery, melting, and good. October.

SUPRÊME DE QUIMPER.

This nice little Pear is of Belgian origin. Tree moderately vigorous, upright and productive. Young wood olive yellow brown, very short-jointed.

Fruit medium, roundish, slightly pyriform. Skin fine, clear yellow, richly shaded with red, somewhat specked and netted with russet. Stalk rather short, obliquely inserted, without cavity, by a slight appearance of a lip. Calyx open or partially closed. Basin shallow. Flesh whitish, juicy, melting, sweet and perfumed. Good to very good. Ripe early in August. Should be gathered very early, or it becomes dry.

SURPASSE MEURIS.

Ferdinand Demeester.

A seedling of Van Mons'. Tree vigorous, very productive.

Fruit medium, roundish, slightly oval. Skin greenish yellow, sometimes shaded with dull crimson in the sun, and thickly sprinkled with brownish dots. Stalk stout, fleshy at insertion, in a shallow depression. Calyx large, open. Segments long, recurved. Basin shallow, uneven. Flesh whitish, juicy, buttery, half melting, sweet. Good. November.

SURPASSE VIRGALIEU.

Surpasse Virgouleuse.

Colmar Van Mons, erroneously.

The precise origin of this very delicious fruit is not known. It was first sent out from the nursery of the late Mr. Andrew Parmentier, of Brooklyn, under this name, and is, perhaps, an unrecognized foreign

Pear, so named by him in allusion to its surpassing the favorite Virgalieu (White Doyenné) of New York.

Fruit rather large, roundish, sometimes roundish obovate. Skin smooth, pale lemon yellow, with a very few minute dots, and rarely a little faint red on the sunny side. Stalk rather more than an inch long, not deeply planted in a cavity rather higher on one side. Calyx rather small, and pretty firm, set in a slight, smooth basin. Flesh white, exceedingly fine-grained and buttery, abounding with delicious, high-flavored, aromatic juice. Very good. October.

Surpasse Virgalieu.

SUZETTE DE BAVAY.

Raised by Major Esperen. Tree vigorous, and very productive.

Fruit small, roundish oblate. Skin yellowish, sprinkled with minute dots, and some traces of russet. Stalk curved, inserted in a small cavity. Calyx open. Basin shallow and uneven. Flesh whitish, melting, sweet, and pleasant. Good. Only valuable for cooking. January to March.

SWAN'S EGG.

Moor-fowl Egg, incorrectly.

A very old Pear, unworthy cultivation.

Fruit small, oval. Skin pale green, washed with pale brown on the sunny side, and dotted with brownish specks. Flesh soft, juicy, with a sweet, somewhat musky flavor. October.

SWISS BERGAMOT.

Bergamotte Suisse.

Striped Bergamot.

Bergamot Rayée.

A very pretty, roundish, striped Pear. Branches often striped.

Fruit of medium size, roundish, a little inclined to turbinate. Skin smooth, pale green, striped with yellow and pale red. Flesh melting, juicy, sweet, and pleasant. Good. October.

SYLVANGE.

Bergamotte Sylvange.
Green Sylvange.
Sylvanche.

Bergamot Sylvanche.
Silvanbirne.
Sylvange Pierard.

A foreign variety, superseded.

Fruit roundish obovate. Skin rough, pale green, with a slightly darker green cheek. Flesh greenish white, juicy, tender, and melting, with a sweet, agreeable flavor. Good. October, and keeps a long time.

TARDIF DE MONS.

Fruit oblong obovate. Skin yellow, with an orange tinge in sun, and strewed with large russety dots. Flesh white, tender, buttery, melting, very juicy, rich, sugary. November. (Hogg.)

TARQUIN.

An old variety, which we have never fruited. The description by Prince resembles that of Belle Williams, recently received as new.

Fruit large, oblong pyriform, with a shallow groove from one end of the fruit to the other. Skin greenish yellow, marbled over with fawn. Stalk medium length, enlarged, with a fleshy appearance near its junction with the fruit. Flesh breaking without being dry, rather delicate, and has a slight acidity. Good. Ripens April, May.

TARQUIN DES PYRÉNÉES.

Tree vigorous.

Fruit large, pyriform. Stem long, stout, fleshy at its junction, without cavity. Calyx large, open, with persistent segments, in a broad, irregular basin, surrounded by russet. Skin green, sprinkled or patched with russet, and thickly covered with brown dots. Flesh of poor quality, a very long keeper, and said to keep two years. Only a cooking Pear.

TAYLOR PEAR.

Merriweather.

Originated on the farm of Mr. Merriweather, near Charlottesville, Albemarle Co., Va. Tree vigorous. Young wood clear olive brown, productive.

Fruit medium, roundish oblate. Skin light green, mottled with dark green, netted and dotted with russet. Stalk medium. Cavity shallow. Calyx small, open. Flesh yellowish, coarse, buttery, juicy, half melting, sweet, and pleasant. Good. November, December.

TEA.

Raised by Mrs. Ezra Merchant, of Milford, Conn. The seed was found in a pound of tea, which she purchased at the store, hence its name. Tree vigorous and productive. Young wood olive yellow.

Fruit medium, obovate, inclining to pyriform. Skin lemon yellow, with numerous small brown dots, and sometimes a reddish cheek, netted and patched with russet. Stalk rather stout, inserted obliquely under a lip in a very small cavity. Calyx half closed. Basin shallow. Flesh white, fine, juicy, melting, and vinous. Good to very good. Ripens last of August to middle of September.

THEODORE VAN MONS.

This Belgian Pear, supposed one of Van Mons' seedlings, originated about 1827, but was not brought to notice until about 1843. The tree is a vigorous, upright grower, quite productive. The young wood light yellow reddish brown.

Theodore Van Mons.

Fruit medium or above, oblong pyriform. Skin greenish or pale yellow, with traces and patches of russet, and many gray and green dots. Stalk curved. Cavity slight, russeted. Calyx open. Segments reflexed. Flesh whitish, rather coarse, juicy, melting, vinous. Good to very good September, October.

THÉRÈSE KUMPS.

A Belgian Pear, introduced in 1847. Tree vigorous, productive.

Fruit medium, oblong pyriform, pale yellow, slightly tinted with brownish in sun, small patches, large specks and dots of thin russet. Stalk medium, rough, inserted with rings at base. Calyx with short, almost erect segments. Flesh yellowish white, half fine, melting, juicy, sweet, vinous, perfumed. November. (An. Pom.)

THOMPSON'S.

This Pear, received by us from the Horticultural Society of London, was named in honor of Mr. Robert Thompson, the head of the fruit department in the Society's garden, to whose pomological acumen the horticultural world is so largely indebted. Tree vigorous and productive. Fruit variable. Young wood reddish yellow brown.

Fruit of medium size, obovate pyriform, slightly irregular in surface. Skin pale lemon yellow, with a few small russet dots and patches and streaks. Stalk pretty stout, an inch or more long, inserted in a blunt, uneven cavity. Calyx open, stiff, often without divisions. Basin abrupt, uneven. Flesh white, buttery, melting, sugary, slightly aromatic. Good to very good. October and November.

THOORIS.

A Belgian Pear, introduced in 1854, and unworthy cultivation.

Fruit below medium, oval, pale yellow, thickly sprinkled with brown dots. Flesh white, coarse, dry, sweet, and poor. Early September.

THUERLINCKX.

Tuerlinckx.

Beurré Tuerlinckx.

This variety was grown from seed and first exhibited in 1848, by M. Thuerlinckx, of Malines, Belgium. Tree moderately vigorous.

Fruit very large, regular oblong obovate pyriform. Skin dull greenish, with a shade of brown at ends, and marblings of dull dark green and brown. Stalk medium, inserted without depression by a ring. Flesh white, buttery, acidulous. November, December. (Al. Pom.)

TILLINGTON.

Raised in the village of Tillington, near Hereford, England, and first exhibited by T. A. Knight, Esq., before the London Horticultural Society, in 1820. Tree hardy and productive.

Fruit medium size, short pyriform, greenish yellow, with light brown russet dots. Stalk short. Calyx open. Flesh yellowish, tender, buttery, melting, not juicy, vinous, aromatic. Good. October.

TOTTEN'S SEEDLING.

Raised by Colonel Totten, of New Haven, Conn. Tree vigorous. Young wood dull olive yellow brown.

Fruit small, roundish pyriform, pale yellow, with a shade of crimson in the sun, traces, patches, and dots of russet. Stalk long. Calyx open. Flesh white, sweet. Poor. September.

TRESCOTT.

Originated on the farm of Niles Trescott, Cranston, R. I.

Fruit medium size, roundish obovate, orange yellow, with patches of cinnamon russet. Flesh fine-grained, melting, juicy, pleasant. Good. Last September. (Hort.)

TRIOMPHE DE JODOIGNE.

A Belgian Pear, seedling of M. Bouvier in 1830, introduced in 1843. Tree vigorous and productive. Young wood short-jointed, dull grayish brown.

Fruit large, obovate ovate obtuse pyriform. Surface uneven. Skin pale greenish yellow, shaded and mottled with crimson in the sun, patches, nettings, and traces of russet, and thickly sprinkled with brown and green dots. Stalk rather long, a little inclined, fleshy at its insertion by a ring. Cavity small. Calyx open. Segments short and stiff. Basin small, uneven. Flesh whitish, coarse, juicy, half melting, sweet. Good to very good. October.

TRIOMPHE DE LOUVAIN.

Of Belgian origin. Tree vigorous, productive, an early bearer.

Fruit medium, roundish oblate. Skin rather rough, greenish yellow, mostly covered with thin dull russet, with a dull red cheek in sun, many russet brown dots. Stalk rather short, stout. Cavity medium. Calyx large, open. Segments recurved. Flesh whitish, coarse, not juicy or melting, sweet. Good. September.

TRUCKHILL BERGAMOT.

Fruit medium or above, roundish oblate. Skin yellow, with crimson and fawn in the sun, sprinkled with gray and green dots. Stalk rather short. Cavity deep. Calyx open. Basin deep, abrupt, uneven. Flesh half melting, somewhat coarse and gritty, moderately juicy. Good. October.

TWENTY-FIFTH ANNIVERSAIRE DE LEOPOLD I.

This Pear, with its unfortunate long name, is a seedling of M. Grégoire, Jodoigne, Belgium. The tree is of medium vigor, and very productive.

Fruit medium to large, oval obovate pyriform. Skin pale greenish yellow, with a few patches of crimson in the sun, and netted, patched, and dotted with russet. Stalk medium or slender. Cavity narrow. Calyx with half-erect segments. Flesh white, fine, melting, buttery, juicy, sweet, with a delicious perfume. November. (An. Pom.)

TYLER.

An American variety. Tree moderately vigorous. Young wood reddish yellow brown.

Fruit below medium, roundish pyriform, yellow, netted and patched and dotted with russet. Stalk long and slender, in a moderate cavity.

surrounded by russet. Calyx open. Basin shallow and uneven. Flesh white, coarse, granular, buttery, melting, juicy, brisk, and vinous. Good. October.

TYSON.

A native seedling, found in a hedge on the farm of Jonathan Tyson, of Jenkintown, near Philadelphia. Tree an upright, vigorous grower, but a tardy bearer, very productive. Young wood olive yellow brown.

Fruit medium or below, acute pyriform. Skin clear, deep yellow at full maturity, slightly russeted, with a fine crimson cheek, and numerous

Tyson.

minute brown dots. Stalk long and curved, generally inserted by a fleshy ring or lip. Calyx open. Basin shallow. Flesh rather fine, juicy, melting, very sugary, and somewhat aromatic. Very good to best. Ripens last of August and first of September.

UPPER CRUST.

A seedling of South Carolina, and introduced by Colonel Sumner.

Fruit below medium, roundish. Skin greenish, covered with dots

and patches of russet. Stalk rather short and stout. Cavity broad, shallow. Calyx large, open. Flesh granular, not juicy, rots at core Poor. August.

URBANISTE.

Count Coloma.
St. Marc?
Beurré Picquery.
——— Drapiez.
Coloma d'Automne.

Louise d'Orleans.
Picquery.
Louis Dupont.
Henkel d'Hiver.
Urbaniste Seedling.

The Urbaniste is a fruit which, in its delicious flavor, compares perhaps more nearly with the favorite old Doyenné or Virgalieu than any other fruit, and adds, when in perfection, a delicate perfume peculiarly its own. Its handsome size and remarkably healthy habit commend it for those districts where the Doyenné does not flourish. The tree is a

Urbaniste.

moderately vigorous grower, and though it does not begin to bear so early as some varieties, it yields abundant and regular crops, and gives every indication of a long-lived, hardy variety. For the orchard or garden in the Middle States, therefore, we consider it indispensable. With so many other fine sorts, we owe this to the Flemish, it having

been originated by the Count de Coloma, of Malines. It was first introduced into this country in 1823. Young shoots upright, short-jointed, olive yellow brown.

Fruit of medium size, often large, obovate pyriform. Skin smooth and fair, pale yellow, with gray dots, and a few russet streaks. Stalk about an inch long, rather stout, and inserted in a well-marked or rather broad depression. Calyx small, closed, and set in a narrow basin, which is abruptly and rather deeply sunk. Flesh white, yellowish at the core, buttery, very melting and rich, with a copious delicious juice, delicately perfumed. Very good or best. Ripens from the last of September till the end of November, if kept in the house.

URSULA.

Fruit below medium size, oblong acute pyriform. Skin yellow, much shaded with fine crimson in the sun, partially netted and patched, and thickly sprinkled with russet dots. Stalk stout, fleshy at base, inclined, set without cavity. Calyx open. Flesh yellowish, coarse near the core, juicy, half melting, sweet, pleasant. Good to very good. October, November.

UWCHLAN.

Dowlin.

Round Top.

Origin on the premises of widow Dowlin, Uwchlan township, Pa., near the Brandywine. Tree of moderate growth.

Fruit below medium, roundish, inclining to obovate. Skin yellow, mostly covered with golden russet. Stalk long, curved, in a slight depression. Calyx open. Basin shallow. Flesh white, melting, juicy, slightly vinous, with a fine aromatic flavor. Good to very good. If not picked early it is disposed to rot at the core. Ripens last of August.

VALENTINE.

Originated on Long Island.

Fruit above medium, oblong acute pyriform, pale yellowish green, tinge of red in the sun. Flesh white, juicy, melting, sweet, pleasant. Good. August.

VALLÉE FRANCHE.

De Vallée.

Bonne de Keinzheim.

De Keinzheim.

An old variety, unworthy cultivation.

Fruit medium, obovate pyriform. Skin yellowish green. Flesh white, not fine-grained, quite juicy, but not buttery, and of a simple sweet flavor. Last of August.

VAN ASSCHE.

Van Assene.

Van Asshe.

This Flemish Pear is quite handsome but of variable quality. Tree vigorous, productive. Young wood reddish yellow brown.

Fruit medium to large, roundish obovate pyriform. Skin pale whit-

ish yellow, shaded, mottled, and dotted with crimson, and thickly covered with conspicuous brown dots. Stalk curved, inclined, set in a shallow cavity, sometimes by a lip. Calyx partially closed. Segments short, erect. Basin abrupt, large, deep, slightly corrugated. Flesh white, juicy, melting, sweet, pleasant. Good to very good. September.

VAN BUREN.

An American seedling, raised by Governor Edwards, of New Haven, Conn. Only valuable for cooking.

Fruit medium, roundish oblate. Skin clear yellow, with a rich orange-red blush next the sun, regularly dotted with conspicuous brownish specks, and slightly touched with greenish and russet spots. Flesh white, crisp, sweet. October.

VAN DEVENTER.

Origin, New Jersey. Tree very vigorous, very productive.

Fruit rather small, oblong ovate pyriform, greenish yellow, shaded with brownish red in the sun, with many gray and green dots. Stalk inclined, inserted by a lip, and sometimes rings. Calyx partially closed. Basin shallow. Flesh whitish, juicy, tender, half melting, sweet, pleasant. Good. Middle August.

VAN DE WEYER BATES.

Vandeweyer Bates.

Fruit below medium, roundish obovate, pale lemon yellow, covered with small brown dots, and a few veins of the same color. Calyx large, open. Flesh yellow, buttery, juicy, rich, sugary, with a pleasant aroma. One of the finest late Pears. March to May. (Hogg.)

VAN MARUM.

Beurré Van Marum.	Calebasse Carafon.
Grosse Calebasse du Nord.	Calebasse Moustre.
Bouteille.	Calebasse Monstrueuse du Nord.
Monstrueuse du Nord.	Calebasse Royale.
Triomphe du Nord.	Calebasse de Holland.
Triomphe de Hasselt.	Calebasse Impériale.
Poire Van Marum.	Calebasse du Nord.
Calebasse de Nerckman's.	Calebasse Monstrueuse.

Originated with Van Mons. Tree a vigorous grower, productive. Young wood reddish brown.

Fruit large to very large, oblong pyriform. Skin yellow, rarely with a little red. Stalk rather long and slender, inserted in a flattened cavity. Calyx large, set in a regular shallow basin. Flesh white, liable to rot at the core, half melting, not very juicy, but sweet and pleasantly perfumed. Good. October.

VAN MONS LÉON LE CLERC.

Van Mons Léon le Clerc was originated by M. Léon le Clerc, an amateur cultivator, of Laval, in France, who, in naming it, desired to couple his own name with that of his friend, Dr. Van Mons—"le grand prêtre de Pomona." Its young shoots are strong, upright, olive-colored.

Fruit large, oblong obovate. Skin yellowish, much mingled with brown over nearly the whole surface, and slightly russeted near the stalk. Stalk an inch and a half long, rather stout, obliquely inserted, with little depression. Calyx small, open, set in a shallow basin. Flesh yellowish white, buttery, and melting, with a sugary flavor. Good to very good. October and November.

VAN MONS ST. GERMAIN.

St. Germain Nouveau.

A seedling of Professor Van Mons', and considered a great acquisition to the list of fine Pears. Tree vigorous, productive.

Fruit rather above medium, regular, oblong obovate pyriform, greenish yellow, shaded with dull green, and with fawn russet patches and minute black dots. Stalk long, inserted with scarcely any depression, surrounded by a few folds. Flesh white, half fine, melting, juicy, sweet, perfumed. September. (Al. Pom.)

VAUQUELIN.

Poire Vauquelin.

Saint Germain Vauquelin.

A variety from Rouen, France. Tree a vigorous grower. Young wood reddish brown.

Fruit medium, obovate pyriform, sometimes oblong obovate pyriform. Skin greenish, a little brownish in the sun, some patches and traces of russet, and russet dots. Stalk stout, inserted with little or no cavity, and base enlarged. Flesh whitish, juicy, melting, vinous, astringent. Good. December, January.

VERLAINE.

Verlaine d'Été?

One of Van Mons' seedlings.

Fruit medium, oblong obovate pyriform, pale yellow orange in sun, with patches and dots of brownish red. Stalk slender, inserted in a small cavity. Calyx with short, stiff segments. Flesh white, half fine, melting, juicy, sweet, vinous. September. (An. Pom.)

VERMILLON D'EN HAUT.

A foreign variety. Tree vigorous, with strong young shoots of a light olive yellow brown.

Fruit medium size, obovate pyriform, greenish yellow, shaded with red in the sun. Flesh fine, melting, juicy, sweet. September.

VERMONT.

Vermont Seedling.

A supposed seedling, taken from Vermont to near Oswego, N. Y., where it has fruited. Tree an upright grower. Young wood grayish olive.

Fruit medium or below, ovate obovate obtuse pyriform, pale whitish

yellow, slight red in the sun, traced, netted, and dotted with russet. Stalk slender. Cavity deep. Calyx with erect segments. Flesh whitish, juicy, melting, sweet, pleasant. Good to very good. October.

VERULAM.

Black Beurré.
Spring Beurré.

Buchanan's Spring Beurré.
New Spring Beurré.

An old variety, valuable only for cooking.

Fruit large, obovate, dull green, covered with thin russet in the shade, and reddish brown in the sun, thickly dotted with gray dots. Stalk slender. Calyx open. Flesh crisp, coarse-grained, and when stewed assumes a fine rose color. January to March. (Hogg.)

VEZOUZIERE.

This is a seedling raised by M. Léon le Clerc, from seeds of the Van Mous Léon le Clerc. Tree a vigorous grower, productive. Young wood reddish olive brown.

Fruit medium or below, nearly globular, slightly oblate. Skin yellowish, sprinkled with minute gray and green dots. Stalk long, curved, inserted in a broad, shallow cavity. Calyx open, persistent, in a wide, uneven basin. Flesh very juicy, melting, sweet, and agreeable. Good to very good. September.

VICAR OF WINKFIELD.

Le Curé.
Monsieur le Curé.
Clion.
Belle de Berry.
Belle Héloïse.
Bon Papa.
De Clion.
Monsieur.
Belle Andreane.
De Monsieur Le Curé.
Belle Adrienne.
Vicaire de Winkfield.

Missive d'Hiver.
Cueillette d'Hiver.
Comice de Toulon.
Du Curé.
Grosse Allongée.
Du Pradel.
Wicar of Wakefield.
Pradello de Catalogne.
Curette.
Jouffroy.
Messire d'Hiver.

This large and productive Pear was discovered, as a natural seedling, in the woods of Clion, France, by a French *curate*, whence it obtained in France the familiar name of *Le Curé*, or *Monsieur le Curé*. A short time after it became known at Paris, it was imported into England by the Reverend Mr. Rham, of Winkfield, Berkshire, and cultivated and disseminated from thence, becoming known in the neighborhood of London as the *Vicar of Winkfield*. With regard to its merits there is some difference of opinion—some persons considering it a fine fruit. It is always remarkably large, fair, and handsome. We think it always a first-rate baking Pear. Occasionally we have tasted it fine as a table Pear, but generally it is astringent, and only third-rate for this purpose. If ripened off in a warm temperature, however, it will generally prove a good second-rate eating Pear. But its great productiveness, hardiness, and fine size, will always give it a prominent place in the orchard as a profitable market cooking Pear. The tree grows thriftily, with drooping fruit branches. Shoots diverging, dark olive brown.

Fruit large and long pyriform, often six inches long, and a little one-sided. Skin fair and smooth, pale yellow, sometimes with a brownish

Vicar of Winkfield.

cheek, and marked with small brown dots. Stalk an inch or an inch and a half long, slender, obliquely inserted without depression. Calyx large, open, set in a basin which is very slightly sunk. Flesh greenish white, generally juicy, but sometimes buttery, with a good, sprightly flavor. November to January.

VICOMTE DE SPOELBERCH.

De Spoelberg.

Beurré de Spoelberg.

Despoilberg.

A seedling of Van Mons', described in 1830, and dedicated to M. le Vicomte de Spoelberg de Lowenjoul. Tree vigorous, productive. Young wood reddish yellow brown.

Fruit medium, roundish acute pyriform. Skin pale yellow, covered with numerous small dots, and small patches of russet. Stalk curved, fleshy at its insertion, with slight russet. Calyx open. Basin small. Flesh white, battery, juicy, melting, not high flavored. Good. November, December.

VINEUSE.

Vineuse d'Esperen.

A seedling of Major Esperen's, first introduced in 1840. Tree vigorous, with slender wood, productive. Young wood reddish olive brown.

Fruit medium or above, obovate ovate slightly obtuse pyriform. Skin greenish, slightly bronzed in the sun, a few patches and nettings of russet, and many small brown and green dots. Stalk medium. Cavity small. Calyx large, open. Basin broad, shallow. Flesh coarse, juicy, melting, acid. Good. October.

VIRGOULEUSE.

Poire-glace.

Le Virgoule.

Poire de Glace.

Chambrette.

Virgolese.

Ice Pear.

Bujaleuf.

Chambrette d'Hiver.

La Virguleuse.

An old French variety, of little value.

Fruit medium, pyriform. Skin very smooth, yellowish green at maturity, sprinkled with numerous gray or reddish dots. Flesh white, luttary. Good. November to January.

VON ZUGLER.

A new Belgian variety. Tree slender. Young wood olive. Productive.

Fruit medium size, roundish acute pyriform. Skin yellow, nearly covered with cinnamon russet. Stalk rather short, inclined in a slight depression by a fleshy lip. Calyx small, open. Segments short, erect. Basin small. Flesh white, juicy, melting, sweet, slightly aromatic. Very good. September.

WADLEIGH.

Origin, New Hampshire.

Fruit medium, nearly globular. Fine yellow, slightly netted and patched with russet. Stalk short, stout, inserted in a slight cavity, sometimes by a fold or lip. Calyx with small short segments. Flesh white, fine, a little gritty, juicy, melting, pleasant. Good. September.

WALKER.

No. 135, Van Mons.

This is a seedling of Van Mons', and sent to Robert Manning, of

Salem, Mass., in 1834-5, under number. The tree is a vigorous, healthy grower, upright habit. The young wood grayish.

Fruit large, oblong pyriform. Skin greenish yellow, sometimes a shade of crimson in the sun. Slight nettings and patches of russet, and thickly sprinkled with brown dots. Stalk long, fleshy at insertion, in a slight cavity by a ring. Calyx open or partially closed. Segments short, erect. Basin small. Flesh white, a little coarse, juicy, half melting, vinous, a little astringent. Good to very good. October.

WASHINGTON.

Robinson.

Naaman's Creek.

Robertson.

Namen's Creek.

Washington.

A beautiful American Pear, of very excellent quality, which is a native of Delaware. It was discovered there in a thorn hedge, near Naaman's Creek, on the estate of Colonel Robinson. It is one of the most attractive and distinct of our native desert Pears. Young shoots slender, diverging, reddish yellow brown.

Fruit of medium size, oval obovate, regularly formed. Skin smooth, clear lemon yellow, with a sprinkling of reddish dots on the sunny side. Stalk about an inch and a half long, inserted even with the surface, or with a slight depression. Calyx small, partly closed, and set in a shallow basin. Flesh white, very juicy, melting, sweet, and agreeable. Very good. Middle of September.

WATSON.

An American variety, of poor quality.

Fruit below medium, roundish slightly obovate, yellowish, covered mostly with russet. Flesh whitish, coarse, moderately juicy, sweet. Early September.

WEBSTER.

Originated at Hudson, N. Y. Tree a moderate grower, productive. Young wood reddish brown.

Fruit medium, globular obtuse pyriform. Skin yellow, sometimes a tinge of crimson in the sun. Traces and nettings of russet, and many minute brown dots. Stalk long, slender, inclined, set in a small russeted cavity. Calyx open. Segments long, reflexed. Flesh white, juicy, melting, sweet, slightly aromatic. Good to very good. November.

WELBECK BERGAMOT.

Hepworth.

Fruit above medium, roundish, uneven in outline, bossed about the stalk, lemon yellow, blush of light crimson in the sun, and thickly sprinkled with large russet specks. Calyx small, open. Basin shallow. Flesh white, rather coarse-grained, half melting, juicy, sweet, without flavor. November. (Hogg.)

WELLINGTON.

Raised by — Wellington, Braintree, Mass., and first shown before the Massachusetts Horticultural Society in 1864.

Fruit large, oblong obovate obtuse pyriform. Skin clear pale yellow, clouded with green. Stalk very short. Calyx open, with short, stiff, slightly incurved segments. Basin shallow. Flesh yellowish white, little coarse, juicy, melting, sweet, with a peculiar aroma. November. (Hov. Mag.)

WENDELL.

A seedling of Van Mons', named in honor of Dr. H. Wendell, Albany, N. Y. Tree vigorous, upright.

Fruit rather small, roundish pyriform, pale yellow, shaded in sun with crimson, and sprinkled with dots. Calyx small, partially open. Flesh whitish, fine-grained, juicy, melting, buttery, sweet, pleasant. Good. September.

WESTCOTT.

A native of Rhode Island. Tree vigorous, an early bearer, very productive.

Fruit medium, irregular globular. Stalk long, curved, rather stout, fleshy at its insertion, in a cavity of moderate depth, with a lip. Calyx very small, in a shallow furrowed basin. Color light yellow, with numerous gray dots. Flesh white, juicy, nearly melting, coarse, granular, sweet, and agreeable. Good. September, October.

WETMORE.

Raised by E. B. Wetmore, Westmoreland, N. Y. Tree upright, vigorous. Young wood reddish yellow brown.

Fruit small, roundish oval. Skin pale yellow, with nettings and patches of russet, and thickly sprinkled with russet dots. Stalk long, slender, set in a small cavity, sometimes by a lip. Calyx open. Segments short, erect. Basin shallow, slightly corrugated. Flesh white, juicy, melting, sweet, aromatic. Good to very good. October.

WHARTON'S EARLY.

Origin unknown. Tree vigorous. Young wood olive yellowish brown.

Fruit medium size, obovate oblong acute pyriform. Skin pale yellow, traces of russet, and thickly sprinkled with russet dots. Stalk long, curved, rather slender, set in a slight cavity, sometimes by a lip. Calyx open. Segments short, erect. Basin small, uneven. Flesh whitish, juicy, melting, sweet, slightly musky. Good or very good. August.

WHEELER.

Originated in Greenwich, R. I. Tree vigorous, upright. Young wood olive yellow brown.

Fruit medium, roundish obovate. Skin greenish yellow, a few traces and patches of russet, and numerous gray and green dots. Stalk medium. Cavity small. Calyx open. Basin abrupt, uneven. Flesh white, juicy, melting, sweet, pleasant. Good. August.

WHIELDON.

Whieldon's McLellan.

McLellan.

Originated in the garden of Wm. W. Whieldon, Concord, Mass. The tree is moderately vigorous, and a profuse bearer.

Fruit medium or above, obovate obtuse, slightly pyriform. Skin pale yellowish green, with a tinge of red in the sun, numerous russet nettings and dots. Stalk long, rather slender, a little inclined, set in a shallow cavity. Calyx open. Segments a little recurved. Basin medium, uneven. Flesh whitish, a little gritty near the core, juicy, melting, buttery, sweet, pleasant, slightly aromatic. Good to very good. September.

WHITE DOYENNE.

Doyenné White.
Virgalieu, of New York.
St. Michael, of Boston.
Butter Pear, of Philadelphia.
Virgaloo.
Bergoloo.
Yellow Butter.
White Beurré.
White Autumn Beurré.
Dean's.
Warwick Bergamot.
Pine Pear.
St. Michel.
Reigner.
Doyenné.
Doyenné blanc.
Beurré blanc.

Poire de Limon.
Valencia.
Citron de Septembre.
Bonne-ente.
A courte queue.
Kaiserbirne.
Kaiser d'Automne.
Weisse Herbst Butterbirne.
Dechantsbirne.
Nouvelle d'Oné.
Edwige.
Carlisle.
White or Autumn Butter.
Valentia or Valencia.
Poire du Doyen.
Garner or Gardner.
Sublime Garnotte.

The White Doyenné is, unquestionably, one of the most perfect of autumn Pears. Its universal popularity is attested by the great number of names by which it is known in various parts of the world. As the Virgalieu in New York, Butter Pear in Philadelphia, and St. Michael's in Boston, it is most commonly known; but all these names, so likely to create confusion, should be laid aside for the true one, White Doyenné.* It is an old French variety, having been in cultivation over two hundred years. The branches are strong, upright, yellowish gray or light brown.

Fruit of medium or large size, regularly formed, obovate. It varies considerably in different soils, and is often shorter or longer on the same

* Virgalieu seems an American name, and is always liable to be confounded with the Virgouleuse, a very different fruit. The Doyenné (pronounced *dwoy-annay*), literally *deanship*, is probably an allusion to the Dean by whom it was first brought into notice.

tree. Skin smooth, clear pale yellow, regularly sprinkled with small dots, and often with a fine red cheek. Stalk brown, from three-fourths to an inch and a fourth long, a little curved, and planted in a small, round cavity. Calyx always very small, closed, set in a shallow basin, smooth or delicately plaited. Flesh white, fine-grained, very buttery,

White Doyenné.

melting, rich, high-flavored and delicious. Best. September—and, if picked early from the tree, will often ripen gradually till December.

The DOYENNÉ PANACHE, or *Striped Dean*, is a variety rather more narrowing to the stalk, the skin prettily striped with yellow, green, and red, and dotted with brown. Flesh juicy, melting, but not high-flavored. October.

WHITE'S SEEDLING.

Origin, New Haven, Conn. Tree a vigorous grower, very productive. Young wood olive brown.

Fruit medium, oblong ovate obovate. Skin yellow, sometimes with a brownish blush in the sun, considerably netted and patched with russet, and many russet dots. Stalk long, inclined, set in a shallow cavity, often by a fleshy lip. Calyx open. Segments short, erect. Basin small, uneven. Flesh yellowish, juicy, melting, sweet, aromatic. Good to very good. October to February.

WIEST.

From Pennsylvania. Tree a vigorous grower. Young wood reddish yellow brown, with oblong gray specks.

Fruit medium or below, roundish oval, green, shaded with dull red, and sprinkled with green and gray dots. Stalk rather stout. Calyx small, closed. Segments to a point. Flesh whitish green, juicy, melting, subacid. Good. September.

WILBUR.

The Wilbur is a native fruit, which originated in Somerset, Mass. Shoots slender, light olive brown.

Fruit below medium size, roundish ovate, pale yellow, slightly netted and patched with russet, and thickly sprinkled with russet dots. Stalk small in a small cavity. Calyx open. Segments long. Basin small. Flesh yellowish, juicy, melting, slightly astringent. Good. September.

WILKINSON.

The original tree grows on the farm of Mr. J. Wilkinson, Cumberland, R. I. The tree is very thrifty, hardy, and a regular bearer. The shoots are long, upright, stout, olive yellow, with oblong white specks.

Fruit of medium size, obovate, inclining to oval. Skin smooth and glossy, bright yellow, dotted with brown points. Stalk an inch and a quarter long, rather stout, inserted with little or no depression. Calyx small, open, and firm, set in a shallow basin. Flesh very white, juicy, melting, sweet, and rich, with a slight perfume. Good. October to December.

WILLERMOZ.

This Belgian Pear was produced in 1848. The tree is an extremely fine grower, with young shoots dark dull olive brown, very productive.

Fruit large, obovate obtuse pyriform. Skin greenish yellow, nettings and some large patches of russet, and many small russet dots. Stalk medium or rather stout, inclined, set in a small cavity. Calyx open, or partially closed. Basin abrupt. Flesh whitish, buttery, juicy, melting, coarse at core, slightly vinous. Good to very good. November, January.

WILLIAM EDWARDS.

A seedling of Ex-Governor Edwards, of New Haven, very productive, and a good baking fruit, but not juicy or melting enough for the dessert.

Fruit of medium size, obtuse pyriform, terminating rather abruptly at the stalk. Skin yellow, and at maturity profusely dotted with red and russet points or dots on the sunny side. Flesh yellowish white, buttery, sugary. September.

WILLIAM PRINCE.

Origin unknown. Tree vigorous, upright, productive.

Fruit medium, roundish pyriform. Skin greenish yellow, with a shade of crimson in the sun, and many brown dots. Stalk rather short. Calyx open. Basin shallow. Flesh white, juicy, melting, sweet. Good to very good. September, October.

WILLIAMS' EARLY.

A native fruit, which originated on the farm of Mr. A. D. Williams, of Roxbury, Mass. Tree a moderate grower. Young shoots brown red.

Fruit small, roundish slightly pyriform. Skin bright yellow, thickly sprinkled with rich scarlet dots on the sunny side. Stalk an inch and a half long, straight, a little fleshy where it joins the fruit. Calyx very short, open. Basin shallow and slightly plaited. Flesh yellowish white, a little coarse-grained at first, but, when ripe, very juicy, half buttery, with a slightly musky flavor. Good. First to the middle of September.

WILLIAMSON.

Origin on the farm of Nicholas Williamson, Long Island. Tree hardy, vigorous, and a good bearer.

Fruit medium, roundish oblate. Skin greenish yellow, a few patches and traces of russet. Stalk rather stout. Calyx open. Basin uneven. Flesh white, coarse, juicy, half melting. Good. October.

WILMINGTON.

A seedling of Passe Cohnar, raised by Dr. Brinckle, of Philadelphia. Tree a moderate grower. Young wood dull yellow brown.

Fruit medium, obovate obtuse pyriform. Skin greenish yellow, netted and patched with russet, and thickly sprinkled with russet dots. Stalk long, set in a small cavity, often by a lip. Calyx open. Segments persistent. Basin shallow, uneven. Flesh whitish green, juicy, buttery, melting, sweet, pleasant, slightly aromatic. Good to very good. September.

WINDSOR.

Summer Bell.	Belle d'Été.	Green Windsor.
Konge.	Lady Thigh.	Grosse Jargonelle.
Madame.	Bell Tongue.	Supreme.
Madame de France.	Bellissime.	Water, of some.

Watermelon, of some.

The Windsor is an old European Pear, very commonly known in some parts of this country as the Summer Bell Pear. It is a profitable market sort, bearing regularly large crops, and selling well, although in quality it is, from its astringency, almost uneatable, and to be valued only as a cooking fruit. The tree is remarkable for its stout, perfectly upright dark brown shoots.

Fruit large, pyriform or bell-shaped, widest above the middle, nar-

rowing to the eye. Skin yellowish green. Flesh white, tender or soft, coarse-grained, with a somewhat astringent juice. Rots at the core. Last of August.

WINSHIP.

Winship Seedling.

Originated in the nurseries of the Messrs. Winship, Brighton, Mass. Tree vigorous. Young wood rich dull yellow reddish brown.

Fruit medium size, oblong acute pyriform. Skin greenish yellow, with traces and patches of russet. Stalk long, rather stout, and uneven. Calyx large. Segments short, erect. Basin small, corrugated. Flesh white, coarse, not juicy or melting. Poor. August.

WINTER BONCHRÉTIEN.

Bon Chrétien d'Hiver.	De Dos.
Poire d'Angoise.	De Fesses.
Good Christian of Winter.	De Bon Crustemenien.
Winter Good Christian	De Chrétien.
Bon Chrétien de Constantinople.	Bon Chrétien de Tours.
Panchresta.	Bon Chrétien de Vernon.
Poire d'Apothécaire.	Bon Chrétien.
Crustemenie.	Bon Chrétien d'Auch.
A Tetine.	De Saint-Martin.

This is perhaps one of the oldest Pears known, having been described in 1485. Its value is only for cooking.

Fruit large, obovate obtuse pyriform. Skin dull yellow, tinge of brown in the sun, and sprinkled with russet dots. Stalk medium. Cavity small. Calyx open. Basin deep. Flesh white, crisp, juicy, sweet, perfumed. December to March.

WINTER NÉLIS.

Nélis d'Hiver.	Etourneau.
Bonne de Malines.	Bergamotte Thouin.
Beurré de Malines.	Colmar Nélis.
La Bonne Malinaise.	Thouin.
Milanaise Cuvelier.	Colmar d'Hiver.

The Winter Nélis holds, in our estimation, nearly the same rank among winter Pears that the Seckel does among the autumnal varieties. It is a very hardy and thrifty tree, and bears regular crops of pears, which always ripen well, and in succession. Branches diverging, rather slender, dark reddish brown. It is a Flemish Pear, and was originated by M. Nélis, of Mechlin.

Fruit of medium size, or usually a little below it, roundish obovate, narrowed-in near the stalk. Skin yellowish green at maturity, dotted with gray russet, and a good deal covered with russet patches and streaks, especially on the sunny side. Stalk an inch and a half long, bent, and planted in a narrow cavity. Calyx open, with stiff, short divisions, placed in a shallow basin. Flesh yellowish white, fine-grained, buttery, and very melting, abounding with juice of a rich, saccharine, aromatic flavor. Best. In perfection in December, and keeps till the middle of January.

Winter Nélis.

WINTER SECKEL.

Origin, near Fredericksburg, Va. Introduced by H. R. Roby.

Fruit small, obovate, yellow, with a brownish cheek in sun, patches and nettings of russet, and many large green and brown dots. Stalk slender. Calyx large, open. Flesh white, a little coarse at core, juicy, half melting, sweet. Good. January to March.

WINTER THORN.

Épine d'Hiver.

Épine Rose d'Hiver.

Fruit medium, roundish obovate, yellowish green, with grayish brown dots. Calyx small, open. Flesh whitish, tender, buttery, sweet, musky. November, January. (Hogg.)

WOODBIDGE'S SECKEL.

Originated at Detroit, Mich. Tree moderately vigorous.

Fruit small, ovate pyriform. Skin pale yellow, shaded and marbled with crimson in the sun, and thickly sprinkled with brown and crimson dots. Stalk long, slender. Calyx open. Flesh yellowish, juicy, melting, sweet, vinous. Very good, but rapidly decays at the core. September.

WOODSTOCK.

Origin, Vermont. Tree a moderate grower, very productive. Young wood olive brown.

Fruit medium or below, varying in form from roundish obtuse to obovate pyriform. Skin pale yellow, netted and patched, and thickly sprinkled with russet dots. Stalk long, rather slender, inserted in a small cavity, often by a lip. Calyx open. Segments long, slender, persistent. Basin abrupt. Flesh white, juicy, melting, sweet, pleasant, slightly musky. Good to very good. September.

WREDOW.

This is of unknown origin, probably French. Tree moderately vigorous, very productive. Young wood dark olive.

Fruit medium, obovate pyriform. Skin greenish yellow, shade of crimson in the sun, netted, patched, and dotted with rich golden russet. Stalk long, slender, inserted in a small cavity, sometimes by a lip. Calyx open. Segments recurved. Flesh whitish, juicy, melting, brisk, vinous. Good to very good. September.

YAT.

Yutte.
Beurré Gris d'Été.
De Hollande.
Gute Graue.

Graue Sommer Butterbirne.
Jutjesbirne.
Jut-peer.
Jutte.

Originated in Holland, of little value. Tree vigorous. Young wood reddish yellow brown.

Fruit small, obovate pyriform, green, with some large, round, light-colored specks, brown russet in sun. Flesh white, tender, juicy, sweet. Rots quickly. September.

ZEPHERIN LOUIS.

Zepherin Louis Grégoire.

Originated and first described by M. Grégoire, of Jodoigne, Belgium. Tree a moderate healthy grower.

Fruit medium, roundish obovate. Skin dull greenish yellow, clouded with brownish red, and shades of russet. Stalk very short. Cavity narrow, round. Calyx small. Flesh yellowish white, tinge of green, half melting, juicy, sweet, slightly aromatic. January. (Al. Pom.)

ZEPHIRIN GRÉGOIRE.

Raised by M. Grégoire, of Jodoigne, in 1843. Tree a free grower. Young wood smooth, light olive yellow brown.

Fruit medium, irregular, roundish acute pyriform. Skin greenish yellow, reddish in the sun, with patches of russet, and many green and gray dots. Stalk short, fleshy, very fleshy at insertion, and without a cavity. Calyx open. Segments long. Flesh whitish, melting, juicy, perfumed. Good to very good. October, November.

ZOAR BEAUTY.

Zoar Seedling.

A native of Ohio. Tree vigorous, dark brown shoots, an early and abundant bearer.

Fruit medium, acute pyriform. Skin yellow, with a beautiful crimson or carmine cheek in sun, thickly dotted with minute green dots. Stalk long, curved, fleshy at insertion, often by a ring or lip, in a small cavity. Calyx open. Segments erect, sometimes recurved. Flesh white, granular, half breaking, moderately juicy, sweet, aromatic, perfumed. Unless gathered early it rots at core. Good. Early August.

SELECT LIST OF PEARS FOR TABLE USE, MARKETING,
AND COOKING.

Ananas d'Été. Table and market.
 Baron de Mello. Table and market.
 Bartlett. Table and market.
 Beurré d'Albret. Table and market.
 Beurré d'Anjou. Table and market.
 Beurré Bosc. Table and market.
 Beurré Brignais. Table and market.
 Beurré Clairgeau. Market.
 Beurré Diel. Table and market.
 Beurré Giffart. Table.
 Beurré Gris d'Hiver Nouveau. Table and market.
 Beurré Hardy. Table and market.
 Beurré Koning. Table and market.
 Beurré Sterckmans. Table and market.
 Beurré Superfin. Table and market.
 Black Worcester. Market and cooking.
 Bloodgood. Table.
 Brandywine. Table.
 Brialmont. Table and market.
 Buffum. Table and market.
 Catillac. Market and cooking.
 Church. Table.
 Clapp's Favorite. Table and market.
 Coit's Beurré. Table and market.
 Dana's Hovey. Table and market.
 Dearborn Seedling. Table.
 Dix. Table and market.
 Doctor Reeder. Table.
 Doyenné Boussock. Table and market.
 Doyenné Comice. Table and market.
 Doyenné d'Été. Table and market.
 Doyenné Gris. Table and market.

Duchesse D'Angoulême. Table and market.
Duchesse D'Orleans. Table and market.
Edmonds. Table and market.
Emile d'Heyst. Table and market.
Flemish Beauty. Table and market.
Fondante d'Automne. Table and market.
Footc's Seckel. Table.
Fulton. Table and market.
Gansel's Bergamotte. Table and market.
Henkel. Table and market.
Howell. Table and market.
Jones' Seedling. Table and market.
Josephine Malines. Table and market.
Lawrence. Table and market.
Léon le Clerc Laval. Market and cooking.
Louise Bonne de Jersey. Table, market, and cooking.
Lycurgus. Table.
McLaughlin. Table and market.
Madame Eliza. Table and market.
Manning's Elizabeth. Table.
Maréchal de la Cour. Table and market.
Merviam. Table and market.
Onondaga. Table and market.
Paradise d'Automne. Table and market.
Pound. Market and cooking.
Prince's St. Germain. Table and market.
Rostiezer. Table and market.
Rutter. Table and market.
Seckel. Table and market.
Sheldon. Table and market.
Souvenir d'Esperen. Table and market.
Spanish Bon Chrétien. Market and cooking.
Stevens' Genesee. Table and market.
Surpasse Virgalieu. Table and market.
Tyson. Table and market.
Urbaniste. Table and market.
Vicar of Winkfield. Market and cooking.
Washington. Table and market.
White Doyenné. Table and market.
Winter Bonchrétien. Market and cooking.
Winter Nélis. Table and market.

CHAPTER XXVII.

THE PLUM.

Prunus domestica, L. *Rosaceæ*, of botanists.

Prunier, of the French ; *Pflaumenbaum*, German ; *Prugno*, Italian ; *Ciruelo*, Spanish.

THE original parent of most of the cultivated Plums of our gardens is a native of Asia and the Southern parts of Europe, but it has become naturalized in this country, and in many parts of it is produced in the greatest abundance.* That the soil and climate of the Middle States are admirably suited to this fruit is sufficiently proved by the almost spontaneous production of such varieties as the Washington, Jefferson, Lawrence's Favorite, &c. ; sorts which equal or surpass in beauty or flavor the most celebrated Plums of France or England.

USES. The finer kinds of plums are beautiful dessert fruits, of rich and luscious flavor. They are not, perhaps, so entirely wholesome as the peach and the pear, as, from their somewhat cloying and flatulent nature, unless when very perfectly ripe, they are more likely to disagree with weak stomachs.

For the kitchen the plum is also very highly esteemed, being prized for tarts, pies, canning, sweetmeats, etc. In the South of France an excellent spirit is made from this fruit fermented with honey. In the western part of this State, where they are very abundant, they are halved, stoned, and dried in the sun or ovens in large quantities, and are then excellent for winter use. For eating, the plum should be allowed to hang on the tree till perfectly ripe, and the fruit will always be finer in proportion as the tree has a more sunny exposure. The size and quality of the fruit is always greatly improved by thinning the fruit when it is half-grown. Indeed, to prevent rotting, and to have this fruit in its highest perfection, no two plums should be allowed to touch each other while growing, and those who are willing to take this pains, are amply repaid by the superior quality of the fruit.

* There are three species of wild plum indigenous to this country—of tolerable flavor, but seldom cultivated in our gardens. They are the following:—

I. THE CHICKASAW PLUM. (*Prunus Chicasa*, Michaux.) Fruit about three-fourths of an inch in diameter, round, and red or yellowish red, of a pleasant, subacid flavor, ripens pretty early. Skin thin. The branches are thorny, the head rather bushy, with narrow lanceolate serrulate leaves, looking at a little distance somewhat like those of a peach-tree. It usually grows about 12 or 14 feet high ; but on the Prairies of Arkansas it is only 3 or 4 feet high, and in this form it is also common in Texas. The DWARF TEXAS PLUM described by Kenrick is only this species. It is quite ornamental.

II. WILD RED OR YELLOW PLUM. (*P. Americana*, Marshall.) Fruit roundish oval. skin thick, reddish orange, with a juicy, yellow, subacid pulp. The leaves are ovate, coarsely serrate, and the old branches rough and somewhat thorny. Grows in hedges, and by the banks of streams, from Canada to the Gulf of Mexico. Tree from 10 to 15 feet high. Fruit ripens in July and August.

III. The BEACH PLUM, or Sand Plum. (*P. Maritima*, Wang.) A low shrub with stout straggling branches, found mostly on the sandy sea-coast, from Massachusetts to Virginia, and seldom ripening well elsewhere. Fruit roundish, scarcely an inch in diameter, red or purple, covered with a bloom. Pleasant, but somewhat astringent. Leaves oval, finely serrate.

One of the most important forms of the plum in commerce is that of *prunes*, as they are exported from France to every part of the world. We quote the following interesting account of the best mode of preparing prunes from the *Arboretum Britannicum*.—

The best *prunes* are made near Tours, of the St. Catherine Plum and the Prune d'Agen; and the best *French plums* (so called in England) are made in Provence, of the Perdrigon blanc, the Brignole, and the Prune d'Ast; the Provence plums being the most fleshy, and having always most bloom. Both kinds are, however, made of these and other kinds of plums, in various parts of France. The plums are gathered when just ripe enough to fall from the trees on their being slightly shaken. They are then laid, separately, on frames or sieves made of wicker-work or laths, and exposed for several days to the sun, till they become as soft as ripe medlars. When this is the case they are put into a spent oven, shut quite close, and left there for twenty-four hours; they are then taken out, and the oven being slightly reheated, they are put in again when it is rather warmer than it was before. The next day they are again taken out, and turned by slightly shaking the sieves. The oven is heated again, and they are put in a third time, when the oven is one-fourth degree hotter than it was the second time. After remaining twenty-four hours, they are taken out, and left to get quite cold. They are then rounded, an operation which is performed by turning the stone in the plum without breaking the skin, and pressing the two ends together between the thumb and finger. They are then again put upon the sieves, which are placed in an oven from which the bread has been just drawn. The door of the oven is closed, and the crevices are stopped round it with clay or dry grass. An hour afterwards the plums are taken out, and the oven is again shut, with a cup of water in it, for about two hours. When the water is so warm as just to be able to bear the finger in it, the prunes are again placed in the oven, and left there for twenty-four hours, when the operation is finished, and they are put loosely into small, long, and rather deep boxes, for sale. The common sorts are gathered by shaking the trees; but the finer kinds, for making French plums, must be gathered in the morning, before the rising of the sun, by taking hold of the stalk between the thumb and finger, without touching the fruit, which is laid gently on a bed of vine-leaves in a basket. When the baskets are filled, without the plums touching each other, they are removed to the fruit-room, where they are left for two or three days exposed to the sun and air; after which the same process is employed for the others; and in this way the delicate bloom is retained on the fruit, even when quite dry.

PROPAGATION AND CULTURE. The plum is usually propagated in this country by sowing the seeds of any common free-growing variety (avoiding the Damsons, which are not readily worked), and budding them, when two years old, with finer sorts. The stones should be planted as soon as gathered, in broad drills (as in planting peas), but about an inch and a half deep. In good soil the seedlings will reach eighteen inches or two feet in height the next season, and in the autumn or the ensuing spring they may be taken from the seed-beds, their tap-roots reduced, and all that are of suitable size planted at once in the nursery rows, the smaller ones being thickly bedded until after another season's growth.

The stocks planted out in the nursery will ordinarily be ready for working about the ensuing midsummer, and, as the plum is quite difficult to bud in this dry climate, if the exact season is not chosen, the budder must watch the condition of the trees, and insert his buds as early as they are sufficiently firm,—say, in this neighborhood, about the 10th of July. Insert the buds, if possible, on the north side of the stock, that being more protected from the sun, and tie the bandage rather more tightly than for other trees.

The English propagate very largely, by layers, three varieties of the common plum—the *Muscle*, the *Brussels*, and the *Pear Plum*, which are almost exclusively employed for stocks with them. But we have not found these stocks superior to the seedlings raised from our common plums (the *Blue Gage*, *Horse Plum*, &c.), so abundant in all our gardens. For dwarfing, the seedlings of the *Mirabelle* are chiefly employed.

Open standard culture is the universal mode in America, as the plum is one of the hardiest of fruit-trees. It requires little or no pruning beyond that of thinning out a crowded head, or taking away decayed or broken branches, and this should be done before midsummer, to prevent the flow of gum. Old trees that have become barren may be renovated by heading them in pretty severely, covering the wounds with a solution of gum shellac, and giving them a good top-dressing at the roots.

SOIL. The plum will grow vigorously in almost every part of this country, but it only bears its finest and most abundant crops in heavy loams, or in soils in which there is a considerable mixture of clay. In sandy soils the tree blossoms and sets plentiful crops, but they are rarely perfected, falling a prey to the curculio, an insect that harbors in the soil, and seems to find it difficult to penetrate or live in one of a heavy texture, while a warm, light, sandy soil is exceedingly favorable to its propagation. It is also undoubtedly true that a heavy soil is naturally the most favorable one. The surprising facility with which superior new varieties are raised merely by ordinary reproduction from seed, in certain parts of the valley of the Hudson, as at Hudson or near Albany, where the soil is quite clayey, and also the delicious flavor and great productiveness and health of the plum-tree there, almost without any care, while in adjacent districts of rich sandy land it is a very uncertain bearer, are very convincing proofs of the great importance of clayey soil for this fruit.*

Where the whole soil of a place is light and sandy, we would recommend the employment of pure yellow loam or yellow clay in the place of manure, when preparing the border or spaces for planting the plum. Very heavy clay, burned slowly by mixing it in large heaps with brush or fagots, is at once an admirable manure and alterative for such soils. Swamp muck is also one of the best substances, and especially that from salt-water marshes.

Common salt we have found one of the best fertilizers for the plum-tree. It greatly promotes its health and luxuriance.

INSECTS AND DISEASES. There are but two drawbacks to the culti-

* When this was written it was generally supposed that the curculio would not attack the fruit of plums growing on trees in clayey soils; but practical experience has shown that such is not the fact.—REVISOR.

vation of the plum in the United States, but they are in some districts so great as almost to destroy the value of this tree. These are the *curculio* and the *knots*.

The curculio, or plum-weevil (*Rhynchænus Nenyphar*), is the uncompromising foe of all smooth-stone fruits. The cultivator of the Plum, the Nectarine, and the Apricot, in many parts of the country, after a flattering profusion of snowy blossoms and an abundant promise in the thickly set young crops of fruit, has the frequent mortification of seeing nearly all, or indeed, often, the whole crop, fall from the trees when half or two-thirds grown.

If he examines these falling fruits he will perceive on the surface of each, not far from the stalk, a small semi-circular scar. This scar is the crescent-shaped insignia of that little Turk the curculio—an insect so small as, perhaps, to have escaped his observation for years, unless particularly drawn to it, but which nevertheless appropriates to himself the whole product of a tree, or an orchard of a thousand trees.

The habits of this curculio, or plum-weevil, are not yet fully and entirely ascertained. But careful observation has resulted in establishing the following points in its history :—

The curculio, and its mark.

The plum-weevil is a small, dark brown beetle, with spots of white, yellow, and black. Its length is scarcely one-fifth of an inch. On its back are two black humps, and it is furnished with a pretty long, curved throat and snout, which, when it is at rest, is bent between the forelegs. It is also provided with two wings, with which it flies through the air. How far this insect flies is yet a disputed point, some cultivators affirming that it scarcely goes farther than a single tree, and others believing that it flies over a whole neighborhood. Our own observation inclines us to the belief that this insect emigrates just in proportion as it finds in more or less abundance the tender fruit for depositing its eggs. Very rarely do we see more than one puncture in a plum, and, if the

insects are abundant, the trees of a single spot will not afford a sufficient number for the purpose; then there is little doubt (as we have seen them flying through the air) that the insect flies farther in search of a larger supply. But usually, we think, it remains nearly in the same neighborhood, or migrates but slowly.

About a week or two after the blossoms have fallen from the trees, if we examine the fruit of the plum in a district where this insect abounds, we shall find the small, newly formed fruit beginning to be punctured by the proboscis of the plum-weevil. The insect is so small and shy, that unless we watch closely it is very likely to escape our notice. But if we strike or shake the tree suddenly, it will fall in considerable numbers on the ground, drawn up as if dead, and resembling a small raisin, or, perhaps more nearly, a ripe hemp-seed. From the first of April until August this insect may be found, though we think its depredations on fruit, and indeed its appearance in any quantity, is confined to the months of May and June in this climate. In places where it is very abundant, it also attacks to some extent the cherry, the peach, and even the apple and pear.

Early in July the punctured plums begin to fall rapidly from the

tree. The egg deposited in each, at first invisible, has become a white grub or larva, which slowly eats its way towards the stone or pit. As soon as it reaches this point the fruit falls to the ground. Here, if left undisturbed, the grub soon finds its way into the soil.

There, according to most cultivators of fruit, and to our own observations, the grubs or larvæ remain till the ensuing spring, when in their perfect form they again emerge as beetles and renew their ravages on the fruit. It is true that Harris and some other naturalists have proved that the insect does sometimes undergo its final transformation and emerge from the ground in twenty days, but we are inclined to the opinion that this only takes place with a small portion of the brood, which, perhaps, have penetrated but a very short distance below the surface of the soil. These making their appearance in midsummer, and finding no young fruit, deposit their eggs in the young branches of trees, etc. But it is undeniable that the season of the plum-weevil is early spring, and that most of the larvæ which produce the annual swarm, remain in the soil during the whole period intervening since the fall of the previous year's fruit. Plum-trees growing in hard trodden court-yards usually bear plentiful crops.

The modes of destroying the plum-weevil are the following:—

1. *Shaking the tree and killing the beetles.* Watch the young fruit, and you will perceive when the insect makes its appearance by its punctures upon them. Spread some sheets under the tree, and strike the trunk pretty sharply several times with a *wooden mallet*. The insects will quickly fall, and should be killed immediately. This should be repeated daily for weeks, or so long as the insects continue to make their appearance. Repeated trials have proved, beyond question, that this rather tedious mode is a very effectual one if persisted in.* Coops of chickens placed about under the trees at this season will assist in destroying the insects.

Dr. E. S. Hull, of Alton, Illinois, has invented a machine for catching the curculio on a large scale for orchard culture, but not having seen it, we copy an extract from the *Hearth and Home*:

"This is nothing but a gigantic white umbrella, turned bottom upward, mounted upon an immense wheelbarrow, and split in front to receive the trunk of the tree which is to be operated upon. At the interior end of the split in front is a padded bumper, which strikes against the trunk as the operator wheels the barrow, first against one tree, and then against another, and with two or three sudden jars fetches all the insects off the boughs into the white umbrella, which gapes widely open to receive them. Really, it is a most magnificent institution, but for its

* Merely *shaking* the tree is not sufficient. The following memorandum, as additional proof, we quote from the *Genesee Farmer*:—"Under a tree in a remote part of the fruit-garden, having spread the sheets, I made the following experiment. On *shaking* the tree well I caught five curculios; on jarring it with the hand I caught twelve more; and on striking the tree with a stone, eight more dropped on the sheets. I was now convinced that I had been in error; and calling in assistance and using a hammer to jar the tree violently, we caught, in less than an hour, more than two hundred and sixty of these insects." We will add to this, that to prevent injury to the tree a large wooden mallet should be substituted for a hammer, and it is better if a thick layer of cloth is bound over its head. A sharp stunning blow is found necessary to readily dislodge the insect, and as such, when given directly upon the bark of the tree, often causes a bruise, it is found to be a good practice to saw off a small limb and strike the blow upon the stump.

practical success three things are necessary: 1st. That the land should be decently clean, and not overgrown with rank weeds four or five feet high. 2d. That the orchard be a sufficiently large one to pay the interest on the prime cost of the machine. 3d. That the trees have a clean trunk of some three or four feet."

For those wishing a full description of the machine, we refer them to the Doctor's own statement in the *American Entomologist* for July, 1869.

2. *Gathering the fruit and destroying the larvæ.* As the insect, in its larva or grub form, is yet within the plums when they fall prematurely from the tree, it is a very obvious mode of exterminating the next year's brood to gather these fallen fruits daily, and feed them to swine, boil, or otherwise destroy them.

A simple and easy way of covering the difficulty, where there is a plum orchard or enclosure, is that of turning in swine and fowls during the whole season, when the stung plums are dropping to the ground. The fruit, and the insects contained in it, will thus be devoured together. This is an excellent expedient for the farmer, who bestows his time grudgingly on the cares of the garden.

The knots or black gum. In some parts of the country this is a most troublesome disease, and it has, in neighborhoods where it has been suffered to take its course, even destroyed the whole race of Plum-trees.

The knots is a disease attacking the bark and wood. The former at first becomes swollen, afterwards bursts, and, finally, assumes the appearance of large, irregular, black lumps, with a hard, cracked, uneven surface, quite dry within. The passage of the sap upwards becomes stopped by the compression of the branch by the tumor, and, finally, the poison seems to disseminate itself by the downward flow of the sap through the whole trunk, breaking out in various parts of it.

The sorts of plum most attacked by this disease are those with purple fruit, and we have never known the green or yellow fruited varieties infected, until the other sorts had first become filled with the knots. The common Horse Plum and Damson appear to be the first to fall a prey to it, and it is more difficult to eradicate it from them than from most other sorts. The common Morello cherry is also very often injured by the same disease, and, in some districts, the sweet cherry also.

There is yet some doubt respecting the precise cause of these knotty excrescences, though there is every reason to think it is the work of an insect. Professor Peck and Dr. Harris believe that they are caused by the same curculio or plum-weevil that stings the fruit; the second brood of which, finding no fruit ready, choose the branches of this tree and the cherry. This observation would seem to be confirmed by the fact that the grubs or larvæ of the plum-weevil are frequently found in these warts, and that the beetles have been seen stinging the branches.

On the other hand, the following facts are worthy of attention. First, in some parts of the country, where the curculio has been troublesome for many years, the knots have never been known. Secondly, in many cases, the knots have been abundant on Plum-trees, when the fruit was entirely fair and uninjured by the curculio, even upon the same branches.

These facts seem so irreconcilable with the opinion that the curculio produces both these effects, that we rather incline at present to the belief, that though the curculio deposits its eggs in the tumors on the

branches while they are yet soft and tender, yet it is not to the curculio, but to some other insect or cause that we owe this unsightly disease.

Practically, however, this is of little account. The experience of many persons, besides ourselves, has proved most satisfactorily that it is easy to extirpate this malady, if it is taken in season and unremittingly pursued. As early as possible in spring the whole of the infected trees should be examined, and every branch and twig that shows a tumor should be cut off and immediately burned. Whatever may be the insect, we thus destroy it, and, as experience has taught us that the malady spreads rapidly, we will thus effectually prevent its increase. If the trees are considerably attacked by it, it will probably be necessary to go over them again about the middle of May, but, usually, once a year will be sufficient. If any of the trees are very much covered with these knots, it is better to head back the shoots severely, or dig them up and burn them outright, and it will be necessary to prevail upon your neighbors, if they are near ones, to enter into the plan, or your own labors will be of little value. Pursue this simple and straightforward practice for two or three seasons (covering any large wounds made with the solution of gum shellac), and the knots will be found to disappear, the curculio to the contrary notwithstanding.

VARIETIES. There are now a pretty large number of fine plums, and some most important additions have been made by the seedlings raised in this country. The Green Gage still stands at the head of the list for high flavor, though several other sorts are nearly or quite equal to it. The Washington, the Jefferson, and the Madison are among the largest and most beautiful; and Coe's Golden Drop and Reine Claude de Bavay are very desirable for their late maturity.

In describing Plums, the surface of the young wood, when just ripened, is an important character; as it is *smooth* in some varieties, and *downy*, or covered with soft hairs, in others. In some varieties the flesh *parts* from the stone, while in others it *adheres*. And, finally, the depressed line or channel which runs down one side of the exterior surface of the plum is called the *suture*, and the prominence or absence of this feature enables us to distinguish many kinds at first sight.

VARIETIES.

ABRICOTÉE DE BRAUNAU.

Branches smooth.

Fruit large, roundish, inclining to oval, rather flattened on the sides, and marked with a suture which is deep towards the stalk, and higher on one side than the other. Skin whitish green, covered with a thick white bloom on the shaded side, and reddish, with some spots of a deeper red on the side next the sun. Stalk an inch long, thick. Flesh yellow, firm, juicy, sweet, sugary, and rich flavored, separating from the stone. Ripe middle of September. (Hogg.)

ALBANY BEAUTY.

Denniston's Albany Beauty.

Originated with Isaac Denniston, Albany, N. Y. Tree moderately vigorous. Branches smooth.

Fruit rather below medium size, roundish oval, with an obscure suture. Skin pale whitish green, marked with numerous small purplish dots, and covered with a thin bloom. Stalk an inch or more long, slender, very slightly inserted. Flesh yellow, moderately juicy, rich, and sweet; separates from the stone, which is small and pointed. Good to very good. Ripe August.

AMERICAN MAGNUM BONUM.

A native variety, quite common, but its origin unknown. Tree very vigorous, with strong, downy branches.

Fruit rather large, oval. Suture broad, shallow. Skin deep purple, covered with a thick blue bloom. Stalk rather long, curved, set in a moderately deep cavity. Flesh greenish yellow, juicy, sweet, and pleasant; adheres to the stone. Good. Early September.

AMERICAN WHEAT.

Tree moderately vigorous, productive. Branches smooth, grayish brown.

Fruit quite small, roundish, with a shallow suture. Stalk slender. Skin greenish, shaded with violet purple, and covered with a thin blue bloom. Flesh greenish, juicy, sweet. Good. Adheres partially to the stone. Last of August.

ANGELINA BURDETT.

An English variety, raised by Mr. Dowling, Southampton. Tree moderate grower, productive, hardy. Branches smooth.

Fruit above medium, round, with a suture deepest next the stalk. Skin thick, dark purple, thickly covered with brown dots and a blue bloom. Flesh yellowish, juicy, well flavored; separates from the stone. Good. Early September.

ANNA MARIA.

Raised by S. D. Pardee, New Haven, Conn. Tree moderately vigorous, rather spreading, very productive. Branches slightly downy, gray, short-jointed.

Fruit below medium, roundish oval, without suture. Skin pale greenish yellow, splashed with darker green, and covered with a thin blue bloom. Stalk rather short, in a small cavity. Flesh pale green, very juicy, melting, rich, sugary. Good to very good. Adheres slightly at one edge of the stone. Last of August.

APPLE PLUM.

From the garden of D. U. Pratt, Chelsea, Mass.

Fruit medium, roundish flattened, a little swollen on one side. Suture medium. Skin reddish purple, with a blue bloom and light dots. Flesh greenish yellow, a little coarse, sweet, sprightly, with considerable austererity at the skin; adheres partially to the stone. Good. September.

APRICOT.

Apricot Plum of Tours.
Abricot'e de Tours.

Abricotée.
Yellow Apricot.
Abricotée Blanc.

Abricotée Blanche.
Old Apricot.

Branches quite downy, nearly white.

Fruit above medium size, roundish, with a deep suture or furrow. Skin yellow, dotted and tinged with red on the sunny side, covered with a white bloom. Flesh yellow, rather firm, separates from the stone; slightly bitter, until fully ripe, when it is melting, juicy, and high-flavored. Good. Ripe the middle of August.

AUBURN.

A native of Western New York. Tree vigorous. Branches smooth, reddish.

Fruit medium, oval. Suture shallow. Skin light reddish purple, with a thin lilac bloom. Stalk rather short. Flesh rather coarse, orange yellow, not juicy, sweet, pleasant; separates from the stone. Good. Early August.

AUTOMNE DE SCHAMALI.

Prune d'Automne de Schamili.

Damascena Schamali.

D'Automne de Schamal.

A German variety. Tree vigorous. Branches upright, smooth, light reddish brown.

Fruit large, oval, with a long, peculiar mamelon neck, one side sometimes enlarged. Suture large, deep, two-thirds around. Skin light reddish purple, with a light lilac bloom. Stalk long and stout. Flesh orange yellow, juicy, sweet; adheres firmly to the stone. Good. September.

AUTUMN COMPOTE.

This variety was grown by Thomas Rivers, Sawbridgeworth, England, from seed of Cooper's Large. Tree vigorous, moderately productive. Branches smooth.

Fruit large, oblong oval, narrowing to the lower end. Suture broad and shallow, one side often swollen. Skin dull whitish yellow, with light crimson on the sunny side, and covered with a thin lilac bloom. Stalk long, set in a small narrow cavity. Flesh yellow, a little coarse, juicy, sweet, pleasantly mixed with acid; adheres partly to the stone. Good to very good. September.

AUTUMN GAGE.

Roe's Autumn Gage.

Reine Claude d'Automne.

Raised by Wm. Roe, of Newburg. Of good quality, a very abundant bearer. Branches smooth. Tree vigorous, spreading.

Fruit medium size, oval, rather broadest towards the stalk. Stalk three-fourths of an inch long, inserted without any depression. Skin pale yellow, covered with thin whitish bloom. Flesh greenish yellow, separating from the stone, juicy, sweet, and of delicate, pleasant flavor. Good to very good. Stone long, compressed, pointed at both ends. September.

BAYAY'S GREEN GAGE.

Reine Claude de Bavay.

Monstrueuse de Bavay.

Saint Clair.

Raised by Major Esperen, and dedicated to M. De Bavay, of Vilvorde. A very vigorous grower, very productive, and a valuable addition to the late varieties. Branches smooth.

Fruit large, roundish, slightly depressed. Skin greenish yellow, with stripes and splashes of green, covered with a thin bloom. Suture medium. Apex dimpled. Stalk short and stout, set in a small cavity. Flesh yellow, juicy, melting, with a sugary, rich, excellent flavor; separates from the stone. Best. Last of September and first of October.

Bavay's Green Gage.

stone. Good. Last of August.

BEJONNIÈRES.

Prune des Bejonnières.

A foreign variety. Tree vigorous. Branches smooth, reddish brown.

Fruit medium or below, oval, often with a slight neck. Suture broad, shallow. Skin pale yellow, with a thin light bloom. Stalk rather stout, in a small cavity. Flesh greenish yellow, juicy, sweet, slightly vinous; separates from the

BELGIAN PURPLE.

Bleu de Belgique.

Bleu de Perque.

From Belgium. Tree vigorous. Branches smooth. Buds prominent.

Fruit rather large, roundish oval. Suture shallow. Apex sunken. Skin deep brownish purple, covered with a blue bloom. Stalk half inch long, rather slender. Cavity large. Flesh a little coarse, greenish, juicy, rich, sugary; adheres to the stone. Very good. Early September.

BELLE DE LOUVAIN.

Prune de Louvain.

A Belgian variety, of unknown origin. Tree vigorous, productive. Branches stout, smooth, grayish brown.

Fruit large, long oval. Suture deep. Skin purplish red, covered with a thin bloom. Flesh yellow, a little coarse, juicy, agreeable; separates from the stone. September. (Al. Pom.)

BELLE DE SEPTEMBRE.

Van Mons' Red?

Van Mons' Red Gage?

Autumn Beauty.

Reine Claude Rouge de Septembre.

Reina Nova.

Gros Rouge de Septembre.

Reine Claude Rouge Van Mons?

A variety introduced from Brussels. Tree vigorous and productive. Branches smooth.

Fruit medium, roundish, inclining to oval. Sides unequal. Suture large, extending a little beyond the apex. Skin light reddish purple, covered with a thin blue bloom. Stalk short, slender. Cavity small.

Flesh orange yellow, juicy, sweet, vinous; adheres to the stone. Good to very good. September.

BENEDICT.

Origin, Pa. Tree vigorous. Branches smooth, brownish.

Fruit small, oval, one side a little enlarged. Suture distinct, extending a little beyond the apex. Skin pale yellow, covered with a thin white bloom and a few red dots and blotches on the sunny side. Stalk of medium length, inserted in a small cavity. Flesh pale yellow, juicy, sweet and pleasant. Good. Adheres to the stone.

BINGHAM.

A native fruit, originally from Pennsylvania, and named after the Bingham family. Tree vigorous, productive. Branches downy.

Fruit large, long oval, rather widest towards the stalk. Skin deep yellow, somewhat spotted with rich red on the sunny side. Stalk slightly inserted. Flesh yellow, adhering to the stone, juicy, and of rich and delicious flavor. Very good. Last of August and first of September.

BLEECKER'S GAGE.

German Gage.

Bleecker's Yellow.

Bleecker's Yellow Gage.

A fruit of the first quality, not only excellent but remarkably hardy, and a good and regular bearer. It was raised by the late Mrs. Bleecker, of Albany. Tree very vigorous. Branches downy.

Fruit of medium size, roundish oval, very regular. Suture scarcely perceptible. Stalk quite long, an inch or more, straight and pretty stout, downy, slightly inserted. Skin yellow, with numerous imbedded white specks, and a thin white bloom. Flesh yellow, rich, sweet, and luscious in flavor; separates almost entirely from stone, which is pointed at both ends. Very good. Easily distinguished from Yellow Gage by its longer and stouter stalk. Very good. Last of August.

BLUE GAGE.

Azure Hâtive.

Little Blue Gage.

Black Perdrigon.

Cooper's Blue Gage.

An ordinary little round blue Plum, the *Azure Hâtive* of the French. Branches slender and downy.

Fruit quite small and round. Skin dark blue, covered with light blue bloom. Flesh greenish, juicy, a little acid, somewhat rich, and separates from the stone. Good. Ripe middle of August.

Bleecker's Gage.

BLUE IMPÉRATRICE.

Impératrice.
Véritable Impératrice.

Violette.
Impératrice Violet.

Empress.
Violet Empress.

The true Blue Impératrice is an admirable Plum, one of the finest of the late plums, hanging for a long time on the tree, and may be kept in the fruit-room a considerable period after being gathered. It is rich, sugary, and excellent. The branches are long, smooth, and slender, and the smaller twigs start out at nearly right angles with the main branches.

Blue Impératrice.

Fruit of medium size, oval obovate, obtuse, tapering most towards the stalk. Stalk nearly an inch long, set in a slight hollow. Skin deep purple, covered with a thick blue bloom. Flesh greenish yellow, pretty firm, rather dry, but quite rich and sugary, adhering closely to the stone. Very good. Ripens in October, and will hang, in sheltered situations, till the middle of November.

BLUE PERDRIGON.

Violet Perdrigon. Perdrigon Violette.
Brignole Violette.

A very old variety from Italy. Branches downy.

Fruit of medium size, oval. Skin reddish purple, with many brown dots, and a very thick whitish bloom. Flesh greenish yellow, rather firm, sugary; adhering to the stone. Good. Last of August.

BLUE PLUM.

From the South. Propagated by suckers. Tree productive. Branches smooth.

Fruit medium, roundish, scarcely oval. Suture obscure. Skin dark blue, with light blue bloom. Flesh yellowish green, juicy, sweet; adheres to the stone. Early August. (White.)

BLUM.

This is supposed to be a seedling of North Carolina. The Country Gentleman describes it as:—

“Fruit full medium or rather large, oval. Color dull orange, with numerous small brown dots. Suture distinct. Stalk short. Cavity narrow. Flesh yellowish brown, fine-grained, very juicy. Very good. July, August.”

BONNET D'EVÊQUE.

Tree vigorous, upright. Branches smooth.

Fruit medium, obovate. Skin dark purple. Flesh rich, separating from the stone. October. (Hogg.)

BOULOUF.

Fruit large, roundish, red or reddish violet, with spots. Flesh yellow, fine, juicy, slightly acid, perfumed. September. (S. V. M.)

BRADSHAW.

Black Imperial.

Blue Imperial.

Tree an upright, vigorous grower. Branches smooth, brownish.

Fruit large, oval obovate, sometimes with a slight neck. Suture half round, broad, shallow. Apex a little sunk. Skin reddish purple, covered with a light blue bloom. Stalk rather stout, curved, set in a small cavity. Flesh yellowish, coarse, juicy, brisk, pleasant; adheres partially to the stone. Good to very good. August.

Bradshaw.

BRAHY'S GREEN GAGE.

Reine Claude de Brahy.

Tree vigorous, with stout, smooth branches, brownish purple.

Fruit large, roundish, inclining to oval. Suture half round, large. Skin greenish yellow, splashed with darker green, and covered with a pretty thick light bloom. Flesh greenish yellow, sugary, rich; adheres to the stone. Very good. September.

BREVOORT'S PURPLE.

New York Purple.

Brevoort's Purple Washington.

Brevoort's Purple Bolmar.

Washington Purple.

Raised by Henry Brevoort, New York. Tree vigorous. Branches long, smooth.

Fruit large, oval. Skin reddish, covered with a violet bloom. Flesh yellowish, soft, juicy, not very sweet, but with considerable vinous flavor; adheres closely to the stone. Good. Ripe the first of September.

BRICETTA.

Petit Bricette.

Bricet.

Mirabelle Tardive.

Mirabelle d'Octobre.

Tree moderately vigorous. Branches smooth.

Fruit medium, roundish oval. Skin yellow, with spots of red. Stalk of medium length, set in a small cavity. Flesh yellow, rather

firm, very juicy, sugary, and excellent; adheres to the stone. Good. Ripens middle of September.

BRYANSTON'S GAGE.

Fruit medium, oval, with a shallow suture. Apex a little sunk. Skin dull pale yellow, with a bronze cheek in the sun, covered with a light bloom. Stalk rather stout. Cavity medium. Flesh yellow, a little coarse, juicy, sweet, pleasant; adheres partially to the stone. Good to very good. October.

BUEL'S FAVORITE.

An excellent Plum, raised by Isaac Denniston, of Albany, N. Y. Tree moderately vigorous. Branches smooth, reddish.

Fruit pretty large, ovate, broadest towards the stalk. Suture quite distinct for half the circumference. Stalk nearly three-quarters of an inch long, rather stout, slightly inserted. Skin pale green, thickly sprinkled with lighter dots, and speckled with a little red next the stalk. Flesh greenish yellow, rather firm, juicy, and quite rich and high-flavored; adheres to the stone, which is long and pointed. Good. Last of August.

BURGUNDY PRUNE.

Prune de Bourgogne.

Fruit medium, egg-shaped, with a neck. Suture indistinct. Skin reddish black, with a blue bloom, covered with numerous small dots. Stalk long, set in a very small cavity. Flesh fine, juicy, sugary, very pleasant; separates from the stone. Good. Middle of September.

BURLINGTON GAGE.

Origin, Burlington, Vt. Tree hardy, vigorous, spreading, irregular grower, productive even when young. Wood yellowish gray.

Fruit medium size. Form roundish oval. Color dark purplish blue, with rich bloom. Flesh greenish yellow, juicy, rich. Freestone. Good. August.

BURETTES.

Raised by M. Grégoire. Tree of medium vigor, very fertile.

Fruit large, long oval. Skin dull yellow. Flesh very delicate, melting, abounding in juice, very sweet, with a delightful aroma. Ripe the end of September. (Al. Pom.)

BYFIELD.

Tree moderately vigorous. Branches smooth.

Fruit small, round. Skin light yellow. Flesh yellow, of good flavor; adheres to the stone, which is thick. Good. Middle to last of August.

CALDWELL'S GOLDEN DROP.

An American variety. Tree vigorous. Branches smooth.

Fruit large, oval, one side often enlarged. Suture half round, large. Skin yellow, marbled with crimson in the sun, thin bloom. Stalk slender. Cavity small. Flesh yellow, juicy, sugary, rich; adheres to the stone. Good. August.

CALDWELL'S WHITE GAGE.

American. Tree productive. Branches smooth or slightly downy, grayish.

Fruit medium, oval, narrowing a little to the apex. Suture shallow. Point at apex. Skin greenish yellow, dotted with purple in the sun, covered with a thick bloom. Stalk long. Flesh greenish yellow, rather coarse, juicy, sugary; adheres to the stone. Good. September.

CAMBELL.

Cambell's Seedling.

McCauley's Seedling.

Tree vigorous. Branches smooth.

Fruit rather large, oval. Suture shallow. Skin pale yellow, splashed with green, dotted and marbled with crimson in the sun, light bloom. Stalk long. Cavity small. Flesh pale yellow, a little coarse, juicy, sweet; adheres partially to the stone. Good. September.

CHAPIN.

Originated with Aaron Chapin, Hartford, Conn. Tree vigorous grower.

Fruit medium, oval. Suture shallow. Skin light reddish purple or chocolate, blue bloom. • Stalk long, slender. Cavity deep. Flesh yellow, juicy, and vinous; adheres partially to the stone. Good. Late October.

CHERRY.

Early Scarlet.

De Virginie.

Prunus Cerasifera.

Myrobolan.

D'Amérique Rouge.

Miser Plum.

Virginia Cherry.

Prunus Myrobolana.

The Cherry Plum or Early Scarlet is a very distinct species. Tree grows rapidly, forming a bushy head, with slender branches and small leaves. A beautiful early fruit. Good for preserving or market.

Fruit is round, about an inch in diameter, of a lively red, with very little bloom, and a very slender, short stem, set in a narrow cavity. The flesh is greenish, melting, soft, very juicy, with a pleasant, lively, sub-acid flavor—neither rich nor high flavored—and adheres closely to the stone. It ripens about the middle of July, before most other plums, and this, and its pretty appearance at the dessert, are its chief merits. Branches smooth. The common Cherry Plum, or MYROBOLAN, of Europe, is rather larger, and shaped like a heart. In all other respects the same.

CHESTER COUNTY PRUNE.

Origin, Chester Co., Pa. Tree vigorous, upright, with long, slender branches, smooth, and of a light grayish brown.

Fruit medium or below; long oval or oblong oval, almost without suture. Skin black, with a thick blue bloom. Stalk rather long, slender. Cavity small. Flesh greenish, sweet; separates freely from the stone. Good. Early September.

CHESTON.

Matchless.

Diaprée Violette.

Violet Diaper.

A pleasant early Plum, but superseded now by better ones. Branches downy.

Fruit rather small, oval. Skin dark purple, with a blue bloom. Stalk quite short, set without depression. Flesh yellow, firm, sweet, and rather sprightly; separating from the stone. Good. Last of July and first of August.

CLEAVINGER.

A native of Philadelphia Co., Pa. Tree vigorous, spreading. Branches downy.

Fruit rather large, oval. Suture distinct, one side often enlarged. Skin deep purple, thick blue bloom. Stalk moderately stout. Cavity deep. Flesh orange yellow, coarse, juicy, vinous, subacid; adheres to the stone. Good. Last of August.

COE'S GOLDEN DROP

Bury Seedling.

Coe's Imperial.

New Golden Drop.

Fair's Golden Drop.

Golden Gage.

Waterloo of some.

Goutte d'Or.

Coe's Plum.

Prune Goutte d'Or.

Raised by Mr. Coe, an English gardener, near London. Tree moderately vigorous, productive; requires a warm, late season to ripen, it north of 41° latitude. Branches smooth.

Fruit of the largest size, oval, with a well-marked suture, on one side of which it is a little more swollen than the other, the outline narrowing towards the stalk. Skin light yellow, with a number of rich dark red spots on the sunny side. Stalk nearly an inch long, rather stiff, set on the end of the fruits. Flesh yellow, rather firm, adhering closely to the stone, which is quite pointed. Flavor rich, sweet, and delicious. Very good. Last of September.

COE'S LATE RED.

Saint Martin.

Saint Martin Rouge.

Prune de St. Martin.

Red Saint Martin.

Tree vigorous, with long, rather slender branches, very productive. A good late variety. Branches downy.

Fruit of medium size, nearly round, with a well-marked suture

Coe's Golden Drop.

running along one side. Skin light purplish red, with a thin blue bloom. Stalk pretty stout, three-fourths of an inch long, set nearly even with the surface. Flesh yellowish, rather firm and crisp, juicy, with a rich vinous flavor; separating almost entirely from the stone. Good to very good. October and November.

COE'S VIOLET.

Coe's Golden Drop Violette.

Tree vigorous. Branches smooth, dark brown.

Fruit large, oval. Suture large, extending a little beyond the apex. Skin light reddish, thickly sprinkled with brown dots and a lilac bloom. Stalk rather long and stout. Cavity small. Flesh yellowish, juicy, sweet; adheres to the stone. Good to very good. September.

COLUMBIA.

Columbian Gage.

Raised by L. U. Lawrence, Hudson, N. Y. Tree vigorous, productive, but subject to rot.

Fruit of the largest size, six or seven inches in circumference, nearly globular, one half rather larger than the other. Skin brownish purple, dotted with numerous fawn-colored specks, and covered with much blue bloom, through which appears a reddish brown tint on the shaded side. Stalk about an inch long, rather stout, inserted in a narrow, small cavity. Flesh orange, not very juicy, but when at full maturity very rich, sugary, and excellent; it separates freely from the stone, except a little on the edge. The stone is quite small and compressed. Good. Last of August.

Coe's Violet.

COMTE GUSTAVE D'EGGER.

An Austrian variety, originated with M. Liegel, of Braunau, from seed of the Abricotée. Tree moderately vigorous. Branches downy.

Fruit small or medium, oblong oval. Suture half round, broad, deep, distinct. Skin pale yellow, bronzed in sun and tinged with violet. Flesh yellowish, fine, sweet, juicy, delicious; separates from the stone. September. (An. Pom.)

COOPER'S LARGE.

Cooper's Large Red. Cooper's Large American. La Délicieuse?

Coxe, who first described this Plum, says it was raised by Mr. Joseph Cooper, of New Jersey, from a stone of the Orleans. He con-

siders it as a fine large plum, but exceedingly liable to rot upon the tree. Tree vigorous. Branches smooth, dark brown.

Fruit large, oval. Sides unequal. Suture broad, large, often extending beyond the apex. Skin deep bluish purple, pretty thickly covered with a blue bloom. Stalk medium. Cavity large, deep. Flesh yellowish, not very juicy, sweet, slightly vinous; adheres to the stone. Good. September.

COPE.

Raised by John Cope, near Philadelphia.

Fruit large, long oval, dark purple. Flesh not juicy, acid; separates from the stone. Good for cooking.

COPPER.

French Copper.

An old Plum, very productive and profitable. Tree vigorous. Branches smooth. Very productive and a good market sort.

Fruit medium or below, oval, without suture and with a slight navel-neck. Skin deep copper color, covered with a thick blue bloom. Stalk rather long, slender, set on a point without depression. Flesh greenish, juicy and acid; adheres to the stone. Good. Valued for cooking. Last September.

CORSE'S ADMIRAL.

Raised by Henry Corse, of Montreal, Canada. Branches downy.

Fruit above medium size, oval. Skin light purple, covered with a pale lilac bloom. Flesh greenish yellow, juicy and sprightly, but second-rate in flavor, and adhering closely to the stone. Good. September.

CORSE'S FIELD MARSHAL.

Skin lively purplish red. Raised by Henry Corse, Montreal, Canada.

Fruit rather large, oval. Flesh greenish yellow, juicy, but a little tart; adheres closely to the stone. Ripe middle of August.

CORSE'S NOTA BENE.

Raised by Henry Corse, of Montreal, Canada. Tree very vigorous, very productive, and hardy. Branches smooth.

Fruit of rather large size, round. Skin pale lilac or pale brown, often dull green on the shaded side, with much light blue bloom. Stalk half an inch long, set in a round hollow. Flesh greenish, rather firm, juicy, sweet, and rich, and separates from the stone. Good. First of September.

COX'S SEEDLING.

Raised by Mrs. Cox, York, Pa. Tree a vigorous upright grower. Branches smooth.

Fruit very large, roundish oval, slightly compressed. Suture broad, shallow. Skin yellow, sometimes a little splashed with green, and cov-

ered with a light bloom. Stalk rather stout, in a narrow, rather deep cavity. Flesh greenish yellow, a little coarse, juicy, sweet; separates from the stone. Good. Early August.

CROFT'S EARLY.

Fruit small, reddish blue. Flesh yellow, dry, devoid of flavor. August. (Elliott.)

CRUGER'S SCARLET.

Cruger's.

Cruger's Seedling.

Cruger's Scarlet Gage.

Raised by Henry Cruger, of New York. Tree of free growth. Branches long, downy, very productive.

Fruit rather larger than a Green Gage, roundish oval, with an obscure suture. Skin, when fully exposed, a lively red, but usually a bright lilac, covered with a thin bluish bloom, and speckled with numerous golden dots; in the shade it is pale fawn-colored on one side. Stalk half an inch long, set in a shallow depression. Flesh deep orange, not very juicy nor rich, but with a very agreeable, mild, sprightly flavor. It hangs well after ripening. Good. Last of August.

DAMSON.

Common Damson.
Black Damson.Purple Damson.
Early Damson of many.

The common oval Blue Damson is almost too well known to need description, as every cottage garden in the country contains this tree, and thousands of bushels are annually sold in the market for preserves. The tree is enormously productive, but in the hands of careless cultivators is liable to be rendered worthless by the *knots*, which are easily extirpated if the diseased branches are regularly burned every winter or spring. Branches slender, a little thorny and downy.

Fruit small, oval, about an inch long. Skin purple, covered with thick blue bloom. Flesh melting and juicy, rather tart; separates partially from the stone. September.

As the Damson is frequently produced from seed, it varies somewhat in character.

The SHROPSHIRE or PRUNE DAMSON is an English purple variety, rather obovate in figure, but little superior to our common sort. The SWEET DAMSON resembles the common Damson, and is but slightly acid.

The LATE BLACK DAMSON, LATE PURPLE DAMSON, PRINCE'S EARLY DAMSON, SMALL RED DAMSON, SMALL WHITE DAMSON, LARGE WHITE DAMSON, are also varieties not of sufficient value or distinctness to render separate description necessary.

The WINTER DAMSON is a valuable market sort from its extreme lateness. It is small, round, purple, covered with a very thick light blue bloom. Flesh greenish, acid, with a slight astringency, but makes good preserves. It bears enormous crops, and will hang on the tree till the middle of November, six weeks after the common Damson, uninjured by the early frosts.

DANA'S YELLOW GAGE.

A New England variety, raised by the Rev. Mr. Dana, of Ipswich, Mass. It is a very hardy and healthy tree, and bears abundantly. Branches smooth.

Fruit of medium size, oval, pale yellow, with a very thin bloom, the skin clouded like that of the Imperial Gage. Flesh adheres to the stone, juicy, sweet, with a lively peculiar flavor. Good. Last of August and first of September.

DATE PLUM.

Prune Datte.	Quetsche de Hongrie.
Prune d'Autriche.	Quetsche Datte.
D'Autriche.	Dattelszwetsche.

Fruit small, nearly round. Suture distinct, rather flat. Skin yellow, marked with touches of bright red in the sun, and covered with a whitish bloom. Flesh yellow, soft. Early September. (Pom. Mag.)

DE DÉLICE.

A foreign variety of excellence. Tree moderately vigorous and productive. Branches smooth.

Fruit medium, roundish oval, with a slight neck, a little swollen on one side. Suture small. Skin green, marbled and shaded with violet, and covered with a thin bloom. Stalk three-fourths of an inch long, rather stout, very slightly inserted. Flesh orange yellow, juicy, melting, with a rich, sugary, luscious flavor; adheres slightly to the stone. Very good. Ripens the last of September.

DE MONTFORT.

A seedling of Prevost. Tree of moderate growth, spreading, very productive. Branches smooth.

Fruit medium size, roundish oval. Suture large, extending to apex. Skin dull purple, with russet dots and stripes, a thin blue bloom. Stalk nearly an inch long, rather stout, without depression. Flesh greenish, juice abundant, sweet, and rich; separates from the stone. Very good. Ripens last of August.

DENNISTON'S RED.

Raised by Isaac Denniston, Albany. Vigorous grower, productive. Branches smooth, dark colored.

Fruit rather large, roundish oval, narrowed towards the stalk. Suture running half round. Skin of a beautiful light red, sprinkled with many small, fawn-colored dots, and dusted with a very light bloom. Stalk very long and slender, slightly inserted. Flesh amber color, juicy, rich, and sprightly, with an excellent flavor. It separates from the stone, which is small, oval, and compressed. Good. Last of August.

DENNISTON'S SUPERB.

Madison.

An excellent seedling, from Mr. Denniston's famous plum orchard,

near Albany, N. Y., of the Green Gage family, a third larger than the latter variety, and nearly as rich in flavor. Tree very vigorous and productive. Branches downy.

Fruit round, a little flattened, and having a distinct suture, often extending quite round the fruit. Skin pale yellowish green, marked with a few large purple blotches and dots, and overspread with a thin bloom. Stalk rough, three-fourths of an inch long, set in a cavity of moderate size. Flesh very thick (the stone being small), moderately juicy, with a rich vinous flavor; stone parts readily, and is roundish and thick. Best. Middle and last of August.

Denniston's Superb.

DIAMOND.

English origin. Branches long, downy.

Fruit of the largest size, oval. Skin black, covered with a blue bloom. Flesh deep yellow, coarse-grained, and rather dry, a little acid, and without flavor; separates from the long-pointed stone. Scarcely good. Valuable for cooking only. First of September.

DICTATOR.

Raised by Henry Corse, of Montreal. Tree vigorous and hardy.

Fruit very large, brownish purple, covered with a bloom. Flesh juicy, rich, and high-flavored. (Hov. Mag.)

DOMINE DULL.

Dutch Prune.

Dutch Quetzen.

This good American Prune was raised from a seed brought from Holland by the Rev. Mr. Dull, a Dutch minister, who afterwards resided at Kingston, N. Y. The parent tree was the common Dutch Prune. Branches long and smooth.

Fruit of medium size, long oval, with little or no suture. Skin very dark purple, nearly black, dusted with some blue bloom. Stalk nearly an inch long, inserted with very little cavity. Flesh yellow, quite juicy at first, but if allowed to hang on the tree becomes dry, rich, and sweet; it adheres closely to the stone. Good. A prodigious bearer, and a really good fruit. September.

DORR'S FAVORITE.

Originated with Elisha Dorr, Albany, N. Y. Tree moderately vigorous. Branches smooth, brownish.

Fruit large, oval, with a slight neck. Suture broad. Apex a little sunk. Skin yellowish, marbled and dotted in the sun with purplish crimson, thin lilac bloom. Stalk long. Cavity small. Flesh yellowish, a little coarse, juicy, sweet; adheres to the stone. Good to very good. Last of September.

DOWNING'S EARLY.

Originated at Newburgh, N. Y. Tree moderately vigorous. Branches short-jointed, slightly downy.

Fruit medium, oval. Suture half round. Skin yellow, slight blush, and minute crimson dots. Flesh yellow, sweet; adheres slightly to the stone. Good. Early September.

DOWNTON IMPÉRATRICE.

Raised by Mr. Knight. A strong, upright growing tree. Branches long, smooth.

Fruit of medium size, oval, narrowing a little to the stalk. Skin pale yellow, quite thin. Flesh yellow, melting, and sweet when fully ripe, with a little acidity before; adhering to the stone. Good to very good. Ripens last of September, and hangs some time on the tree.

DRAP D'OR.

Mirabelle Double.

Mirabelle Grosse.

Yellow Perdrigon.

The Drap d'Or, or Cloth of Gold Plum, is about the size and figure of the Green Gage, but of a fine golden yellow, and ripens a week earlier. Branches slightly downy.

Fruit below medium size, round, with an indistinct suture, and a dimpled or pitted apex. Stalk slender, half an inch long. Skin rich bright yellow, with a few crimson specks when fully exposed. Flesh yellow, sugary, and rich; separates freely from the stone. Good to very good. Early in August.

DRONET DAMASK.

Damas Dronet.

Branches smooth.

Fruit small, oval. Skin yellowish, with a thin light bloom. Flesh greenish, sweet; separates from the stone. Good. Late August.

DUANE'S PURPLE.

Purple Magnum Bonum.

Pourprée Duane.

Raised by James Duane, of Duanesburgh, N. Y. Tree very vigorous, distinct from the Red Magnum Bonum of Europe. Branches very downy.

Fruit very large, oval or oblong, considerably swollen on one side of the suture. Skin reddish purple in the sun, but a very pale red in the shade, sparingly dotted with yellow specks, and covered with lilac bloom. Stalk three-fourths of an inch long, slender, set in a narrow cavity. Flesh amber-colored, juicy, sprightly, moderately sweet; adheres partially to the stone. Good. Ripens with the Washington (or a little before), about the 10th of August.

DUNMORE.

Dumore.

Foreign origin.

Fruit small, oblong oval. Skin thick and green, becomes golden

yellow at maturity. Flesh yellow, fine, very juicy, sweet, very aromatic; separates from the stone. Ripens the first of October. (Al. Pom.)

EARLY AMBER.

Fruit small, somewhat oblong, broadest at apex. Skin pale greenish yellow, with small crimson specks in sun, covered with a thin whitish bloom. Flesh greenish yellow, juicy, subacid; adheres to the stone. Early August. (Lind.)

EARLY APRICOT.

Abricote Hâtif.

Abricotée Hâtive.

Fruit small, roundish. Skin pale red, darker in the sun. Flesh yellowish green, moderately juicy, acid; adheres to the stone. Good. Early August.

EARLY CROSS.

Originated with Mr. Cross, Salem, Mass. Tree moderately vigorous, productive.

Fruit small to medium, roundish. Skin reddish purple, covered with a thick bloom. Stalk half an inch long. Flesh greenish yellow, juicy, sweet, and good; adheres to the stone. Good. Ripens the second week in August.

EARLY FAVORITE.

Rivers's Early Favorite.

Rivers' No. 1.

Raised by Thomas Rivers, England. Tree moderately vigorous. Branches rather slender, slightly downy.

Fruit small to medium, roundish oval, with a shallow suture. Skin almost black, sprinkled with russet dots, and covered with a blue bloom. Flesh greenish yellow, juicy, sweet, vinous, not quite as early as Jaune Hâtive, separates from the stone. Good. First of August.

EARLY GREEN GAGE.

Reine Claude Hâtive.

Fruit small, round, flattened at top. Skin yellowish green, with a red cheek, and a few dots. Stalk about half an inch long. Flesh yellow, very tender, juicy, sweet, rich; separates from the stone. Last of July. (Hogg.)

EARLY ORLEANS.

New Early Orleans.

Monsieur Hâtif de Montmorency.

New Orleans.

Wilmot's Orleans.

Grimwood's Early Orleans.

Wilmot's Early Orleans.

Hampton Court.

Early Monsieur.

Monsieur Hâtif.

Monsieur Hâtive.

Tree a moderate grower. Branches downy.

Fruit of the size and color of the common Orleans, a little more

oval, and with a more shallow suture. Skin a little marbled. Flesh yellowish green, of brisk flavor, rather richer than the old Orleans, and separates from the stone. Good. Last of August.

EARLY PROLIFIC.

Early Rivers.

Rivers' Early Prolific.

Rivers' Early No. 2.

Raised by Thos. Rivers, England. A prolific early Plum. Tree moderately vigorous, with smooth grayish branches.

Fruit medium, roundish oval. Skin reddish purple, covered with a fine blue bloom. Stalk about half an inch long, set in a very small cavity. Flesh yellowish, juicy, sweet, and pleasant; separates from the stone. Good. First of August.

EARLY ROYAL OF NIKITA.

A German variety. Tree moderately vigorous. Branches smooth, gray.

Fruit small, roundish oval, narrowing towards the stalk. Skin violet purple, with a thin blue bloom. Stalk set with little or no cavity. Flesh orange yellow, juicy, sugary, rich; adheres to the stone. Good to very good. Early September.

EARLY ST. JOHN.

Prune de St. Jean.

St. Jean.

Tree moderately vigorous. Branches slightly downy.

Fruit medium, roundish oblong. Suture shallow, distinct. Skin reddish purple. Flesh green, firm, sweet, sprightly; separates from stone. Good. Last of August.

EARLY YELLOW PRUNE.

A foreign sort. Tree vigorous and very productive. Branches downy.

Fruit rather large, oval. Skin yellow, with a very slight bloom, and dotted with red in the sun. Stalk of medium length, inserted in a small cavity. Flesh yellow, sweet, juicy, with somewhat of a melon flavor. Separates from the stone. Good. Middle of August.

There is another Early Yellow Prune that originated in Bedford Co., Pa., which differs but little from the above either in appearance or quality.

EDOUARD SENECLAUZE.

Branches downy.

Fruit very small, obovate, narrows toward the stalk. Skin clear golden yellow. Flesh very tender, sweet, and rich; separates freely from the stone. July. (Hogg.)

ELFREY.

Elfry's Prune.

Branches smooth.

Fruit small, oval. Skin blue. Flesh greenish, very sweet, dry, and firm; parting very freely from the stone. Good. Last of August.

EMERALD DROP.

Origin, Newburgh, N. Y. Tree moderately vigorous, and very productive. Branches long and smooth.

Fruit of medium size, long oval. Suture strongly marked, and the fruit larger on one of its sides. Skin pale yellowish green, sometimes dull green only in the shade. Stalk three-fourths of an inch long, inserted with scarcely any depression. Flesh greenish yellow, very juicy; adheres somewhat to the stone, which is long and pointed. Good. Last of August.

ENGLISH WHEAT.

Wheat Plum.

Wheaton.

Whitlow.

Nutmeg.

Fruit medium, roundish oval. Suture moderate. Skin reddish purple, with a blue bloom, covered with numerous white dots. Stalk half an inch long, rather strong, set in a rather deep cavity. Flesh yellow, a little coarse, juicy, sweet, with a rich flavor. It adheres to the stone. Good. Last of August.

ENGLISH YELLOW GAGE.

Little Queen Claude.

Reine Claude Blanche.

Small Green Gage.

Petite Reine Claude.

—— petite espèce.

Gonne's Green Gage.

White Gage.

This Plum, formerly known, we believe, as the little Queen Claude, but which has now received the *sobriquet* of Yellow Gage, we suppose for good reasons, from the head of the fruit department in the London Horticultural Society's garden, is an old French variety described by Duhamel. Branches smooth and rather long.

Fruit below medium size, round, with a distinct suture on one side. Stalk half an inch long, rather slender, inserted in a slight hollow. Skin pale yellowish green, speckled with a few reddish dots, and over-spread with a good deal of bloom. Flesh pale yellow, sweet, and pleasant; separates freely from the stone. Good. Middle of August.

EUGENE FURST.

Sweet Damson.

Quetsche Précoce de Furst.

A new German variety. Branches smooth.

Fruit small, obovate pointed. Skin dark purple, with a thick bloom. Flesh yellowish, juicy, sweet; separates from the stone. Good. Last of August.

FINE BONTÉ.

This variety originated at Moselle, France. Tree vigorous. Branches smooth.

Fruit small, oval pointed. Skin reddish purple or lilac, blue bloom. Flesh greenish yellow, juicy, sweet; separates from the stone. Last of July. (Verg.)

FOOTE'S EARLY ORLEANS.

Raised by Asahel Foote, Williamstown, Mass. Tree vigorous, spreading. Branches slightly downy, grayish.

Fruit medium, roundish, inclining to oval, dot at apex. Skin deep black covered with a blue bloom. Stalk medium, slender, set in a deep cavity. Flesh greenish, moderately juicy, sweet, pleasant; adheres to the stone. Good to very good. Early August.

FOOTE'S GOLDEN GAGE.

Same origin as the preceding. Tree very vigorous, upright. Branches slightly downy, reddish brown.

Fruit large, nearly globular. Suture shallow, half round. Skin golden yellow, with obscure splashes of green, and shaded with red in the sun; thin bloom. Stalk slender. Cavity small. Flesh yellow, juicy, sweet, slightly vinous; adheres very slightly to the stone. Very good. Early September.

FOTHERINGHAM.

Sheen. Fotheringay. Grove House Purple.

An old English Plum of good quality. Branches smooth.

Fruit of medium size, obovate, with a distinct suture. Skin reddish purple, covered with a pale blue bloom. Flesh pale greenish yellow, juicy, sprightly, and rich; separating from the stone. Good. Middle of August.

FROST GAGE.

Frost Plum.

A late Plum, scarcely yielding to any other late variety in the excellence of its flavor. It appears to have originated in Fishkill, Dutchess Co., N. Y., where it has for many years past been most extensively cultivated for market; but of late has been so subject to knots that it is not now much grown. Branches smooth.

Fruit rather below medium size, roundish oval, with a distinct suture on one side. Skin deep purple, with a few brown specks, and a thin bloom. Stalk half to three-fourths of an inch in length, inserted with little or no depression. Flesh greenish yellow, juicy, sweet, rich and melting; adhering to the stone. Good to very good. First of October.

FULTON.

Origin uncertain. Found at Johnstown, Fulton Co., N. Y. Tree vigorous and productive. Branches smooth, reddish.

Fruit rather large, roundish oval. Suture shallow, half round. Skin whitish yellow, covered with a bloom, blotched and marbled in the sun. Stalk rather stout. Cavity large. Flesh golden yellow, juicy, sugary, vinous. Good to very good. Separates from the stone. Early October.

GALBRAITH.

Originated with Mr. Galbraith, near Boalsburg, Pa. A straggling grower. Tree very vigorous. Branches smooth, brownish gray.

Fruit medium to large, roundish oval. Suture shallow. Skin purple. Stalk medium. Cavity deep. Flesh tender, juicy; adheres to the stone. Good. August.

GEM.

Originated near Albany, N. Y. Tree vigorous. Branches downy.

Fruit small, roundish. Suture slight. Apex a little sunk. Skin whitish, mostly shaded and mottled with violet in the shade and purple in the sun, covered with a blue bloom. Stalk rather long. Cavity large. Flesh yellow, juicy, sweet, adheres partially to the stone. Its beauty its only merit. Last of August.

GENL. HAND.

Origin uncertain; supposed to have originated on the farm of Genl. Hand, near Lancaster, Pa. Tree very vigorous. Branches smooth.

Fruit very large, roundish, oval. Suture obscure, running half round. Skin deep golden yellow, slightly marbled with greenish yellow. Stalk long, set in a shallow cavity, the whole of that end being flattened. Flesh coarse, pale yellow, moderately juicy, sweet and good, but not high flavor; separates freely from the stone. Good. September.

GERMAN PRUNE.

Common Quetsche.	Quetsche Grosse.
True Large German Prune.	Prune d'Allemagne.
Turkish Quetsche.	Quetsche d'Allemagne Grosse.
Leipzig.	Damas Gros.
Sweet Prune.	Covetche.
Damask.	Early Russian.
Impératrice Violette.	German Quetsche. Conetsche.
Impératrice Violette Grosse.	Koetsche.
Damas Violet Gros.	Quetzen.
Zwetsche.	Large German Prune.

So many Plums are cultivated under the name of German Prune that it is difficult to fix this fickle title, a circumstance owing to the fact that the prune frequently comes the same, or nearly the same, from seed, and in prune-growing districts this is a popular way of increasing them, while it, of course, gives rise to many shades of character. It is a valuable class of plums, of fair quality for the table, but most esteemed for drying and preserving—abundant bearers, and hanging long on the tree. Branches smooth. The common German Prune is described as follows:—

Fruit long oval, nearly two inches long, peculiarly swollen on one side, and drawn out towards the stalk. Suture distinctly marked. Skin purple, with a thick blue bloom. Stalk three-fourths of an inch long, slender, slightly inserted. Flesh firm, green, sweet, and pleasant; separates from the stone, which is flat, very long, and a little curved. Good to very good. 10th of September.

This prune is, perhaps, the most universal and most valuable fruit-tree in Germany, Hungary, Saxony, and all Central Europe. Preserved, it is used in winter as a substitute for

German Prune.

butter by the laboring peasantry; and dried, it is a source of large profit in commerce.

The AUSTRIAN QUETSCHÉ, *Thomp.* (*Quetsche de Brême, Bremen Prune*), is a sub-variety, much like the foregoing, purple, a freestone, of rather better flavor, and ripening somewhat later.

ST. JAMES' QUETSCHÉ is another variety, with smooth branches, and oblong fruit of medium size. Flesh purple, adheres to the stone, of very good flavor. It yields good crops. September.

GHISTON'S EARLY.

Branches smooth, short-jointed.

Fruit large, oval. Skin clear yellow, with a light bloom. Flesh yellow; separates from the stone. Poor. Middle of August.

GIFFORD'S LAFAYETTE.

Tree very vigorous, and very productive.

Fruit medium, long oval, purple, with a bloom. Flesh greenish, coarse, juicy, not rich; adheres to the stone. Poor. Last of August.

GISBORNE'S.

Gisborne's Early.

Paterson's.

Tree a moderate grower, spreading, productive. Branches downy.

Fruit medium, oval. Suture distinct, one side often enlarged. Skin greenish yellow, with red next the sun, marbled and spotted, thin bloom. Stalk medium. Cavity deep. Flesh yellowish, rather coarse, moderately juicy; separates from the stone. Good. Last of August.

GOLDEN CHERRY PLUM.

Raised by Samuel Reeve, Salem, N. J. Tree vigorous, productive.

Fruit small to medium, roundish. Skin fine waxen yellow, becoming bronzed in the sun. Flesh yellowish, juicy, brisk, subacid; adheres to the stone. July.

GOLDEN ESPEREN.

Cloth of Gold Esperen.
Drap d'Or Esperen.

Raised by Major Esperin. Tree of moderate growth, spreading. Buds large, pointed, a promising variety. Branches smooth, reddish brown.

Fruit large, roundish oval. Skin golden yellow, with light streaks of green beneath, covered with a thin bloom, and a few crimson dots on the sunny side. Suture shallow. Stalk short and rather stout, in a small cavity. Flesh light yellowish, rather coarse, very juicy, sugary, and rich. Good to very good. Adheres partially to the stone. Ripens last of August.

Golden Esperin.

GOLIATH.

Caledonian.
Steers's Emperor.

Saint Cloud.
Wilmot's late Orleans.

A large and handsome Plum. It is easily distinguished from the Nectarine Plum, with which it has been confounded, by its gray, very downy shoots.

Fruit large, roundish oblong, enlarged on one side of the suture. Skin a fine deep red, approaching purple, a little paler in the shade, dusted with a thin blue bloom. Flesh yellow, adheres considerably to the stone, rather juicy, with a brisk, sprightly flavor. Good. Last of August.

GONNE.

Prune Gonne.

A large and handsome Belgian Plum. Tree vigorous productive. Branches downy.

Fruit large, roundish oval. Suture distinct. Skin reddish purple, with carmine dots and specks in sun, thin bloom. Flesh yellowish, rather coarse, juicy, melting, sweet; separates from the stone. Early September. (An. Pom.)

GREAT DAMASK VIOLET OF TOURS.

Gros Damas de Tours

Largest Damask of Tours.

Damas de Tours gros.

This French Plum is described by Lindley, whom we copy. Branches downy.

Fruit medium, somewhat oval. Skin dark blue, covered with a violet bloom. Flesh yellow, and loosely adheres to the stone. Early August.

GREEN GAGE.

Bruyn Gage.	Abricot Vert.	Schnuyler Gage, incorrectly.
Bradford Gage.	Dauphine.	Trompe Garçon.
Wilmot's Green Gage.	Louis Brun?	Trompe Valet.
—— New Green Gage.	Abricotée Sageret?	Verducia.
—— Late Green Gage.	Ida Gage.	Verdochio.
Isleworth Green Gage.	Cant's late Green Gage.	Verte Tiquetée.
Brugnon Gage.	Aloise's Green Gage.	Murray's Reine Claudia.
Reine Claude.	Goring's Golden Gage.	Huling's Reine Claudia.
Grosse Reine Claude	Great Green Damask.	Reine Claudia blanche la grosse.
Grosse Reine	Ida Green Gage.	Gros Damas vert.
Damas Vert.	Mirabelle Vert Double.	Livingston Manor.
Sucrin Vert.	Queen Claudia.	Reine Claude Dorée.
Vert Bonne.	Rensselaer Gage.	

The Green Gage is universally admitted to hold the first rank in flavor among all Plums, and is everywhere highly esteemed. In France this variety is generally known as the Reine Claude, having, it is said, been introduced into that country by Queen Claude, wife of Francis I. During the last century an English family by the name of *Gage* obtained a number of fruit-trees among the monks of Chartreuse, near Paris. Among them was a tree of this plum, which, having lost its name, was

called by the gardener the Green Gage. It is pronounced, by Lindley, the best plum in England, and we must admit that we have no superior to it here.

The Green Gage is a very short-jointed, slow-growing tree, of spreading and rather dwarfish habit. It is an abundant and pretty regular bearer, though the fruit is a little liable to crack upon the tree in wet seasons. Branches smooth. Buds with large shoulders.

Green Gage.

Fruit round, rather small, seldom of medium size. Suture faintly marked, but extending from the stalk to the apex. Skin green, or yellowish green at full maturity, when it is often a little dotted or marbled with red. Stalk half to three-fourths of an inch long, slender, very slightly inserted. Flesh pale green, exceedingly melting and juicy, and usually separates freely from the stone. Flavor at once sprightly and very luscious. Best. Ripe about the middle of August.

There are several seedling varieties of this Plum in various parts of this country, but none superior or scarcely equal to the old.

GUNDAKER PRUNE.

Groundacre.

Raised by Samuel E. Gundaker, of Lancaster, Penn.

The Gundaker Prune is of a yellowish white color, nearly as large as the Blue Prune, and of the same oval shape, very high-flavored, and a good bearer.

GUNDAKER PLUM.

Same origin as the Prune, of a purple color on one side, and the other a light color, heart-shaped, resembling a Plum called Golden Drop, but larger in size, and a great bearer. (Gundaker in Hort.)

GUTHRIE'S APRICOT.

Guthrie's Golden.

Raised by Mr. Guthrie, Scotland. Tree very vigorous, hardy, productive. Branches smooth.

Fruit rather large, roundish oval. Suture very slight. Skin yellow, sprinkled with a few crimson dots, and covered with a thin bloom. Stalk rather long, set in a small depression. Flesh yellow, coarse, juicy, sweet, but not high-flavored; adheres to the stone. Good to very good. Ripens the last of August.

GUTHRIE'S AUNT ANN.

Aunt Ann.

Same origin as the preceding. Tree vigorous, upright. Branches smooth, reddish.

Fruit medium, oval. Suture shallow, a little more than half round.

Apex a little sunk. Skin pale yellow, somewhat splashed with green, covered with a thin bloom. Stalk rather long. Cavity moderate. Flesh yellow, juicy, sugary, slightly vinous; adheres to the stone. Good to very good. Early September.

GUTHRIE'S LATE GREEN.

Minette.

Raised by Mr. Guthrie, Scotland. A very rapid grower. Branches smooth.

Fruit medium, globular, swollen on one side. Skin yellow, with splashes of green, and covered with a thin bloom. Stalk three-fourths of an inch long, inserted in a small cavity. Flesh greenish yellow, juicy, sugary, rich; adheres to the stone. Very good. Early September.

Guthrie's Late Green.

GUTHRIE'S RUSSET.

Another of Mr. Guthrie's originating. Tree vigorous. Branches smooth, brownish

Fruit large, oval. Suture large, half round. Skin yellow, covered with a thin bloom, sometimes marbled in the sun with crimson. Stalk long, slender. Cavity small. Flesh yellow, juicy, sweet, rich; adheres to the stone. Good to very good. Last of August.

GUTHRIE'S TAYBANK.

Same origin as above. Branches smooth, short-jointed.

Fruit large, roundish oval. Skin greenish yellow. Flesh yellowish, juicy. Good. Last of September. (Elliott.)

GUTHRIE'S TOPAZ.

Raised by Mr. Guthrie, Scotland. Tree a moderate grower, with smooth reddish brown branches, very productive.

Fruit medium, oval, with a slight neck, one side somewhat swollen. Suture moderate. Skin golden yellow, with a thin bloom. Stalk an inch long, slender, curved, inserted in a small deep cavity. Flesh yellow, juicy, sweet, not very rich, but pleasant; adheres to the stone. Good. Middle of September.

GWALSH.

Fruit large, oblong oval. Suture shallow. Skin deep purple, with

a bloom. Stalk rather short, slightly sunk. Flesh greenish, coarse, not very juicy, sweet, and pleasant; adheres to the stone. Good. First of September.

HALLENBECK.

Originated with Henry Hallenbeck, East Greenbush, Rensselaer Co., N. Y. Tree vigorous, with upright stout shoots and prominent buds. rather slow growth. Branches smooth or slightly downy.

Fruit large, roundish oval, one side often enlarged. Suture broad, shallow. Skin deep reddish purple, sprinkled with numerous minute dots, and covered with a grayish blue bloom. Stalk stout. Cavity large. Flesh greenish yellow, very juicy, sugary, with a brisk flavor; adheres closely to the stone. Good. Last of August.

HARTWISS' YELLOW PRUNE.

A German variety. Tree vigorous, very productive.

Fruit medium, oval, narrowed toward the stalk, next which is a slight mamelon neck. One side compressed. Skin fine yellow, slightly blotched and dotted with crimson, thin light bloom. Stalk long, slender. Cavity small. Flesh yellow, a little coarse, juicy, sugary. Separates freely from the stone. Good to very good. Early September.

HENRIETTA GAGE.

Early Genesee.

Originated in the town of Henrietta, Monroe Co., N. Y. Tree of rather slow growth. Branches brownish gray, slightly downy.

Fruit medium, roundish oval. Suture shallow, a little more than half round. Skin pale yellowish white, with a thin white bloom. Stalk rather short, stout, in a small cavity. Flesh yellow, not very juicy, sweet; adheres to the stone. Good. Early August.

HENRY CLAY.

Raised by Elisha Dorr, Albany, N. Y. Tree vigorous and productive. Its great beauty will make it desirable. Branches smooth.

Fruit medium, somewhat oval, inclining to a neck, with a slight suture. Skin yellow, with a light bloom, and the cheek beautifully marbled and shaded with red. Stalk long, slender, inserted in a small cavity. Flesh yellow, juicy, and sweet; adheres slightly to the stone. Good to very good. Last of August.

HIGHLANDER.

Origin, Newburgh, N. Y. Tree vigorous and very productive. Branches gray, smooth.

Fruit large, irregularly ovate, somewhat swelled on one side. Suture moderate, half round. Skin deep blue, inclining to reddish brown, covered with a thin bloom, and thickly sprinkled with brown dots. Stalk very short, inserted in a slight cavity. Flesh greenish yellow, juicy, sugary, rich, vinous; adheres slightly to the stone. Good to very good. Last of September.

HOLLAND.

Blue Holland.

Holland Prune.

Tree vigorous. Branches downy, rather slender.

Fruit round, slightly flattened. Skin blue or light reddish purple, covered with a blue bloom. Flesh juicy, melting, sweet, and pleasant; separating freely from the stone. Good. Last of August to the middle of September.

HORSE PLUM.

Large Early Damson.

Sweet Damson.

Tree vigorous, upright. Branches downy.

Fruit of medium size, oval, with a deep suture on one side. Skin purple in the sun, reddish on the shaded side, with blue bloom. Flesh greenish yellow, rather dry and acid, separates from the stone. Scarcely good. Last of August.

HOWARD'S FAVORITE.

Raised by E. Dorr, Albany, N. Y. Tree a vigorous grower, very productive. Branches smooth.

Fruit large, oval, narrowing toward the stalk, and flattened at apex. Suture shallow, a little more than half round. Skin pale yellow, dotted and marbled with carmine in the sun, covered with a thin lilac bloom. Stalk rather long. Cavity small. Flesh yellow, juicy, sweet; adheres to the stone. Good to very good. September.

HOWELL'S EARLY.

Sea. Early Purple. Chapin's Early.

Origin unknown; brought from Virginia. Tree of rather slow growth. Wood slender, gray, and downy.

Fruit rather below medium size, oval, without any suture, one side a little enlarged. Skin pale red, reddish purple in the sun, covered with a light lilac bloom. Stalk short, stout, with a slightly elevated collar. Flesh yellow, juicy, rich, sweet; separates from the stone. Good to very good. Early August.

Howard's Favorite.

HOW'S AMBER.

Origin, Portsmouth, N. H. Tree vigorous, productive.

Fruit medium, roundish, slight suture. Skin amber-colored in the shade, mottled with rose, thinly covered with pale violet bloom. Stalk of medium length, inserted without cavity. Flesh coarse, yellow, melting, juicy; adhering to the stone. First of September. (Hov. Mag.)

HUDSON GAGE.

Reine Claude d'Hudson.

Raised by L. U. Lawrence, of Hudson, N. Y. Tree thrifty, productive. Branches downy.

Fruit of medium size, oval, a little enlarged on one side of the obscure suture. Skin yellow, clouded with green streaks under the skin, and covered with a thin white bloom. Stalk short, little more than half an inch long, inserted in a moderate hollow. Flesh greenish, very juicy and melting, with a rich, sprightly, excellent flavor. It separates from the stone (adhering very slightly). Very good. First week in August.

Hudson Gage.

HULINGS' SUPERB.

Keyser's Plum.

Gloire de New York.

Raised by Mr. Keyser of Pennsylvania, and brought into notice by Dr. W. E. Hulings of that State. Tree very vigorous, upright, large foliage, blunt shoots, large-shouldered buds, moderate bearer. Branches downy.

Fruit very large, roundish oval, with a distinct though shallow suture. Stalk strong and stout, set in a round, small cavity. Skin rather dull greenish yellow, thinly covered with pale bloom. Flesh greenish yellow, rather coarse, but with a rich, brisk, sprightly flavor. Good. It adheres to the stone. Middle of August.

ICKWORTH IMPÉRATRICE.

Knight's No. 6.

Raised by Mr. Knight, of Downton Castle. It hangs a long while on the tree, and if gathered and wrapped in soft paper, will keep many weeks. Branches smooth.

Fruit rather above medium size, obovate. Skin purple, peculiarly traced or embroidered with streaks of golden fawn color. Stalk moderately long and thick. Flesh greenish yellow, sweet, juicy, and rich, mostly adhering to the stone, which is rather small. Very good. Early in October.

IMPÉRIALE DE MILAN.

Prune de Milan.

Tree vigorous, rather spreading. Branches smooth.

Fruit rather large, roundish oval. Suture broad, extending two-thirds around one side, often enlarged. Skin deep purple, covered with a thick blue bloom. Stalk stout, set in a small cavity. Flesh greenish, juicy; sugary, adheres to the stone. Good. Early September.

IMPERIAL GAGE.

Flushing Gage.
 White Gage.
 Prince's Imperial Gage.
 Superior Green Gage.

Reine Claude Impériale.
 Prince's Gage.
 Admiral de Rigny?
 Prince's White Gage.

Prince's Imperial.

The Imperial Gage has long enjoyed the reputation of one of the most excellent and productive of Plums. It was raised at Prince's Nursery, Flushing, N. Y., from the seed of the Green Gage, and the fact of the fruit of a single tree near Boston having produced fruit to the value of nearly fifty dollars annually, has often been repeated as a proof of the profit of its cultivation for market. The tree grows freely and rises rapidly, and has long dark shoots, slightly downy.

Fruit rather above medium size, oval, with a distinct suture. Stalk nearly an inch long, slightly hairy, and pretty stout, inserted in an even hollow. Skin pale green until fully ripe, when it is tinged with yellow, showing a *peculiar marbling of dull green stripes*, and covered with copious white bloom. Flesh greenish, very juicy, melting, and rich, with a very slightly agreeable flavor; it separates pretty freely from the stone. The latter is oval, and pointed at both ends. Best. Early September.

Imperial Gage.

IMPERIAL OTTOMAN.

A very neat early Plum, of good flavor, and a prolific bearer. It has the reputation of having been brought from Turkey, but it is uncertain whether this is correct. Tree vigorous, upright. Branches long, slightly downy.

Fruit scarcely below medium size, roundish, between Green Gage and the American Yellow Gage in appearance, and having a suture on one side, from the stalk half way down. Stalk downy, slender, curved, three-fourths of an inch long, inserted in a very slight cavity. Skin dull yellow, clouded with darker streaks, and covered with a thin bloom. It adheres considerably to the stone. The flesh is juicy, sweet, melting. Good to very good. Last of July.

Imperial Ottoman.

IMPERIAL PURPLE

Originated with Wm. R. Prince, Flushing, L. I. Tree vigorous, very productive. Branches smooth.

Fruit medium, roundish oval, one side slightly compressed. Suture slight. Skin reddish purple, covered with a pretty thick lilac bloom. Stalk rather short, slender. Cavity small. Flesh greenish, juicy, sweet; adheres to the stone. Good to very good. Last of August.

INCOMPARABLE.

Nonpareil.

Incomparable Prune.

A German Prune Plum. Tree vigorous, upright, with long slender smooth branches.

Fruit medium or below, long oval, narrowing at ends. Suture shallow, pointed at apex. Skin deep purplish black, covered with a thick blue bloom. Stalk long, slender. Cavity small. Flesh yellowish, sweet; adheres slightly to the stone. Good. Last of September.

ISABELLA.

This is an attractive-looking English Plum. Branches quite downy and gray.

Fruit medium size, oval, rather narrower towards the stalk. Skin dark dull red in the sun, paler in the shade, and thickly sprinkled with darker colored dots. Stalk three-fourths of an inch long, a little hairy, set in a moderate hollow. Flesh yellow, rich, juicy, with a smart flavor, and adheres to the stone. Good. Last of August.

ITALIAN DAMASK.

Damas d'Italie.

Tree thrifty, vigorous.

Fruit medium, roundish oval. Suture shallow. Apex slightly sunken. Skin purplish black, covered with a thick blue bloom. Stalk rather stout. Flesh light green, a little firm, moderately juicy, slightly vinous; separates from the stone. Good. Late August.

ITALIAN PRUNE.

Prune d'Italie.

Altesse Double.

Fellenberg.

Italian Quetsche.

Quetsche d'Italie.

Tree vigorous, spreading. Branches smooth.

Fruit medium, oval. Suture moderate. Skin dark blue, with a bloom. Stalk an inch long, rather stout, inserted in a very small cavity. Flesh dark yellow, juicy, sweet, and good; separates from the stone. Good. First of October.

IVES.

Ives' Washington.

Ives' Seedling.

Raised by J. M. Ives, Salem, Mass. Tree of moderate growth, straggling and irregular, prominent buds. Branches smooth.

Fruit medium, oval. Suture a mere line. Skin pale yellow, with a light thin bloom. Stalk long, slender. Flesh yellow, melting, juicy; separates from the stone. Good. Early September.

JACOB.

Tree moderately vigorous. Branches smooth.

Fruit medium, oval, with a neck, one side enlarged. Suture large. Skin violet purple, covered with lilac bloom. Stalk long, slender. Cavity small. Flesh greenish, juicy, sweet; separates from the stone. Good. September.

JAUNE HÂTIVE.

Early Yellow.

Catalonian.

White Primordian.

Jaune de Catalogne.

Prune de St. Barnabé.

D'Avoine.

Amber Primordian.

Jean Hâtive.

Early John.

Bilboa.

St. Barnabée.

Loudon Plum.

Prune de Catalogne.

Avant Prune blanche.

Cerisette Blanche

Pickett's July.

Prune Monsieur Jaune.

Prune d'Altesse blanche.

The earliest of Plums, which is its chief recommendation. It is a very old variety, from Catalonia and the South of France, and has been in cultivation more than two hundred years. It is a pretty little fruit, and is worthy of a place in the garden of the amateur. The tree has long, slender, downy branches.

Fruit small, oval or obovate, with a shallow suture on one side. Stalk slender, half an inch long. Skin pale yellow, thinly coated with bloom. Flesh yellow, tolerably juicy, and melting, of sweet and pleasant flavor; separates from the stone. Good. From the 10th to the middle of July.

JEFFERSON.

If we were asked which we think the most desirable and beautiful of all dessert Plums, we should undoubtedly give the name of this new variety. When fully ripe, it is nearly equal in flavor to the Green Gage, that unsurpassable standard of flavor. But when we contrast the small appearance of the Green Gage with the unusual size and beauty of the Jefferson, we must admit that it takes the very first rank. It is about ten days or a fortnight later than the Washington, ripening the last of August.

We received the Jefferson Plum, a few years ago, from the late Judge Buel, by whom it was raised and named. It is a good moderate grower and regular bearer, and the crop is very handsome on the tree. Branches slightly downy.

Fruit large, oval, slightly narrowed on one side towards the stalk. Skin golden yellow, with a beautiful purplish-red cheek, and covered with a thin white bloom. Stalk an inch long, pretty stout, very slightly inserted. Suture indistinct. Flesh deep orange; parts freely, and al-

most entirely from the stone, which is long and pointed. Very rich, juicy, luscious, and high-flavored. Best.

Jefferson.

JERUSALEM.

Prunier de Jerusalem.
Violette Jerusalem.

Prune Violet de Jerusalem.
De Bordeaux.

Œil de Bœuf.

Fruit large, long, egg-shaped. Skin dark purple, covered with a dense blue bloom. Stalk an inch long, hairy. Flesh firm, sweet, brisk; separates from the stone. Middle September. (Hogg.)

JODOIGNE GREEN GAGE.

Boulouf.

Reine Claude de Jodoigne.

Royal de Vilvorde.

Tree vigorous. Branches smooth, stout, short-jointed.

Fruit large, round, inclining to oblate. Suture shallow, half round. Skin thin, greenish yellow, with blush red strewn green and yellowish dots on the side next the sun, and covered with a thin blue bloom. Stalk half an inch long. Flesh whitish yellow, firm, very juicy, tender, sugary, rich. Late September. (Hogg.)

JUDSON.

Raised by Mr. Judson, of Lansingburgh, N. Y. Tree thrifty and productive. Branches smooth.

Fruit large, long oval. Suture broad, rather deep. Skin reddish purple, covered with a thin blue bloom. Stalk long, stout. Flesh greenish, rather coarse, not very juicy, sweet; adheres partially to the stone. Scarcely good. Last of August.

JULY GREEN GAGE.

Reine Claude de Bayay Hâtive.

Early Bayay.

Fruit medium, roundish, slightly oblong. Suture distinct, a little more than half round. Skin greenish yellow, tinged with purple in the sun, thin bloom. Stalk rather stout. Cavity broad, shallow. Flesh yellow, juicy, sweet; separates from the stone. Very good. Last August.

KESTER'S GREEN GAGE.

Raised by — Weaver, Mt. Pleasant, Westmoreland Co., Pa. Tree vigorous, productive.

Fruit small, nearly globular, one side enlarged. Suture rather large. Skin pale yellowish green, with splashes of deeper green, slight bloom. Stalk of medium length, inserted in a large cavity. Flesh greenish, juicy, sugary, rich. Very good. Adheres slightly to the stone.

KESTER'S YELLOW GAGE.

Raised by — Weaver, Mt. Pleasant, Westmoreland Co., Pa. Tree vigorous, upright. Branches smooth.

Fruit medium, roundish oval. Suture broad and shallow. Skin pale yellow, splashed with green, and covered with a thick white bloom. Stalk of medium length, inserted in a small cavity. Flesh greenish yellow, juicy, sugary, rich. Very good. Adheres partially to the stone.

KIRKE'S.

Kirke's Plum is a variety which came to us from England, where

it was first brought into notice by Mr. Kirke, the nurseryman, at Brompton. Branches smooth.

Fruit of medium size, roundish oblong, with very little suture. Skin dark purple, with a few golden dots, and coated with an unusually thick blue bloom, which adheres pretty closely. Stalk three-fourths of an inch long, inserted in a very slight depression. Flesh greenish yellow, firm, and very rich in flavor. It separates freely from the stone, which is flat and broad. Good to very good. Last of August and first of September.

KOLENKAMP.

Originated in the garden of W. Kolenkamp, Philadelphia, Pa.

Fruit large, oval, red. Flesh yellowish, dry; separates from the stone. Last of September. (Am. P. Soc.)

LADY PLUM.

Raised by Isaac Denniston, Albany, N. Y. Tree of slender growth, productive. It is quite a pretty fruit, esteemed highly for preserving, this being its chief quality. It is a rampant grower, an abundant bearer.

Fruit quite small, oval. Stalk short and stout. Color light yellow, spotted with red. Stone free and small. Flavor acid. First of September. (E. Dorr in Cult.)

LANGDON.

Langdon's Seedling.

Raised by Reuben Langdon, of Hartford, Conn. Tree vigorous and productive. Branches smooth.

Fruit rather large, roundish oval, with a moderate suture. Skin reddish purple, covered with a thick lilac bloom. Stalk three-fourths of an inch long, inserted in a rather deep cavity. Flesh greenish yellow, coarse, juicy, sprightly, subacid, and adheres mostly to the stone. Good. Last of August.

LARGE GREEN DRYING.

Knight's Large Drying.

A late variety, raised, we believe, by Mr. Knight, and introduced here from the garden of the Horticultural Society of London. The tree is vigorous, and the branches are smooth.

The fruit large, round, greenish yellow. The flesh yellowish, moderately juicy, sweet. Good. Adheres to the stone. Middle of September.

LATE BLACK ORLEANS.

Tree vigorous, with long and slender smooth branches; very productive.

Fruit medium, nearly round. Suture broad, shallow. Dot at apex. Skin deep black, covered with a thick blue bloom, and thickly sprinkled with minute brown dots. Stalk rather stout. Cavity small. Flesh deep yellow, juicy, sugary; adheres firmly to the stone. Good. Last of September.

LATE BOLMER.

Winter Bolmar.

Fruit medium, roundish. Skin yellow, mottled with red next the sun. Flesh yellow, rather firm, sweet, but not rich; separates from the stone. Good. Middle of September.

LATE RIVERS.

A seedling of Thomas Rivers, England. Branches smooth.

Fruit below medium size, round, slight suture. Skin dark purple, almost black. Stalk an inch or more long, slender. Flesh yellow, juicy, sweet; adheres to the stone. Good. Last of October. (Hogg.)

LAWRENCE'S EARLY.

A foreign variety.

Fruit medium size, roundish oval, flattened at ends. Skin dark purplish red, covered with a thick bloom. Flesh juicy; separates from the stone. Good. Middle August.

LAWRENCE'S FAVORITE.

Lawrence's Gage.

Reine Claude de Lawrence.

Lawrence's Favorite is a fruit of high merit, raised by Mr. L. U. Lawrence, of Hudson, N. Y., from a seed of the Green Gage.

The general appearance of the fruit is like that of its parent, except that it is much larger. It hangs well on the tree, and its size, flavor, and productiveness should give it a place in every garden.

Lawrence's Favorite.

Lawrence's Favorite forms an upright tree of thrifty growth. Young branches smooth.

Fruit large, heavy, roundish, a little flattened at either end. Skin dull yellowish green, clouded with streaks of a darker shade beneath, and covered with a light bluish-green bloom. The upper part of the fruit, when fully ripe, is covered with a *peculiar brownish network*, and a few reddish dots. Stalk short, only half an inch long, slender, inserted in a narrow cavity. Flesh greenish, resembling that of the Green Gage, re-

markably juicy and melting, perhaps scarcely so rich as the latter, but with a very rich, sprightly vinous flavor, and one of the most delicious of plums. The flesh sometimes adheres a little when not fully ripe, but then separates freely. Best. Middle of August.

LAWSON'S GOLDEN.

Damas Lawson.

Golden Gage Lawson.

Tree vigorous, productive. Branches smooth.

Fruit medium, roundish oval. Suture very shallow. Skin pale yellow.

low, lightly shaded and mottled in the sun with dull crimson, covered with a thin bloom. Stalk long, slender. Cavity small. Flesh yellow, juicy, sweet. Adheres to the stone. Good to very good. Last of August.

LEWISTON EGG.

Origin, Lewiston, N. Y. Tree vigorous and productive. Branches downy.

Fruit medium size, oval. Skin pale yellow, with a bloom. Flesh yellow, adhering closely to the stone, not very sweet, and only secondary flavor. Good. Last of August.

LIEGEL'S APRICOT.

Abricotée de Braunan Nouvelle.

Branches downy.

Fruit medium, roundish. Suture deep. Skin like Green Gage, covered with a white bloom, becoming yellowish as it ripens. Flesh greenish yellow, melting, juicy, sugary; separates from the stone. Last of September. (Hogg.)

LOMBARD.

Bleecker's Scarlet. Beekman's Scarlet. Montgomery Prune.

Tree very vigorous, hardy, has strikingly crimped leaves, bright purple glossy shoots, very productive, popular.

It was called the Lombard Plum by the Massachusetts Horticultural Society, in compliment to Mr. Lombard, of Springfield, Mass., who first brought it into notice in that State; and it is said to have been received by him from Judge Platt, of Whitesborough, N. Y., who raised it from seed. But it was previously well known here by the name of *Bleecker's Scarlet*. Never having been described under that name, however, we adopt the present title.

Fruit of medium size, roundish oval, slightly flattened at either end. Suture obscure. Stalk quite slender, scarcely three-fourths of an inch long, set in a broad, abruptly narrowing cavity. Skin delicate violet red, paler in the shade, dotted with red, and dusted thinly with bloom. Flesh deep yellow, juicy, and pleasant, but not rich; adhering to the stone. Good. Middle and last of August.

Lombard.

LONG SCARLET.

Scarlet Gage.

Red Gage, incorrectly.

American. Tree very vigorous, and very productive. Shoots downy.

Fruit of medium size, oblong obovate, swollen on one side of the suture, and tapering to the stalk. Skin bright red in the sun, pale yellowish red on the shady side, covered with a fine lilac bloom. Flesh deep yellow, juicy, acid at first, but, if allowed to hang, it becomes rather rich and sweet. It adheres to the stone. Good. Last of August.

LOUISA.

From Missouri. Tree vigorous, very productive, spreading. Branches evidence of its native wild character.

Fruit medium, nearly round, yellow, nearly covered with purplish red, gray dots, thin bloom. Suture slight. Flesh yellow, juicy. Good. Adheres to the stone. Last of August. (Husmann.)

LUCOMBE'S NONESUCH.

An English Plum, raised by Lucombe, of the Exeter Nursery. Tree moderately vigorous. Branches smooth.

Fruit above medium size, roundish, shaped and colored much like the Green Gage, but much more distinctly streaked with yellow and orange, and covered with a whitish bloom. Suture broad. Stalk straight, three-fourths of an inch long, set in a wide hollow. Flesh pretty firm, greenish, and adheres to the stone. Good. Last of September.

McLAUGHLIN.

Raised by James McLaughlin, Bangor, Me. Tree hardy, vigorous, and productive, a valuable variety, nearly or quite equal to Green Gage.

Branches smooth.

McLaughlin.

Fruit large, nearly round, oblate, flattened at both ends. Suture slight. Stalk three-fourths of an inch long, inserted in a small cavity by a ring. Skin thin and tender, yellow, dotted and marbled with red on the sunny side, and covered with a thin bloom. Flesh dull yellow, rather firm, juicy, very sweet and luscious, perfumed. It adheres to the stone. Best. Last of August.

MAMELONNÉE.

Mamelon Sageret.

A seedling of Sageret, near Paris. Tree moderately vigorous. Branches smooth, brownish gray.

Fruit of remarkable shape, having a neck or (mamelon) at the base of the stock. It is of excellent quality, hardy and prolific. Fruit of medium size, oval, tapering towards the apex, and a well-marked suture on one side. Stalk small, inserted without depression. Skin pale yellow, a few splashes and streaks of green, dotted and marbled with crimson in the sun, covered with a thin light bloom. Flesh yellow, juicy, sugary, rich; separates from the stone. Good to very good. Middle August.

MANNING'S LONG BLUE PRUNE.

Manning's Prune.

Large Long Blue.

Manning's Long Blue.

Origin unknown. Tree vigorous, with long dark-colored shoots, very productive. Branches smooth.

Fruit quite large, long oval, a little one-sided, with an obscure suture. Stalk very long and slender, set in a very trifling depression. Skin dark purple, with a thick blue bloom. Flesh greenish yellow, firm, rather

juicy, with a sweet, sprightly, pleasant flavor. It separates pretty readily from the stone, which is long and pointed. Good. First to last of September. Ripens gradually and bears carriage well.

MANN'S IMPERIAL.

Brandy Gage.

Mann's Brandy Gage.

This fruit is a small form of Coe's Golden Drop, of rich flavor, but very much earlier. It differs from Coe's Golden Drop by having downy shoots. (Hogg.)

MARTEN.

Marten's Seedling.

An accidental seedling in the garden of Mr. Marten, Schenectady, N. Y. A very vigorous, upright grower, productive. Branches smooth, grayish.

Fruit large, roundish oblong, irregular suture, rather deep from stalk to apex, which is a little sunk. Skin yellow, somewhat streaked with green, and dotted with red on the sunny side. Stalk nearly an inch long, set in a small cavity. Flesh yellow, a little coarse, juicy, with a brisk sprightly flavor. Separates from the stone. Good to very good. First of September.

MAUGERON.

Damascene Maugeron.
Damas de Maugeron.

Maugeron.
Maugeron Damask.

Branches smooth.

Fruit large, round, depressed. Skin purplish, dotted with yellowish dots, and covered with a blue bloom. Flesh whitish yellow, not very juicy, breaking, sweet; separates from the stone. Early September. (Liegel.)

MEDITERRANEAN.

Tree vigorous, productive. Branches smooth, quite reddish.

Fruit medium, ovate-necked. Suture medium. Skin light crimson. Stalk long, slender. Cavity small. Flesh yellow, sweet, sprightly; separates from the stone. Good. Early September.

MEIGS.

Fruit large, roundish oval. Suture indistinct. Skin dull reddish purple, with numerous gray dots. Stalk long, curved, slender, set in a small cavity. Flesh greenish yellow, juicy, rich, sugary and excellent; adheres to the stone. Good. Last of September.

MINER.

Hinckley.
Isabel.

Gillett.
Townsend.

Robinson.

This is an improved variety of the wild or Chickasaw Plum, originated with Mr. Miner, Lancaster, Pa. Branches smooth, dark red.

Fruit medium, oblong, pointed at apex. Skin dark purplish red, with a fine bloom. Flesh soft, juicy, vinous; adheres to the stone. Early October.

MIRABELLE.

Mirabelle Petite.	Mirabelle de Vienne.	Gelbe Mirabelle.
Mirabelle Jaune.	White Mirabelle.	Small Mirabelle.
Mirabelle Blanche.	Mirabelle Précoce.	Little Mirabelle.
Mirabelle Perle.	Prune de Mirabelle.	Petit Drap d'Or.

A very pretty little fruit, exceedingly ornamental on the tree, the branches of which are thickly sprinkled with its abundant crops. The tree is small in all its parts, and although the fruit has a tolerable flavor, yet from its size and high perfume it is chiefly valued for preserving. Branches downy.

Fruit quite small, obovate, with a well-marked suture. Stalk half an inch long, slightly inserted. Skin of a beautiful yellow, a little spotted with red at maturity, and covered with a white bloom. Flesh orange, sweet, and sprightly, becoming dry when over-ripe, and separates from the stone. Good. Middle of August.

MIRABELLE DE NANCY.

A variety resembling the foregoing, except in its maturing later.

Fruit small, nearly round, rich yellow, dotted with red. Flesh juicy. September. (Hogg.)

MITCHELSON.

Mitchelson's.

Raised by — Mitchelson, England. Tree hardy, productive. Branches smooth.

Fruit above medium size, oval, without suture. Skin black, dotted with a few minute fawn-colored dots, covered with a thin blue bloom. Stalk stout. Flesh yellow, tender, juicy, sweet; separates from the stone. Good. Early September. (F. and P.)

MONROE.

Monroe Egg.

Raised by Miss Dunham, Penfield, Monroe Co., N. Y. Tree very vigorous and productive. Branches smooth.

Fruit medium or above, oval. Skin greenish yellow, with rarely a blush. Stalk rather long, with very little depression. Flesh greenish yellow, not very tender, sweet. Good. First of September.

MOROCCO.

Early Morocco.	Black Morocco.
Early Black Morocco.	Early Damask.

A good early Plum, of rather slow growth, and a moderate bearer. Branches downy.

Fruit of medium size, roundish, with a shallow suture on one side, a little flattened at both ends. Skin dark purple, covered with a pale thin bloom. Stalk half an inch long, rather stout. Flesh greenish yellow, adhering slightly to the stone, juicy, with a smart, rich flavor, becoming quite sweet at maturity. Good. First to middle of August.

MOYRET'S GAGE.

Reine Claude Moyret.

A new French Plum, originated by M. Moyret, at Neuville-sur-Ain. Tree vigorous. Branches slightly downy.

Fruit medium, roundish. Suture half round, distinct, not deep. Skin light reddish, covered with an amber-blue bloom. Stalk rather stout, set in a cavity rather deep. Flesh greenish yellow, fine, juicy, sweet, perfumed; separates from the stone. Early August. (Verg.)

MULBERRY.

Raised by Isaac Denniston, of Albany. The tree is a vigorous grower.

Fruit large, oval, somewhat narrowest towards the stalk. Skin pale whitish yellow, sprinkled with white dots, and dusted with a pale bloom. Stalk an inch long, rather slender, very slightly inserted. Flesh greenish yellow, juicy, sweet, good; adheres slightly to the stone. Good. First of September.

MUSCLE.

This variety is only valuable for stocks on which to propagate other sorts.

Fruit small, oblong, dark red. Stone large.

MUSK DAMASK.

Prune de Malthe.

De Chypre.

Damas Musqué.

Prune de Chypre.

Musqué de Malta?

Tree vigorous, upright. Branches smooth or slightly downy.

Fruit below medium, roundish. Suture distinct. Skin deep purple or bluish black, covered with a thick blue bloom. Flesh yellow or greenish yellow, juicy, sugary, musky. Good. Adheres slightly to the stone. Last of August.

NECTARINE.

Caledonian.

Howell's Large.

Jenkins' Imperial.

Peach Plum, erroneously.

Prune Pêche.

Lonis Philippe.

Tree vigorous, upright, stout, blunt, purplish shoots, nearly smooth. A fine-looking fruit, of foreign origin, but only of second quality.

Fruit of the largest size, regularly formed, roundish. Stalk about half an inch long, rather stout, and set in a wide shallow depression. Skin purple, dusted with a blue bloom. Flesh dull greenish yellow, becoming tinged with red at maturity, a little coarse-grained, with a rich, brisk flavor, and adhering partially to the stone. Good. Middle of August.

NELSON'S VICTORY.

Knevet's Late Orleans.

Tree very vigorous, an abundant bearer. Branches smooth.

Fruit medium-sized, round, marked with a shallow suture. Skin deep purple, covered with a blue bloom. Stalk half an inch long, set

in a shallow cavity. Flesh firm, rather coarse, sweet, briskly flavored; adhering to the stone. Middle September. (Hogg.)

NEWMAN.

A variety of the Chickasaw family, that has recently come into notice through D. L. Adair, of Kentucky. Tree healthy, hardy, vigorous, and productive.

Fruit medium, roundish oval. Skin light scarlet, with a thin bloom. Flesh soft, light pinkish, vinous, juicy; adheres to the stone. Early August.

NORBERT.

Prune de Lepine.

Prune de Prince.

Branches slightly hairy.

Fruit very small, round, inclining to oblate. Skin dark purple, covered with a thick, clear, light blue bloom. Flesh greenish yellow, firm, sweet, not juicy. Separates from the stone. (Hogg.)

NORMAN PERDRIGON.

Perdrigon Normand.

A French variety.

Fruit medium, nearly round. Skin light purple, considerable bloom, marked with fawn-colored dots. Flesh yellowish, melting, juicy, sweet; adheres to the stone. Last of August. (Pom. Man.)

NORTH.

North's Seedling.

Raised by Professor North, Clinton, N. Y. Tree very vigorous, very productive. Branches slightly downy.

Fruit large, roundish oblong oval. Skin reddish purple, with a thin bloom. Flesh yellowish, juicy, moderately sweet, perfumed. Good to very good. Early September.

NOUVELLE DE DORELLE.

Prune Grosse Quetsche Nouvelle.

Dorelle's Neue Grosse Zwetsche.

Prune Nouvelle de Dorrel.

Quetsche de Dorelle Nouvelle Grand.

Dorelle's New Purple Prune.

A German variety. Tree moderately vigorous. Branches downy.

Fruit large, oval, somewhat pointed at the stalk. Suture shallow, distinct, one side often a little enlarged. Skin violet purple, covered with a thin blue bloom, and pretty thickly sprinkled with whitish brown dots. Stalk rather long and stout, set in a small cavity. Flesh yellow, juicy, sugary, vinous; adheres to the stone. Good to very good. Last of August.

OBERLEY.

Oberley's Greenwood.

Originated in Northampton Co., Pa., on the farm of — Oberley. Tree a thrifty, upright grower, very productive. Branches smooth, greenish.

Fruit medium size, roundish. Suture shallow. Apex a little sunk. Skin amber, nearly covered with rosy red, thin light bloom. Stalk medium, slender, set in a moderate cavity by a ring. Flesh yellow, juicy, vinous, rather sweet; adheres to the stone. Good. Last of August.

OCTOBER GREEN GAGE.

Late Green Gage. Reine Claude Tardive. Reine Claude d'Octobre.

Tree very vigorous. Young wood smooth, stout, and short-jointed.

Fruit small, roundish. Suture moderate. Apex dimpled. Skin greenish yellow, covered with a thin white bloom, mottled with crimson in sun. Stalk stout, rather long. Flesh green, juicy, sugary, and rich; separates from the stone. Good to very good. First of October.

ORANGE.

Orange Gage. Wager.

Origin, Rhinebeck, Dutchess Co., N. Y. Tree a vigorous grower, productive. Branches stout and smooth.

Fruit very large, oval, flattened at both ends. Skin bronze yellow, marked with roughish white dots and clouded with purplish red near the stalk. The latter is three-fourths of an inch long, rather rough, inserted in a narrow round cavity. Flesh deep yellow, a little coarse-grained, moderately juicy, sugar and acid combined. It adheres a little to the stone. Good. Last of August.

ORLEANS.

Monsieur.	Anglaise Noir.	Prune de Monsieur.
Monsieur Ordinaire.	English Orleans.	Common Orleans.
Old Orleans.	Prune d'Orleans.	Red Orleans.
Red Damask.	Late Monsieur.	

A popular English market Plum, being hardy and uniformly productive. Tree vigorous. Branches gray, and very downy.

Fruit middle-sized, round, a little enlarged on one side of the distinct suture. Skin dark red, becoming purple in the sun. Flesh yellowish, sweet, mixed with acid, and separates freely from the stone. Good. Middle of August.

OULLIN'S GOLDEN.

Reine Claude d'Oullins.	Oullin's Golden Gage.
Reine Claude Précoce.	Monstruense d'Oullins.
Oullin's Gage.	

This is a German Plum, large and showy. Tree very vigorous and productive, with smooth branches, stout, short jointed.

Fruit large, roundish oblong. Suture very shallow. Skin rich yellow, flecked and shaded with green, small crimson dots in sun, and covered with a thin white bloom. Stalk inserted in a broad, moderately deep cavity. Flesh yellow, very tender, juicy, sugary; adhering slightly to the stone. Very good. Middle of August. (Hogg.)

PARSONAGE.

Origin, Rhinebeck, Dutchess Co., N. Y. Tree very vigorous, upright, productive. Branches smooth.

Fruit medium to large, oval. Skin pale yellow, lightly splashed with green. Stalk of medium length, inserted in a small depression. Flesh yellow, juicy, with a rich sugary flavor. It separates freely from the stone. Good. First of September.

PEACH PLUM.

Prune Pêche.

Large Peach.

Reine Claude Berger ?

Tree upright, vigorous, only a moderate bearer. Tree rather tender at the North. Branches smooth.

Fruit very large, shaped more like a peach than a plum, roundish, much flattened at both ends. Suture shallow, but strongly marked. Apex much depressed. Skin light brownish red, sprinkled with obscure dark specks, and covered with a pale bloom. Stalk short, rather stout, set in a shallow narrow cavity. Flesh pale yellow, a little coarse-grained, but juicy, and of pleasant sprightly flavor when fully ripe; separates freely from the stone. Good. Last of July.

PENOBSCOT.

Raised by James McLaughlin, Bangor, Me. Tree vigorous, hardy, productive. Branches smooth.

Fruit large, oval. Suture distinct. Stalk three-fourths of an inch long, set in a small cavity. Skin yellow, tinged with green and a faint red cheek. Flesh yellow, sweet, and pleasant; adheres to the stone. Good. First of September.

PEOLY'S EARLY BLUE.

This is a native fruit, of medium quality. Branches very downy.

Fruit middle-sized, roundish. Suture scarcely visible. Skin very dark blue, covered with light blue bloom. Flesh yellow, of pleasant flavor, adhering partially to the stone. Good. Early August.

PERDRIGON VIOLET HÂTIF.

Tree hardy, vigorous, productive. Branches downy.

Fruit medium or below, roundish, slightly oval. Suture half round, shallow. Apex a little sunk. Skin violet or reddish purple, sprinkled with brownish dots and covered with a blue bloom. Stalk short, stout. Cavity small. Flesh yellowish, moderately juicy, with a sugary pleasant flavor; separates from the stone. Good or very good. Middle August.

PERSHORE.

An English variety. Branches smooth.

Fruit above medium size, obovate. Skin yellow, with a golden tinge. Flesh tender, with a fine subacid flavor; adhering to the stone. Last of August. (Hogg.)

PETER'S YELLOW GAGE.

Tree moderately vigorous, with short branches, which are downy.

Fruit medium, nearly globular, a little depressed at base. Suture broad, shallow. Apex broad, shallow, sunken. Skin pale yellow, sometimes with crimson dots in the sun and a thin light bloom. Stalk rather short and stout, set in a large cavity. Flesh yellowish, juicy, sugary; adheres slightly to the stone. Good to very good. Middle August

POND'S SEEDLING.

Pond's Purple.

American origin. Tree very vigorous. Branches downy.

Fruit middle-sized, roundish. Skin purple. Flesh yellowish, rather dry, separates from the stone, sweet, mingled with acid. Good. Early in August.

POND'S SEEDLING.

Plum de l'Inde.

Fonthill.

Pond's Purple.

English origin. Tree very vigorous and productive; a beautiful fruit. Branches smooth, grayish.

Fruit very large, oval, tapering a little towards the stalk, sometimes with a mamelon neck. Skin yellowish, nearly covered with bright red or carmine, having a thin whitish bloom, and sprinkled with brownish dots. Flesh yellow, a little coarse, juicy, and sugary, but not rich. Good. Middle of September.

PRÉCOCE DE TOURS.

Early Violet.
Violette Hâtive.
Early Tours.
Perdrigon Violet.
Blue Perdrigon.
Violet de Tours.
Noire Hâtive.
Prune de la Madelaine.
Damas de Tours.
Prune de Gaillon.

Of foreign origin. Tree vigorous, with long, slender branches, moderately productive. Branches downy.

Fruit rather more than an inch in diameter, oval, with a shallow suture. Skin deep purple, covered with a thick azure bloom. Stalk half an inch long, set in a narrow cavity. Flesh at first greenish, but becoming dull yellow at maturity; a little fibrous, but juicy, sweet, melting, and slightly perfumed; it adheres considerably to the stone. Good. First of August.

Pond's Seedling (English.)

PRÉCOCE DE BERGTHOLD.

Tree moderately vigorous, very productive.

Fruit small, nearly globular. Suture shallow, but distinct point at apex. Skin pale yellow, sometimes with marblings of green, and covered with a thin white bloom. Stalk short, stout. Cavity shallow. Flesh yellow, juicy, sugary; adheres slightly to the stone. Good. Early August.

PRINCE ENGLEBERT.

From Belgium. This is a promising variety for market growing, as the tree is a great bearer, and the fruit valuable for dessert and cooking. Tree vigorous. Branches smooth.

Prince Engelbert.

Fruit large, oblong oval. Suture very slight, one side a little enlarged. Skin very deep purple, sprinkled with brown dots, and covered with a deep blue bloom. Stalk rather stout, set in a deep cavity. Flesh yellowish green, juicy, sugary; separates from the stone. Very good. Last of August.

PRINCE OF WALES.

Chapman's Prince of Wales.
Prince Albert?

English origin. Tree very vigorous, very productive. Branches smooth or slightly downy.

Fruit large, globular, inclining to oblong, with a moderate suture on one side. Skin reddish purple, with brownish yellow dots, and a thick bloom. Stalk short and stout, set in a moderate cavity. Flesh a little coarse, greenish yellow, juicy, sweet, and sprightly, not rich, partially adhering to the stone. Good. First of September.

PRINCE'S ORANGE EGG.

Raised by William Prince, Flushing, Long Island, N. Y. Tree very vigorous and productive. Branches smooth.

Fruit rather large, oval. Skin yellow, covered with a thin bloom. Stalk three-fourths of an inch long, rather stout, set in a small cavity. Flesh golden yellow, coarse, juicy, sprightly, subacid, not rich; adheres to the stone. Good. Middle of September.

PRINCE'S ORANGE GAGE.

Fruit medium, roundish oval. Suture moderate. Skin yellow.

Stalk long, set in an open cavity. Flesh ight yellow, coarse, juicy, pleasant, but not rich; adheres to the stone. Good. First of September.

PRINCE'S PRIMORDIAN.

Prince's Blue Primordian.

Originated with William Prince, of Flushing, L. I. Branches slender, grayish.

Fruit small, oval, blue. Flesh pleasant; its principal value is its early maturity. (Pom. Man.)

PRINCE'S YELLOW GAGE.

American Yellow Gage of some.

White Gage of some.

The Yellow Gage was raised so long ago as the year 1783, by the elder Mr. Prince, of Flushing, L. I. Its great bardiness and productiveness, joined to its rich, sugary flavor, make it a favorite sort. Branches smooth, short-jointed, and the tree forming a large spreading head.

Fruit a little above medium size, oval, rather broadest towards the stalk. Suture a mere line. Skin golden yellow, a little clouded, and covered with a copious white bloom. Stalk an inch long, inserted in a small round cavity. Flesh deep yellow, rich, sugary, and melting, though sometimes rather dry; parts freely from the stone. Very good. Early in August.

Prince's Yellow Gage.

PROVENCE DAMASK.

Damas de Provence.

Early Damask of Provence.

Damas de Provence Hâtif.

Tree vigorous, branches downy.

Fruit above medium, roundish. Suture deep. Skin reddish purple, covered with blue bloom. Flesh yellowish green; separates from the stone. Good for cooking. Last of July.

PRUNE D'AGEN.

D'Agen.

Robe de Sergeant.

St. Maurin.

Prune d'Ast.

Agen Datte.

Prane de Brignole of some.

Prune du Roi.

A foreign variety of excellent quality. Tree of moderate growth. Branches smooth. Very productive.

Fruit medium size, oval, slightly necked. Suture small. Skin vio-

let purple, covered with a thick bloom and numerous small dots. Stalk nearly an inch long, a little curved, set in a small depression. Flesh greenish yellow, juicy, sugary, rich, and delicious, slightly adherent to the stone. Best. Middle and last of September.

Prune d'Agen.

Purple Favorite.

PURPLE FAVORITE.

This delicious fruit received its name from us some years ago. The tree from which the stock now in this country was derived, stood for many years (until it died of old age) in the centre of the principal garden here, and was planted by the father of the author. Its origin we were never able to learn, and we have not been able during all our pomological researches and comparisons to identify it with any other sort.

The Purple Favorite, when in perfection, is not surpassed by any other Plum in luscious flavor. It is more juicy and melting than the Purple Gage, and has some affinity to the Diaprée Rouge, or Mimms. It should have a place in every garden, as it bears well, and is very hardy. In the nursery it has the dwarfish habit of the Green Gage, but more slender shoots. Branches nearly smooth, short-jointed.

Fruit medium size, often large, roundish obovate. Suture none. Skin light brown in the shade, brownish purple in the sun, dotted with numerous golden specks, and dusted with thin, light blue bloom. Stalk three-fourths to one inch long, set in a very slight depression. Flesh pale greenish, very juicy, tender, melting, with a luscious sweetness. Parts freely from the stone, which is very small and roundish. Best. Begins to ripen about the 20th of August, and will hang for a fortnight on the tree.

PURPLE GAGE.

Reine Claude Violette.

Die Violette Königin Claudie.

Violette Queen Claude.

Violet Gage.

The Purple Gage holds the first place for high flavor among purple

plums abroad. Although it is well known in France under the title of the Reine Claude Violette, as in England under that of the Purple Gage, yet its native country is not precisely determined. Tree moderately vigorous. Branches smooth, much like those of the Green Gage.

Fruit medium sized, shaped like the Green Gage, roundish, a little flattened. Suture shallow, but distinct. Stalk an inch long, rather thick, set in a narrow cavity. Skin a little thick, violet, dotted with pale yellow, and covered with light blue bloom. Flesh greenish yellow, rather firm, rich, sugary, and very high-flavored; separates from the stone, which is oval and compressed. Ripens rather late, and will hang on the tree—shrivelling a little, but not cracking—all the month of September. Very good.

QUACKENBOSS.

Introduced by Mr. Quackenboss, of Greenbush, N. Y. Origin in the garden of S. C. Groot, Albany. A very rapid upright grower, and productive. Branches smooth.

Fruit large, oblong roundish. Skin deep purple, covered with a bluish bloom. Suture scarcely apparent. Stalk long, slender, and set in a slight depressed cavity. Flesh greenish yellow, sprightly, juicy, a little coarse-grained, sweet, and subacid; adheres slightly to the stone. Good. September.

QUEEN MOTHER.

Red Queen Mother.

Pigeon's Heart.

Damas Violet.

A neat little reddish Plum, long known in European gardens. Branches smooth, rather feeble in growth.

Fruit rather small, round, about an inch in diameter. Skin dark, purplish red in the sun, pale reddish amber in the shade, with many reddish dots. Stalk half an inch long. Flesh yellow, sweet and rich, separating freely from the stone. Good. September.

REAGLE'S ANCIENT CITY.

Originated at Schenectady, N. Y., by C. Reagles. Tree very vigorous. Branches smooth.

Fruit large, roundish oval. Skin clouded orange, red in the sun. Suture distinct. Flesh yellow, juicy, sweet; separates from the stone. Good. Last of August.

REAGLE'S GAGE.

Another of the seedlings raised by C. Reagles, Schenectady, N. Y., from seed of the Washington. Tree vigorous, upright. Branches smooth.

Fruit medium, nearly globular. Suture broad and shallow. Apex

Reagle's Gage.

sunken. Skin greenish yellow, with splashes of darker green, and covered with a bloom. Stalk medium in length and thickness. Cavity large. Flesh greenish yellow, juicy, sweet, slightly vinous; separates from the stone. Very good. Last of August.

REAGLE'S UNION PURPLE.

Same origin as the preceding. Tree vigorous, branches smooth.

Fruit large, roundish oval. Skin reddish purple, covered with a thin bloom, suture only perceptible near the stalk and apex. Stalk short, stout. Flesh greenish, a little coarse, vinous, sweet; adheres to the stone. Good. September.

RED APRICOT.

Abricotée Rouge.

A French variety. Tree moderately vigorous. Branches smooth.

Fruit of medium size, roundish oval. Skin of a fine clear red in the shade, violet in the sun. Flesh orange color, sweet, but rather dry, and without much flavor; separates freely from the stone. Good. Last of August.

RED DIAPER.

Diaprée Rouge.
Roche Carbon.

Mimms.
Imperial Diadem.

The *Diaprée Rouge*, or *Red Diaper*, is a very large and handsome French Plum. A rather slow grower. Branches almost smooth.

Fruit large, obovate. Skin of a reddish purple, with a few golden specks, and a light blue bloom, easily rubbed off. Stalk three-fourths of an inch long, slender, hairy, slightly inserted. Flesh pale green, juicy, very melting, rich, and delicious, separating from the stone, which is quite small. Good to very good. Last of August.

RED GAGE.

An American Plum, of delicious flavor, very hardy, and a prodigious bearer. It is a seedling raised from the *Green Gage* by the elder Wm. Prince, of the *Flushing Nurseries*, in 1790. It grows very vigorously, and is distinguished, when young, by its deep green crimped foliage. Branches dark reddish, smooth.

Fruit about as large as the *Green Gage*, but more oval, regularly formed. Skin brownish or brick red, with little bloom. Stalk rather slender, set in a narrow cavity. Flesh greenish amber, very juicy, melting, sugary, and luscious. It parts freely from the stone, which is small. Best. Middle of August.

Red Gage.

RED GAGE OF DUTCHESS COUNTY.

A seedling of *Dutchess Co., N. Y.* Tree vigorous, upright, productive. Branches slightly downy.

Fruit medium, roundish oval, a little compressed. Suture large, often extending two-thirds around the fruit. Skin yellowish, nearly covered with a light reddish purple, and with a thin lilac bloom, thickly sprinkled with brown dots. Stalk short, stout. Cavity large. Flesh yellow, juicy, slightly vinous; adheres to the stone. Good. Last of August.

RED MAGNUM BONUM.

Purple Egg.	Imperial Violet.	Prune d'Œuf.
Red Imperial.	Impériale Violette.	Red Egg.
Imperial.	Imp'riale Rouge.	Askew's Purple Egg.
Purple Magnum Bonum.	Dame Aubert Violette.	Die Rothe Eiperflaume.
Florence.	Imp'riale.	Shepler?

A foreign variety of moderate growth, slender smooth shoots, distinct from the American variety, which is a vigorous grower, with downy shoots.

Fruit large, oval, with a strong suture, on one side of which the fruit is more swollen. Skin rather pale in the shade, but deep red in the sun, sprinkled with many gray dots, and dusted with but little pale bloom. Stalk an inch or more long, slender, set in a narrow cavity. Flesh greenish, rather firm and coarse, with a subacid flavor, separating from the stone, which is oval and pointed. Good. First of September.

RED PERDRIGON.

Perdrigon Rouge.

Foreign. Branches downy.

Fruit of medium size, roundish. Sides often unequal. Skin fine deep red, much lilac bloom. Stalk long, slender. Flesh pale yellow, a little coarse, moderately juicy and sweet, and parts from the stone. Good. Last of August to the middle of September.

RED PRIMORDIAN.

Originated with William Prince, Flushing, L. I. Tree vigorous, upright, with long, smooth, brownish gray branches.

Fruit medium or small, oval, somewhat pointed, slightly necked. Skin light lilac or chocolate, and covered with a thin, light lilac bloom. Stalk rather long, slender, set in a small ring. Flesh yellowish, moderately juicy, with a slight acid flavor; separates from the stone. Good. Early August.

REINE VICTORIA.

This is a French variety, and quite distinct from the Victoria. Branches downy. It is of short oval shape, much like Kirke's, but not quite so round. Skin dark reddish purple. Flesh very juicy, rich, and agreeable, and separating from the stone. It is from two to three weeks later than Kirke's. (Hogg.) We think this may yet prove to be Sharp's Emperor.

REIZENSTEIN'S YELLOW PRUNE.

An Italian fruit. Tree very vigorous and productive. Branches smooth.

Fruit medium size, oval, narrowing at both ends, often enlarged on one side and swollen on one edge. Small mamelon neck. Suture large, extending beyond the apex. Skin fine yellow, often much shaded and marbled with rich crimson, and covered with a thin lilac bloom. Stalk long, rather slender. Cavity small. Flesh golden yellow, juicy, sweet; adheres closely to the stone. Good to very good. Last September.

RHINEBECK YELLOW GAGE.

Origin, Rhinebeck, N. Y. Tree very strong and vigorous. Branches smooth.

Fruit large, oval. Suture deep. Skin yellow. Stalk rather long, inserted by a fleshy ring without depression. Flesh coarse, juicy, sweet, and pleasant; adheres to the stone. Good. First of September.

RHUE.

Rhue's Seedling.

Origin, Pennsylvania. Tree vigorous, productive. Branches slightly downy.

Fruit large, oval. Suture shallow, broad, half round. Apex slightly sunk. Skin reddish purple, covered with a blue bloom. Stalk rather short, stout. Cavity deep. Flesh greenish yellow, rather coarse, juicy, sweet, vinous; adheres partially to the stone. Good. Middle August.

RICHLAND.

Originated on the farm of Randall Elden, Richland, Bucks Co., Pa. Tree upright, vigorous. Branches smooth, long, slender.

Fruit medium size, oval, a little pointed at apex. Skin reddish purple, covered with a thin blue bloom. Stalk in a small cavity. Flesh greenish yellow, juicy, sugary; adheres partially to the stone. Good. Last of August.

ROBY'S YELLOW.

A seedling raised by H. R. Roby, Fredericksburgh, Va. Tree moderately vigorous. Branches smooth.

Fruit rather small, roundish. Suture broad, shallow. Sides unequal. Skin greenish yellow, covered with a copious light bloom, and a few red dots in the sun. Stalk short. Cavity small. Flesh greenish yellow, juicy, sweet; adheres to the stone. Good. Last of August.

ROLLANDE GALLOPPI.

Tree very vigorous, upright. Branches smooth.

Fruit medium, elongated oval, with a large neck. Suture large, half round. Skin pale yellowish green, dotted and marbled with crimson in the sun, and covered with a thin light bloom. Stalk slender. Cavity small. Flesh yellowish green, juicy, sweet; adheres to the stone. Good. Last of September.

RONALD'S FANCY.

Fruit medium or above, oval. Suture half round. Skin yellow, striped, marbled, and splashed with green, and covered with a thin light bloom. Stalk half inch long. Cavity moderate. Flesh greenish yellow, juicy, sugary, vinous, sprightly; separates from the stone. Good. Early October.

ROSTRAVE BELL.

Originated with John D. Stephens, Westmoreland Co., Pa. Tree very vigorous and productive. Branches smooth.

Fruit large, roundish oval. Suture broad, shallow, two-thirds round, one side enlarged. Skin reddish purple, many brown dots, and covered with a blue bloom. Stalk medium. Cavity large, rather deep. Flesh yellowish, coarse, not very juicy, vinous; adheres partially to the stone. Good. Early September.

ROYALE.

La Royale.
Royal.

Royal Red.
Sir Charles Worsley's.

French Royal.
Prune Royale.

The Royale, a French variety, is remarkable for the exceedingly thick coat of bloom which covers the skin. The tree is a slow grower, forms a bushy, spreading head, and its very downy shoots have a gray or whitish appearance. It bears regularly, but moderately, and though not fit for the orchard, it is a first-rate garden fruit.

Fruit of medium size, often quite large, round, lessening a little towards the stalk. Suture distinct at the apex on one side only. Skin reddish purple, dotted with light brown specks, and covered with a thick pale bloom, which adheres closely. Stalk three-fourths of an inch long, downy, set in a narrow cavity. Flesh dull yellow, rather firm, but melting, very juicy, with an exceedingly rich, vinous flavor; it separates from the stone, which is small, roundish, pointed at both ends. Good to very good. Last of August, till the middle of September.

ROYALE DE TOURS.

Royal Tours.

A French variety, received from several sources, but they do not agree, neither do the authorities; some say a freestone, and others a cling. Branches always quite downy.

Fruit large, roundish, but marked with a large and deep suture extending quite half round, and enlarged on one side. At the apex is a small, white, depressed point. Skin lively red in the shade, deep violet in the sun, with many minute golden dots, and coated with a thick blue bloom. Stalk half to three-fourths of an inch long, stout, set in a narrow cavity. Flesh greenish, rather firm, with a rich, high-flavored, abundant juice. Good to very good. Middle August.

ROYALE HÂTIVE.

Early Royal.

Marian.

An early Plum, of French origin. Tree vigorous, with stout short branches. Branches very downy.

Fruit of medium size, roundish, a little wider towards the stalk. Skin light purple, dotted (and faintly streaked) with brownish yellow, and covered with a blue bloom. Stalk half an inch long, stout, inserted with little or no depression. Flesh yellow amber, with rich, high flavor, and parts from the stone (adhering slightly till ripe). Very good. Early August.

Royale Hâtive.

Saint Catherine.

SAINT CATHERINE.

Among the fine old varieties of late Plums the St. Catherine is one of the most celebrated. In France it is raised in large quantities, in some districts making the most delicate kind of prunes. It is also much esteemed for preserving, and is of excellent quality for the dessert. Branches smooth, upright, rather slender.

Fruit of medium size, obovate, narrowing considerably towards the stalk, and having a strongly marked suture on one side. Stalk three-fourths of an inch or more long, very slender, inserted in a slight cavity. Skin very pale yellow, overspread with thin white bloom, and occasionally becoming a little reddish on the sunny side. Flesh yellow, juicy, rather firm, and adheres partially to the stone. In flavor it is sprightly, rich, and perfumed. Very good. Middle to last of September.

SAINT ÉTIENNE.

Tree of moderate growth. Branches smooth.

Fruit medium, roundish heart-shaped. Suture shallow, half round. Skin yellow, shaded, marbled, and dotted with rich dark crimson. Stalk short, rather slender. Cavity small. Flesh fine yellow, juicy, sweet, and rich; separates from the stone. Good to very good. Last of August.

SAINT JULIEN.

Common St. Julien.
French St. Julien.

Petit St. Julien.
St. Julien petit.

Fruit small, oval, dark violet, covered with bloom. Flesh greenish, slightly acid; separates from the stone. Last of August. (Pom. Man.)

SAINT MARTIN'S QUETSCHIE.

A very late variety of Prune from Germany. Hardy and a good bearer. Branches smooth.

Fruit of medium size, ovate, or considerably broadest towards the stalk. Suture broad, shallow. Skin pale yellow, covered with a white bloom. Flesh yellowish, with a rich and excellent flavor, and separates readily from the stone. Good. First of October, and will hang a month.

SCHENECTADY, CATHERINE.

Origin, Schenectady, N. Y. Tree vigorous, very productive. Branches smooth, grayish.

Fruit medium, roundish oval. Suture shallow on one side. Skin reddish purple, covered with a thin blue bloom. Stalk of medium length, slender, set in a small cavity. Flesh greenish yellow, very juicy, sugary, and rich; separates freely from the stone. Very good. First of September.

SCHUYLER GAGE.

Originated with Gen. Schuyler, Albany, N. Y., from a seed of the Green Gage. Tree upright, very vigorous and productive. Branches smooth.

Fruit medium, oval. Suture moderate. Skin yellow, with small green splashes, dotted and washed with carmine on the sunny side, and covered with a thin bloom. Stalk long, curved, inserted in a small cavity. Flesh yellow, juicy, sweet, rich, and excellent; separates from the stone. Very good. Last of September.

Schenectady Catherine.

SEMIANA OF BOSTON.

Blue Impératrice of some.

This is quite distinct from the Semiana of Europe. It is probably a native fruit. Tree moderately vigorous, with slender shoots nearly smooth, very productive, late, keeps well—a good market fruit.

Fruit medium, oval, with a slight rise or neck next the stalk. Skin deep purple, covered with blue bloom. Stalk short. Cavity very small. Flesh greenish, juicy, subacid, not rich; adheres to the stone. Good. Last of September and first of October.

SEPTEMBER DAMASK.

Damas de Septembre.

Prune de Vacance.

Prunier des Vacances.

Branches downy.

Fruit small, roundish oval. Suture distinct. Skin dark purple, covered with a thick blue bloom. Flesh greenish yellow, sweet; separates from stone. Poor. Last of September.

SHARP'S EMPEROR.

Dolphin.
Dauphin.

Denyer's Victoria.
Alderton.
Impérial de Sharp.

Victoria.
Royal Dauphine.

A beautiful Plum, brought into notice by Denyer, of Sussex, England. Tree vigorous and productive. Branches strong, downy, and foliage large.

Fruit large, roundish oval. Suture shallow, but distinct. Skin light yellow, marbled, spotted, and shaded with light lilac and purple, thickly sprinkled with light and gray dots, and covered with a thin lilac bloom. Stalk medium length, rather stout, set in a rather deep cavity. Flesh golden yellow, coarse, not very juicy or sugary, a little vinous; separates from the stone. Good. Middle September.

SHELDON.

Originated on the farm of Wareham Sheldon, Huron, Wayne Co., N. Y. Tree a rapid grower, and very productive. Branches smooth, stout.

Fruit large, oval. Suture shallow. Skin deep purple, thick blue bloom. Stalk short, in a small cavity. Flesh greenish, juicy, slightly acid; separates from the stone. Good. September.

SIAMESE.

Branches long, slender, and smooth.

Fruit mostly in pairs, distinct, but closely joined on one side, medium-sized obovate. Skin pale yellow, with a white bloom. Flesh yellow, juicy, and sprightly, of second-rate flavor, and adheres to the stone. Good. Early September.

SMITH'S ORLEANS.

Violet Perdrigon, incorrectly.

Red Magnum Bonum of some.

Smith's Orleans, the largest and finest of this class of Plums, is a native variety raised from the old Orleans by Mr. Smith, of Gowanus, Long Island. It is one of the most vigorous of all plum-trees, making straight, glossy, reddish purple shoots, with dark green crimped leaves. Very productive. Bearing branches smooth, or nearly so.

Smith's Orleans.

Fruit large, often of the largest size, oval, rather widest towards the stalk, a little irregular, with a strongly marked suture on one side. Stalk quite small and slender, little more than half an inch long, inserted in a deep narrow cavity. Skin reddish purple, covered with a deep blue bloom. Flesh deep yellow, a little firm, very juicy, with a brisk, rich vinous flavor (not sweet and cloying), and adheres to the stone. Good to very good. 20th to the last of August.

SPANISH DAMASK.

Damas d'Espagne.

Fruit small, nearly round. Skin deep purple, covered with bloom. Flesh yellowish, not rich, mild, sweet; separates from the stone. Last of August. (Pom. Man.)

SPOTTED GAGE.

Tree vigorous, very productive. Branches downy.

Fruit medium or above, oval. Suture shallow. Skin greenish yellow, shaded, mottled, and patched with crimson and lilac, numerous light dots, and covered with a thin bloom. Flesh coarse, yellow, sugary, juicy, a little vinous; adheres partially to the stone. Good. Early September.

STANDARD OF ENGLAND.

Said to have been raised by Mr. Dowling, of Southampton, England. Tree vigorous. Branches smooth or slightly downy.

Fruit medium, ovate, slight character of neck. Suture shallow. Skin purplish lilac, many dots, and covered with a thin bloom. Stalk inserted in a small cavity. Flesh greenish, juicy, moderately sweet; separates from the stone. Good. Early September.

STONELESS.

Kirke's Stoneless.

Sans Noyau.

Pitless.

Branches downy. Of no value except as a curiosity.

Fruit small, oval. Skin dark purple, covered with blue bloom. Flesh greenish, harsh acid. Kernel without any stone surrounding. Early September.

SUISSE.

Simiana.

Monsieur Tardif.

Prune d'Altesse.

Prune Suisse.

Swiss Plum.

Monsieur Tardive.

Switzer's Plum.

A foreign variety, of free growth, with long, slender, smooth branches, distinct from Semiana of Boston.

Fruit rather small, roundish oval. Skin violet red, covered with a thick bloom. Flesh greenish yellow, firm, rather dry, but sweet, and separates from the stone. Good. Last of September.

THOMAS.

A handsome native fruit, originated in the garden of William Thomas, of Boston. A free grower, and bears abundantly. Branches slightly downy.

Fruit large, roundish oblong, a little irregular, and rather compressed in the direction of the suture. Stalk hairy, half an inch or more long, stout, set in a small narrow cavity. Skin salmon color, with numerous dots, and a soft red check. Flesh pale yellow, a little coarse-grained, but with a mild pleasant flavor; separating freely from the stone. Good. Last of August.

THORNDYKE GAGE.

A native fruit, originated near Newburgh, N. Y. Tree moderately vigorous. Branches downy.

Fruit below medium, roundish. Suture slight. Skin pale green, with a blue bloom. Flesh greenish, juicy, sweet, pleasant; adheres to the stone. Good. Early September.

TOMLINSON'S CHARLOTTE.

Charlotte.

A seedling raised by Judge Tomlinson, Schenectady, N. Y. Tree vigorous.

Fruit large, oval. Skin yellow. Flesh sweet, agreeable. August. (Pom. Man.)

TRANSPARENT GAGE.

Reine Claude Diaphane.
Diaphane Laffay.

Prune Diaphane Laffay.
Reine Claude Transparent.

Diaphane.

A French variety, evidently from seeds of the Green Gage, raised by M. Laffay, of Paris. Tree vigorous, with long, stout, and smooth branches.

Fruit above medium, roundish oblate. Suture shallow, distinct. Apex sunk. Skin greenish yellow, marbled and specked in the sun with carmine red. Stalk medium. Cavity small, rather deep. Flesh greenish yellow, tender, juicy, sugary, rich. Very good or best. Middle of September.

TROUVÉE DE VOUECHE.

Found in the woods by Grégoire, and by him introduced. Tree moderately vigorous and very fertile.

Fruit medium or small, regularly oval. Skin thick, reddish violet with a shady side, and a violet bloom on the sunny side. Flesh juicy, sweet, and very good. Last of August. (Al. Pom.)

ULYSSES.

A variety from Western New York. Branches smooth.

Fruit above medium, roundish oval. Skin whitish, shaded and mottled with violet purple, thin blue bloom. Flesh yellowish, juicy, sweet; adheres to the stone. Good. Early September.

VIRGIN.

Virginal Blanc.
White Virginal.

Virginal Blanc.
Virginal à gros Fruit blanc.

Virginal à Fruit blanc.

A foreign variety, of free growth. Branches smooth, rather slender

Fruit medium, roundish. Skin reddish purple, with a thick bloom. Flesh greenish, very juicy, sweet. Good to very good. Adheres slightly to the stone. First of September.

WANGENHEIM.

A German variety. Tree a moderate grower. Branches smooth.

Fruit medium, oval. Suture shallow. Apex a little sunk. Skin deep purple, covered with a thick blue bloom. Stalk rather short. Cavity small. Flesh rather firm, greenish yellow, juicy, sugary, rich. Separates from the stone. Good to very good. Last of August.

WASHINGTON.

Bolmar.

Bolmer.

New Washington.

Bolmer's Washington.

Franklin.

Irving's Bolmar.
Jackson.

Parker's Mammoth.

Washington Jaune.

Philippe I.

The Washington, although not equal to the Green Gage and two or three others in high flavor, yet its great size, its beauty, and the vigor and hardiness of the tree, are qualities which have brought this noble fruit into notice everywhere. The parent tree grew originally on Delancey's farm, on the east side of the Bowery, New York, but, being grafted with another sort, escaped notice until a *sucker* from it, planted by Mr. Bolmer, a merchant in Chatham Street, came into bearing about the year 1818, and attracted universal attention by the remarkable beauty and size of the fruit. In 1821, this sort was first sent to the Horticultural Society of London, by the late Dr. Hosack.

The Washington has remarkably large, broad, and glossy foliage, is a strong grower, and forms a handsome round head. Wood light brown, downy.

Fruit of the largest size, roundish oval, with an obscure suture, except near the stalk. Skin dull yellow, with faint marblings of green, but when well ripened, deep yellow, with a pale crimson blush or dots. Stalk scarcely three-fourths of an inch long, a little downy, set in a shallow, wide hollow. Flesh yellow, firm, very sweet and luscious, separating freely from the stone. Good to very good. Middle to the last of August.

Washington.

WAX.

Raised by Elisha Dorr, Albany, N. Y. Tree moderately vigorous and productive.

Fruit medium, roundish oval. Suture slight, broad, shallow. Skin yellow, with a bright carmine cheek, and covered with a thin whitish bloom. Stalk long, slender, set without cavity. Flesh yellow, juicy, subacid, sprightly; separates from the stone. Good. Early October.

WHITE APRICOT.

Abricote Blanc.

Abricot 'e Blanche.

Fruit medium, roundish, yellow. Flesh rather firm, slightly acid ; separates from the stone. Good. Middle August.

WHITE BULLACE.

Branches downy.

Fruit small, round. Skin yellowish white, mottled with red in the sun. Flesh firm, juicy, sweet ; adheres to the stone. Cooking. Early October.

WHITE DAMASK.

Damas Blanc.

Damas Blanc Gros.

Damas Blanc Hâtif Gros.

Branches smooth.

Fruit below medium, roundish oval. Skin greenish yellow, with white bloom. Flesh sweet, pleasant ; separates from the stone. Cooking. Last of September.

WHITE DAMSON.

Late Yellow Damson.

White Damascene.

White Prune Damson.

Late Cluster.

Shailer's White Damson.

Frost Plum.

White Winter Damson.

Branches smooth, and of thrifty growth, very productive.

Fruit small, oval. Skin pale yellow, with a white bloom, and sprinkled with reddish-brown spots at maturity. Flesh adheres closely to the stone, is yellow, and when fully ripe of a rich, sprightly, subacid, agreeable flavor. Good. Last of September.

WHITE DIAPER.

Diapré Blanc.

Diaprée Blanche.

Fruit small, round. Skin whitish green, covered with bloom. Flesh rather firm, pale yellow, sweet. Good. Last of August.

WHITE IMPÉRATRICE.

White Empress.

Impératrice Blanche.

In the habit of the tree, appearance and flavor of the fruit, and season of maturity, it strongly resembles the St. Catherine, but is a free-stone. It is not equal to the latter in flavor. Branches smooth.

Fruit of medium size, obovate, a little flattened at the ends. Suture rather obscure. Skin bright yellow, covered partially with a thin white bloom, and spotted with a little red. Stalk a little more than half an inch long, set in a narrow cavity. Flesh yellow, very juicy, crisp, sweet, and quite transparent in texture ; separates freely from the stone. Good. Early in September.

WHITE PERDRIGON.

Perdrigon Blanc.

Maître Claude.

Brignolo.

Tree rather a slow grower. Branches downy.

Fruit middle-sized, oval, narrowing towards the stalk. Skin pale greenish yellow, a few crimson dots in the sun and numerous small white dots, and thinly coated with bloom. Flesh pale yellow, sweet, with a slight perfume, and adheres slightly to the stone. Good. Last of August.

WILDE'S.

Fruit medium, roundish oblong, dark brownish orange, covered with a white bloom. Flesh sweet, not juicy; separates from the stone. Early August.

WILD GOOSE.

Nolen Plum.

An improved variety of the Chickasaw, evident in the greater vigor of the tree and increased size of the fruit, which is nearly as large as a Green Gage. Skin purple, with a blue bloom. Flesh juicy, sweet; adheres to the stone. Last of July.

WILKINSON.

Tree vigorous. Branches smooth, rather slender.

Fruit medium, oval, slightly necked. Skin reddish purple, covered with a thick bloom. Stalk medium, set in a small cavity. Flesh dark yellow, rather firm, sweet, not rich or high flavored; adheres partially to the stone. Good. Last of July.

WINESOUR.

Rotherham.

An English Plum, valued for cooking. Branches downy.

Fruit below medium, oblong oval. Skin dark purple. Flesh greenish yellow, acid; adheres to the stone. September.

WOOLSTON'S BLACK GAGE.

Of same origin as Angelina Burdett and Standard of England. Tree vigorous. Branches smooth.

Fruit medium, roundish, with a shallow suture. Skin very deep purple, with many small dots, and covered with a blue bloom. Flesh melting, juicy, sugary; separates from the stone. Good. Early September.

YELLOW DAMASK.

Damas Jaune.

Branches smooth.

Fruit below medium, nearly round. Skin yellow, with a fine white bloom. Flesh very juicy, separating from the stone. Early October. (Hogg.)

YELLOW EGG.

White Magnum Bonum.
 Askew's Golden Egg.
 Egg Plum.
 White Egg.
 Magnum Bonum.
 Yellow Maguun Bonum.*
 White Mogul.
 Wentworth.

White Imperial.
 White Holland.
 Dame Aubert.
 Dame Aubert blanche.
 Dame Aubert jaune.
 Impériale blanche.
 Grosse Luisante.
 Prune d'Inde blanc.

The White Magnum Bonum, or Egg Plum, as it is almost universally

Yellow Egg.

bearer, though apt, in light soils,
 Middle of August.

known here, is a very popular fruit, chiefly on account of its large and splendid appearance, and a slight acidity, which renders it admirably fitted for making showy sweetmeats or preserves. When it is raised in a fine warm situation, and is fully matured, it is pretty well flavored, but ordinarily it is considered coarse, and as belonging to the kitchen and not to the dessert. Branches smooth, long.

Fruit of the largest size, measuring six inches in its longest circumference, oval, narrowing a good deal to both ends. Suture well marked. Stalk about an inch long, stout, inserted without cavity in a folded border. Skin yellow, with numerous white dots, covered with thin white bloom—when fully ripe, of a deep gold color. Flesh yellow, adhering closely to the stone, rather acid until very ripe, when it becomes sweet, though of only second-rate flavor. Stem long, and pointed at both ends. A pretty good

o drop from the tree before matured.

YELLOW IMPÉRATRICE.

Altesse Blanche.

Monsieur à fruits Jaune.

Branches smooth.

Fruit large, roundish oval, marked with a suture, deep at apex, shallow at the stalk. Skin deep golden yellow, with a few streaks of red about the stalk. Flesh yellow, juicy, melting, sugary, rich, adheres to the stone. Middle of August. (Hogg.)

YOHE'S EAGLE.

An accidental seedling in the garden of Caleb Yohe, Bethlehem, Pa.

* There is really no practical difference between the White and the Yellow Magnum Bonum. The fruit is precisely similar in appearance and quality, though the growth of the two trees may not fully agree.

Fruit large, roundish, oblong oval. Skin greenish yellow, slight red cheek in sun, thin white bloom. Flesh firm, yellow, melting, juicy, sweet; separates from the stone. Good. Early September.

YOUNG.

Young's Seedling.

From Pennsylvania. Tree vigorous. Branches smooth.

Fruit medium, roundish oval, deep reddish purple, with a blue bloom. Flesh yellow, not juicy, sweet; separates from the stone. Good. Last of August.

ORNAMENTAL VARIETIES.

There are few varieties of Plums which are considered purely ornamental. One, however, is a remarkable exception to this, as it is scarcely exceeded in beauty in the month of May by any other flowery shrub—we mean the DOUBLE-FLOWERING SLOE. It is a large shrub, only 10 or 12 feet high, with quite slender shoots and leaves, but it is thickly sprinkled, every spring, with the prettiest little double white blossoms about as large as a sixpence, resembling the Lady Banks' Roses. It is one of the greatest favorites of the Chinese and Japanese—those flower-loving people.

The COMMON ENGLISH SLOE, or Blackthorn (*Prunus spinosa*), is rather an ornamental tree in shrubbery plantations. The branches are more thorny than those of the common Damson, and the fruit is nearly round, quite black, but covered with a thick blue bloom. In the spring this low tree is a perfect cloud of white blossoms.

The DOUBLE-BLOSSOMED PLUM has large and handsome double white flowers. Except in strong soils, however, they are apt to degenerate and become single, and are, indeed, always inferior in effect to the Double Sloe.

The Cherry Plum we have already described. It is one of the fruit-bearing sorts.

SELECTION OF VARIETIES FOR TABLE, MARKET, AND COOKING.

Bavay's Green Gage. Table and market.
 Bleecker's Gage. Table and market.
 Bradshaw. Market and cooking.
 Coe's Golden Drop. Table, market, and cooking.
 Denniston's Superb. Table and market.
 German Prune. Market and cooking.
 Green Gage. Table and market.
 Howard's Favorite. Table and market.
 Hudson Gage. Table and market.
 Imperial Gage. Table and market.
 Imperial Ottoman. Table and market.
 Jefferson. Table and market.
 Lawrence's Favorite. Table and market.
 Lombard. Market and cooking.

McLaughlin. Table and market.
 Pond's Seedling (English). Market and market.
 Prince Engelbert. Table and market.
 Prince's Yellow Gage. Table and market.
 Prune d'Agen. Table and market.
 Purple Favorite. Table.
 Smith's Orleans. Table and market.
 Transparent Gage. Table and market.
 Washington. Table and market.
 Yellow Egg. Market and cooking.

CHAPTER XXIX.

THE POMEGRANATE.

Punica granatum, L. ; *Granatacea*, of Botanists.
Grenadier, of the French ; *Granatenbaum*, German ; *Melagrano*,
 Italian ; *Granado*, Spanish.

THIS unique fruit, the most singularly beautiful one that ever appears at the dessert, is a native of China and the South of Europe. It grows and bears very readily in this country, as far north as Maryland and the Ohio River, though the fruit does not always mature well north of Carolina, except in sheltered places. It is even hardy enough to stand the winter here, and will bear very good fruit if trained as an espalier and protected in winter.

The fruit is as large as an apple. Its skin is hard and leathery, of a yellowish orange color, with a rich red cheek. It is crowned in a peculiar manner with the large calyx, which remains and increases in size after the flower has fallen. There is a pretty bit of mythological history told by Rapin, the French poet, respecting this fruit. Bacchus once beguiled a lovely Scythian girl, whose head had been previously turned by the diviners having prophesied that she would some day wear a crown, and who therefore lent a willing ear to his suit. The fickle god, however, not long after abandoned her, when she soon died of grief. Touched at last, he metamorphosed her into a pomegranate-tree, and placed on the summit of its fruit the crown (calyx) which he had denied to his mistress while living.

The fruit of the common Pomegranate is acid, but the cultivated variety bears fruit of very agreeable, sweet flavor. The interior of the fruit consists of seeds enveloped in pulp, much like those of the gooseberry, but arranged in compartments, and of the size and color of red currants. Medicinally, it is cooling and much esteemed, like the orange, in fevers and inflammatory disorders.

The tree is of low growth, from twelve to twenty feet, with numerous slender, twiggy branches, and is very ornamental in garden scenery, either when clad with its fine scarlet flowers or decked with fruit, which hangs and grows all summer, and does not ripen till pretty late in the season. It is well worthy of a choice sheltered place at the

North, on a wall or espalier rail, where it can be slightly protected with mats or straw in winter; and it deserves to be much more popular than it now is in every Southern garden. If raised in large quantities there, it would become a valuable fruit for sending to the Northern cities, as it is now constantly sent from the South of Europe to Paris and London. Hedges are very often made of it near Genoa and Nice.

PROPAGATION AND CULTURE. This tree is readily propagated by cuttings, layers, suckers, or seeds. When by seeds, they should be sown directly after they ripen, otherwise they seldom vegetate. Any good rich garden soil answers well for the Pomegranate; and, as it produces little excess of wood, it needs little more in the way of pruning than an occasional thinning out of any old or decaying branches.

VARIETIES. There are several varieties. The finest, viz.:—

1. THE SWEET-FRUITED Pomegranate (*Grenadier à Fruit Doux*), with sweet and juicy pulp.
2. THE SUBACID FRUITED Pomegranate; the most common variety cultivated in gardens.
3. THE WILD or ACID-FRUITED Pomegranate, with a sharp, acid flavor, which makes an excellent syrup.

Besides these, there are several double-flowering varieties of the Pomegranate, which are very beautiful, but bear no fruit. They are also rather more tender than the fruit-bearing ones. The finest are the DOUBLE RED Pomegranate, with large and very splendid scarlet blossoms, and the DOUBLE WHITE Pomegranate, with flowers nearly white. There are also the rarer varieties, the YELLOW FLOWERED and the VARIEGATED FLOWERED Pomegranate, seldom seen here, except in choice green-house collections.

CHAPTER XXX.

THE QUINCE.

Cydonia vulgaris, Dec.; *Rosaceæ*, of Botanists.

Coignassier, of the French; *Quittenbaum*, German; *Kivepeer*, Dutch; *Cotogno*, Italian; and *Membrillo*, Spanish.

THE Quince is a well-known hardy, deciduous tree, of small size, crooked branches, and spreading, bushy head. It is indigenous to Germany and the South of Europe; and it appears first to have attracted notice in the city of *Cydon*, in Crete or Candia, whence its botanical name, *Cydonia*. The fruit is of a fine golden yellow, and more nearly resembles that of the orange than any other. It was even more highly esteemed by the Greeks and Romans, for preserving, than by us. "Quinces," says Columella, "not only yield pleasure, but health."

The Quince seldom grows higher than fifteen feet, and is usually rather a shrub than a tree. Its large white and pale pink blossoms, which appear rather later than those of other fruit-trees, are quite ornamental; and the tree, properly grown, is very ornamental when laden in October and November with its ripe golden fruit.

Uses.—The Quince is, in all its varieties, unfit for eating raw. It is, however, much esteemed when cooked. For preserving it is everywhere valued, and an excellent marmalade is also made from it. Stewed, it is very frequently used to communicate additional flavor and piquancy to apple-tarts, pies, or other pastry. In England, wine is frequently made from the fruit by adding sugar and water, as in other fruit wines; and it is a popular notion there that it has a most beneficial effect upon *asthmatic* patients. Dried Quinces are excellent.

In this country large plantations are sometimes made of the Quince; and as it is in good soil a plentiful bearer, it is considered one of the most valuable market fruits. The Apple Quince is the most productive and salable; but as the Pear Quince ripens and can be sent to market much later, it frequently is the most profitable. The Angers is also a profitable market sort, producing abundantly, and keeping equally as well as the Pear-shaped.

Propagation.—The Quince is easily propagated from seed, layers, or cuttings. From seeds the Quince is somewhat liable to vary in its seedlings, sometimes proving the apple-shaped and sometimes the pear-shaped variety. Cuttings prepared in the autumn, heeled-in, and protected during winter, and planted in a shaded situation early in the spring, root very easily, and this is perhaps the simplest and best way of continuing a good variety. Another way is to bud upon free growing sorts, as that of the Angers.

Quince *stocks* are extensively used in engrafting or budding the pear, when it is wished to render that tree *dwarf* in its habit.

Soil and Culture.—The Quince grows naturally in rather moist soil, by the side of rivulets and streams of water. Hence it is a common idea that it should always be planted in some damp, neglected part of the garden, where it usually receives little care, and the fruit is often knotty and inferior.

This practice is a very erroneous one. No tree is more benefited by manuring than the quince. In a rich, mellow, deep soil, even if quite dry, it grows with thrice its usual vigor, and bears abundant crops of large and fair fruit. It should therefore be planted in a deep and good soil, kept in constant cultivation, and it should have a top-dressing of manure every season when fair and abundant crops are desired. As to pruning or other care, it requires very little indeed—an occasional thinning out of crowding or decayed branches being quite sufficient. Thinning the fruit when there is an overcrop improves the size of the remainder. Twelve feet apart is a suitable distance at which to plant this tree.

The Quince, like the apple, is occasionally subject to the attacks of the borer and a few other insects, which a little care will prevent or destroy. For their habits we refer the reader to the Apple.

VARIETIES

ANGERS.

This is the variety most generally used for stocks on which to bud the pear. It is only within a few years that its value as a fruit has been

known. The tree is one of the most thrifty growing, and an abundant bearer. It does not cook quite as tender as the apple, but will keep much longer. In form it is much like the apple, but the flesh is a little harsher and more acid.

APPLE-SHAPED QUINCE.

Orange Quince.

This is the most popular variety in this country. It bears large roundish fruit, shaped much like the apple, which stews quite tender, and is of very excellent flavor. It also bears most abundant crops. Leaves oval.

There are several inferior varieties of the Apple Quince. The true one bears fruit of the size of the largest apple, fair and smooth, and a fine golden color.

NEW UPRIGHT.

Paris de Fontenay.

This is an upright growing variety, forming quite small, compact little trees. Of little or no value as a fruit.

PEAR-SHAPED QUINCE.

Oblong Quince.

The Pear-shaped Quince is drier and of firmer texture than the foregoing. It is rather tough when stewed or cooked, the flesh is less lively in color, and it is therefore much less esteemed than the apple-shaped variety. The fruit is of medium size, oblong, tapering to the stalk, and shaped much like a pear. The skin is yellow. The leaves are oblong ovate. It ripens about a fortnight later than the apple-shaped, and may be preserved in a raw state considerably longer.

PORTUGAL QUINCE.

The Portugal Quince is rather superior to all others in quality, as it is less harsh, stews much better, and is altogether of milder flavor, though not fit for eating raw. For marmalade and baking it is much esteemed, as its flesh turns a fine purple or deep crimson when cooked.

The leaf of the Portugal Quince is larger and broader than that of the common quince, and the growth of the tree is stronger. The fruit is of the largest size, oblong ovate, obtuse. The skin is in color not so deep an orange as that of the other sorts.

The Portugal Quince is unfortunately a shy bearer, which is the reason why it has never been so generally cultivated as the Apple Quince.

REA'S SEEDLING.

Van Slyke.

A new seedling, raised by Joseph Rea, Coxsackie, Greene Co., N. Y. It is a superb fruit, averaging one-third larger than the apple or

orange quince, of the same form and color, fair and handsome, and equally as good, and by some preferred to the apple quince for culinary purposes. Tree healthy, a thrifty grower, and moderately productive—an acquisition.

Ornamental Varieties.—There are two or three ornamental varieties of the Quince, which are natives of China and Japan, and are now among the most common and attractive of our garden shrubs. They are the following :—

CHINESE QUINCE.

We have had this pretty shrub in our garden for several years, where it flowers abundantly, but has as yet produced no fruit. The leaves are oval, somewhat like those of the common Quince, but with a shining surface. The flowers are rosy red, rather small, with a delicate violet odor, and have a very pretty effect in the month of May, though much less showy than those of the Japan Quince. The fruit is described as large, egg-shaped, with a green skin and a hard dry flesh, not of any value for eating. The leaves assume a beautiful shade of red in autumn.

JAPAN QUINCE.

Cydonia Japonica.

Pyrus Japonica.

The Japan Quince is a low thorny shrub, with small dark green leaves. It is the most brilliant object in the shrubbery during the month of April, the branches being clothed with numerous clusters of blossoms, shaped like those of the Quince, but rather larger, and of the brightest scarlet. The fruit which occasionally succeeds these flowers is dark green, very hard, and having a peculiar and not unpleasant smell. It is entirely useless.

The WHITE, or BLUSH JAPAN QUINCE (*C. jap. fl. albo*) resembles the foregoing, except that the flowers are white and pale pink, resembling those of the common apple-tree.

CHAPTER XXXI.

THE RASPBERRY.

Rubus Idæus, 4; *Rosaceæ*, of botanists
Framboisier, of the French; *Himbeerstrauch*, German; *Framboos*, Dutch; *Rovato*, Italian; and *Frambucso*, Spanish.

THE Raspberry is a low deciduous shrub, which in several forms is common in the woods of both Europe and America. The large-fruited varieties most esteemed in our gardens have all originated from the long cultivated *Rubus Idæus*, or Mount Ida bramble, which appears first to have been introduced into the gardens of the South of Europe from Mount Ida. It is now quite naturalized in some parts of this country.

Besides this, we have in the woods the common black raspberry, or thimbleberry (*Rubus occidentalis*, L.), and the red raspberry (*Rubus strigosus*, Michx.), with very good fruit.

The name raspberry (*Raspo*, Italian) is probably from the raspberry roughness of prickly wood. The term *raspis* is still used in Scotland.

USES.—The raspberry is held in general estimation, not only as one of the most refreshing and agreeable subacid fruits for the dessert, but it is employed by almost every family in making preserves, jams, ices, sauces, tarts, and jellies; and on a larger scale by confectioners for making syrups, by distillers for making raspberry brandy, raspberry vinegar, &c. Raspberry wine, made in the same way as that of currant, is considered the most fragrant and delicious of all home-made wines.

Succeeding the strawberry at the beginning of summer, when there is comparatively little else, this is one of the most invaluable fruits, and, with the strawberry, generally commands the attention of those who have scarcely room for fruit-trees. It is, next to the strawberry, one of the most wholesome berries, and not being liable to undergo the acetous fermentation in the stomach, it is considered beneficial in cases of gout or rheumatism.

PROPAGATION.—The raspberry is universally propagated by suckers, or offsets, springing up from the main roots. It may also be grown from pieces of the roots, two to three inches long, and planted in a light sandy soil early in the spring, covering about one inch deep, and adding a slight coat of light mulch to prevent the earth from drying or baking. The Black Caps, Yellow Caps, and the Purple Cane varieties are grown from burying the tips of canes in the latter part of August or September, or as soon as the ends of the canes stop growing about one inch deep, when they will form roots and make good plants for transplanting the following spring. Seeds are only planted when new varieties are desired. The seedlings come into bearing at two or three years of age.

SOIL AND CULTURE.—The best soil is a rich deep loam, rather moist than dry, but the raspberry will thrive well in any soil that is rich and deep.

In making a plantation of raspberries, plant the suckers or canes in rows, from three to four feet apart, according to the vigor of the sort. Two or three suckers are generally planted together, to form a group or *stool*, and these stools may be three feet apart in the rows, or they may be set one plant in a place, at distances of one foot to eighteen inches along in the row.

The plantation being made, its treatment consists chiefly in a single pruning every year, given early in the spring. To perform this, examine the stools in April, and leaving the strongest shoots or suckers, say about three or five to each stool, cut away all the old wood and all the other suckers. The remaining shoots should have about a foot of their ends cut off, as this part of the wood is feeble and worthless. It is also a good plan soon after the fruit is gathered to cut out the old canes, which have fruited so as to give the new a better chance to ripen. With a light top-dressing of manure, the ground should then be dug over, and little other care will be requisite during the season, except keeping down the weeds.

When very neat culture and the largest fruit are desired, more space is left between the rows, and after being pruned the canes are tied to

long lines of rods or rails, like an espalier, by which means they are more fully exposed to the sun and light.

For field culture, the European varieties ought to be planted four or five feet apart each way, which gives room for the plow and cultivator to work both ways. The Black Cap varieties should be five or six feet each way, and the growing canes of these should be stopped or shortened in when about three feet high, which causes them to grow stocky and throw out lateral shoots, and these should be cut back to within eighteen inches or two feet the following spring.

A fine crop of the autumnal varieties of raspberries is readily obtained by cutting down the canes over the whole stool, in the spring, to within a few inches of the ground. They will then shoot up new wood, which comes into bearing in August or September.

We have found a light application of salt, given with the top-dressing of manure in the spring, to have a most beneficial effect on the vigor of the plants and the size of the fruit.

A plantation of raspberries will be in perfection at the third year, and after it has borne about eight or ten years it must be broken up and a new one formed on another plot of ground.

All the raspberries except the hardy American varieties should be pruned in the fall. After which bend the canes gently on the ground, and cover them an inch or two deep with earth; let them remain in the spring until the cold winds are over, or until the buds begin to swell, then take them up and tie them to stakes or frames.

Varieties.—The finest raspberries in general cultivation for the dessert are the Hudson River Antwerp, Fastolf, Orange, Belle de Pallan, Knevet's Giant, French, Franconia, and Clarke.

The common American Red is most esteemed for flavoring liqueurs or making brandy, and the American Black is preferred by most persons for cooking and drying. The Ever-bearing varieties are valuable for prolonging the season of this fruit till late frosts.

ALLEN.

Allen's Antwerp.

English Red Cane.

False Red Antwerp.

The origin of this variety is unknown. It is said by F. R. Elliott to have been brought to Cleveland by an English gardener, and was, by Mr. Elliott, sent to W. H. Sotham, Black Rock, N. Y., from whose garden Lewis F. Allen obtained it. Canes strong, vigorous, upright, somewhat branching. Spines purplish, quite numerous. This and the following, in foliage and fruit, are similar to American Red, and no doubt are improved seedlings of it, or a cross between it and some foreign sort, both throw up a large quantity of suckers, which should not be allowed to grow if a crop of fruit is wanted.

Fruit medium, nearly globular, light red, juicy, not very firm; separates freely; mild, pleasant flavor.

ALLEN'S RED PROLIFIC.

Same origin as the preceding. Canes strong, upright, without branches. Spines whitish, rather scattering.

Fruit medium, nearly globular, light red or crimson, rather juicy, not very firm, separates freely, productive.

AMERICAN BLACK.

Common Black-Cap.
Thimbleberry.Black Raspberry.
Rubus Occidentalis.

This Raspberry, common in almost every field, with long, rambling, purple shoots, and flattened, small, black berries, is everywhere known. It is frequently cultivated in gardens, where, if kept well pruned, its fruit is much larger and finer. Its rich acid flavor renders it, perhaps, the finest sort for kitchen use—tarts, puddings, &c. It ripens a little earlier than most of the European sorts.

AMERICAN RED.

Common Red.

Stoeever.

The Common Red Raspberry is a native of this and all the Middle States. It ripens nearly a week earlier than the Antwerps, bears well, and though inferior in flavor and size to these sorts, is esteemed by many persons, particularly for flavoring liqueurs.

Fruit of medium size, roundish, light red, pleasant subacid in flavor. Shoots very vigorous, long, upright, and branching, grows from four to six feet high. Light shining brown, with purplish spines. Leaves narrow, light green.

AMERICAN WHITE.

Yellow Cap.

Golden Cap.

A variety resembling the American Black in all respects, except in the color of its fruit, which is pale yellow or white, and the flavor not as rich or sprightly.

ARNOLD'S ORANGE.

Originated with Charles Arnold, Paris, Ontario, C. W. Canes strong, branching, yellowish brown, almost smooth, and produces but few suckers.

Fruit large, somewhat shorter than Brinckle's Orange, and of a darker orange color, unsurpassed by any for rich flavor. (Arnold's MS.)

ARNOLD'S RED.

Same origin as the preceding. A strong grower. Canes strong branching, dark purple, somewhat drooping. Spines slightly purple, stout, quite numerous.

Fruit large, red, about the size and shape of Philadelphia, but of superior flavor. An enormous bearer both in July and September. (Arnold's MS.)

AUGUST BLACK.

This variety was received from Thomas Rivers, England. Canes strong, branching. Spines greenish, quite numerous.

Fruit medium size, roundish oblate, dark red, slight bloom, rather soft, subacid.

AUTUMN BLACK.

Raised by Thomas Rivers, England. It is said by its author to be propagated only from seeds. We quote his description of the fruit:—

“Fruit medium size or large, dark purple, very juicy and agreeable.”

BAGLEY'S PERPETUAL.

Fruit medium, oblate, crimson, brisk subacid. Of poor quality.

BARNET.

Cornwall's Prolific.
Cornwall's Seedling.

Lord Exmouth's.
Large Red.

Barnet Cane.

An old English variety. Canes long, yellowish green, branching.

Fruit large, roundish conical, bright purplish red. Pleasant flavor.

BELLE DE FONTENAY.

Belle d'Orleans.

A variety producing its fruit mainly in the autumn. It suckers freely, and requires to be carefully thinned out. The canes should all be cut down in spring in order to obtain good crops. Canes strong, stout, branching. Spines purplish, short, and stiff, quite numerous.

Fruit large, long conical. Grains large, dark crimson, thin bloom. Flesh moderately firm, juicy, sprightly; adheres slightly to the core.

BELLE DE PALUAU.

A new French variety, of good promise. Canes strong, vigorous, upright. Spines short, purplish, rather slender, and numerous at base.

Fruit very large, conical, a little obtuse, bright light crimson. Grains large, regular, a few hairs. Flesh quite firm, juicy, rich. Very good. Separates freely from the germ in picking.

BLACK.

English Black.

This is a hybrid from England. An old variety. Canes moderately vigorous, with numerous purple spines.

Fruit medium, roundish, dark crimson or purplish. Grains medium or small, compact. Flesh rather firm, brisk subacid, separates freely.

BRENTFORD CANE.

English.

Fruit medium, oval conical, dull dark red. Inferior to the best. Not productive.

BURLINGTON.

Prosser.

Originated by Benjamin Prosser, of Burlington, N. J. There is some confusion as to this kind, two or three having been sent out under this name. The one we have is moderately vigorous and productive. Spines greenish white, with a brownish tinge, slender, and more numerous than any kind we have ever seen.

Fruit large, roundish conical. Grains rather small, compact, scarlet. Flesh quite firm, juicy sweet and good.

CANADA BLACK CAP.

A variety of American Black, which we have not seen, but said to have been brought from Canada to Piqua, Ohio, where it is popular.

CARTER'S PROLIFIC.

Prolific (Carter's).

An English variety. Canes strong, with purplish spines.

Fruit large, roundish or obtuse conical, deep scarlet, slight bloom. Grains medium compact. Flesh rather firm, moderately juicy, sweet, pleasant. Good.

CATAWISSA.

A native of Columbia Co., Penn. Vigorous and very productive. This is especially valued in some localities as an autumn or late-bearing variety. In order to obtain the best crops, the canes should all be cut away in spring, and as the new sprouts grow they should be thinned to four to six canes only. It is a little tender, and should always be covered in winter.

Fruit medium size, flattened, dark crimson, covered with thick bloom. Flavor sprightly, rather acid, more suited to the amateur than for general cultivation. Commences ripening about the first of August, and continues in use a long time.

CLARKE.

Raised by E. E. Clarke, New Haven, Conn. Canes very strong, vigorous, upright. Spines purplish, rather long and stiff. Foliage large, flat, and thick, and endures heat and cold better than any European kind we have. It is not entirely hardy, but more so than any foreign sort, and produces better crops by being covered. It is better suited to light sandy soils than any of its class.

Fruit large, conical, regular. Grains large, quite hairy, bright crimson. Flesh rather soft, juicy, sweet, and excellent.

COL. WILDER.

Originated with Dr. Brinckle, Philadelphia. Strong white spines. Leaf much crimped. Productive, and a good grower.

Fruit large, roundish, semi-transparent, yellowish white or cream color, pleasant flavor, but not rich.

COPE.

Raised by Dr. Brinckle. Canes strong, upright. Spines short, purplish, numerous.

Fruit large, obtuse conical, or nearly globular. Grains compact, scarlet, with a slight bloom. Flesh firm, moderately juicy, sweet, and pleasant.

CRETAN RED.

A rather late variety, of medium quality.

Fruit of medium size, globular, inclining to conical, deep purplish red, subacid, and good.

CUSHING.

Originated with Dr. Brinckle, Philadelphia. Canes moderately vigorous. Productive. Spines purplish, long, stiff, rather numerous.

Fruit roundish conical, regular in form, crimson, with a thin bloom, sprightly rich acid flavor. Parts freely from the germ.

DAVISON'S THORNLESS.

Thornless Black Cap.

Said to have originated in the garden of Mrs. Mercy Davison, Gowanda, Angola, Erie Co., N. Y. It differs from the American Black Cap only by its ripening a few days earlier. It is nearly as vigorous, and about as productive, not quite as large, but a little sweeter and the canes without spines, except a small one on the leaf stalk.

DOOLITTLE.

American Improved.

Joslyn's Black Cap.

Doolittle's Black Cap.

Joslyn's Improved.

Joslyn's Improved Black Cap.

Introduced by Leander Joslyn, of Phelps, Ontario Co., N. Y. Canes very vigorous, branching. Spines whitish, stout, and numerous. Very productive.

Fruit similar to American Black, but an improvement on it, and is one of the best of its class for market.

DOUBLE-BEARING.

Perpetual Bearing.

Late Liberian.

A variety of the Antwerp, formerly esteemed for its habit of bearing late in the season ; but is now surpassed by better kinds.

DUHRING.

Originated with Henry Duhring, Philadelphia, Pa. Canes strong. Spines slightly purplish, not very strong, but quite numerous.

Fruit large, roundish obtuse, deep red or crimson. Grains large, rather soft, sweet. Good. Separates freely.

ELLISDALE.

Described by H. A. Terry as having been found growing wild upon the Ellisdale Farm, in Iowa. It is a variety of the Purple Cane Family, but of stronger growth.

Fruit large, darker in color, with a little more bloom, and about the same quality.

ELM CITY.

A hardy sort, size and flavor much like Philadelphia. Eight to ten days earlier than other sorts. (F. Trowbridge, MS.)

ELSIE.

A seedling raised by Samuel Miller, of Bluffton, Mo., who describes it as very large and excellent. We have not fruited it.

EMILY.

A seedling from the Col. Wilder. White spines.

Fruit large, conical, sometimes round, often shouldered, which distinguishes it from the other varieties ; light yellow.

ENGLISH GLOBE.

Canes strong. Spines short, purplish, moderately numerous.

Fruit large, obtuse conical, dark crimson. Flesh soft, juicy, sweet.

FASTOLLE.

Filby.

The Fastollf Raspberry is an English variety of high reputation. It derives its name from having originated near the ruins of an old castle, so called, in Great Yarmouth. Canes strong, rather erect, branching, light yellowish brown, with few pretty strong bristles.

Fruit very large, obtuse or roundish conical, bright purplish red, rich and high-flavored, slightly adhering to the germ in picking.

FRANCONIA.

Abel.

This was imported from Vilmorin, of Paris, under this name, by S. G. Perkins, Esq., of Boston, some years ago. Its crops are abundant, the fruit is firm, and bears carriage to market well, and it ripens about a week later than Red Antwerp. It is one of the finest for preserving. Canes strong, spreading, branching, yellowish brown, with scattered, rather stout purple spines. Leaves rather large, very deep green.

Fruit large, obtuse conical, dark purplish red, of a rich acid flavor, much more tart and brisk than that of the Red Antwerp.

Naomi so closely resembles this in growth, fruit, &c., that we are unable to see any difference, yet it is claimed to be a seedling, differing in the canes being more hardy and the grains of less size, &c.

FRENCH.

Vice-President French.

Originated with Dr. Brinckle. A little later than most sorts, a very productive, vigorous grower. Canes very strong, tall and upright. Spines purplish, stout and short, numerous at base, few at top. Foliage large, deep green, with many deep veins.

Fruit medium to large, roundish or very obtuse conical, inclining to oblate, deep crimson, slight bloom. Grains large. Flesh rather firm, sweet and very good. Separates freely.

FULTON.

A seedling of the French. Raised by Dr. Brinckle.

Fruit large, round, crimson, productive; a vigorous grower, red spines.

GARDEN.

Doolittle's Red Flavored Black Cap.

A variety of the Black Cap, lighter in color, more acid. Good cooking sort.

GEN. PATTERSON.

A seedling of the Col. Wilder. Raised by Dr. Brinckle; vigorous grower, very productive, red spines.

Fruit large, round, crimson; does not part readily from the stem.

GOLDEN THORNLESS.

A large variety of the American white or yellow, introduced from the west by Purdy and Johnston, of Palmyra, N. Y. It is moderately vigorous, very productive, and has but few spines.

Fruit equal in size to the McCormick, oblate, occasionally conical, slight bloom, dull orange or darker than the American yellow, rather firm, juicy, sweet and pleasant.

HILDRETH.

Introduced by Isaac Hildreth, of Big Stream Point, Yates Co., N. Y. as a native sort near that place. It does not grow readily from the tips of the canes and produces but few suckers. Canes rather strong. Spines purplish, stiff, numerous.

Fruit medium, roundish oblate, dull red or maroon, thick bloom, half firm, juicy, sweet, subacid and similar to Purple Cane in flavor.

HORNET.

Raised by Souchet, near Paris, very productive. Canes very strong, vigorous, upright. Spines purplish, rather stout, and numerous at the base.

Fruit very large, conical, often irregular. Grains large, quite hairy, compact, crimson. Flesh rather firm, juicy, sweet, and good. Separates freely.

HUDSON RIVER ANTWERP.

New Red Antwerp.

Origin unknown, but as far as we have been able to trace it, was first brought to this country by the late Mr. Briggs, of Poughkeepsie, N. Y. Its firmness of flesh and parting readily from the germ, together with its productiveness, render it the most popular variety for market. Canes short, but of sturdy growth, almost spineless, of a very peculiar gray or mouse color.

Fruit large, conical. Flesh firm, rather dull red, with a slight bloom, not very juicy, but of a pleasant, sweet flavor.

HUNTSMAN'S GIANT.

Raised by Prof. T. W. Huntsman, Flushing, L. I. Fuller describes it as similar to the Franconia in size, shape, and quality, but the canes taller, and having a peculiar grayish white bark.

IMPERIAL.

A large French variety. Canes pale green, nearly white, with a pale red blush.

Fruit large, roundish, bright red. Flesh firm, excellent. (Gar. Mon.)

IMPERIAL RED.

Red Imperial.

A variety grown in New Jersey, where it proves hardy.

Fruit medium, roundish, scarlet, half firm, juicy, pleasant.

JOUET.

A French variety. Canes yellowish green. Spines whitish, numerous.

Fruit small, long conical, bright lemon yellow, with a whitish bloom. Flesh soft, sweet. Only good.

KIRTLAND.

Cincinnati Red?

Origin unknown. A vigorous, upright grower, not much branched. Spines whitish, not very stout nor numerous; the earliest to ripen, suckers freely.

Fruit medium, roundish or obtuse conical, inclining to oval. Grains small, light crimson, slight bloom. Flesh tender, soft, not very juicy, nor high flavored; separates freely.

KNEVET'S GIANT.

This is one of the strongest growing varieties. Very productive, and of excellent flavor. Canes strong, erect. Spines small, reddish, very few.

Fruit of the largest size, obtuse conical, deep red, firm in texture, and hangs a little to the germ in picking. Berries sometimes double, giving them a cock's-comb appearance.

LARGE-FRUITED MONTHLY.

Rivers' New Large Monthly.

Canes moderately strong, upright. Spines red, stout, and numerous.

Fruit above medium size, roundish conical, crimson. Flesh soft, sweet, and excellent.

LINDLEY.

Raised by Joseph B. Lindley, of Newark, N. J. Canes strong, tall, upright, much branched. Spines greenish and stout, numerous; suckers too freely.

Fruit medium to large, conical, a little obtuse, crimson. Grains medium to large, compact. Flesh rather soft, juicy, sweet, and good; adheres slightly.

LUM'S EVER-BEARING.

Autumn Black Raspberry.

Raised by H. B. Lum, of Sandusky, O. This variety is much like the Ohio Ever-bearing Black Cap, and is increased by layers from the tips of the canes. Like the Catawissa, it is advisable, when a full autumn crop is desired, to cut away the canes in spring. It is similar in size to the Black Cap, but not quite as firm.

McCORMICK.

Miami Black Cap.	Large Miami Black Cap.	Mammoth Cluster.
Collinsville Miami.	Improved Miami.	Superior Miami.

A variety of the American Black Cap, with stronger and more vigorous canes, having fewer spines, and more productive, and is the largest and best Black Cap we have yet seen.

Fruit similar in form to American Black Cap, but of much larger size, of deeper color, more bloom, juice, and sweetness.

MAGNUM BONUM.

A white or yellowish fruit, of large size, rather firm flesh, and finely flavored, similar to the Old Yellow Antwerp. Very productive and vigorous.

MIAMI BLACK.

Little Miami Black Cap.

A common Black Cap, originally found growing along the Miami River, in Ohio, from whence its name. It is of less value than the McCormick, but very vigorous, very productive, of a more brownish red, not quite as sweet, and not quite as late in ripening.

MRS. WOOD.

Originated with Mrs. Reuben Wood, near Cleveland, O. Supposed a hybrid between the Black Cap and Purple Cane families. Canes very strong, much branched, productive.

Fruit medium, roundish obtuse, purplish red, with a bloom. Flesh moderately firm, juicy, sprightly subacid; separates freely. Matures its crop quite late, and is on that account valuable.

MOTE'S EVER-BEARING.

Raised by L. S. Mote, of West Milton, O. A new Ever-bearing variety, of vigorous growth, somewhat like Catawissa. Canes of a brownish color, branching. Spines slender, but sharp, and quite numerous at the base, few at the top.

Fruit medium, roundish obtuse, dark red, with a bloom. Grains quite large, rather firm, juicy, subacid; separates freely.

NORTHUMBERLAND FILL-BASKET.

A foreign variety. Canes strong, vigorous, with numerous rather strong crimson-colored spines.

Fruit somewhat globular or obtuse conical. Grains large, compact, deep red, with a good, pleasant, slightly acid flavor; adheres a little to the core.

NOTTINGHAM SCARLET.

An old English variety, of medium size, obtuse conical, red, good flavor.

OCTOBER RED.

Merveille de Quatre Saisons.

A French variety. Requires the canes to be cut down in spring in order to produce much fruit. Canes strong, upright. Spines purplish.

Fruit medium, roundish, inclining to conic or obtuse conical, crimson. Flesh rather soft, juicy, sweet, and separates freely.

OCTOBER YELLOW.

Merveille de Quatre Saisons.

This is of same origin and similar to the above, except that the fruit is of a yellow color and not quite as firm.

OHIO EVER-BEARING.

Ohio Raspberry.

This is a native of Ohio. It is precisely like the American Black Raspberry, or Black Cap, in all respects, except that it has the valuable property of bearing abundant crops of fine fruit till late in the season.

ORANGE.

Brinckle's Orange.

Originated with Dr. W. D. Brinckle. It is unquestionably the largest and finest flavored light-colored Raspberry yet known, and deserves a place in every garden. Canes strong, branched. Strong white spines. Very productive.

Fruit large, conical, sometimes ovate, beautiful orange color. Grains large. Flesh juicy, a little soft, sweet, rich. Excellent.

PHILADELPHIA.

Supposed a chance native variety, found wild in the county of Philadelphia, Pa. The canes have proved hardy, very productive, and well suited to light soils in the southern portions of the Middle States. Canes vigorous, tall, branching, almost free from spines.

Fruit medium, roundish, dark crimson or purplish red. Flesh rather soft, moderately juicy, mild subacid; separates freely. Good.

PILATE.

This is a French variety, of good flavor. Canes moderately strong, with a tinge of purple. Spines purplish.

Fruit large, conical, crimson, with a slight bloom. Flesh moderately firm, juicy, sweet. Good. Separates freely.

PRINCE OF WALES.

Cutbush's Prince of Wales.

An English variety. Canes strong, nearly upright. Spines purplish.

Fruit large, conical, somewhat obtuse. Grains small, rather compact, regular, quite hairy, crimson. Flesh moderately firm. Sweet and very good. Separates freely.

PRINCE'S GLOBOSE.

Raised by Wm. R. Prince, Flushing, L. I. Canes strong, upright, branching. Spines long, very stout, and numerous. Suckers numerous.

Fruit large, nearly globular or very obtuse conical. Grains very large, dull red, with a deep bloom. Flesh coarse, rather dry, crumbling. Not valuable.

PURPLE CANE.

Purple Prolific.
Huntsville.

English Purple.
English Red.

Red Prolific.
Allen, erroneously.

A native variety. Canes strong and tall, often branching, reddish purple. Spines rather long, stiff, and moderately numerous.

Fruit medium size, oblate, purplish maroon, slight bloom. Flesh soft, juicy, and rich.

RED ANTWERP.

Old Red Antwerp.
Knevet's Antwerp.
True Red Antwerp.

Howland's Red Antwerp.
Framboisier à Gros Fruit.
Burley.

This is the common Red Antwerp of England and this country, and is quite distinct from the North River variety, which is shorter in growth, and has a conical fruit. Canes strong and tall. Spines light red, rather numerous, and pretty strong.

Fruit large, nearly globular or obtuse conical. Color dark red, with large grains, and covered with a thick bloom. Flesh juicy, with a brisk vinous flavor.

RED PEARL.

Fruit medium, roundish conical, light red, moderately firm. Scarcely good.

RILEY'S EARLY.

From New Jersey. It is described as of medium size, good flavor, and quite early. We have not seen it.

RIVERS' ORANGE.

Large Orange.

Raised by Thomas Rivers, England. Canes strong, branching. Spines greenish, stout, not numerous.

Fruit medium to large size, roundish conical, pale reddish orange or deep orange. Grains large. Flesh soft, juicy, subacid, but not rich; separates freely.

RUSSELL'S RED.

Raised by Dr. G. W. Russell, of Hartford, Conn. Belonging to the Antwerp family. Canes strong. Spines short, stout, whitish, productive.

Fruit large, conical, scarlet. Grains medium, compact. Flesh rather firm, juicy, sweet; separates freely.

SEMPER FIDELIS.

An English variety. Canes strong, upright. Spines purplish, short, and stiff.

Fruit large, conical, somewhat irregular, dull red, with a thick bloom. Grains medium, compact. Flesh firm, not very juicy, subacid. Good.

SENECA BLACK CAP.

A variety of the American Black Cap, raised by Mr. Dell, of Seneca Co., N. Y. It is larger and later than Doolittle, very vigorous, very productive. Spines reddish, strong, and numerous.

Fruit rather larger than Doolittle, not as black, but with a shade of purple, light bloom, juicy, and sweet.

SOUCHETTI.

White Transparent.

A French variety, raised by M. Souchet, near Paris, France. Canes moderately strong. Spines greenish, short, slender, scattering.

Fruit rather large, conical, a little elongated. Grains medium, compact, pale creamy yellow. Flesh rather soft, moderately juicy, mild sweet, not rich; separates freely.

SUMMIT.

Of the American Yellow Cap class, raised by O. T. Hobbs, Radolph, Pa. Canes strong, branching. Spines stout and numerous.

Fruit large for its class, roundish oblate, orange color, with pink at the base of most of the grains, which are rather small and compact. Much like Yellow Cap in form, but the flesh firmer and richer.

SURPRISE.

This is another variety of the American Black Cap, found wild and introduced to notice by George Husman, of Bluffton, Mo. In growth its canes have few and short spines, and have stiff upright branches.

The fruit is larger, more conical, darker in color, with a peculiar deep bloom, and fewer seeds than the Common Black Cap.

SWEET YELLOW ANTWERP.

An old English variety, sweet but unprofitable. Canes slender.

Fruit medium, roundish obtuse conical, light yellow. Grains small. Flesh soft, juicy, sweet.

THUNDERER.

Foreign. Strong grower. Canes erect. Spines red, not numerous, productive.

Fruit rather large, obtuse conical, deep red, rather acid flavor.

VICTORIA.

Roger's Victoria.

An English variety, of rather dwarf and delicate habit. It is an autumn-bearing sort.

Fruit rather large, dark red. Good.

WALKER.

Raised by Dr. Brinckle. Canes strong, with few reddish spines.

Fruit large, round, deep crimson, solid, adheres firmly to the stem, keeps long in perfection on the plant, bears carriage well.

WHITE CANADA.

Raised by Charles Arnold, Paris, Ontario, C. W. Canes vigorous, upright, brownish yellow. Spines white, quite stout, numerous.

Fruit about the shape of Brinckle's orange, pale yellow, of a decidedly Antwerp flavor. (C. Arnold, MS.)

WOODSIDE.

Originated in New Jersey. One of the Black Cap family. Canes light crimson or dark scarlet. Spines few and scattering.

Fruit very large, globular, black, with little bloom, sweet, juicy, and good. Produces a second crop in autumn. (Fuller.)

WOODWARD.

Raised by Dr. Brinckle. This is one of the smallest varieties, though larger than the ordinary wild Raspberry.

Fruit round, sometimes roundish ovate, crimson, ripens quite early.

YELLOW ANTWERP.

White Antwerp.

Double-Bearing Yellow.

The Yellow Antwerp is a large, light-colored Raspberry, and, with high cultivation, a good sort, but greatly surpassed by the Orange. Canes strong and vigorous, light yellow, sometimes with many bristles or spines, often nearly smooth. Productive.

Fruit large, nearly conical, pale yellow, sweet, and of good flavor.

YELLOW PEARL.

A variety of the Yellow Cap. More vigorous, very productive, often produces a fall crop.

Fruit darker in color, with a slight bloom, and more sprightly in flavor.

CHAPTER XXXII.

THE STRAWBERRY.

Fragaria (of species). L. *Rosaceæ*, of botanists.

Fraisier, of the French; *Erdbeerpflanze*, German; *Aadbezie*, Dutch; *Pianta di Fragola*, Italian; and *Fresa*, Spanish.

THE Strawberry is the most delicious and the most wholesome of all berries, and the most universally cultivated in all gardens of temperate climates. It is a native of the temperate latitudes of both hemispheres, —of Europe, Asia, North and South America,—though the species found in different parts of the world are of distinct habit, and have each given rise, through cultivation, to different classes of fruit.

The name of this fruit is by some understood to have arisen from the common and ancient practice of laying straw between the plants to keep the fruit clean. Another reason of the origin of the name comes from the custom of children stringing the berries on straws.

In the olden times the variety of strawberries was very limited, and the garden was chiefly supplied with material for new plantations from the woods. Old Tusser, in his "Five Hundred Points of Good Husbandry," points out where the best plants of his time were to be had, and turns

them over with an abrupt, farmer-like contempt of little matters, to feminine hands :—

“Wife, into the garden, and set me a plot
With strawberry roots, of the best to be got;
Such growing abroad, among thorns in the wood,
Well chosen and picked, prove excellent good.”

The Strawberry, though well known, is of comparatively little value in the South of Europe. Old Roman and Greek poets have not, therefore, sung its praises ; but after that line of a northern bard,

“A dish of ripe strawberries, smothered in cream,”

which we consider a perfect *pastoral idyl* (as the German school would say) in itself, nothing remains to be wished for.

Ripe, blushing Strawberries, eaten from the plant, or served with sugar and cream, are certainly Arcadian dainties with a true paradisiacal flavor, and, fortunately, they are so easily grown that the poorest owner of a few feet of ground may have them in abundance.

To the confectioner this fruit is also invaluable, communicating its flavor to ices, and forming several delicate preserves. In Paris a cooling drink, *bavaroise à la grecque*, is made of the juice of strawberries and lemons, with the addition of sugar and water.

The Strawberry is perhaps the most wholesome of all fruits, being very easy of digestion, and never growing acid by fermentation, as most other fruits do. The often quoted instance of the great Linnæus curing himself of the gout by partaking freely of strawberries—a proof of its great wholesomeness—is a letter of credit which this tempting fruit has long enjoyed, for the consolation of those who are looking for a bitter concealed under every sweet.

PROPAGATION AND SOIL. The strawberry propagates itself very rapidly by runners,* which are always taken to form new plantations or beds. These are taken off the parent plants early in spring, or in August and September, and at once planted in the rows or beds where they are to fruit.

The best soil for a strawberry is a deep rich loam. Deep it must be, if large berries and plentiful crops are desired ; and the wisest course, therefore, where the soil is naturally thin, lies in trenching and manuring the plot of ground thoroughly before putting out the plants. But even if this is not necessary, it should be dug deeply, and well enriched with strong manure beforehand.

The best exposure for strawberries is an open one, fully exposed to the sun and light.

CULTURE IN ROWS. The finest strawberries are always obtained when the plants are kept in *rows*, at such a distance apart as to give sufficient space for the roots, and abundance of light and air for the leaves.

In planting a plot of strawberries in rows, the rows should be two feet apart, and the plants of the large-growing kinds, two feet from each other in the rows ; of the smaller growing kinds, from one foot to eighteen inches is sufficient. The runners must be kept down by cutting them off at least three times a year, and the ground must be maintained in good order by constant dressing. During the first year a row

* Excepting the *Bush Alpines*, which have no runners, and are propagated by division of the roots.

of any small vegetables may be sown in the spaces between the rows. Every autumn, if the plants are not luxuriant, a light coat of manure should be dug in between the rows; but if they are very thrifty it should be omitted, as it would cause them to run too much to leaf.

A light top-dressing of leaves, or any good compost, applied late in the fall, greatly promotes the vigor of the plants, and secures the most tender kinds against the effects of an unusually cold winter. Before the fruit ripens the ground between the rows should be covered with straw, or light new-mown grass, to keep it clean.

A plantation of this kind in rows will be found to bear the largest and finest fruit, which, being so fully exposed to the sun, will always be sweeter and higher flavored than that grown in crowded beds.

CULTURE IN ALTERNATE STRIPS. A still more easy and economical mode is that of growing the strawberry in strips.

Early in April, or in August, being provided with a good stock of strong young plants, select a suitable piece of good deep soil. Dig in a heavy coat of stable manure, pulverizing well and raking the top soil. Strike out the rows, three feet apart, with a line. The plants should now be planted along each line, about a foot apart in the row. They will soon send out runners, and these runners should be allowed to occupy a width of one foot, leaving an alley of two feet, which is kept clear from weeds, and is used to walk in when gathering the fruit.

The occupied strip or bed of runners will now give a heavy crop of strawberries, and the open strip of two feet will serve as an alley from which to gather the fruit. After the crop is over, dig and prepare this alley or strip for the occupancy of the new runners for the next season's crop. The runners from the old strip will now speedily cover the new space allotted to them, and will perhaps require a partial thinning out to have them evenly distributed. As soon as this is the case, say about the middle of August, dig under the whole of the old plants with a light coat of manure. The surface may be then sown with turnips or spinage, which will come off before the next season of fruits.

In this way the strips or beds occupied by the plants are reversed every season, and the same plot of ground may thus be continued for years, but less productive than when new land is taken.

It may be remarked that the Alpine and European Wood strawberries will do well and bear longer in a rather shaded situation. The Bush-Alpine, an excellent sort, having no runners, makes one of the neatest *borders* for quarters or beds in the kitchen garden, and produces considerable fruit till the season of late frosts. If the May crop of blossoms is taken off, they will give a moderate crop in September.

To accelerate the ripening of early kinds in the open garden, it is only necessary to plant rows or beds on the south side of a wall or tight fence. A still simpler mode, by which their maturity will be hastened ten days, is that of throwing up a ridge of soil three feet high, running east and west, and planting it in rows on the south side. (The north side may also be planted with later sorts, which will be somewhat retarded in ripening.)

Hermaphrodite and Pistillate Plants.—A great number of experiments have been made, and a great deal has been written lately, in this country, regarding the most certain mode of producing *large crops* of this fruit.

Cultivators divide all Strawberries into classes, characterized by their

blossoms. The first of these they call *staminate* (or male), from the stamens being chiefly developed. The second they call *hermaphrodite* (or perfect), from their having both stamens and pistils developed. The third are called *pistillate* (or female), from the pistils being chiefly developed.

The first class really does not exist among cultivated varieties, because a pure male variety, or one producing only male flowers, cannot bear fruit.

In planting strawberry beds it is important, therefore, to the cultivator to know which are the *perfect*, or *hermaphrodite*, and which are the *pistillate* varieties—as they are found to be permanent in these characters. We have accordingly designated these traits in the descriptions of the varieties which follow.

Upon the relative proportion of *hermaphrodites*, cultivators are not absolutely agreed. Some considering one plant of a *hermaphrodite* sufficient to impregnate ten or twelve *pistillates*; others again set twenty *pistillates* to one. The *hermaphrodite*, or perfect flowering sorts, require no special care of this kind, and are generally preferred by planters, and are considered fully as productive as an entire *pistillate*, even when most advantageously impregnated.

STRAWBERRY BLOSSOMS.

Perfect or Hermaphrodite blossom.

Pistillate blossom.

Nothing is easier than to distinguish the two classes of strawberries when in blossom. In the *Hermaphrodite*, the long yellow anthers (*a*), bearing the fine dust or pollen, are abundant. In the *pistillate*, only the cluster of pistils (*b*), looking like a very minute green strawberry, is visible (that is, to the common observer, for the male organs are merely *rudimentary*, and not developed), while the perfect, or hermaphrodite flower, as seen in the drawing, has both stamens and pistils developed.

VARIETIES.

The varieties of this fruit are very numerous, indeed quite unnecessarily so for all useful purposes. They were formerly divided into classes, designated as the *pine* and *scarlet*, but the introductions of late years have become so intermingled as to make reference thereto of no practical value, if indeed it can be done correctly.

The characters of the flowers corresponding with the above are noted in the text by the words *Hermaphrodite* and *Pistillate*.

As before remarked, the varieties of the Strawberry are very numerous. They are also comparatively evanescent. We have therefore omitted to name or describe many sorts once recorded, because of a doubt as to their present existence. Again, others have perhaps only a

local habitation and name, and, possessing no superior qualities, are not worthy of perpetuation, and are therefore omitted.

ADAIR.

Nimrod.

An English variety. Hermaphrodite.

Fruit large, conical, dark red. Flesh deep red, soft, hollow at core.

ADMIRAL DUNDAS.

An English variety, of vigorous habit. Hermaphrodite.

Fruit large. Color pale scarlet. Flesh moderately firm, juicy, with a good but not high flavor.

AGRICULTURIST.

Abraham Lincoln.

President.

Raised by Seth Boyden, Newark, N. J. Plant vigorous, foliage dark green; hardy and very productive. Pistillate.

Fruit large, roundish conical, elongated, often with a neck. Surface somewhat uneven; first berries often cock's-comb shape, deep crimson. Flesh dark red, quite firm, juicy, sweet, and rich.

AJAX.

An English variety. A large dark-colored fruit, of a blunt ovate form, with a deep-colored flesh, well flavored and good. Vines not hardy. (Hov. Mag.)

ALICE MAUD.

Princess Alice Maud.

A foreign variety. Hermaphrodite.

Fruit large, conical. Color dark glossy scarlet. Flesh light scarlet, juicy, rich, and excellent.

AMBROSIA.

An English variety.

Fruit large, roundish, dark shining crimson. Flesh juicy, rich. (Hogg.)

AMERICA.

Raised by J. Koech, Waterloo, N. Y., who informs us they ripen nearly all at the same time, and quite as early as the Early Scarlet.

Fruit large, obtuse conical, often wedge shape, crimson. Flesh quite firm, juicy, rich subacid.

ARIADNE.

Pistillate.

Fruit rather large, conical, slight neck, light scarlet, sweet, fine flavor. (Hov. Mag.)

AUSTIN.

Austin Seedling.

Austin Shaker.

Shaker's Seedling.

Originated at the Shaker Settlement, near Albany, N. Y. Hardy and productive. Hermaphrodite.

Fruit large, roundish conical, light scarlet. Flesh white, rather soft, acid, and deficient in flavor.

BARNES MAMMOTH.

Raised by D. H. Barnes, of Poughkeepsie, N. Y. Plant very vigorous, very productive, and said to be one of the best for market.

Fruit very large, roundish obtuse conical. Surface somewhat uneven; crimson. Flesh scarlet, firm, juicy, sprightly subacid.

BARON DEMAN DE LENNICK.

Fruit very large, elongated flattened cone, light scarlet. Flesh pink, solid, sweet. (Fuller.)

BICOLOR.

Foreign.

Fruit large, conical, rich blush red. Flesh moderately firm.

BICTON PINE.

Barnes' White.

Virgin Queen.

An English variety, but too tender for our climate.

Fruit large, roundish. Color white, with a tinge of pink on the sunny side. Flesh tender, delicate, mild and pleasant, but not rich.

BIJOU.

Raised by M. De Jonghe. Not profitable.

Fruit medium, conical, bright crimson or scarlet. Flesh white, firm.

BISHOP'S ORANGE.

Bishop's New.

Orange Hudson Bay.

Pistillate. Vines hardy, vigorous, and productive.

Fruit medium, conical, regular. Color light scarlet, approaching orange. Flesh rather firm, rich, and excellent.

BLACK PRINCE.

Black Imperial.

Cuthill's Black Prince.

Malcolm's Aberdeen Seedling.

A foreign variety, and, when in perfection, of the best quality. Variable. Pistillate.

Fruit large, regular roundish or ovate depressed. Color very deep crimson, almost black, glossy. Flesh deep crimson, rather firm, rich, and high-flavored.

BLACK ROSEBERRY.

Fruit medium, nearly round, dark red or purplish, pleasant flavor, moderate bearer.

BONTÉ DE ST. JULIAN.

A foreign variety.

Fruit medium size, roundish conical, bright scarlet. Flesh tinged with red, rich, sugary.

BOSTON PINE.

Bartlett.

Raised by C. M. Hovey, Boston, Mass. This fine Strawberry, to have it in perfection, requires rich, deep soil, and to be grown in hills or bunches eighteen or twenty inches apart each way. Hermaphrodite.

Fruit rather large, roundish, slightly conical. Color deep glossy crimson. Flesh rather firm, juicy, rich, and of excellent flavor—an uncertain variety in many places.

BOUDINOT.

Originated with H. Boudinot, Alexandria, Licking Co., O. Hermaphrodite.

Fruit large, roundish conical, rich clear scarlet. Flesh firm, good flavor, and productive.

BOULE D'OR.

Boisselot.

Plant robust, moderately productive.

Fruit very large, roundish flattened, bright glossy orange scarlet. Flesh white, sweet. (Fuller.)

BOYDEN'S MAMMOTH.

Raised by Seth Boyden, Newark, N. J. Plant vigorous, not very productive.

Fruit large, roundish, often depressed, dark crimson.

BOYDEN'S NO. 30.

Raised by Seth Boyden, of Newark, N. J. Plant vigorous, very productive. Its large size, productiveness and firmness give promise as a valuable market variety.

Fruit very large, roundish obtuse conical, regular, often with a short neck, bright crimson. Flesh quite firm, juicy, rich subacid.

BREWER'S EMPEROR.

English. Hermaphrodite. Medium size, ovate, dark red, good flavor.

BRIGHTON PINE.

Raised by T. Scott, of Brighton, Mass. Said to be early, hardy, and productive.

Fruit medium to large, conical, light crimson, rich sprightly flavor.

BRILLIANT.

Raised by Wm. R. Prince, Flushing. Hermaphrodite.
Fruit large, conical, deep crimson.

BRITISH QUEEN.

Myatt's British Queen.

Raised by Mr. Myatt, England. Flowers hermaphrodite. Plant vigorous, rather tender, requires deep, rich cultivation.

Fruit very large, roundish conical, occasionally cock's-comb-shaped, of a beautiful shining scarlet. Flesh rather firm, juicy, rich, and excellent.

BROOKLYN SCARLET.

Raised by A. S. Fuller. Hermaphrodite.

Fruit medium to large, elongated, a little compressed, bright scarlet. Flesh rather soft, sweet, rich.

BRYAN'S SATISFACTION.

A new sort. Originated with S. Bryan, Vineland, N. J.

Fruit small, heart-shape pointed, glossy crimson. Flesh firm.

BURR'S NEW PINE.

Raised by Zera Burr, Columbus, O. Vines moderately vigorous, productive. Flowers pistillate.

Fruit medium, regular roundish conical. Color light crimson. Flesh tender, juicy, with a sweet, rich, aromatic flavor.

BURR'S SEEDLING.

Burr's Old Seedling. Burr's Staminate.

Raised by Zera Burr, Columbus, O. Hermaphrodite. Vines hardy, vigorous, and productive.

Fruit rather large, roundish, inclining to conic. Color light scarlet. Flesh tender, juicy, with a mild, pleasant flavor.

CALEB COPE.

An American variety. Pistillate.

Fruit large, pointed, scarlet. Flesh white.

CAPT. COOK.

An English variety, of large size, somewhat resembling the British Queen, but not quite so large; the color is dark and rich. Poor bearer.

CAROLINA SUPERBA.

An English variety. Plant hardy and productive.

Fruit very large, ovate, sometimes cock's-comb shape. Seeds not deeply embedded, pale red. Flesh clear white, firm, solid, rich. (Hogg.)

CHAMPION.

Originated by Dr. J. C. Neff, Carlisle, Cumberland Co., Pa. Hermaphrodite.

Fruit large. Flesh firm, melting, sweet. (Dr. Neff.)

CHARLES DOWNING.

Raised by J. S. Downer, Fairview, Ky. Plant very vigorous and very productive. Hermaphrodite.

Fruit very large, nearly regular, conical, deep scarlet. Seeds brown and yellow, rather deep. Flesh quite firm, pink, juicy, sweet, rich.

CHARLES FAVORITE.

A seedling from Hovey's Seedling. Size, shape, flavor, and color similar, but ripens ten days earlier. (Hov. Mag.)

CHARLOTTE.

Pistillate.

Fruit large, obovate, dark scarlet. Flesh sweet.

CHILLIAN.

Pyramidal Chillian, or Newland.

Raised by Mr. Newland, in New Jersey.

Fruit medium, conical, bright crimson. Flesh rather firm, mild acid, late. Productive, sometimes very good.

CHORLTON.

Charlton Prolific.

Raised by William Chorlton, Staten Island, N. Y. Hermaphrodite.

Fruit large, roundish obtuse, slight neck, scarlet. Flesh light scarlet, rather acid.

CLINTON.

Raised by Elias Camfield, near Newark, N. J. Plant hardy, healthy, vigorous, productive, rather early, and said to be a valuable market sort.

Fruit large, roundish, crimson. Flesh quite firm, juicy, rich, sprightly subacid.

COCKSCOMB.

Obtained in the Royal Gardens, Windsor, England.

Fruit very large, ovate, occasionally cock's-comb-shaped. Skin pale scarlet. Flesh white, with a rosy tinge, rich. (Hogg.)

COLFAX.

From Indiana. Plant very vigorous, very productive, but too small to be of much value.

Fruit small size, round, dark crimson. Flavor subacid, with a peculiar spicy taste.

COLONEL ELLSWORTH.

Raised by A. S. Fuller, Ridgewood, Bergen Co., N. J. Plant moderately vigorous, productive, the foliage often burns with the sun. Hermaphrodite.

Fruit medium, roundish conical, somewhat obtuse, slight neck, dark scarlet. Flesh rather firm, not very juicy, sweet.

COLUMBUS.

American. Pistillate. Large, roundish, hardy, productive, dark red, tender, and sweet.

COMTE DE FLANDRE.

Fruit large, conical, bright crimson, fine flavor. Excellent bearer. (Gar. Mon.)

COMTE DE PARIS.

Fruit large, obtuse heart-shaped. Skin scarlet, becoming deep crimson. Flesh pale red, and solid throughout, with a brisk acid flavor. (Hogg.)

CORNUCOPIA.

Raised by Wm. R. Prince, Flushing, L. I. Plant vigorous, moderately productive.

Fruit large, conical, bright scarlet. Flesh rather soft, sweet. Good.

CRIMSON CLUSTER.

An English variety.

Fruit medium size, roundish, sometimes cock's-comb shape, dark red. Flesh firm, juicy, sweet. (Hogg.)

CRIMSON CONE.

Scotch Pineapple.

Dutchberry.

Scotch Runner.

An old and beautiful variety, a hardy, vigorous grower, productive. Pistillate.

Fruit medium, irregular elongated conic. Color deep crimson. Seeds deeply embedded. Flesh rather firm, sprightly, with a rich acid flavor, rather late in ripening. One of the best for preserving.

CRIMSON FAVORITE.

Originated with A. S. Fuller. Plant vigorous, not productive.

Fruit large, roundish obtuse conical, somewhat irregular. Color crimson. Flesh rich, juicy, sweet, sometimes hollow.

CRIMSON QUEEN.

Doubleday's No. 2.

An English variety, moderately productive.

Fruit medium to large, cock's-comb shape, irregular, bright scarlet. Flesh firm, brisk acid.

CULVERWELL'S SEEDLING.

An English variety.

Fruit long, tapering, much furrowed, very dark red, almost black. Flesh firm, and rich flavored. (Hogg.)

CUSHING.

Raised by Dr. W. D. Brinckle, Philadelphia.

Fruit medium, roundish conical. Color light scarlet. Flesh tender, with a sprightly, pleasant flavor.

CUTTER'S SEEDLING.

Bunce.

Originated in Massachusetts. Plant vigorous, productive. Hermaphrodite.

Fruit medium to large, roundish obtuse conical, slight neck, bright scarlet. Seeds yellow and brown. Flesh scarlet, rather soft, juicy, sweet.

DE BATH.

Fruit large, roundish oval. Color pale rose, or white tinted with rose. Flesh white, fine, sweet, juicy, excellent. (Al. Pom.)

DÉLICES D'AUTOMNE.

Not productive.

Fruit large, roundish, light scarlet, sweet, rich, high-flavored.

DEPTFORD PINE.

Myatt's Deptford Pine.

English. Hermaphrodite. Large, wedge-shaped, bright glossy scarlet. Flesh solid, rich, subacid. Shy bearer.

DIADEM.

Raised by William R. Prince. Pistillate. Large, showy, rounded, beautiful light scarlet, pleasant flavor, a fine and beautiful berry. (W. R. P., in Hort.)

DOCTOR HOGG.

This variety is from Nottingham, England. It is described by foreign authors as very hardy, holding its foliage well, and one of the finest.

Fruit very large, cock's-comb-shaped. Skin pale red. Flesh pale red, sweet, very rich flavor.

DOCTOR NICAISE.

This is a French variety, of recent introduction, often producing fruit of extra large size. It is hermaphrodite; not productive.

Fruit very large, irregular cock's-comb shape, bright clear scarlet red. Flesh moderately firm, juicy, sweet, a little hollow at centre.

DOWNER'S PROLIFIC.

Raised by J. S. Downer, Kentucky. Hermaphrodite. Plant vigorous, very productive, early. Valuable for near market growing.

Fruit medium to large, roundish conical, light clear bright scarlet. Flesh rather soft, juicy, rich, but a little acid.

DOWNTON.

Knight's Seedling.

English. Hermaphrodite. Medium, with a neck, ovate, dark purplish scarlet, good flavor. Poor bearer.

DUC DE BRABANT.

From Belgium.

Fruit large, conical, bright scarlet, good flavor, tolerably productive, and early.

DUC DE MALAKOFF.

Fruit large, handsome, roundish, a cock's-comb shape, deep red. Flesh red, sweet.

DUKE OF KENT.

Austrian Scarlet

Nova Scotia Scarlet.

Globe Scarlet.

Early Prolific Scarlet.

Oatland's Scarlet.

Duke of York Scarlet.

English. Plant vigorous, productive. Hermaphrodite.

Fruit small, roundish conical, bright scarlet. Flavor sharp and good. Ripens early, which is its chief merit.

DUNDEE.

A Scotch variety. Pistillate. Medium, roundish oval, light scarlet, rich acid flavor, productive, late.

DURAND.

Durand's Seedling.

Raised by Elias W. Durand, Irvington, N. J. Plant moderately vigorous, not very productive. Hermaphrodite.

Fruit large, irregular in form, from conic to oblong. Color scarlet. Flesh somewhat firm, juicy, nearly white.

ECLIPSE.

Reeve's Eclipse.

Fruit above medium size, conical. Seeds small. Skin glossy red, shining as if varnished. Flesh firm, solid, white. (Hogg.)

CRYSTAL PALACE.

Myatt's Eleanor.

An English variety, of vigorous growth, hardy, and requires plenty of room.

Fruit large, very conical, regular, brilliant glossy scarlet. Flesh firm, fine-grained, juicy, and high-flavored.

ELTON.

Elton Seedling.

Elton Pine.

An old English variety, that ripens quite late.

Fruit large, ovate, frequently cock's-comb shape, bright shining crimson. Flesh red, firm, brisk subacid.

ELTON IMPROVED.

Raised at the Royal Garden at Frogmore, England.

Fruit large, conical, bright glossy crimson. Flesh solid, sweet, and good. (Fuller.)

EMILY.

An English variety. Plant hardy, not very productive.

Fruit large, round, pale red. Flesh white, juicy, and sweet.

EMMA.

One of M. de Jonghe's raising; vigorous, moderately productive.

Fruit medium size, obtuse conical, bright deep red. Flesh whitish, juicy, moderately sweet.

EMPRESS EUGÉNIE.

A variety from France. Not valuable.

Fruit large, irregular in form, deep red. Flesh red, sweet, tolerably good.

ENGLISH LADY FINGER.

Fruit medium size, oblong, orange scarlet. Flesh white, sweet, and good.

FAIRY QUEEN.

Raised in the Royal Gardens at Frogmore, England.

Fruit large, conical. Skin pale scarlet, shining as if varnished. Flesh pure white, tender, juicy, sweet, very rich. (Hogg.)

FERDINANDE.

This is a French variety, of good promise.

Fruit large, regular obtuse conical, rich deep scarlet red. Seeds light yellow. Flesh firm, juicy, rich, and high-flavored. (Am. Pom.)

FILBERT PINE.

Myatt's Seedling.

An English sort, that is said to succeed finely in light soils. Vines prolific, matures late.

Fruit above medium size, conical, occasionally cock's-comb shape, dull red. Flesh pale pink, firm, rich, brisk, with a fine aroma. (Hogg.)

FILL-BASKET.

An English variety, very large, roundish, dark scarlet, beautiful, good flavor.

FILLMORE.

Raised by Samuel Feast & Sons, Baltimore, Md. Plants moderately vigorous. Pistillate. In deep rich soils, under high culture, this is one of value for amateur cultivation; not profitable for market.

Fruit medium to large, obtuse conical, rich deep scarlet. Seeds yellow, and near the surface. Flesh moderately firm, rich acid.

FLEMING.

Originated in Pennsylvania. Plants vigorous, moderately productive. Pistillate.

Fruit large, roundish obtuse conical, deep scarlet. Seeds yellow, not deep. Flesh rather soft, sweet, and rich.

FLORENCE.

Raised by Wm. R. Prince; vigorous, moderately productive. Hermaphrodite.

Fruit large, conical, scarlet, fine flavor.

FRENCH.

French's Seedling.

From Moorestown, N. J. Plant vigorous, moderately productive. Hermaphrodite. A fine early variety for private gardens.

Fruit medium to large, roundish obtuse conical, light bright scarlet. Flesh rather soft, rich, and good.

FROGMORE LATE PINE.

Raised by Mr. Ingram, at the Royal Gardens, Frogmore, England.

Fruit large, conical or cock's-comb shape, with a glossy neck, bright, rich dark red. Flesh juicy, rich, high-flavored. Late. (Hogg.)

GARIBALDI.

An American variety, raised by W. A. Burgess, near New York. Hermaphrodite.

Fruit medium size, roundish obtuse conical, light scarlet. Seeds yellow. Flesh soft, rich, sweet.

GENESEE.

Raised by Ellwanger & Barry, Rochester, N. Y. Hardy, vigorous, moderately productive. Hermaphrodite.

Fruit rather large, roundish, somewhat oblate, largest at centre, tapering towards base and apex, generally necked. Color scarlet, inclining to crimson. Flesh tender, juicy, mild, and pleasant, not rich.

GENERAL SCOTT.

Raised by W. A. Burgess, near New York. Plant vigorous, productive.

Fruit large, roundish obtuse, deep scarlet, rather soft, rich, subacid.

GLOBE.

Myatt's Globe.

English. Large, rich scarlet, excellent flavor, moderately productive.

GLOBOSE SCARLET.

Raised by Wm. R. Prince, Flushing, Long Island, N. Y. Plant vigorous, moderately productive. Pistillate.

Fruit large, roundish, light scarlet. (Pr.)

GOLDEN SEEDED.

Raised by W. H. Read, Port Dalhousie, C. W. Poor bearer.

Fruit medium, conical, rich crimson, bright yellow seeds. Flesh half firm, juicy, rich, mild, pleasant.

GOLIATH.

Kitley's Goliath.

An English variety. Hermaphrodite. Plant vigorous, hardy, and moderately productive.

Fruit very large, irregular, often cock's-comb shape, bright scarlet, rich, high flavor, and, like all the English varieties, requires plenty of room and high culture.

GREAT EASTERN.

Plants vigorous, not very productive. Hermaphrodite.

Fruit large, broadly conical, light crimson. Flesh whitish, rather firm, sweet, not high-flavored, a little hollow.

GREEN PROLIFIC.

Newark Prolific.

Raised by Seth Boyden, Newark, N. J. Plant hardy, very vigorous, very productive, and is highly valued by some as a market sort. Pistillate.

Fruit large, roundish obtuse conical, orange scarlet. Surface soft, centre of flesh firm, rather acid.

GROVE END SCARLET.

Atkinson's Scarlet.

Aberdeen Beehive.

English. Hermaphrodite. Medium, globular, bright scarlet, rather acid, early, productive.

HAQUIN.

This foreign variety is of good rich quality, but not productive. Hermaphrodite.

Fruit large, broadly conical, sometimes irregular, bright scarlet. Seeds yellow brown. Flesh pinkish, rather firm, juicy, rich.

HARLEM ORANGE.

Originated near Baltimore, Md. Pistillate.

Fruit orange color, pineapple shape, glossy. Good. (Hov. Mag.)

HATHAWAY.

Hathaway's Seedling.

Raised by B. Hathaway, Little Prairie Ronde, Mich. Plant vigorous, very productive. Hermaphrodite.

Fruit large, roundish obtuse or oblate. Seeds yellow and brown. Color deep scarlet. Flesh scarlet, juicy, moderately firm, rich acid.

HENDRY.

A new foreign variety, very beautiful.

Fruit large, long ovate, slight neck, light red or pale red at point, glossy. Flesh moderately firm, juicy, rich, sweet.

HERO.

Fruit large, regular, globular, bright red. Flesh carmine, very sweet. Early. (Fuller.)

HIGHLAND CHIEF.

This variety, Hogg writes, "deserves universal cultivation." It is worthy of trial here. We copy his description:—

Fruit large, roundish ovate, and somewhat flattened. Seeds not deep. Skin fine, clear red, becoming dark red. Flesh dark red, firm, very juicy, vinous, with a rich pine flavor.

HIGHLAND MARY.

An English variety; an abundant bearer.

Fruit above medium, conical, inclining to cock's-comb shape, dark red. Flesh white, hollow at core. (Hogg.)

HOOKER.

Raised by H. E. Hooker, Rochester, N. Y. Plant vigorous, hardy, and productive. Hermaphrodite.

Fruit large, broadly conical, regular, very large, specimens sometimes cock's-comb-shaped or depressed. Color deep crimson, almost maroon, with a polished surface, which is rather soft. Flesh deep crimson, rather tender, juicy, with a fine rich flavor.

HOOPER'S SEEDLING.

An English variety. Hermaphrodite. Medium, conical, deep glossy crimson, rich and sweet, not productive.

HOVEY'S SEEDLING.

Young's Seedling.

Germantown.

This splendid Strawberry was raised in 1834, by Messrs. Hovey, seedsmen, of Boston, and is undoubtedly one of the finest of all varieties. The vines are vigorous and hardy, producing moderately large crops, and the fruit is always of the largest size, and finely flavored. It is well known at the present moment throughout all the States. The leaves are large, rather light green, and the fruit-stalk long and erect. Pistillate.

Fruit very large, roundish oval or slightly conical, deep shining scarlet. Seeds slightly embedded. Flesh firm, with a rich, agreeable flavor. It ripens about the medium season, or a few days after it.

HUDSON.

Hudson's Bay.
Late Scarlet.American Scarlet.
York River Scarlet.

An old American variety, formerly much cultivated for the markets, but other and larger kinds are taking its place. Pistillate.

Fruit medium, conical, sometimes with a neck. Color rich, dark shining red. Seeds deeply embedded. Flesh firm, of a high, but brisk acid flavor. Good for preserving.

HUNTSMAN.

American. Pistillate. Large roundish, light scarlet, poor flavor, very productive.

IDA.

Miss Ida.

Raised by E. H. Cocklin. Plants vigorous, and when fertilized very productive. Pistillate. Foot-stalks long, holding the fruit well up.

Fruit medium, roundish conical, dark rich red. Flesh moderately firm, juicy, sprightly, rich, a little acid. Ripens among the earliest, and continues late.

IMPÉRATRICE EUGÉNIE.

Fruit large, conical, bright glossy rosette, handsome, firm, sweet, perfumed.

IMPERIAL CRIMSON.

Raised by W. R. Prince. Plant vigorous, productive. Pistillate.

Fruit large, short cone, or rounded. Color dark scarlet or crimson. Flesh firm, sweet, and fine flavor. (Pr.)

IMPERIAL SCARLET.

Raised by Wm. R. Prince. Plant vigorous, productive. Pistillate. Fruit very large, obtuse cone or rounded, scarlet, juicy, and sprightly flavor.

INGRAM'S PRINCE ARTHUR.

Raised at the Royal Gardens, Frogmore, England. Fruit medium, conical, regular, with a glossy neck, brilliant scarlet. Flesh white, solid, juicy, brisk, rich and fine flavor.

IOWA.

Early Washington.

Washington.

Brook's Prolific.

A seedling of the Western prairies. Hermaphrodite. Plant hardy vigorous, and very productive.

Fruit medium to large, roundish, light orange scarlet. Flesh tender, juicy, very acid; an early variety.

JENNY LIND.

Raised by Isaac Fay, Cambridgeport, Mass. Hermaphrodite. Vines hardy, vigorous, and productive; an early variety.

Fruit medium, conical. Color rich crimson, glossy. Flesh rather firm, juicy, rich, sprightly subacid.

JENNY'S SEEDLING.

An American variety, hardy, vigorous, and productive. Pistillate.

Fruit large, roundish conical. Color rich dark red. Flesh firm, rich, sprightly subacid.

JESSIE READ.

Raised by W. H. Read, Port Dalhousie, C. W. Hermaphrodite. Moderately productive.

Fruit large, roundish conical, light scarlet. Flesh soft, sweet, rich.

JOHN POWELL.

Fruit above medium size, long ovate, with a neck, bright shining red. Flesh white, firm, juicy, sugary, rich. (Hogg.)

JUCUNDA.

Knox's 700.

A foreign variety, that, like some others of its class, does extremely well in some few localities, under high cultivation. Plants moderately vigorous. Hermaphrodite.

Fruit large to very large, obtuse conical or coxcomb flattened, bright light scarlet. Seeds mostly yellow. Flesh light pink, moderately firm, sweet, not high flavor, often hollow.

JULIEN.

Originated with W. F. Kramer, Dubuque, Iowa. Said to be from seed of the Peabody.

Fruit medium, roundish, rich scarlet, glossy. Flesh moderately firm, sweet, well flavored.

KEEN'S SEEDLING.

Keen's Black Pine.

Murphy's Child.

An old well-known English sort of the finest quality, but does not generally succeed here. Hermaphrodite.

Fruit large, roundish, often coxcomb-shaped, dark purplish scarlet. Surface polished. Flesh firm, with a rich high flavor.

KENTUCKY.

Raised by J. S. Downer, of Fairview, Todd Co., Ky. We have not seen the fruit, and give Wm. Parry's description. Plant strong, vigorous, very productive, with long fruit-stalks, bearing the berries well up from the ground, and the foliage standing the heat of summer and cold of winter, and is a week later than most varieties. Hermaphrodite.

Fruit large to very large, roundish conical, bright scarlet. Flesh white, firm, juicy, rich, sweet, and of excellent quality. (Wm. Parry's MS.)

KIMBERLY PINE.

Fruit large, irregular oval, bright crimson scarlet. Flesh firm, juicy, subacid.

KRAMER.

Origin, near Dubuque, Iowa. Plant vigorous, hardy. Hermaphrodite. Productive.

Fruit medium, roundish conical, rich dark red, moderately firm, juicy, a little acid, but pretty rich and good.

LA CHALLONAISE.

Fruit large, conical, bright pale scarlet. Flesh white, juicy, sweet. (Hogg.)

LA CONSTANTE.

A foreign variety that occasionally succeeds, but generally it burns and dies out. In quality it is excellent, and for some amateur gardens a desirable variety. Hermaphrodite.

Fruit large, roundish conical, bright lively crimson. Flesh white, tinged with rose-color, firm, juicy, rich, and delicious.

LA DÉLICIEUSE.

Of foreign origin.

Fruit large, roundish oblate, pale red. Flesh whitish, sweet.

LADIES' PINE.

Originated with W. H. Read, Canada. Unproductive. Pistillate.

Fruit small, roundish, light scarlet. Flesh soft, sweet, rich, and delicious.

LADY.

This is comparatively a new variety from England. It is described

as large in size, bright salmon-color, tinged with crimson. Flesh juicy, and delicious flavor.

LADY FINGER.

Ladies' Finger.

Originated in Burlington, N. J. Plants vigorous, moderately productive. Hermaphrodite.

Fruit medium, oblong conical, dark rich clear scarlet or red. Flesh firm, juicy, rich, sprightly subacid. Very good.

LADY OF THE LAKE.

Raised by John C. Scott, Brighton, Mass. Plants vigorous, hardy, productive. Pistillate.

Fruit large, rather uneven, dark red. Flesh firm. (Jour. of Hort.)

LA FERTILE.

Fruit large, conical, bright red. Flesh white, with a rosy tinge, firm, juicy, sweet. (Hogg.)

LA GROSSE SUCRÉE.

A German variety. Hermaphrodite.

Fruit large, oblong, dark crimson. Flesh white, solid, sweet, pleasant.

LA LIEGEOISE.

French. Hermaphrodite. Large, bright scarlet, medium quality, unproductive.

LA PERLE.

Foreign.

Fruit medium, conical, bright red.

LA REINE.

A foreign sort. It is described as of large size, conical, or coxcomb shape. Flesh white, juicy, sweet, rich, not productive.

LARGE EARLY SCARLET.

Early Virginia.

An American variety, one of the earliest, an abundant bearer; popular in many sections. Hermaphrodite.

Fruit medium or below, roundish ovate, regularly formed, light scarlet. Seeds deeply embedded. Flesh tender, of a rich, excellent flavor.

LA SULTANE.

This is a French variety, of large size, conical in form, light clear red. Flesh white, firm, juicy, sweet, perfumed.

LAURELLA.

Origin unknown. Plant vigorous, productive. Pistillate.

Fruit large, broadly conical, scarlet. Seeds yellow brown. Flesh rather soft, pink, rather acid, not rich.

LA VERSAILLAISE.

A French variety.

Fruit very large, oblong, bright scarlet. Flesh shaded with red, firm, juicy, rich, sweet.

LE BARON.

Raised by Wm. R. Prince. Hermaphrodite

Fruit early, very large, obtuse cone, dark scarlet, not showy, sweet, rich, melting.

LENNIG'S WHITE.

White Pineapple.
Albino.

Albion White.
White Albany.

Origin, supposed Germantown, Pa. This is one of the very finest-flavored sorts grown; but unfortunately it does not produce but very moderate crops, and is therefore unsuited to any but amateurs. Plants vigorous. Hermaphrodite.

Fruit large, roundish obtuse conical. Seeds reddish, not deep. Color whitish, tinged with red. Flesh soft, tender, juicy, sweet, rich, delicious pineapple flavor.

LÉONCE DE LAMBERTYE.

Fruit very large, conical. Skin bright shining red, as if varnished. Seeds slightly embedded. Flesh firm, rosy white, very juicy, rich and sweet. (Hogg.)

LÉOPOLD I.

This is a Belgian variety.

Fruit large, roundish conical, rich deep red. Seeds yellow, prominent. Flesh tinted with rose, juicy, sweet, delicious. (An. Pom.)

LITTLE MONITOR.

Originated with W. A. Burgess.

Fruit small, roundish obtuse conical, light scarlet. Flesh soft, rich, sweet.

LIZZIE RANDOLPH.

American. Pistillate. Medium, roundish, light crimson, poor flavor, productive.

LONGWORTH'S PROLIFIC.

Originated at Cincinnati, on the lands of Mr. Longworth, in the Garden of Eden, by Mr. Schneicke. Hermaphrodite. Vines vigorous and very productive. Footstalks long, stout. Leaves large, not very thick, considerably ruffled.

Fruit large, roundish, broad at base, sometimes oblate. Color light crimson. Flesh firm, scarlet, with numerous rays (the remains of the filaments). Flavor rich, briskly acid. Valuable for preserving.

LORENZ BOOTH.

Fruit large, oval, bright glossy red. Flesh dark crimson, firm, sweet.

LORIO.

A new German variety.

Fruit large, obtuse conical, rich clear dark red. Flesh reddish tinged, juicy, vinous, sweet.

LUCAS.

Fruit large, roundish oval, glossy crimson. Flesh firm, rich. Good.

LUCIDA PERFECTA.

Fruit medium to large, light clear crimson, conical or obtuse conical, occasionally coxcomb shape. Flesh white, juicy, sweet.

McAVOY'S EXTRA RED.

McAvoy's No. 1.

Same origin as Superior. Pistillate. Vines hardy, vigorous, and very productive.

Fruit large, irregularly oblate, generally necked. Color deep scarlet. Flesh tender, juicy. Flavor exceedingly acid. Excellent for preserving.

McAVOY'S SUPERIOR.

McAvoy's No. 12.

General McLellan.

Buffalo.

Origin, Cincinnati, on the lands of Mr. Longworth. Pistillate. Vigorous and productive.

Fruit large, roundish irregularly oblate, more or less necked. Color light crimson, becoming deep crimson at full maturity. Flesh deep scarlet, tender, very juicy, with an exceedingly rich vinous flavor. Surface of the fruit rather tender, and will not bear long carriage.

MEAD'S SEEDLING.

Raised by Peter B. Mead, Tenafly, Bergen Co., N. J. Plant a good grower, moderately productive. Pistillate.

Fruit medium size, long conical, inclining to a neck, light scarlet. Seeds brown yellow. Flesh pinkish, rather firm, sweet, and rich.

MARGUERITE.

A French variety.

Fruit large, elongated conical, bright shining red. Flesh whitish pinkish, sweet, coarse, hollow, poor.

MAMMOTH.

Myatt's Mammoth.

English. Hermaphrodite. Large, roundish, dark crimson, poor flavor, unproductive.

MELON.

Scotch, medium, roundish, dark color ; not of much value.

METCALF'S EARLY.

Origin, Niles, Mich. Plant hardy, vigorous, moderately productive. Fruit small, roundish, inclining to oval, light scarlet. Flesh rather soft, mild acid. Not very early.

METHVEN SCARLET.

Methven Castle.	Keen's Seedling of some.
Warren's Seedling.	Higgins' Seedling.
Southampton Scarlet.	British Queen of some.

An English variety, of large size, roundish or coxcomb-shaped, rather dull scarlet. Flesh soft, and of indifferent flavor. Pistillate.

MONITOR.

Raised by A. S. Fuller. Hermaphrodite. Fruit medium to large, roundish conical, with a neck, bright scarlet. Flesh dry, coarse, firm. Poor. Carries well to market.

MONROE SCARLET.

Raised by Ellwanger & Barry, Rochester, N. Y. Pistillate. Plant vigorous and productive.

Fruit rather large, roundish, light scarlet. Flesh tender, juicy, and of very good flavor.

MONTEVIDEO PINE.

Raised by Wm. R. Prince. Hermaphrodite. Fruit large, conical, pineapple flavor, ripening late. (W. R. P. in Hort.)

MOYAMENSING.

Raised by Gerhard Schmitz, of Philadelphia. Pistillate. Moderately vigorous and productive.

Fruit medium to large, broadly conical, deep crimson. Seeds numerous, deeply embedded. Flesh red, rather firm, pretty briskly acid, much like Hudson.

MYATT'S ELIZA.

Omer Pacha.	Rival Queen.
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An English variety, of fine flavor; but, like most of its class, a poor bearer. Hermaphrodite.

Fruit medium to large, roundish conical, with a glossy neck, light glossy scarlet. Flesh rich, sweet, delicious.

NAOMI.

An accidental American seedling.

Fruit medium, roundish, inclining to oval, quite deep scarlet. Flesh white, sweet, soft, not high-flavored.

NAPOLEON.

This variety originated with M. Lorio, of Liege, Belgium. Hermaphrodite.

Fruit large, roundish, light clear red or scarlet. Flesh firm, juicy, sweet.

NAPOLEON III.

Originated with M. Gloede. Plants vigorous, productive. Hermaphrodite.

Fruit large to very large, conical, irregular, sometimes coxcomb-shaped, light scarlet. Seeds yellow, reddish near the surface. Flesh white, rather firm, juicy, sweet, rich.

NECKED PINE.

Unique Prairie.

Pine Apple.

An American variety, rather early. Pistillate. Medium size, conical, with a neck, light scarlet. Flesh tender, sprightly, rather acid.

NEW JERSEY SCARLET.

Originated near Burlington, N. J. Plants vigorous, moderately productive. Hermaphrodite. Early.

Fruit medium, conical, with a neck, light clear scarlet. Flesh moderately firm, juicy, sprightly, mild subacid.

NICANOR.

Raised by Messrs. Ellwanger & Barry, Rochester, N. Y. Plants vigorous, productive. Hermaphrodite. Footstalks tall, upright.

Fruit medium or above, roundish obtuse conical, bright scarlet, somewhat glossy. Seeds brown yellow, not deeply embedded. Flesh juicy, reddish, rather firm, rich, sweet.

OLD BLACK.

Black.

Mulberry.

Black Pine.

Black Canterbury.

Black Beacon.

Turkey Pine.

A very old variety, described by Lindley, as:—

“Fruit middle-size, conical elongated and pointed, with a neck, hairy, very dark purplish red. Flesh scarlet, firm, with a buttery core, very rich and high-flavored.”

OLD JOHN BROWN.

Raised by Dr. H. Schroeder, of Bloomington, Ill.

Fruit very large, broadly conic, pointed, light crimson, sweet. (Fuller.)

OLD PINE, OR CAROLINA.

Pine Apple.

Carolina.

Old Scarlet Pine.

Old Scarlet.

Blood Pine.

Grandiflora.

American. Hermaphrodite. Medium, conical, with a neck, sometimes coxcomb-shaped, bright scarlet. Flesh solid, juicy, and rich.

ORANGE PROLIFIC.

Raised by Ellwanger & Barry, Rochester, N. Y. Pistillate. Vines hardy, vigorous, very productive.

Fruit large, roundish, sometimes oblate, often necked, deep crimson. Seeds deeply embedded. Flesh somewhat firm, with a brisk, rather acid flavor.

OSCAR.

An English variety. Hermaphrodite.

Fruit large, irregular in form, from ovate to coxcomb, rich deep crimson. Flesh red, melting, firm, juicy, rich, and sweet.

PEABODY.

Peabody's Seedling.

New Hautbois.

This variety originated with Charles A. Peabody, Columbus, Ga.

Fruit of large size, form irregular. Flesh firm, sweet, melting, juicy, with a pineapple flavor. When fully ripe the color is a rich deep crimson.

PEAK'S EMPEROR.

Originated by E. Peak, South Bend, Ind.

Fruit large, oblong conical, dark crimson. Flesh firm, juicy, mild, subacid.

PENNSYLVANIA.

Raised by Gerhard Schmitz, of Philadelphia. Pistillate. Plant moderately vigorous, not productive.

Fruit medium to large, broadly conical, deep crimson. Flesh red, very similar to Moyamensing.

PREMIER.

British Green Seedling.

An English variety.

Fruit large, roundish or roundish ovate, bright red, shining. Flesh white, firm, juicy, rich. (Hogg.)

PRESIDENT WILDER.

Raised in 1860 by Hon. Marshall P. Wilder, of Dorchester, Mass., from seed of Hovey's Seedling impregnated with La Constante, and dedicated to him by the Massachusetts Horticultural Society. This new variety, as grown on the originator's grounds, promises to be valuable, and if it succeeds as well in other soils and localities it will be an acquisition. Plant healthy, hardy, vigorous, and very productive. Fruit-stalk short,

stout, erect. It is said to stand the heat of summer and cold of winter uninjured.

Fruit large to very large, roundish obtuse conical, very regular, bright crimson scarlet. Seeds mostly yellow, near the surface. Flesh rosy white, quite firm, juicy, sweet, and rich.

There is another *President Wilder*, originated in Europe, that is described as large, ovate conical, with a neck, bright rich deep crimson. Flesh rose-color, moderately firm, juicy, rich, and excellent.

PRIMORDIAN.

Raised by Wm. R. Prince. Pistillate.

Fruit large, conical, deep scarlet. (W. R. P., in Hort.)

PRINCE ALBERT.

English. Hermaphrodite. Large, oblong cone, deep scarlet, not high flavor, moderately productive.

REINE DES BELGES.

A new Belgian variety.

Fruit large. Form variable, from long conical to obtuse conical, bright rich scarlet. Flesh firm, juicy, sweet. Agreeable. (An. Pom.)

PRINCE FREDERICK WILLIAM.

An English variety. Hermaphrodite.

Fruit large, roundish, pale red. Flesh with a rosy tint, sweet, and good flavor.

PRINCE OF ORLEANS.

Hermaphrodite. Medium. Roundish, dark color, poor bearer.

PRINCE OF WALES.

An English fruit of large size, with a bright deep red glossy surface, and a delicate solid flesh, somewhat acid.

PRINCE'S CLIMAX.

Raised by Wm. R. Prince, Flushing, L. I. Pistillate. Productive.

Fruit large, conical, bright scarlet. Flesh sweet, good flavor.

PRINCE'S EXCELSIOR.

Raised by Wm. R. Prince. Pistillate.

Fruit large, obtuse conical or rounded, deep scarlet. Flesh sweet, fine flavor.

PRINCE'S MAGNATE.

Scarlet Magnate.

Originated with Wm. R. Prince. Pistillate.

Fruit large, roundish obtuse conical, bright scarlet. Flesh rather soft, pinkish, hollow, not rich.

PRINCESS ROYAL.

Ingram's Princess Royal.

This is an English variety. Pistillate.

Fruit medium, roundish conical, bright deep scarlet. Flesh firm, juicy, rich, perfumed.

PRINCESS ROYAL.

Originated in France, by M. Pelvilian.

Fruit large, oblong obtuse conical in form. Skin very bright rich scarlet. Flesh half firm, juicy, melting, sweet. (An. Pom.)

PRINCESS ROYAL OF ENGLAND.

Cuthill's Princess Royal.

An English variety. Hermaphrodite.

Fruit medium size, roundish ovate or conical, with a neck. Seeds deeply embedded. Skin deep scarlet. Flesh pale red at the surface, whitish at the core, rich, high flavor. (Hogg.)

PROLIFIC.

English. Hermaphrodite. Large, conical, light glossy scarlet, rich flavor, unproductive.

PROFUSE SCARLET.

American. Pistillate. Medium, a little improvement on the old Early Scarlet, which it much resembles. Productive.

RANDOLPH PINE.

Raised by O. T. Hobbs, Randolph, Pa.

Fruit medium, long conical, bright scarlet. Flesh sweet, whitish, not rich.

RICHARDSON'S EARLY.

American. Hermaphrodite. Medium, conical, dark crimson, early, good flavor. Not productive.

RICHARDSON'S LATE.

American. Hermaphrodite. Large, roundish, light scarlet, good sprightly flavor, moderately productive.

RIFLEMAN.

An English variety.

Fruit large, ovate or coxcomb shape. Skin bright salmon-colored. Flesh solid, white, firm, juicy, rich. (Hogg.)

RIPAWAM.

Faulkner's King.

Faulkner's Seedling.

Raised by J. W. Faulkner, Stamford, Conn. Plant moderately vigorous and productive.

Fruit large, roundish obtuse conical, sometimes coxcomb shape, scarlet. Flesh whitish, rather firm, juicy, sweet.

RIVAL HUDSON.

Raised by Mr. Burr, Columbus, O. An improvement on the old Hudson. Plant hardy and productive. Pistillate.

Fruit medium, conical. Color deep crimson. Flesh firm, with a brisk subacid flavor.

RIVERS' ELIZA.

Seedling Eliza.

Raised by Thomas Rivers, England. Hermaphrodite.

Fruit large, ovate conical, glossy scarlet. Flesh moderately firm, good flavor.

ROBINSON'S DEFIANCE.

Raised in Ohio. Plant vigorous, not productive.

Fruit medium, roundish conical, necked, dull red. Flesh quite firm, acid.

ROSEBERRY.

Aberdeen.

Scotch Scarlet.

Aberdeen Seedling.

Prolific Pine.

Rose.

Brickley Scarlet.

Foreign. Pistillate. Rather small, ovate, dark scarlet, tolerable flavor. Poor bearer.

ROSEBUD.

Fruit large, ovate, coxcomb shape, with a neck. Skin fine bright red. Flesh rich. (Hogg.)

ROSS'S PHENIX.

Raised by Alexander Ross, Hudson, N. Y. Hermaphrodite; does not succeed unless with deep, rich soil, and good cultivation.

Fruit large, generally coxcomb-shaped. Color very dark red. Flesh firm, and high-flavored.

RUBY.

English. Medium size. Bright-colored berry of a long ovate form, similar in shape to Scott's Seedling. Flesh juicy, rich, and excellent. Not very hardy.

RUSSELL'S PROLIFIC.

Originated with H. Russell, Seneca Falls, N. Y. Vines vigorous, productive. Pistillate.

Fruit large, conic, compressed, ribbed, scarlet, changing to crimson. Seeds small, pretty deeply embedded. Flesh mild, moderately rich, rather soft, pleasant.

SABREUR.

A foreign variety, productive.

Fruit medium, conical, bright orange scarlet. Seeds prominent. Flesh solid, white, sweet, and of high flavor. (Fuller.)

SALTER'S VERSAILLAISE.

An English variety. Hermaphrodite.

Fruit large, ovate, sometimes flattened or coxcomb-shaped, dark red. Flesh pale, juicy, and rich. (Thomp.)

SCARLET CONE.

Raised by Ellwanger & Barry, Rochester, N. Y. Pistillate. Plant vigorous and very productive.

Fruit large, perfectly conical, bright scarlet, beautiful.

SCARLET MELTING.

American. Pistillate. Medium, conical, light scarlet, showy, very tender, not rich. Very productive.

SCARLET NONPAREIL.

English. Large, pretty regularly formed, roundish conical, bright glossy red, saccharine, and rich.

SCOTT'S SEEDLING.

Raised by Mr. J. Scott, of Brighton, Mass. Hermaphrodite.

Fruit rather large, elongated conic, regular, light crimson or scarlet. Flesh pale red, not very juicy, nor high-flavored.

SIR CHARLES NAPIER.

An English variety. Plant tender.

Fruit large, roundish, flattened or coxcomb-shaped, light scarlet. Flesh whitish pink, juicy, not high-flavored.

SIR HARRY.

A seedling of the British Queen, impregnated with Keen's Seedling. The berries are large, of a thick coxcomb form, large calyx, and stout fruit stems. Color deep dark red, or mulberry, glossy. Flesh red, solid, fine-grained, very juicy, and of delicious flavor.

SIR JOSEPH PAXTON.

A fine early variety.

Fruit large, roundish, bright shining crimson. Seeds prominent. Flesh salmon-colored, firm, and rich. (Hogg.)

SOUTHBOROUGH.

Southborough Seedling.

Marshall's Seedling.

English. Pistillate.

Fruit medium, ovate conical, rich deep scarlet. Flesh firm, mild, rich flavor. (Elliott.)

SOUVENIR.

Souvenir de Kieff?

Raised by M. de Jonghe, of Brussels.

Fruit large, roundish ovate to long conical, irregular and corrugated, bright shining red. Seeds large, even with the surface. Flesh white, firm, juicy, rich.

STINGER.

Union.

Stinger's Seedling.

Raised by Wm. H. Stinger, near Philadelphia. Hermaphrodite.

Fruit large, roundish, sometimes coxcomb shape, brilliant glossy scarlet. Flesh firm, juicy, rich, pleasant

STIRLING CASTLE PINE.

Fruit large, ovate or conical, bright deep scarlet. Flesh pale scarlet, brisk. (Hogg.)

SWAINSTONE'S SEEDLING.

English. Hermaphrodite. Large, ovate, beautiful light glossy scarlet, and good flavor. Bears only very moderate crops.

THE PRAIRIE FARMER.

Originated on the grounds of Wm. D. Neff, of Ottawa, Ill. Plant strong and vigorous. Foot-stalks large and tall, and promise well as a market variety. Hermaphrodite.

Fruit very large, oblong compressed or ovate, occasionally coxcomb-shape, irregular, deep scarlet; texture firm; subacid. (Prairie Farmer.)

TOPSY.

One of De Jonghe's seedlings, not valuable.

Fruit medium, oblong conical, light scarlet. Flesh firm, sweet.

TRIOMPHE DE GAND.

The Triomphe de Gand is a Belgian variety, which appears to stand our climate, and produce more crops in more localities than any other foreign sort. The vines are vigorous, hardy, moderately productive, and well suited to strong clayey soils, requires high cultivation and to be grown in hills. Hermaphrodite.

Fruit large, roundish obtuse, sometimes coxcomb shape, bright rich red next the calyx, almost greenish white at point, glossy as if varnished. Seeds light yellow brown, near the surface. Flesh firm, white, a little hollow at core, juicy, with a peculiar rich and agreeable flavor.

Romeyn Seedling so closely resembles this that we are unable to see any difference; but the originator claims that it is a seedling of more vigor in foliage and roots, more productive, and less number of coxcomb berries.

TRIOMPHE DE LIÈGE.

A Belgian variety, raised by M. Lorio.

Fruit large, oval, with a slight neck, bright deep scarlet. Seeds few, long-pointed. Flesh rather soft, juicy, rich, aromatic. (An. Pom.)

VICOMTESSE HÉRICART DE THURY.

Duchesse de Trévise.

Marquise de la Tour Maubourg.

A French variety, of fine quality, but the foliage does not stand our climate well. Hermaphrodite. Moderately productive.

Fruit large, roundish, broadly conical, sometimes coxcomb-shaped, deep scarlet, somewhat glossy. Flesh rich, sweet, and high-flavored.

VICTORIA.

Trollope's Victoria.
Union.

Golden Queen.
Trembly's Union.

An English variety, moderately productive, quite handsome. Hermaphrodite.

Fruit very large, nearly globular, regular. Calyx very large, in a depression. Color light crimson. Flesh light scarlet, tender, juicy, sweet, rich, with a somewhat peculiar aromatic flavor.

VICTORY OF BATH.

Fruit large, ovate, bright red. Flesh white, firm, juicy, rich. (Hogg.)

VINEUSE DE NANTES.

Fruit medium to large, flattened, bright glossy crimson. Flesh red, solid, sweet, peculiar vinous flavor. (Fuller.)

WALKER'S SEEDLING.

Raised by Samuel Walker, Roxbury, Mass. Hermaphrodite.

Fruit medium to large, regular, generally conic. Color very deep crimson, becoming maroon at maturity, glossy. Flesh deep crimson, tender, juicy, with a fine, rich, brisk acid flavor.

WARD'S FAVORITE.

Fruit medium to large, roundish, deep crimson. Flesh sweet, rich.

WESTERN QUEEN.

Raised by Prof. Kirtland, Cleveland, O. Pistillate. Vines hardy and productive.

Fruit medium to large, roundish conical. Color rich glossy dark red. Flesh firm, juicy, subacid, sprightly and agreeable flavor. (Elliott.)

WILLEY.

American. Pistillate. Vigorous, hardy, and very productive.

Fruit medium, roundish. Color deep crimson. Flesh firm, with a sprightly acid flavor. A good sort for preserving.

WILMOT'S PRINCE ARTHUR.

Fruit medium size, conical. Skin deep red and glossy. Flesh scarlet, firm, hollow at core. (Hogg.)

WILSON'S ALBANY.

Raised by the late James Wilson, Albany, N. Y. Although not of high quality, because of its superabundance of acid, yet no variety has become so generally cultivated as the Wilson's Albany. The vine is very hardy and vigorous, very productive, commencing to ripen its fruit early, and continuing to the latest. Hermaphrodite.

Fruit large, broadly conic, pointed. Color deep crimson. Flesh crimson, tender, with a brisk acid flavor.

WIZARD OF THE NORTH.

A Scottish variety. Hermaphrodite.

Fruit medium to large, roundish obtuse, dull red. Flesh red, soft, juicy, not rich.

WONDERFUL.

Jeyes' Wonderful.

Myatt's Prolific.

Fruit large, conical, frequently coxcomb-shaped and fingered. Skin pale red, whitish at apex. Seeds numerous. Flesh white, tender, melting, juicy, sweet, with a fine aroma. (Hogg.)

ALPINE AND WOOD STRAWBERRIES.

BRUNE DE GILBERT.

A variety of the Alpine, with larger fruit than the common, and remarkable for its reddish-brown color. It is well flavored, and an abundant bearer. (Hogg.)

GALLAND.

This is a variety of the Alpine, of a dark red color.

RED ALPINE.

Red Monthly Strawberry.

Des Alpes à Fruit Rouge.

Des Alpes de Tous les Mois à Fruit Rouge, &c.

The common Red Alpine, or monthly-bearing Strawberry, is a native of the Alps, and succeeds well with very trifling care in this country. The Alpines always continue bearing from June till November; but a

very fine autumnal crop is secured by cutting off all the spring blossoms. The plant resembles the Red Wood, and the fruit is similar in flavor and color, but long conical in form. Flowers always perfect.

RED-BUSH ALPINE.

Ruisson.
Des Alpes sans Filets.

Monthly, without Runners.
Commun sans Filets.

The Bush Alpines are remarkable among Strawberries for their total destitution of runners. Hence they always grow in neat, compact bunches, and are preferred by many persons for edging beds in the kitchen garden. The fruit is conical, and the whole plant, otherwise, is quite similar to common Alpines. We think it one of the most desirable sorts, and it bears abundantly through the whole season. The Bush Alpines were first introduced into the United States by the late Andrew Parmentier, of Brooklyn. To propagate them the roots are divided. Flowers always perfect.

RED WOOD.

English Red Wood.
Des Bois à Fruit Rouge.
Common Rouge.

Newland's Mammoth.
Stoddard's Alpine.
Washington Alpine.

This is the wild Strawberry of Europe (*F. vesca*), long more commonly cultivated in our gardens than any other sort, and still, perhaps, the easiest of cultivation, and one of the most desirable kinds. It always bears abundantly; and though the fruit is small, yet it is produced for a much longer time than that of the other classes of strawberries, and is very sweet and delicate in flavor. Flowers always perfect.

Fruit red, small, roundish ovate. Seeds set even with the surface of the fruit. It ripens at medium season.

TRIOMPHE D'HOLLANDE.

Triumph of Holland Alpine.

Des Quatre Saisons.

This new variety of the Alpine comes from the Netherlands, where it is said to have been raised by M. J. Verkroost, Utrecht. The habit of growth is very vigorous, compact, and the plant very productive. The fruit is large for its class, regular, roundish conical, light scarlet red. Seeds light yellow. Flesh juicy, sweet, rich, aromatic, delicious.

WHITE ALPINE.

White Monthly.

Des Alpes à Fruit Blanc.
Des Alpes de Tous les Mois à Fruit Blanc, &c.

Precisely similar to the Red Alpine, except in color.
Fruit conical, white.

WHITE-BUSH ALPINE.

White Monthly, without Runners.

Buisson des Alpes Blanc, &c.

This differs from the Red-Bush Alpine only in the color of the fruit, which is conical and white.

WHITE WOOD.

This is precisely similar in all respects to the Red Wood, except in its color, which is white. It ripens at the same time.

HAUTBOIS * STRAWBERRIES.

BELLE DE BORDELAISE.

A new variety. Plants very vigorous and productive.

Fruit medium or large, ovate, deep rich crimson. Flesh firm and high-flavored.

PROLIFIC OR CONICAL.

Musk Hautbois.	Double Bearing.	Sir Joseph Banks.
French Musk Hautbois.	Caperon Royal.	Caperon Hermaphrodite.
Sacombe.	Regent's Dwarf.	

This is a capital variety. Its strong habit and very large, usually perfect flowers, borne high above the leaves, distinguish it. The fruit is very large and fine, dark-colored, with a peculiarly rich, slightly musky flavor. It bears most abundant crops. Hermaphrodite.

Fruit large, conical, light purple in the shade, dark blackish purple in the sun. Seeds prominent. Flesh rather firm, sweet, and excellent. It ripens tolerably early, and sometimes gives a second crop.

The COMMON HAUTBOIS, GLOBE, LARGE FLAT, &c., are scarcely worthy of cultivation here.

ROYAL HAUTBOIS.

This is one of the largest, most vigorous, and prolific of the Hautbois family.

Fruit medium to large, roundish conical, regular. Seeds yellow, on the surface, rich dark crimson. Flesh whitish, soft, sweet, rich.

CHILI STRAWBERRIES.

TRUE CHILI.

Patagonian.	Greenwell's New Giant.	Greenwell's French.
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Fruit very large, bluntly conical or ovate, dull red. Seeds dark brown, projecting. Flesh very firm, hollow-cored, of a rather indifferent sweet flavor. Ripens late.

WILMOT'S SUPERB.

An English seedling, raised from the foregoing, very showy in size, but indifferent fruit and a poor bearer.

Fruit roundish, sometimes coccumb-shaped; surface pale scarlet, polished; seeds projecting. Flesh hollow, and of only tolerable flavor. Medium season.

* *Haut-bois*, literally *high-wood*, that is, wood strawberries with high leaves and fruit-stalks.

YELLOW CHILI.

Fruit very large, irregular in form, yellow, with a brown cheek, Seeds slightly embedded. Flesh very firm, rather rich.

GREEN STRAWBERRIES.

Little valued or cultivated, being more curious than good. They resemble, in general appearance, the Wood Strawberries. Leaves light green, much plaited. Flesh solid. There are several sorts grown by the French, but the following is the only one of any value, and it is a shy bearer.

GREEN STRAWBERRY.

Green Pine.
Green Wood.

Fraisier Vert.
Powdered Pine.

Green Alpine.

Fruit small, roundish or depressed, whitish green, and at maturity tinged with reddish brown on the sunny side. Flesh solid, greenish, very juicy, with a peculiar rich, pineapple flavor. Ripens late.

SELECTION OF VARIETIES.

The Strawberry is so variable in soils and climates that it is very difficult to select such as will always give satisfaction. We present the following as a list embracing varieties that have proved satisfactory with us:—

Agriculturist, Charles Downing, Downer's Prolific, French, Green Prolific, Hovey's Seedling, Jucunda, Longworth's Prolific, Napoleon III., Royal Hautbois, Triomphe de Gand, Wilson's Albany.

Key to French standard names of Fruit.—To meet the wants of some of our farming friends in various parts of the country who are zealous collectors of fruit, but at the same time are more familiar with plough-handles than with the sound of *Monsieur Crapaud's* polite vernacular, we have prepared the following little key to the pronunciation of such French names as are necessarily retained among the standard varieties.

So long as these sorts must retain their foreign names, it is very desirable that they should be correctly pronounced. To give to these French terms what appears to merely English readers the proper sound is often as far as possible from the true pronunciation. A skilful Hibernian gardener puzzled his employer, a friend of ours, during the whole month of September with some pears that he persisted in calling the "Lucy Bony," until, after a careful comparison of notes, the latter found he meant the *Louise Bonne*.

We have therefore, in the following, eschewed all letters with signs, and given, as nearly as types alone will permit us, the exact pronunciation of the French names.

KEY TO FRENCH NAMES.

APPLES.

Court Pendu Plat.—Coor Pahn du Plah.
Drap d'Or—Drah dor.
Fenouillet Gris.—Fen-nool-yai Gree.
Male Carle.—Mal Carl.
Pomme de Neige.—Pum de Naije.
Reinette Blanche d'Espagne.—Ren-ett-Blansh d'Espagne.
Reinette Triomphante.—Ren-ett Tre-ome-fant.

APRICOTS.

Albergier.—Al-bare-je-ai.
Briançon.—Bre-ahn-sohn.
Belle de Choisy.—Bel de Shwoi-sey.
Belle Magnifique.—Bel Man-gne-feek.
Bigarreau.—Be-gar-ro.
Bigarreau Rouge.—Be-gar-ro Rooje.
Bigarreau Couleur de Chair.—Be-gar-ro Coo-lur de Shair.
Bigarreau Gros Cœur.—Be-gar-ro Gro Keur-ai.
Bigarreau Tardif de Hildesheim —Be-gar-ro Tar-deef de Hildesheim.
Gros Bigarreau Rouge.—Gro Be-gar-ro Rooje.
Griotte d'Espagne.—Gre-ote Des-pan.

GRAPES.

Chasselas Musqué.—Shah-slah Meuskay.
Chasselas de Fontainebleau.—Shah-slah de Fone-tane-blo.
Ciotat.—Se-o-tah.
Lenoir.—Lun-war.

NECTARINES.

Brugnon Violet Musqué.—Brune-yon Ve-o-lay Meus-kay.
Brugnon Musqué.—Brune-yon Meus-kay.
D'Angleterre.—Dahn-glet-are.
Duc du Tellier.—Deuk du Tel-yay.

PEACHES.

Abricotée.—Ab-re-co-tay.
Belle de Vitry.—Bell de Ve-tree.
Grosse Mignonne.—Groce Mene-yon.
Madeleine de Courson.—Mad-lane de Coor-son.
Pavie de Pomponne.—Pah-vee de Pom-pone.
Pourprée Hâtive.—Poor-pray Hat-eve.
Sanguinole à Chair adhérente.—Sahn-gwe-nole ah Shair Ad-hay-rent.

PEARS.

- Amiré Joannet.—Am-e-ray Jo-ahn-nay.
 Ananas.—An-an-ah.
 Ananas d'Été.—An-an-ah Da-tay.
 Angleterre.—Ahn-glet-are.
 Beurré.—Bur-ray.
 Belle de Bruxelles.—Bel-de Broos-ell.
 Belle et Bonne.—Bel-a-Bun.
 Belle-Lucrative.—Bel-lu-crah-teve.
 Beurré de Capiumont.—Bur-ray de Cap-u-mohn.
 Beurré d'Amalis.—Bur-ray Dah-mah-lee.
 Beurré Gris d'Hiver Nouveau.—Bur-ray Gree Dee-vair Noo-vo.
 Beurré Diel.—Bur-ray De-eli.
 Beurré Bronzée.—Bur-ray Brone-zay.
 Bezi d'Heri.—Ba-zee Daree.
 Bezi Vaet.—Bazee Vah-ai.
 Beurré Crapaud.—Bur-ray Crah-po.
 Bezi de Montigny.—Bay-zee de Mon-teen-gnee.
 Bon Chrétien Fondante.—Bone Cray-te-an Fone-donte.
 Boucquia.—Boo-kiah.
 Calebasse Grosse.—Cal-bass Groce.
 Capucin.—Cap-u-san.
 Chaumontel très Gros.—Sho-mone-tell tray Gro.
 Compte de Lamay.—Conte de Lah-me.
 Colmar Épine.—Cole-mar A-peen.
 Crassane.—Cras-sahn.
 Cuisse Madame.—Kuees Mah-dam.
 D'Amour.—Dam-oor.
 De Louvain.—Dul-oo-van.
 Délices d'Hardenpont.—Day-lece Dar-dahn-pone.
 Doyenné d'Été.—Dwoy-on-nay Day-tay.
 Doyenné Panaché.—Dwoy-on-nay Pan-ah-Shay.
 Dumortier.—Du-mor-te-ay.
 Duchesse d'Angoulême.—Du-shess Dong-goo-lame.
 •Duchesse d'Orléans.—Du-shess Dor-lay-on.
 Enfant Prodige.—On-font Pro-deeje.
 Épine d'Été.—A-peen day-tay.
 Figue de Naples.—Feeg de Nah-pl.
 Fondante d'Automne.—Fone-donte do-tonn.
 Forme de Délices.—Form de Day-lece.
 Forelle.—Fo-rel.
 Fondante du Bois.—Fone-dont du Bwoi.
 Fortunée.—For-tu-nay.
 Franc Réal d'Hiver.—Fronk Ray-ahl Dee-vair.
 Glout Morceau.—Gloo Mor-so.
 Héricart.—Hay-re-car.
 Jalousie.—Jal-oo-zee.
 Jalousie de Fontenay Vendée.—Jal-oo-zee de Fone-ten-ai Von-day.
 Léon le Clerc.—Lay-on le Clair.
 Limon.—Lee-mohn.
 Louise Bonne.—Loo-eze Bun.
 Madeleine, or Citron des Carmes.—Mad-lane, or Cee-trone day Carn.
 Marie Louise.—Mah-re Loo-eze.
 Michaux.—Me-sho.
 Passans de Portugal.—Pah-sahn de Por-tu-gal.
 Pailleau.—Pahl-yo.
 Paradis d'Automne.—Par-ah-deze do-tonn.
 Passe Colmar.—Pass Col-mar.
 Quilletette.—Keel-tet.

Reine Caroline.—Rane Car-o-lene.
 Reine des Poires.—Rane day Pwore.
 Rousselet Hâtif.—Roos-lay Hat-eef.
 Sanspau.—Sahn-po.
 Sieulle.—See-ull.
 Sucrée de Hoyerswarda.—Seu-cray de Hoyersworda.
 Surpasse Virgalieu.—Seur-pass Vere-gal-yu.
 St. Germain.—San Jare-man.
 Sylvange.—Seel-vonje.
 Vallée Franche.—Vol-lay Fronsh.
 Verte Longue.—Vairt Longh.
 Verte Longue Panachée.—Vairt Longh Pan-ah-shay.
 Virgouleuse.—Vere-goo-leuz.
 Wilhelmine.—Wil-el-meen.

PLUMS.

Abricotée Rouge.—Ab-re-co-tay Rooje.
 Diaprée Rouge.—De-ah-pray Rooje.
 Drap d'Or.—Drah-dor.
 Jaune Hâtive.—Jaun Hat-eve.
 Mirabelle.—Me-rah-bell.
 Précoce de Tours.—Pray-cose de Toor.
 Prune Suisse.—Prune Su-ece.
 Royale Hâtive.—Rwoy-al Hat-eve.

INDEX TO THE DIFFERENT FRUITS.

[The standard names are in Roman letters. The synonymous names in *Italic.*]

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THE
FRUITS AND FRUIT-TREES
OF
AMERICA;

OR,
THE CULTURE, PROPAGATION, AND MANAGEMENT, IN THE
GARDEN AND ORCHARD, OF FRUIT-TREES GENERALLY;

WITH
DESCRIPTIONS OF ALL THE FINEST VARIETIES OF FRUIT, NATIVE
AND FOREIGN, CULTIVATED IN THIS COUNTRY.

BY A. J. DOWNING,

CORRESPONDING MEMBER OF THE ROYAL BOTANIC SOCIETY OF LONDON; AND OF THE HORTICUL-
TURAL SOCIETIES OF BERLIN, THE LOW COUNTRIES, MASSACHUSETTS,
PENNSYLVANIA, INDIANA, CINCINNATI, ETC.

APPENDIXES—I, II., AND III.

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ADDITIONAL SYNONYMS

TO THE

APPLE.

Alpian.....	Syn. of Cannon Pearmain.
Anderson.....	" " "
American Nonpareil.....	" Domine.
August Pippin.....	" Summer Sweet Paradise
Bell's Favorite.....	" Sops of Wine.
Bully Pippin.....	" Ewalt.
Chillicothe Sweet.....	" Bailey's Sweet.
Crutchfield Greening.....	" Bullet.
Champ Sweet.....	" Hartford Sweet.
Claybank.....	" Griffith.
Conford.....	" Pryor's Red.
Dixie.....	" Shockley.
Duversen's June.....	" Early Red Margaret.
Early White.....	" Cooper's Early White.
Early July Pippin.....	" Early Harvest.
Early Red Sweet.....	" Red June Sweet.
Father Abram.....	" Abram.
Garvis Seedling.....	" Buckingham.
Glory of the West.....	" Dutch Codlin.
Hollman.....	" Nickajack.
Hazeldeen.....	" Princely.
Herr's June.....	" Early Red Margaret.
Holland's Red Winter.....	" Winesap.
Hutchinson's Pippin.....	" Ben Davis.
Joe Allen.....	" "
Jones's Early Harvest.....	" Carolina Red June.
July Branch.....	" Jersey Sweet.
Kentucky Red Streak.....	" Ben Davis.
Kirby's Red.....	" Red Winter Pearmain.
Lady's Blush.....	" Ewalt.
Long Island Graft.....	" Fall Orange.
Normanton Wonder.....	" Dumelow's Seedling.
New York Bellflower.....	" Fall Orange.
Regular.....	" Cooper's Market.
Red Abram.....	" Abram.
Rigley.....	" Cooper's Market.
Saille Sweet.....	" Red and Green Sweet.
Seneca Favorite.....	" Quince.
Speckled.....	" Fall Orange.
Striped Quarendon.....	" Early Red Margaret.
Striped Sweet Harvest.....	" Red June Sweet.
Striped Red Harvest.....	" " "
Susy Clark.....	" Carolina Red June.
Summer Traveller.....	" Early Red Margaret.
Sweet Dumpling.....	" Summer Sweet Paradise
Tenan Red.....	" Ben Davis.
Texan Red.....	" Winesap.
Uxbridge Spice.....	" Capron's Pleasant.
Van Kleek's Sweet.....	" Hog Island Sweet.
Virginia June.....	" Early Red Margaret.
Virginia Sweet.....	" Red and Green Sweet.
Virginia Pippin.....	" Ben Davis.
Westbrook.....	" Fall Orange.
White Codlin.....	" Dutch Codlin.
White Newell.....	" Fall Orange.
White, or Yellow June of some.....	" Kirkbridge White.
Wine Sweet.....	" Winter Sweet Paradise.
Wrigley.....	" Cooper's Market.
York and Lancaster.....	" St. Lawrence.

ADDITIONAL SYNONYMS

TO THE

APPLE.

American Beauty (incorrectly).....	Syn. to Baltimore.
Aromatic Calville.....	" Aromatic Carolina.
Belle Rose.....	" Primate.
Benjaminite.....	" Fallawater.
Bersford.....	" Pryor's Red.
Black Ann.....	" Black Coal.
Black Spitzenberg.....	" Flushing Spitzenberg.
Boston Pippin.....	" Golden Pippin.
Broad Apple.....	" Pennock.
Byfield.....	" Rock Sweet.
Carolina Winter.....	" Nix Green.
Conic June.....	" Kirkbridge White.
Copp's Mammoth.....	" Gloria Mundi.
Cranberry Pippin (incorrectly).....	" Black Coal.
Donahoe.....	" Red Canada.
Early Baldwin.....	" Primate.
" Congress.....	" Gravenstien.
" Sweet.....	" High Top Sweet.
" Washington.....	" Sops of Wine.
English King.....	" Alexander.
Farmer's Profit.....	" Hubbardston Nonsuch.
Flat Vaudevere.....	" American Pippin.
Fox Apple, of some.....	" American Golden Russet.
Franklin.....	" Fronclin.
French Pearmain.....	" Autumn Pearmain.
Green Sweet of Indiana.....	" Victuals and Drink.
" Winter Pearmain.....	" Autumn Pearmain.
Hare Pippin.....	" Summer Sweet Paradise.
Harris White Hall.....	" Dyer.
Haven Pippin.....	" Ledge Sweet.
Heicke's Summer Queen.....	" Early Pennock.
Highland Pippin.....	" Primate.
Hoover.....	" Black Coal.
" June.....	" Yellow June.
Hower.....	" French Pippin.
Jefferson Pippin.....	" Rawles' Genet.
Jenkins' Summer Pippin.....	" Primate.
Jennings.....	" Porter.
Jersey Pearmain.....	" Autumn Pearmain.
Jewett's Striped.....	" Jewett's Best.
Juicy Bite.....	" Better than Good.
Juniata.....	" Washington Strawberry.
Kennebec Seedling.....	" Winthrop Greening.
Kingsbury Russet.....	" Pumpkin Russet.
Large Summer Pearmain.....	" Buckingham.
Limber Twig Russet.....	" Golden Russet of N. Y.
Lodge's Early.....	" Summer Rose.
Logan's Northern Pippin.....	" Minkler.
Maralandica.....	" Early Harvest.
Montgomery Sweet.....	" Autumn Sweet Bough.
Mountain Flora.....	" Gloria Mundi.
Mountain Green.....	" Fallawater.
North Carolina Vaudevere.....	" Horn.
Oats (incorrectly).....	" Early Harvest.
Paper Skin.....	" Summer Pippin.
Potter's Early.....	" Knowles' Early.
Pound's July.....	" Large Yellow Bough.

Pound Royal (incorrectly).....	Syn. to	Lowell.
Pound Sour.....	"	Golden Pippin.
Queen of the Dessert.....	"	Newtown Spitzenberg.
Rock Apple.....	"	Lansingburgh.
Red Cheek Bellflower.....	"	Ewalt.
Red Gilliflower, of some.....	"	Red Winter Pearmain.
Red Harvest, of some.....	"	Carolina Red June.
Red Winter Sweet, of some.....	"	Moore's Sweet.
Rittner.....	"	Jackson.
Robinson's Streak.....	"	Ben Davis.
Rolfe.....	"	Macomber.
Royal Red of Kentucky.....	"	Winesap.
Russian Hagloe.....	"	Summer Hagloe.
Ryerson.....	"	Primate.
Shelborne's Sweet.....	"	Spice Sweet.
Shropshirevine.....	"	Sops of Wine.
St. John Strawberry.....	"	Early Strawberry.
Striped Shropshire.....	"	" "
Tennessee Early Red.....	"	Early Strawberry.
Vestal.....	"	Maiden's Blush.
Virginia May.....	"	White Juneating.
Waddell Hall.....	"	Shockley.
Wakeman.....	"	Baltimore.
Washington of Maine.....	"	Washington Strawberry.
Weidner.....	"	Early Ripe.
Welch's Spitzenberg.....	"	Red Canada.
White Water Sweet.....	"	Wells' Sweet.
Williamson.....	"	Domine.
Yellow Flat.....	"	Kirkbridge White.
Yellow May Pippin.....	"	White Juneating.
Yellow Summer Pearmain.....	"	Porter.

APPENDIX.

For specimens of Fruit, and information relating to many of the varieties in this Appendix, I am indebted to many of the leading Pomologists in many parts of the country, who will please accept my cordial thanks.

CHARLES DOWNING.

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THE APPLE.

AUTUMN POMME GRIS.

ORIGINATED in the orchard of William Reynolds, Markham, Ontario. Tree a strong upright grower, very productive. Fruit small, oblate, inclining to conic; skin yellow, nearly covered with thin nettings of russet, sometimes a shade of rich red in the sun; stalk long, slender, inserted in a medium cavity; calyx closed; basin broad, shallow, dis

Baltzley.

tinctly and peculiarly corrugated; flesh fine, yellowish, tender, moderately juicy, rich, sprightly subacid and aromatic; very good; core small. October and November.

BALTZLEY.

Baltzley's Sweet.

Originated on the farm of John Baltzley, Manellan Township, Pa. Tree moderately vigorous, spreading, an early bearer, very productive every other year, and a small crop alternate ones; an old apple, but a favorite where known; young shoots light reddish brown, many russet dots.

Fruit rather large, oblate or roundish oblate, nearly regular; skin pale yellow, often with a shade of light pale red in the sun, and a few grayish dots; stalk rather short, small; cavity large, deep; calyx closed; basin large, deep, slightly corrugated; flesh white, half fine, tender, moderately juicy, rather rich, sweet; good to very good. September, October.

BELLE DU HAVRE.

Belle Douce du Havre.

A promising French variety. Tree hardy, vigorous, upright, an early and abundant bearer annually; a good table fruit, and excellent for culinary uses; young shoots reddish brown, slightly downy at the end.

Fruit medium to large, roundish oblate, conical; angular or slightly

Belle du Havre.

ribbed; skin pale greenish yellow, shaded and rather obscurely striped and splashed with light and dark rich red over most of the surface, and many light brown dots; stalk medium, slender; cavity large, deep;

calyx closed; basin rather large, corrugated; flesh quite white, fine, tender, moderately juicy, with a brisk, peculiar, quince-like flavor; good to very good; core small. Ripe last of August to last of September.

BELL'S SEEDLING.

Originated with the late Z. Bell, near Adairville, Kentucky. Tree a vigorous grower, making a large, handsome round head; comes into bearing tolerably early, and rarely fails to produce a crop of fair fruit, and is popular where known.

Fruit medium or above, roundish, inclining to roundish oblong, slightly angular; skin entirely covered with light red, striped and splashed with dark red and a few light dots; stalk short, slender; cavity deep, acute, russeted; calyx closed or partially open; basin rather deep, medium size; flesh whitish, half fine, tender, juicy, sprightly subacid; good to very good; core medium. September, October.

BLenheim PIPPIN.

Blenheim Orange.
Woodstock Pippin.

Blooming Orange.
Northwick Pippin.
Dutch Mignonne, erroneously.

Blenheim.
Kempster's Pippin.

An error having been made in the second revised edition of this work with this variety, Dutch Mignonne and Blooming Orange,—the last being a syn.,—we give a corrected description.

An old variety which originated in Oxfordshire, England. Tree very strong, vigorous, spreading, somewhat drooping when in full bearing, ² makes a large handsome tree in the orchard. It is late coming into bearing, but when fully established is a good regular bearer. This apple is a favorite in England, and succeeds in most localities here in the Middle and Northern States, especially the latter. Young wood stout, reddish brown.

Fruit large, often very large, roundish oblate, regular, skin dull orange, half covered or more with rich dull red, often mixed with russet, dotted and mottled with large yellow russet specks, some of which are areole; stalk rather short, slender, curved; cavity large, deep, russeted, the russet sometimes extending in rays out on the fruit; calyx large, open; basin broad, large, rather deep, slightly corrugated; flesh white, a little coarse—at first firm—but becoming crisp, tender, juicy, rich, brisk subacid, slightly aromatic; core small, very good. November, February.

BOYD.

Origin supposed to be on the McPherson farm, Monroe County, Kentucky, and introduced by Alfred and Thomas Boyd. Tree a strong, spreading, rather straggling grower, and productive.

Fruit large, oblate, slightly conic; skin yellow, shaded with light and dark red, deep rich red in the sun, sometimes obscure splashes and stripes and moderately sprinkled with light and brown dots; stalk very short; cavity large, broad, deep, often slightly russeted; calyx closed

or half open; basin rather large and smooth; flesh yellowish, a little coarse, rather firm, moderately juicy, rather rich subacid, slightly aromatic; good to very good; core small. January to April.

BUNKER HILL.

Originated in the orchard of the late Dr. Paige, of Dryden, New York. Tree a healthy, rapid grower, an early and abundant bearer, and valued where known.

Fruit medium, roundish conical, regular; skin pale whitish yellow, shaded, mottled, striped and splashed with two shades of red, rather thinly over two-thirds the surface, and moderately sprinkled with light dots, a

Bunker Hill.

few being areole; stalk short, slender; cavity medium or large, a little greenish; calyx closed; basin medium, slightly corrugated; flesh quite white, sometimes a little stained next the skin, fine, tender, juicy, subacid, vinous, slight quince-like flavor; very good; core rather small. October.

BZBY'S EARLY.

Origin uncertain, supposed to be Moorestown, New Jersey. Tree a moderate grower, rather spreading, very productive alternate years.

Fruit below medium, roundish oblate; skin pale yellow, thinly shaded, striped and splashed with light red over half the surface; stalk short, small; cavity large, deep; calyx closed; basin quite deep, slightly corrugated; flesh whitish, fine, crisp, tender, juicy, mild subacid; good to very good; core small. Last of August and September.

CADWALLADER'S GOLDEN.

Originated on the farm of James Simmons, near Greenbush, Warren County, Illinois, and introduced by E. F. Cadwallader, Paola, Kansas, who states that the tree is hardy, a strong, vigorous grower, spreading, an early and prolific bearer, and valuable for market and culinary uses.

Fruit medium, oblate or roundish oblate; skin bright yellow, sometimes with a slight blush, moderately sprinkled with dark grayish dots;

Cadwallader's Golden.

stalk rather short, slender; cavity quite large, deep, sometimes slight russet; calyx closed or half open; basin large, deep, slightly corrugated; flesh yellowish white, half fine, tender, juicy, mild, pleasant subacid; good to very good; core small. October, February.

CALKINS' PIPPIN.

Originated with the late Elias Calkins, of West Cornwallis, Nova Scotia. Tree vigorous; forms a large round head, with drooping branches; an early and heavy bearer alternate years; is valuable for market and culinary uses.

Fruit large, roundish conical, sometimes oblong, slightly angular; skin whitish, thinly shaded and mottled on the sunny side, sometimes a few nettings of russet and a few grayish dots; stalk of medium length, slender; cavity large, deep; calyx closed; basin rather narrow, deep, much corrugated; flesh white, rather coarse, tender, juicy, brisk subacid; good; core large. November, February.

CHESTER COUNTY.

Origin uncertain; found on the farm of Dr. J. C. Brosins, Cochranville, Pennsylvania. Tree vigorous, spreading, inclining to droop; very

productive nearly every year; a late keeper, and considered valuable in its locality.

Fruit medium to large, roundish oblate, very slightly conic; skin yellow, shaded, splashed and striped with light and dark red in the sun and faintly on the shaded side, moderately sprinkled with large and small light dots, a few being areole; stalk short; cavity medium, sometimes slightly russeted; calyx small, closed; basin deep, large, slightly corrugated; flesh yellowish, half fine, crisp, tender, juicy, subacid; good to very good; core small. January, March.

CLAYTON.

Originated with Richard Worrell, near Clayton, Indiana, and is valued as a late keeper. Tree vigorous, upright, a regular and abundant bearer, but only moderate crop alternate years.

Fruit rather large, roundish oblate, regular; skin smooth, yellow, nearly covered with light and dark rich red, and moderately sprinkled with light dots; stalk short; cavity rather large, thinly russeted; calyx small, nearly closed; basin medium, slightly corrugated; flesh yellowish, rather coarse, compact, moderately juicy, mild subacid; good; core small. January, May.

CLINE'S CODLIN.

Origin unknown; introduced by Daniel Cline, of Fairview Township, York County, Pennsylvania. Tree vigorous, upright, an early bearer, and very productive.

Fruit medium, oblate, nearly regular; skin pale whitish yellow, almost waxen, sometimes a light shade of red in the sun; stalk short, small; cavity large; calyx closed; basin medium, slightly corrugated; flesh whitish yellow, fine, crisp, juicy, lively subacid; good to very good; core medium. Middle of August to middle of September.

CONNECTICUT RED CHEEK.

Connecticut Red Streak.

Connecticut Red Side.

An old variety, which originated in Hartford County, Conn. Tree vigorous, upright spreading; very productive alternate years.

Fruit rather large, roundish oblate; skin pale, with a bright red cheek, sometimes a few obscure splashes and stripes, and a few scattering brown dots; stalk short, small; cavity large, deep; calyx closed; basin large, deep, slightly corrugated; flesh white, half fine, crisp, tender, juicy, mild subacid; good to very good; core medium. October, November.

CONS.

An old variety of uncertain origin, grown in Lancaster and York counties, Pa., where it is esteemed as a dessert apple. Tree moderately vigorous, rather upright, very productive.

Fruit quite small, roundish, slightly conic; skin whitish, mottled and striped with rather dull red, and sprinkled with a few light dots; stalk long, slender; cavity medium; calyx half closed; basin medium.

corrugated; flesh white, tender, juicy, mild, pleasant subacid; good to very good; core medium. Ripe last of July and August.

CRAIN'S SPICE.

Originated with Dr. James H. Crain, Undulation, Illinois. Tree vigorous, forming a round head; an early, annual, and abundant bearer.

Fruit below medium, oblate, slightly conic, slightly angular; skin entirely covered with deep rich red, and a few light dots; stalk very short, small; cavity small or medium; calyx small, closed; basin somewhat narrow, deep, slightly plaited; flesh quite white, a little stained next the skin, fine, tender, quite acid at first, but when fully ripe a peculiar subacid, quince-like flavor; good; core rather small. October, January.

DAVAGE.

Origin unknown; introduced by Judge James Davage, of Caldonia, Illinois. Tree moderately vigorous, forming a round head, an early and annual bearer, said to be a fine apple, retaining its juice and flavor remarkably well.

Fruit nearly of medium size, oblate; skin whitish, nearly covered with light and dark red, many large yellowish and some brown, irregular, and star-shaped dots, a few being areole; stalk short, small; cavity medium, often slightly russeted; calyx open; basin quite broad, not deep, slightly plaited; flesh whitish, fine, rather firm, juicy, mild subacid, inclining to sweet; good to very good; core small. February, May.

DR. FULCHER.

Received from J. S. Downer, of Fairview, Kentucky, who informs me that it was a chance seedling found on the farm of the late Dr. Fulcher, of that town, and is very popular there. Tree thrifty, upright, inclining to spread in the orchard; an early, annual, and abundant bearer; young shoots light reddish brown.

Fruit below medium, roundish oblate, a little flattened at the ends, sometimes slightly oblique; skin whitish yellow, shaded, mottled, striped, and splashed over two-thirds its surface with light and dark red, a thin grayish bloom, and a few light dots; stalk short, small; cavity rather large, sometimes slightly russeted; calyx open or half closed; basin medium, slightly plaited; flesh white, half fine, sometimes a little stained next the skin, tender, juicy, refreshing, subacid; very good; core small. November, January.

DONAHUE.

Originated with P. Donahue, near Cumberland, Md. Tree moderately vigorous, spreading, productive.

Fruit medium or below, oblate, very slightly conic, regular; skin deep rich red or purplish in the sun, moderately sprinkled with light dots; stalk short, small; cavity broad, sometimes a little greenish;

calyx small, closed; basin large, slightly uneven; flesh white, fine, tender, moderately juicy, mild, pleasant subacid; very good; core small. October, January.

DUFFIELD.

Originated with James Duffield, Jr., Van Buren, Iowa. Tree moderately vigorous, spreading; an early and abundant bearer.

Fruit medium, oblate, sides unequal, skin yellow, shaded, splashed and striped with light and dark red over the whole surface, and moderately sprinkled with light and brown dots; stalk short, small; cavity

Doctor Fulcher.

large, deep, slightly russeted; calyx closed, basin medium, corrugated; flesh yellowish, half fine, tender, juicy, pleasant mild subacid, rather rich; good to very good; core small. November, February.

DULING.

Duling's Sweet.

Originated with Edmund Duling, Linton Township, Coshocton Co., Ohio. Tree healthy, vigorous, rather spreading; begins to bear quite early; a regular bearer, some seasons very heavy crops; young shoots, grayish brown, smooth.

Fruit roundish, inclining to conic, regular; skin yellow, shaded, striped and splashed with deep rich red nearly over the whole surface—the splashes sometimes in broad bands,—pale red in the shade; stalk of medium length, slender, curved; cavity rather narrow, deep; calyx closed; basin medium, regular; flesh whitish, tender, juicy, pleasant, mild subacid, almost sweet; very good; core small. Middle of August to middle of September.

DULIN'S RED.

Raised by Lodd Dulin, of Hopkinsville, Christian County, Ky., where it is considered a valuable and popular winter fruit. Tree moderately vigorous, rather upright, and makes a handsome orchard tree, very productive alternate years; young shoots brownish red, grayish.

Fruit medium, oblate, very little conic, sides sometimes unequal; skin entirely covered with light red, striped and splashed with dark red, and many light and brown dots; stalk short; cavity large, deep; calyx half closed; basin medium, regular; flesh yellowish, a little coarse, breaking, tender, moderately juicy, subacid, slightly aromatic; good to very good; core medium. December, February.

Dulin's Red.

ESPEREN'S REINETTE.

Reinette d'Esperen.

A foreign variety; tree strong and vigorous, spreading, very productive.

Fruit large oblate, or roundish oblate, slightly conic; skin light golden yellow, a shade of pale light red in the sun, and a few brown dots; stalk rather short, small; cavity large, broad, regular, thinly russeted; calyx closed; basin medium, corrugated; flesh whitish yellow, rather coarse, tender, juicy, pleasant subacid; good to very good; core small. December, February.

FAIRY.

A new English dessert apple, which is spoken of as very handsome, and of fine quality, and it is thought will rival in size and color the celebrated Lady apple. Tree moderately vigorous, upright, hardy, and prolific.

Fruit small, oblate, slightly conical; skin lemon yellow, covered with bright lively crimson, shaded with streaks of a deeper tinge; stalk of medium length, slender; cavity small, russety; calyx closed; basin small, plaited; flesh deep yellow, firm, crisp, very juicy, with a rich brisk flavor, and a fine delicate aroma. December, February. (Florist and Pomologist.)

FALL QUEEN, OR HAAS.

Gros Pommier.
Gros Pomier.

Haas.
Maryland Queen.

Horse of some.
Hos§.

Originated on the grounds of Gabriel Cerré many years since, adjoining the then village of St. Louis (now city), Mo. It was at first called Gros Pommier, but now generally Fall Queen or Haas, and we retain this, as it is most commonly used. It is very popular through most of the West and Southwest as a profitable market fruit, and for family use. Tree hardy, very vigorous, upright, forming a beautiful symmetric head; an early, annual, and abundant bearer.

Fruit medium to large, oblate, slightly conical, angular or slightly ribbed; skin smooth, pale greenish yellow, shaded nearly over the whole surface with light and dark red, some rather obscure splashes and stripes, and a few light dots; stalk short, small; cavity medium, a little greenish; calyx closed; basin small or medium, slightly corrugated;

Fall Queen, or Haas.

flesh quite white, fine, often stained next the skin, and sometimes through the flesh, tender, very juicy, vinous, brisk subacid; good to very good; core medium or large. September, October.

FALL STRIPE.

Saxton.

An old variety which originated in Massachusetts or Connecticut. Tree vigorous, forming a handsome round head; very productive alternate years; an early bearer.

Fruit medium, roundish oblate, regular; skin yellow, shaded, striped and splashed with light and dark red over the whole surface, having a few light and brown dots; stalk short, small; cavity medium, slightly russeted; calyx closed; basin medium, slightly corrugated; skin yellowish, a little coarse, juicy, tender, subacid, slightly aromatic; good to very good; core small. September.

FRANCLIN.

Origin, Lancaster County, Pa. Tree moderately vigorous, with a round head, very productive alternate years, and a few the intervening ones.

Fruit nearly of medium size, oblate; skin pale greenish white, covered with pale red, often deep red in the sun, sometimes obscure splashes and stripes, and a few light and gray dots; stalk short, small; cavity rather large, sometimes a little russeted; calyx closed; basin medium, very slightly corrugated; flesh whitish yellow, half fine, tender, juicy, pleasant subacid; very good; core small. September, October.

GENERAL LYON.

A new variety, received from George S. Park, who writes that it was raised from seed of Ben Davis by the late Elias Peck, of Parksville, Missouri, and that the tree is hardy, and resembles its parent in growth; very productive annually, a long keeper, and a good market fruit; young shoots smooth, brownish red.

Fruit medium or below, roundish conical, flattened at the ends, sometimes a little oblique; skin bright yellow, shaded with light and dark red nearly over the whole surface; sometimes a few faint stripes and a few light and brown dots; stalk short, small; cavity medium, often slight green russet; calyx open; basin broad, not very deep, corrugated; flesh yellowish, fine, compact, moderately juicy, mild subacid, rather rich; good to very good; core small. January, April.

GENERAL MARION.

Originated with Henry Lyons, Columbia, S. C. Tree a strong, vigorous grower, quite spreading, not early coming into bearing, but uniformly productive when it attains sufficient age, valuable for its late keeping and productiveness; young shoots reddish brown.

Fruit medium or below; roundish oblate conic, slightly angular; skin pale yellow, shaded, and rather obscurely striped with light and dark red nearly over the whole surface, and moderately sprinkled with light and gray dots; stalk short; cavity medium or small; calyx half closed; basin rather narrow, deep, slightly plaited; flesh whitish, half fine, compact, moderately juicy, mild subacid; good to very good; core medium. January to April.

GILLETTE'S WINESAP.

Origin unknown, but supposed to have originated with the late H. N. Gillette, of Quaker Bottom, Ohio. Tree vigorous, rather spreading, a good and valuable apple, quite productive alternate years.

Fruit rather large, roundish oblate, a little oblique, sides sometimes unequal; skin whitish, shaded and mottled with light red, rather thinly striped and splashed with darker red, and moderately sprinkled with light and brown dots; some specimens have a mixed red and russet on the exposed side; stalk short; cavity medium, much russeted; calyx open, or half closed; basin rather large, regular; flesh white, a little coarse, crisp, juicy, tender, mild subacid; very good; core small. December, January.

GOYEAU.

A chance seedling on the farm of ——— Goyeau, Windsor, Ontario. Tree a vigorous grower, rather straggling and crooked; comes rather early into bearing, and produces good crops annually.

Fruit rather large, roundish, angular or slightly ribbed, and somewhat irregular; skin light pale yellow, many rather obscure light dots; stalk of medium length, slender; cavity rather large, uneven; calyx closed; basin quite large, furrowed; flesh yellowish, fine, very tender, juicy, brisk subacid, excellent for culinary uses, and a fair table fruit. August, September.

GRATTAN.

This new large apple was grown from seed by Nehemiah Smith, of Grattan, but while quite young, before fruiting, was removed to the farm of Solomon Deal, of Oakfield, Mich. It is highly prized in that section for culinary purposes as well as for the table. Tree vigorous, upright, forming a round open head, producing good crops annually, and larger ones alternate years.

Fruit large to very large, roundish oblate, slightly conic, regular; skin smooth, bright yellow, moderately sprinkled with grayish dots; stalk very short, small; cavity large, deep, sometimes slightly russeted; calyx open, or partially closed; basin large, deep, nearly smooth; flesh yellowish, a little coarse, tender, juicy, brisk, subacid; good to very good; core small. September, December.

GROS PIGEONNET.

Of foreign origin. Tree strong, but a slow grower; productive.

Fruit medium, roundish oblate; skin pale yellow, shaded, mottled, and rather obscurely striped and splashed, with light and dark rich red over most of the surface, and moderately sprinkled with small light dots; stalk short, small; cavity medium, russet; calyx closed; basin medium, furrowed; flesh whitish yellow, a little coarse, juicy, subacid; good December, February.

GROS VERT.

Large Green.

Of foreign origin. Tree vigorous, spreading, productive.

Fruit medium, oblate; skin greenish yellow, covered with a few rather obscure green and grayish dots; stalk rather short, moderately stout; cavity quite large, russet; calyx closed; basin medium, slightly corrugated; flesh pale yellow, half fine, tender, juicy, pleasant subacid; good to very good; core small. January, March.

HANNAH.

Originated with Joseph Curtis, of Manchester, O. Tree hardy, vigorous, upright at first, but spreading when in bearing; an annual, moderate bearer.

Fruit roundish oblate conic, slightly angular; skin pale dull greenish yellow, striped, splashed and mottled over half the surface with light red, and moderately sprinkled with large and small white dots, a few being areole; stalk short, small; cavity large, deep; calyx small, closed; basin small, corrugated; flesh greenish white, fine, tender, juicy, mild subacid, almost sweet; good to very good; core small. November, December.

HATCHER.

Hatcher's Seedling.

Originated on the farm of the late O. C. Hatcher, near Franklin, Tenn. Tree an upright thrifty grower, not an early bearer, but pro-

Hatcher.

duces good crops annually; a late keeper, and one of the most popular apples in Middle Tennessee.

Fruit medium, roundish inclining to conic, slightly angular; skin very dark rich red, sometimes almost purplish, a few light dots; stalk short, small; cavity medium, often slight russet; calyx open; basin medium, slightly plaited; flesh yellow, fine, rather compact, juicy, mild. pleasant rich subacid, almost sweet; very good; core small. January, March.

HAWKINS' CHIEF.

Originated with S. Hawkins, Maple Grove, Minn. Tree hardy, healthy and vigorous, and adapted for a northern latitude.

Fruit medium, oblate, slightly conic; skin pale yellow, clear of the slightest blush or tinge; stalk short, stout; cavity shallow; calyx closed; basin broad, deep; flesh rather coarse, brittle, acid; good; core small. October. (Western Pomologist.)

HIRAM.

Origin, orchard of General Isaac Sandford, of Vermillion, Ill. Tree a moderate grower, forming a round head; a moderate bearer at first, but when the tree has attained some age is very productive; valuable in its locality for late keeping and market.

Fruit medium, roundish oblate, sometimes a little oblique; skin entirely covered with dark red, sometimes obscure splashes and moderately sprinkled with light dots; stalk short, small; cavity medium, much russet; calyx closed; basin broad, rather shallow, corrugated; flesh whitish, half fine, rather compact, mild subacid; good to very good; core small. January to May.

HOYA GOLDEN REINETTE.

Hayasche Gold Reinette.

Reinette de Hoya.

Of German origin. Tree strong, vigorous, spreading; an early and abundant bearer.

Fruit medium, oblate, regular; skin golden yellow, shaded with dark red, faintly striped and splashed with light red, and sprinkled with a few light and gray dots; stalk short, small; cavity large, slight russet; calyx closed; basin medium; flesh yellowish, half fine, juicy, tender, subacid; good; core small. November, March.

HUNTSMAN'S FAVORITE.

A seedling on the farm of John Huntsman, of Fayette, Mo. Tree vigorous, not a very early bearer, but is very productive annually when the tree has attained sufficient age; it is said to be a valuable and profitable fruit in the locality where it originated; young shoots smooth, reddish brown.

Fruit large, oblate, slightly conic, often a little oblique; skin smooth, pale yellow, sometimes a shade of pale red or deep yellow in the sun, and a few scattering grayish dots; stalk short, small; cavity broad, deep, sometimes slight russet; calyx closed, or nearly so; basin

large, deep, slightly corrugated; flesh pale yellow, a little coarse, crisp, tender, juicy, mild rich subacid, slightly aromatic; very good; core rather small. December, March.

Huntsman's Favorite.

HUMISTON.

Origin Plymouth, Conn. Tree vigorous, upright, with long branches, forming a spreading head when in fruit, very productive every other year, hangs late on the tree, cooks well, but only second quality for eating.

Fruit medium, oblate to roundish oblate, slightly conic, sides sometimes unequal; skin yellow, a little greenish, shaded and rather obscurely striped and splashed with light and dark red over half or two-thirds its surface, a few light and gray dots; stalk rather short, small; cavity quite large, slightly russeted; calyx closed; basin medium, slightly corrugated; flesh white, half fine, tender, moderately juicy, subacid; good; core small. February, March.

ILLINOIS GREENING.

Originated with Joseph Curtis, of Paris, Ill. Tree hardy, vigorous, upright, somewhat spreading, produces large crops annually, valuable as a late keeping market apple in its locality.

Fruit large oblate, to roundish oblate, sometimes a little oblique; skin greenish yellow, often a shade of dull red in the sun, and a few light and brown dots; stalk short; cavity medium, slight russet; calyx half open; basin large, deep, nearly smooth; flesh yellowish, half fine, rather compact, moderately juicy, subacid; good; core small. January, April.

IOWA RUSSET.

This new apple originated with Joseph L. Budd, Shellsburg, Iowa, who informs us that the tree is very hardy, vigorous, making a compact round head, an early, annual, and abundant bearer; fruit even in size, of good quality, and a valuable acquisition for the prairie country; young shoots light reddish yellow brown.

Fruit medium, oblate to roundish oblate, sometimes slightly oblique; skin deep yellow, a shade of pale red when exposed to the sun, moderately sprinkled with grayish dots, and partially covered with patches and nettings of russet; stalk short, small; cavity quite large; calyx closed; basin round, quite deep, nearly smooth; flesh yellowish, half fine, tender, moderately juicy, mild subacid, rather rich; good to very good; core small. January, March.

Iowa Russet.

IRISH PIPPIN.

Originated with Stephen A. Porter, Norristown, Pa. Tree a free upright grower, forming a handsome head, very productive alternate years; young shoots smooth, reddish brown.

Fruit medium to large, roundish oblate, sometimes roundish, slightly conical; skin whitish, shaded with light bright red, striped and broken splashes of dark red, and a few light and brown dots; stalk very short, small; cavity medium, sometimes a little russeted; basin small, corrugated; flesh white, tender, juicy, mild subacid, slightly vinous; very good; core rather small. October, November.

JOHNSON.

Originated with Thomas Johnson, Ash Ridge, Ill. Tree vigorous, upright, an annual and good bearer; it is highly prized where it originated.

Fruit medium to large, oblate, sometimes slightly oblique skin pale greenish yellow, almost entirely covered with dark rich red, inclining to maroon, and moderately sprinkled with light and gray dots; stalk very short, small; cavity medium, russet; calyx open; basin medium, slightly plaited; flesh yellowish, fine, juicy, mild rich subacid, inclining to sweet; very good; core small. December, March.

Irish Pippin.

KANSAS QUEEN.

Raised by Burrell Atkinson, Leavenworth, Kan. Tree hardy, vigorous, forming a handsome open head; very productive.

Fruit medium, roundish, slightly conical, slightly angular; skin entirely covered with light and dark red, sometimes almost purplish in the sun, moderately sprinkled with small light and gray dots; stalk short, slender; cavity deep, rather narrow; calyx closed or nearly so; basin medium, corrugated; flesh quite white, rather firm, juicy, brisk subacid; good; core rather large. August, September.

KANSAS SWEET.

A seedling raised by B. Atkinson, of Leavenworth, Kansas. Tree erect, compact, vigorous, productive.

Fruit rather large, oblate, slightly conical; skin greenish yellow, covered with broken stripes of light red and crimson; dots small, black, scattered; stalk short, rather thick; cavity regular, wide, deep; calyx small, closed; basin shallow; flesh yellowish white, fine, juicy, crisp, breaking, very tender and pleasant, sugar sweet; quality excellent; core medium. November to January.

KING SOLOMON.

Origin unknown; received from J. S. Downer & Son, of Fairview, Ky., who write me that it came from Georgia. Tree a strong, vigorous grower, spreading, not an early bearer, but very productive alternate years; a handsome and good apple of its season; young shoots dark reddish brown; buds large.

Fruit medium or above, oblate to roundish oblate, slightly angular; skin orange yellow, a few scattered stripes and splashes of light red over the surface, and moderately sprinkled with brown dots; stalk short; cavity medium; calyx large, open; basin rather large or medium; flesh yellow, a little coarse, moderately juicy, mild subacid, slightly aromatic; good to very good; core small. September.

KINNAIRD'S CHOICE.

Originated on the farm of the late Michael Kinnaird, of Franklin, Tenn. Tree a thrifty, vigorous grower, not very upright or regular, similar to Winesap; an early and annual bearer, producing heavier crops alternate years.

Kinnaird's Choice.

Fruit medium, oblate, inclining to conic, slightly angular, or obscurely ribbed, sides sometimes unequal; skin yellow, almost covered with dark rich red, many small light dots near the crown, and larger ones and less number near the base; stalk short, small, sometimes by a lip; cavity wide, deep, russeted; calyx closed; basin large, deep, furrowed; flesh yellowish, half fine, crisp, tender, juicy, mild, rich subacid, slightly aromatic; very good; core small. January.

LALLIER'S PROLIFIC RED.

A new variety raised by Eugene Lallier, of Leavenworth, Kansas. Specimens received from Dr. J. Stayman, who writes that the tree is moderately vigorous, forming a round head, unusually productive on rich bottom land, where nearly all others fail, and has shown no symptom of blight or disease of any kind; use, table and market.

Lallier's Prolific Red.

Fruit medium, oblate, slightly conical; skin pale greenish yellow, shaded with rather bright red, more or less faint stripes and splashes of rather dull red over most of the surface, and covered with numerous light dots in the sun and grayish ones in the shade; stalk short; cavity medium to large, sometimes thinly russeted; calyx closed, or nearly so; basin small or medium, slightly corrugated; flesh yellowish, half fine, crisp, tender, juicy, mild, pleasant subacid; very good; core small. October, February.

LAMBERT.

Keasbey's Favorite.

Origin near Salem, N. J., on the premises of John H. Lambert. Tree very vigorous, rather upright, inclining to spread; a good bearer, and keeps well.

Fruit large, roundish, inclining to oblong, slightly conical; skin whitish yellow, nearly covered with pale light red and obscurely striped and splashed with darker red and numerous light dots; stalk very short, small; cavity large, deep, russeted; calyx large, closed; basin large, deep, corrugated; flesh whitish, half fine, rather firm, juicy, pleasant subacid, slightly aromatic; very good; core small. December to February.

LANDSBERGER REINETTE.

Reinette de Landsberg.

Originated with Justrigrath Burchardt, Hanover, Germany. Tree strong, vigorous, spreading, very productive.

Fruit medium to large, oblate, regular; skin smooth, golden yellow, sometimes a shade of light red in the sun, and many light and brown dots; stalk long, slender; cavity medium, russet; calyx closed; basin medium, corrugated; flesh yellowish, fine, crisp, tender, juicy, lively subacid, rather rich; good to very good; core small. November, January.

LELIEUR.

Of foreign origin and a promising variety. Tree vigorous, upright, very productive.

Fruit medium or above, roundish oblate, slightly angular; skin yellow, shaded, splashed, and striped with light and dark red over the en-

Lelieur.

tire surface, and a few scattering light dots; stalk short, slender; cavity large, deep, a little greenish; calyx closed; basin quite large, moderately deep, slightly corrugated; flesh white, fine, tender, juicy, mild subacid; good to very good; core small. November, February.

LONG'S RUSSET.

Originated with the late J. S. Long, of Fairview, Ky., and is considered one of the best late keeping apples for that locality. Tree vigorous, upright, but spreading when in fruit, and makes a large handsome tree; very productive annually; young shoots reddish brown, grayish.

Fruit medium to large, oblate, slightly oblique; skin greenish, nearly covered with rough dull russet; stalk very short; cavity rather broad, deep; calyx open; basin medium, regular; flesh white, green tinge, half fine, moderately juicy, half tender, pleasant subacid; good; core small. March, April.

McAFEE'S NONSUCH.

McAfee.	Wyandotte.	Large Striped Pearmain.
McAfee's Red.	Gray Apple.	Storr's Wine.
Striped Pearmain.	Indian.	Missouri Superior.
Snorter.	Uncle Zeeke.	New Missouri.
Nonsuch.	Winter Pearmain.	Valandingham's Wine.
Zeeke.	Large Striped Winter Pear-	White Crow.
Gray's Keeper.	main.	Ladies' Favorite of some.
Park's Keeper.	Striped Winter Pearmain.	Hubbardston Nonsuch, erroneously.

As this and Striped Winter Pearmain in the second revised edition have proved to be identical, we give a new description with the additional syns. An old variety, which originated in the orchard of George McAfee, near Harodsborg, Mercer County, Ky. We are indebted to Dr. William Howsley, of Leavenworth, Kansas, for its history, origin, etc. Tree very vigorous, forming a round spreading head. It does not come early into bearing, but is very productive when it attains some age. It is considerably grown through the West and South-west under the name of Striped Winter Pearmain, also more or less by the syns. as given above. It is valued in many localities as one of the best of its season; in others of but little value.

Fruit medium to large, roundish oblate, inclining to conic; skin yellow, striped, splashed and marbled with light and dark bright red nearly over the surface, yet showing the yellow ground nearly all through, thickly sprinkled with large and small light dots, some areole; stalk short to long, slender; cavity large, deep, often thinly russeted; calyx small, closed; basin rather small, slightly plaited; flesh yellowish, half fine, crisp, tender, juicy, rich mild subacid, inclining to sweet, slightly aromatic; very good; core medium. October, February.

MANN.

A chance seedling in the orchard of Judge Mooney, of Granby, N. Y. Tree hardy, an upright grower, with rather slender branches, forming a round head; an early and annual bearer, a late keeper, valuable for market and cooking, and a fair table fruit.

Fruit medium to large, roundish oblate, nearly regular; skin deep yellow when fully ripe, often with a shade of brownish red where exposed, and thickly sprinkled with light and gray dots, a few being areole; stalk short, rather small; cavity medium or quite large, sometimes slightly russeted; calyx generally closed; basin rather large, slightly corrugated; flesh yellowish, half fine, half tender, juicy, mild pleasant subacid; good to very good; core medium. January, April.

Mann.

MARQUIS OF LORNE.

Raised from seed of the Gravenstien by William Sutton, of Port

Marquis of Lorne.

Williams, Nova Scotia. Tree very vigorous, making a large spreading

tree, it is rather late coming into bearing, but produces good crops annually when established; valuable for market and culinary uses.

Fruit large to very large, roundish oblate; skin smooth, whitish yellow, shaded, mottled, and a few broken splashes and stripes of light and dark bright red over most of the surface, with a few light and brown dots; stalk short; cavity large, deep, russeted; calyx large, open; basin large, irregular or ribbed; flesh white, rather coarse, breaking, tender, juicy, lively subacid; good to very good; core medium. November.

MASON'S STRANGER.

Mason's Pippin.

Old Field.

Izzard.

A chance seedling found on the farm of Dr. George Mason, Virginia. Tree of vigorous growth, forming a large symmetric head, very productive annually; a popular and favorite apple where it originated; young shoots brownish red.

Mason's Stranger.

Fruit medium, oblate, somewhat depressed; skin light bright yellow, sometimes a shade of light red where exposed to the sun, and a few brownish dots; stalk short, small; cavity large, slight russet; calyx open; basin large, deep, smooth; flesh whitish, fine, rather compact, crisp, juicy, mild subacid, inclining to sweet, somewhat spicy and rich; very good; core small. December, February.

MISSOURI PIPPIN.

Missouri Keeper.

It is said to have originated in the orchard of Brink Hornsby, Johnson County, Mo. Tree hardy, a strong upright, rather spreading grower, an early and abundant annual bearer.

Fruit medium to large, roundish oblate, slightly oblique, somewhat flattened at the ends; skin pale whitish yellow, shaded, striped and

splashed with light and dark red, often quite dark in the sun, having many large and small light and gray dots; stalk short, small; cavity large, deep; calyx closed, or half open; basin rather abrupt, deep, slightly corrugated; flesh whitish, a little coarse, crisp or breaking, moderately juicy, subacid; good; core small. January, April.

MONTÉ BELLO.

Originated with Matthew Gray, Riverside, Monte Bello Township, Ill. Tree rather upright, hardy, healthy, moderately vigorous, an early bearer, very productive annually, a new variety, and A. C. Hammond, from whom specimens were received, writes that he considers it an apple of great promise.

Monte Bello.

Fruit above medium, oblate, regular; skin pale yellow, shaded and mottled with light red, striped and splashed with dark rich red over the whole surface, and a few large light dots; stalk very short, small; cavity large, broad, russeted; calyx small, nearly closed; basin large, deep, smooth; flesh quite white, fine, sometimes a little stained next the skin, very tender, juicy, mild subacid, vinous; very good; core small or medium. September, November.

MORGAN.

Originated with Benjamin Morgan, Gloucester County, N. J., many years since. Tree a healthy moderate grower, not an early bearer, but produces good crops alternate years when the tree attains some age.

Fruit medium, roundish; skin pale greenish yellow, sometimes a shade of pale red in the sun, and many brown dots; stalk short, small; cavity small, often a little russeted; basin rather small, slightly corrugated; flesh white, fine, tender, moderately juicy, pleasant, mild subacid; good; core small. October, January.

OTOE RED STREAK.

Originated with James H. Masters, Nebraska City, Otoe County, Nebraska. Tree an upright spreading grower, forming a round head; an early and abundant bearer annually.

Otoe Red Streak.

Fruit medium, roundish oblate, sides sometimes unequal; skin whitish yellow, nearly covered with light red, many stripes and broken splashes of dark rich red, moderately sprinkled with light and grayish dots; stalk rather short, slender; cavity large, deep, russeted; calyx closed; basin large, deep, very slightly corrugated; flesh quite white, sometimes a little stained next the skin, crisp, tender, juicy, mild, sprightly subacid; good to very good; core small. November, May.

PARRY'S WHITE.

Imperial White. Superior White. White Apple.

Of unknown origin, supposed to be Pennsylvania. Tree vigorous, upright, compact head, a regular bearer, and very productive; use, table, cooking, and market.

Fruit medium or below, roundish oblate, slightly conic; skin smooth, whitish, sometimes a slight tinge of red in the sun; stalk short, small; cavity large, deep; calyx closed; basin rather shallow, a little uneven; flesh fine, white, crisp, very tender, juicy, subacid; good. August.

PERLE D'ANGLETERRE.

Pearl of England.

Of foreign origin. Tree a strong grower, productive.

Fruit medium or below, sides sometimes unequal; skin yellow, thin,

shaded with light red, some rather obscure stripes and splashes, and many brown dots; stalk of medium length, slender; cavity quite large, russeted; calyx large, open; basin large, broad, slightly corrugated; flesh whitish, half fine, half tender, juicy, brisk subacid, rather rich; good to very good; core small. November, December.

PEWAUKEE.

Raised from seed of Duchess of Oldenburg by George P. Pepper, of Pewaukee, Wis., who sends us specimens, and writes that the tree is strong and vigorous, centre upright, very spreading, an annual bearer, and one of the hardiest and best for the Northwest; young shoots dark brownish red.

Fruit medium to large, roundish oblate; skin bright yellow, striped, splashed and mottled with light and dark red over most of the surface, covered with a thin grayish bloom, and many large and small light dots, a few being areole; stalk short, small; cavity small; calyx closed; basin medium, slightly corrugated; flesh white, a little coarse, breaking, half tender, juicy, subacid, slightly aromatic; good; core small. January to May.

PILOT.

An accidental seedling, found on the premises of John Robbins, at the foot of Pilot Mountain, Nelson County, Va. Tree hardy, of mod-

Pilot.

erate growth, forming a round head, rather slow coming into bearing, but when established produces large crops alternate years, and a few the

intervening ones, and is considered a valuable variety in its locality; young shoots reddish brown.

Fruit large, roundish oblate, slightly angular; skin pale yellowish green, shaded, splashed and striped with pale dull red nearly over the surface, and thickly sprinkled with large areole dots; stalk short, small; cavity rather large; calyx half closed; basin large, deep, smooth; flesh yellowish white, fine, rather firm, tender, juicy, rich subacid, slightly aromatic; very good; core small. December, January.

POMME GRISE D'OR.

Swazie Pomme Grise.

An old variety of unknown origin. I am informed it is considerably grown in Canada and some portions of Western New York, and there were trees of it near Niagara on the Colonel Swazie farm—where it probably originated—two feet in diameter. Tree hardy, upright, moderately vigorous, and a good bearer every other year. The fruit is more oblong, more golden in color, and more aromatic than the Pomme Grise, and is considered superior to it.

Pomme Grise d'Or.

Fruit small, oblate, or roundish oblate, conical; skin deep yellow, covered with a thin light cinnamon grayish russet, and many rather obscure light dots; stalk short to long, slender; cavity rather broad, deep; calyx closed; basin quite large, deep, slightly corrugated; flesh whitish, fine, tender, juicy, mild subacid, rich and aromatic; very good or best; core rather small. January to March or April.

PRESH'S WINTER.

Originated at the Forest Nursery of J. S. Downer & Son, of Fairview, Todd County, Ky., who write that the tree is a good grower, up-

right, rather irregular, very productive alternate seasons, and an excellent winter apple; young shoots reddish brown.

Fruit medium to large roundish, slightly conic; skin pale yellow, shaded with dark red in the sun, thinly shaded and rather obscurely and faintly splashed and striped in the shade, moderately sprinkled with light dots; stalk short, small; cavity medium, considerably russeted; calyx open; basin quite large, deep, smooth; flesh yellowish, fine, a little firm, crisp, juicy, pleasant subacid, vinous; very good; core small. December, March.

PRINCETON.

Origin, Massachusetts. Tree a vigorous grower, spreading; a good bearer alternate years.

Fruit medium, oblate, slightly angular; skin pale yellow, shaded, striped and splashed with light and dark red over most of the surface, a few light and gray dots; stalk short, small; cavity medium, smooth, sometimes thinly russeted; calyx closed; basin large, deep, a little uneven; flesh white, fine, tender, juicy, pleasant subacid; good to very good; core medium. October, January.

RELiance.

Origin, Berlin, Wis.; received from G. N. Smith, who writes that it is valuable for that locality for its hardiness, vigor, and productiveness.

Fruit conical, or oblong conical, slightly ribbed, or with broad shallow furrows; skin pale light yellow with broken stripes and shades of deep red where fully exposed; stalk short; cavity deep, open, slight greenish russet; calyx nearly closed; basin deep, broad, open, with many small sharp furrows; flesh white, half fine, tender, moderately juicy, mild subacid; good to very good; core rather open at centre. January to March.—(*Rural New-Yorker*.)

RIPLEY.

Ripley's Claret.

This is said to have been raised by N. L. Ripley, of Collinsville, Madison County, Ill. Tree said to be thrifty, well shaped and tolerably productive.

Fruit medium to large, oblate, somewhat conical, sides unequal; skin smooth and shining, greenish ground, nearly covered with a brilliant crimson and marked with numerous white dots: stem medium length, slender; calyx large, closed; flesh white, firm, moderately juicy, subacid; very good; core rather small and closed. September. (W. C. Flagg, in *Journal of Horticulture*.)

ROCHESTER PIPPIN.

A hybrid raised by Jacob Moore, of Rochester, N. Y., and judging from the specimens received, being of large size and excellent quality, is a very promising winter variety.

Fruit large, roundish oblate, nearly regular; skin smooth, pale greenish yellow, shaded with light brownish red in the sun, and a few

greenish dots; stalk short, small; cavity large, smooth, a little greenish; calyx closed; basin medium or rather large, smooth; flesh whitish, fine, crisp, tender, juicy, vinous refreshing flavor, slightly aromatic and rich; very good or best; core small. January, March.

Rochester Pippin.

ROSE-BUD.

Origin unknown, supposed to be New Castle County, Del. Tree a strong, vigorous grower, forming a round, rather spreading top, very productive; fruit hangs firmly to the tree, keeps well, and is useful for the table and kitchen.

Fruit medium, roundish oblate, slightly angular; skin yellowish, shaded and rather obscurely splashed and striped with light and dark red nearly over the surface, and moderately sprinkled with quite large light dots; stalk of medium length, slender; cavity rather large, often slightly russeted; calyx closed; basin broad, moderately deep; flesh whitish yellow, half fine, breaking, juicy, mild subacid; good; core small. December, March.

ROSE BEE.

Originated with John Rose, London, Mercer County, Pa. Tree vigorous, upright, a good bearer alternate years, and some the intervening ones.

Fruit medium, roundish oblate, inclining to conic, slightly angular; skin pale whitish yellow, shaded with light red, striped and splashed with dark red, sometimes almost purplish, and a few light dots; stalk short, rather stout; cavity rather small, often russeted; calyx closed;

basin small, slightly corrugated; flesh quite white, sometimes a little stained next the skin, half fine, tender, moderately juicy, brisk subacid; good; core medium. October, January.

ROSE RED.

Of unknown origin, supposed to be on the farm formerly owned by Gideon Ramsdell, Egypt, Monroe County, N. Y. Tree a thrifty, strong grower, upright, inclining to spread; very productive and regular bearer.

Rose Red.

Fruit medium, oblate, or roundish oblate; skin whitish, shaded, striped and splashed with light and dark red, sometimes quite dark, nearly over the whole surface, many light dots, a portion being areole; stalk short, small; cavity large, deep, smooth, a little greenish; calyx half closed; basin large, deep; flesh yellowish, fine, very tender, juicy, vinous, lively subacid; very good; core small. Middle of September and November.

SEAGER.

The original tree grows on land owned by the Indians near Lumberville, Bucks County, Pa. Tree vigorous, upright, productive; young shoots dark brown, buds large, long, prominent.

Fruit medium, oblate, inclining to conic, slightly angular; skin pale yellow, shaded, striped and splashed with light and dark rich red, some of the splashes quite broad and broken, and a few light dots; stalk rather long, slender, curved; cavity large, deep; calyx closed; basin medium, corrugated; flesh white, tender, juicy, rather rich, mild sub-

acid; good to very good; core rather small. Last of August and September.

SCHUYLER'S SWEET.

Originated on the farm of Rensselaer Schuyler, Seneca Falls, N. Y. Tree vigorous, spreading, open head, a regular bearer, and productive.

Fruit large, roundish or roundish oblate, slightly conic, slightly angular; skin pale yellow, a few scattering brown dots; stalk rather short, slender; cavity large, deep; calyx closed; basin large, deep, slightly corrugated; flesh white, half fine, tender, moderately juicy, mild, pleasant sweet, slightly aromatic; good to very good; core small. September, October.

SCRIBNER SPITZENBURGH.

Originated on the farm of Elijah Scribner, Plattsburgh, N. Y. Tree vigorous, spreading, very productive alternate years.

Fruit medium, roundish conical, angular; skin pale yellow, shaded with bright deep red in the sun, sometimes obscure stripes and splashes and pretty thickly sprinkled with light dots; stalk short, moderately stout; cavity rather narrow, deep; calyx half closed; basin medium, furrowed; flesh whitish yellow, half fine, crisp, tender, juicy, subacid, slightly aromatic; good to very good; core small. December, February

SHERMAN'S FAVORITE.

Sherman's Sweet.

Originated on the farm now owned by E. C. Sherman, of Wyoming, N. Y. Tree vigorous, rather spreading, very productive alternate years.

Fruit medium or above, oblate, angular or slightly ribbed; skin greenish yellow, sometimes brownish red in the sun, moderately sprinkled with light and gray dots; stalk rather long, slender; cavity broad, not very deep, a little greenish; calyx closed; basin broad, rather deep; flesh a little coarse, half tender, crisp, juicy, mild, rather rich sweet; good to very good; core medium. November, January.

SILLIX.

Originated on the farm of Thomas Sillix, Manellan Township, Pa. Tree moderately vigorous, upright, somewhat spreading, not an early bearer, but very productive alternate years when the tree has attained some age.

Fruit below medium, roundish, regular; skin pale yellow, shaded with light and dark rich red over half or more of the surface, obscurely splashed and striped, and covered with numerous small light and gray dots; stalk short, small; cavity small, smooth; calyx half closed; basin medium, slightly corrugated; flesh yellow, fine, compact, moderately juicy, mild subacid, almost sweet, quite rich; very good; core small. December, March.

SOMERSET.

Of uncertain origin; supposed to have originated in the town of Somerset, N. Y. Tree vigorous, spreading; an annual bearer, but

Somerset.

heavier crops every other year; a rich, high-flavored apple, desirable for family use.

Fruit below medium, roundish conical, much narrowed towards the calyx; skin whitish yellow, some nettings and patches of russet, and a few brown dots; stalk of medium length, slender; cavity medium; calyx closed; basin small, corrugated; flesh quite white, fine, very tender, juicy, rich, highly aromatic; very good or best; core medium, October.

SOULARD.

Raised by Antoine Lessieur, of Portage des Sioux, a few miles above St. Louis, Mo. Tree very vigorous, upright, slightly spreading when in fruit; an early and abundant bearer. This is highly prized in the neighborhood of its origin.

Fruit medium to large, oblate, slightly conic, slightly angular, or obscurely ribbed; skin whitish, shaded, striped and splashed with light and dark bright red over most of the surface, with a few light and brown dots; stalk short, small; cavity quite large, slight russet; basin medium, corrugated; flesh quite white, very tender, very juicy, sprightly subacid, vinous; very good; core rather large. October, November.

STARR.

This large early apple was an accidental seedling on the premises of the late John Starr, of Woodbury, N. J. The tree is said to be a

vigorous grower, forming a round, somewhat spreading head; branches rather slender; a regular and abundant bearer; valuable as an early

Soulard.

market sort, and for culinary uses; young wood light reddish yellow brown, buds prominent.

Starr.

Fruit large, roundish oblate, obscurely ribbed; skin greenish white, or pale yellow at full maturity, sometimes a shade of light red in the sun,

moderately sprinkled with light and gray dots; stalk short; cavity large, deep; calyx closed; basin of medium size, slightly corrugated; flesh whitish, half fine, crisp, tender, juicy, sprightly subacid; good to very good; core medium; ripens from the middle of July to the middle of September.

STAYMAN'S SUMMER.

Originated on the grounds of Dr. J. Stayman, Leavenworth, Kansas. Tree hardy, vigorous, spreading, irregular, tough, wiry, droops like a weeping willow with ropes of fruit, never breaking a limb; an early bearer and very productive, very nearly equal to Benoni and Summer Pearmain, and handsomer.

Fruit medium, round, regular, approaching conic; skin smooth, greenish yellow, splashed and striped with red and purple, covered with a white bloom; dots small, gray, scattered; stem medium, rather slender; cavity narrow, deep, irregular, russeted; eye very small, closed; basin narrow, shallow, furrowed; core small, slightly open; flesh greenish white, very juicy, brittle, sprightly, high flavored, mild acid; very good; use, kitchen, table, and market. August, September.—(*Western Pomologist*.)

STRIBLING.

Originated with the late William Stribling, Medon, Tenn. Tree a good grower, rather upright, forming a regular round head; an early annual and abundant bearer; young shoots reddish brown.

Stribling.

Fruit medium, oblate, slightly angular; skin whitish, nearly covered with stripes and splashes of light and dark rich red—some of the

splashes almost purplish with rather conspicuous yellow dots; stalk short, small; cavity medium; calyx half open; basin rather small, slightly corrugated; flesh white, tender, moderately juicy, mild pleasant subacid; good to very good. July at the South.

STRIPED SWEET PIPPIN.

Striped Pippin.

An old variety of unknown origin, and was given as a syn. in former editions of this work to Striped Winter Pearmain, but has proved distinct. Tree vigorous, forming a round, rather low head; an early and abundant bearer, but more heavily alternate years; valuable for table or market; young shoots olive brown, slightly downy at the end.

Striped Sweet Pippin.

Fruit rather large, roundish oblate, slightly angular; skin bright yellow, shaded with dark rich red in the sun, striped, splashed and mottled with lighter red on the shaded side, and many light and gray dots; stalk short, small; cavity rather large, deep; calyx closed; basin quite deep, rather abrupt, a little uneven; flesh white, fine, tender, juicy, mild, pleasant rich-sweet, or very mild subacid; very good; core rather large. November, February.

SUMMER KING.

King.
Puckett's Summer.

Puckett.

Cheese.
Summer Cheese.

An old variety supposed to have originated in North Carolina, and has been cultivated in Warren and Todd Counties, Ky., for many years,

where it is highly prized as one of their best and handsomest apples of its season. Tree upright, moderate grower, and productive alternate years: young shoots reddish brown, grayish.

Fruit medium to large, roundish oblate; skin yellowish green, striped with crimson, red and orange; stalk short; cavity large, deep, russeted; calyx closed; basin medium, regular; flesh whitish, yellow, fine, brittle, juicy, mild agreeable subacid flavor; core small. August, September.— (*Western Gardener.*)

SUMMER SPITZENBURGH.

French Spitzenburgh.

Originated with Woolsey Ostrander, Plattekill, N. Y. Tree moderately vigorous, forming a round head; an early and abundant bearer annually.

Fruit medium, roundish conical, slightly angular; skin whitish, almost entirely covered with two shades of red in stripes and splashes,

Summer Spitzenburgh.

some of which are quite dark, and covered with a thin bloom; stalk short; cavity medium, sometimes slightly russeted; calyx closed; basin medium, slightly corrugated; flesh yellowish white, half tender, moderately juicy, subacid, and a little aromatic; good to very good. August, September.

TUTTLE.

Originated on the farm of Lyman Tuttle, Hamden, Conn. Tree upright, vigorous, an early and abundant bearer every other year of fair

fruit, and valued in its locality for market and family use; young shoots dark brown, many light grayish dots.

Fruit medium, roundish oblate conic, sides sometimes unequal; skin pale yellow, shaded, striped and splashed with light and dark red, nearly covering the fruit, and moderately sprinkled with light russet and gray dots; stalk medium, slender; cavity large, russeted, sometimes extending in rays on the base; calyx closed; basin small, slightly corrugated; flesh whitish, fine, tender, juicy, mild pleasant subacid; very good; core medium. December, March.

WEALTHY.

A new variety, raised by Peter M. Gideon, of Excelsior, near St. Paul, Minn. So far the tree has proved hardy, healthy, vigorous, spreading, very productive; a beautiful and excellent fruit.

Fruit medium, oblate, or roundish oblate; skin smooth, whitish yellow, shaded with deep rich red in the sun, obscure broken stripes,

Wealthy.

splashes and mottlings in the shade, sometimes entirely covered with crimson, and many light dots; stalk short to medium, slender; cavity large, green russet; calyx partially closed; basin deep, abrupt, uneven; flesh white, fine, sometimes stained with red, tender, juicy, vinous, lively subacid; very good; core small. December, February.

WESTERN BEAUTY.

Musgrove's Cooper.

Big Rambo.

Ohio Beauty.

Origin unknown. William T. English, of Rhinehart, O., seems to have brought it into notice, and furnished us specimens. Tree very

vigorous, making a large, spreading, open head; an early and good bearer.

Fruit large to very large, roundish oblate, regular; skin pale yellow, shaded with bright red in the sun, some rather obscure splashes and stripes of light red in the shade, thickly sprinkled with large light and gray dots, the light ones being areole; stalk of medium length, slender; cavity large, sometimes light russet; calyx large, closed; basin large, broad, slightly corrugated; flesh whitish yellow, coarse, crisp, tender, juicy, mild subacid; good to very good; core rather small. October, February.

WHITESCARVER.

Originated with R. A. Whitescarver, of Laurel Mills, Va., who informs me that the tree is vigorous, rather spreading or round head, an early and good bearer annually, but more so alternate years.

Fruit medium, roundish oblate; skin pale yellowish green, a few light dots, a portion being areole; stalk short; cavity narrow; calyx small; basin broad, moderately deep; flesh yellowish white, half fine, crisp, tender, juicy, pleasant subacid; very good; core large, open. November, December.

YORK STRIPE.

Origin York County, Pa. Tree moderately vigorous, spreading, an early bearer, and very productive alternate years.

Fruit rather large, roundish, slightly conic, slightly angular; skin pale whitish yellow, shaded and rather thinly striped and splashed with light bright red over the whole surface, but quite faintly on the side least exposed to the sun; stalk short, small; cavity large, deep, a little greenish; calyx open or half closed; basin large, deep, slightly corrugated; flesh white, rather coarse, breaking, moderately juicy, mild subacid; good; core small. January, February.

SIBERIAN CRABS AND IMPROVED SIBERIAN APPLES.

BAILEY'S CRIMSON CRAB.

Raised by William H. Bailey, of Plattsburgh, N. Y. Tree vigorous, upright; very productive.

Fruit large for a Siberian, roundish, very slightly conic; skin yellow, shaded over the whole surface with deep rich crimson, almost purplish in the sun, and covered with a light bloom; stalk short to long, slender, in a medium or small cavity; basin rather shallow, corrugated; flesh yellow, juicy, subacid and astringent. September.

BRIER'S SWEET CRAB.

Originated with B. B. Brier, of Baraboo, Wis. Is the result of a fertilization of the Siberian Crab with the Bailey apple. Tree perfectly hardy, vigorous and productive.

Fruit as large as the Transcendent; shaped like the Bailey Sweet; color pale yellow, beautifully pencilled and splashed with carmine; flesh yellowish, crisp, juicy, very sweet and rich; quality best for dessert or preserves. (A. G. Tuttle, Manuscript.)

LADY ELGIN.

Geneva.

Marengo Siberian, No. 4.

This beautiful new Siberian apple originated on the farm of James Forbes, of Ridott Township, Ill. Tree hardy, vigorous, upright, slender branches, very productive, a pleasant dessert fruit, and said to be excellent for canning; the slight acid or vinous flavor being preferred by some to the rich sweet of the peach.

Fruit large for a Siberian, roundish oblate, regular; skin smooth, whitish yellow, nearly covered with bright rich red, a few light and gray dots; stalk medium, slender; cavity small; calyx closed; basin shallow, corrugated; flesh white, fine, tender, juicy, mild subacid, slightly vinous; very good. September, December.

MACKIE'S BEAUTY SIBERIAN.

Originated with Matthew Mackie, Clyde, N. Y. Tree vigorous; very productive.

Fruit large of its class, roundish oblate; skin whitish, nearly covered with deep rich red, a light grayish bloom, and a few light dots; stalk rather long, slender; cavity quite large; calyx closed; basin broad, rather shallow, corrugated; flesh white, crisp, tender, moderately juicy, subacid, a little astringent. September.

SYLVAN SWEET CRAB.

Raised by Mrs. C. P. Alling, Sylvan, Richland County, Wis., from seed of Siberian Crab, and A. L. Hatch, of that town, describes the tree as vigorous, handsome, and suited to a northern latitude; he says the flesh is tender, juicy, and sweet, and thinks it would make good cider.

Fruit large, two inches or more in diameter, roundish oblate; skin smooth, light yellow, nearly covered with bright red; stalk long, slender; cavity medium; basin rather small; flesh yellowish, tender, juicy, mild, pleasant sweet; core rather large; ripens last of August and first of September. (*Pomologist and Gardener.*)

VAN WYCK'S SIBERIAN.

A chance seedling on the farm of Miss Caroline Van Wyck, Fishkill, Dutchess County, N. Y. Tree vigorous, upright, productive.

Fruit large for a Siberian, roundish, slightly conic; skin smooth, whitish, shaded and mottled with light bright red, and covered with a thin bloom; stalk rather long, slender; cavity rather narrow, deep; calyx closed; basin medium, smooth; flesh whitish, fine, rather firm, moderately juicy, rather rich, honeyed sweet; good; core small and close. September.

SECOND APPENDIX

TO

SECOND REVISED EDITION.

The publishers of Downing's Fruit and Fruit-Trees have requested me to give them a short Appendix containing some of the new fruits, with the additional synonyms, corrections, etc. Further corrections, with a more complete list of new fruits, must await a complete revision of the whole work; and this I hope to be able to accomplish if my life and health are spared, at a future day.

I again thank the many Pomologists and Fruit Growers in various parts of the country for information and specimens of fruit relating to many of the varieties in this Appendix; their names will be duly acknowledged when the third revision of the work is issued.

CHARLES DOWNING.

NEWBURGH, March, 1876.

THE APPLE.

AMSTERDAM SWEET.

High Top Sweet, incorrectly.

ORIGIN, Amsterdam, N. Y., on the farm of Joseph Britten. Tree hardy; a vigorous, stout, upright grower; an early and moderate bearer annually.

Fruit medium, roundish oblate, a little flattened at the ends; skin pale greenish yellow, striped and splashed with light and dark bright red; stalk short, small; cavity medium; basin large, deep, slightly plaited; flesh white, half fine, tender, juicy, rather rich sweet, slightly aromatic; core medium. October, November.

ANNETTE.

Annate.

Old Bettie.

Bettie Brooks.

Of unknown origin, received from John Dollins, Greenwood, Virginia, who informs us that it was found in that locality in the late Nicholas Merritt's orchard a half a century ago; tree vigorous, with an upright, round, compact head, requiring but little pruning—one of the most valuable of its season for its locality.

Fruit medium, oblate, sides sometimes unequal, slightly angular; skin pale greenish yellow, rarely with a blush; stalk very short, small; cavity large, deep, slight russet; basin, broad, deep, a little uneven; flesh white, half fine, brittle, tender, moderately juicy, mild, pleasant, subacid. September, October.

ARNOLD'S BEAUTY.

This fine new apple was raised from seed of the Northern Spy, crossed with the Wagener and Spitzenberg, by Charles Arnold, of Paris.

Ontario. Mr. Arnold states that the tree is hardy, an excellent upright grower, forming naturally a symmetric head, and bearing abundantly.

Fruit medium, oblate, slightly angular; skin bright yellow, occasionally a shade of bright red, and a few brown dots; stalk medium, slender; cavity large, deep, sometimes slight russet; calyx closed; basin, deep, round, slightly plaited; flesh pale yellow, fine, rather firm, juicy, rich subacid, and slightly aromatic; core small. January, May.

BAPTIST.

Origin, Clinton, Kentucky, but by whom is not known; tree vigorous, spreading, and an abundant bearer alternate years; not a good market variety, but valuable as a table, and family apple.

Fruit medium, oblate, somewhat depressed; sides sometimes unequal; skin yellow, entirely covered with dark red, a few faint splashes on the shaded side, and many yellowish and brown dots; stalk very short, rather stout; cavity broad, deep, russeted; calyx half open; basin large, broad, deep, slightly wrinkled; flesh whitish, half fine, tender, moderately juicy, very mild subacid, inclining to sweet; core small. December, February.

BERGEN.

Origin, on the farm of Jessie Griswold, Bergen, N. Y.; tree hardy, vigorous, with an open spreading head, requiring but little pruning; a full bearer alternate years, and a light crop the intervening ones; a good table apple, but more valued for culinary uses.

Fruit medium, roundish; a little angular; skin greenish white, shaded, splashed and marbled with light and dark red over half the surface; stalk short, slender; cavity small; calyx small, closed; basin rather small, corrugated; flesh white, fine, tender, juicy, mild subacid, slightly aromatic; core medium. January, February.

BERKSHIRE SPY.

A new variety, raised by Asahel Foote, of Williamstown, Mass., from seed of Northern Spy; tree of moderate vigor, spreading, wood of great solidity; a moderate annual bearer. Mr. Foote has raised several promising apples, pears and plums which are worthy of trial.

Fruit medium, roundish conical, sides sometimes unequal; skin pale yellow, shaded on one side with light bright red, sometimes a few rather obscure stripes and splashes of a darker hue, and a few light dots; stalk short, small; cavity medium, greenish russet; calyx open with short and divided segments; basin medium, slightly corrugated; flesh whitish yellow, fine, tender, juicy, sprightly subacid, slightly aromatic and rich; core small. December, February.

BLACK'S ANNETTE.

Cornell's Early.

Cornell's Favorite.

Of unknown origin, supposed to be Virginia; tree vigorous, spreading, very productive alternate years.

Fruit medium or below, roundish oblate conical; skin whitish yellow; stalk short to long, slender; cavity large, deep; calyx small, closed; basin rather small, slightly corrugated; flesh white, fine, tender, moderately juicy, sprightly subacid; core small. August.

BLACK HAWK.

Originated in the orchard of William Brooks, Rock Island, Illinois; tree moderately vigorous, with a round rather spreading head; blooms late; an annual bearer of good crops, some seasons very large ones; valuable as a late keeper.

Fruit rather large, oblate; skin greenish yellow, nearly covered with dull red or purplish red in the sun, a few rather obscure stripes and splashes, and a few light dots; flesh whitish, rather coarse, firm, moderately juicy, mild subacid; core small. January, April.

BLUE SPITZENBURG.

Improved Red Spitzenberg.

Origin, Oley Township, Pa.; tree moderately vigorous, making a round head; not an early bearer, but produces good crops alternate years when a little advanced.

Fruit medium or above, roundish oblate, slightly conic, sometimes a little oblique; skin pale whitish yellow, nearly covered with light and dark red, sometimes a few rather obscure stripes and splashes, and many large and small light dots; stalk short, small; cavity medium, slight russet; calyx closed or nearly so; basin medium, corrugated; flesh whitish yellow, half fine, tender, moderately juicy, mild subacid, slightly aromatic; core medium. January, March.

BOWER'S NONPAREIL.

Big Sweet.

Big Green.

Origin supposed to be Harrisonburg, Virginia; tree vigorous, upright, somewhat spreading; an early and good bearer annually, but larger crops alternate years; a large fruit, and highly valued where known.

Fruit large, oblate, regular; skin pale yellow, often a shade of red and numerous russet and brown dots; stalk short, small; cavity rather large, sometimes slight russet; calyx closed; basin large, deep, corru-

gated; flesh white, half fine, tender, juicy, very mild subacid, or almost sweet, slightly aromatic; core small. October, March.

Bower's Nonpareil.

BRILLIANT.

Originated with Lindsay F. Thomas, near Portsmouth, Ohio; tree vigorous, rather spreading; an early and good bearer annually; much esteemed in the neighborhood of its origin.

Fruit medium to large, oblate, slightly angular, sometimes a little oblique; skin pale yellow, somewhat waxy, a shade of pale red where exposed, and a few grayish dots; stalk short, rather small; cavity large, deep, often slightly russeted; calyx large, open; basin large, broad, deep, slightly corrugated; flesh white, a little coarse, tender, juicy, pleasant subacid; core small. October, January.

BROADWATER.

Wheatyard.

Origin, on the farm of Col. Charles Broadwater, near Vienna, Virginia; tree healthy, vigorous; an early and good bearer; a favorite for the table and market in its season where it originated.

Fruit below medium, oblate; skin smooth, pale yellowish white, pale red in the sun; stalk short, small; cavity medium, slightly corrugated; flesh whitish, fine, tender, juicy, mild rich subacid; core small. September.

BUCKS COUNTY.

Originated on the farm of Thomas Head, Yardleyville, Pa.; tree vigorous; long slender branches, spreading head; an annual bearer of good crops, some seasons large crops.

Fruit medium, roundish oblate, or nearly so; skin greenish yellow, shaded, and rather obscurely striped and splashed with dull red; stalk short; cavity small; calyx closed; basin medium, corrugated; flesh whitish, half fine, half firm, moderately juicy, mild subacid; core small. January, May.

BURLINGTON PIPPIN.

Town House.

Origin unknown, supposed to be Burlington, Vermont; tree hardy, vigorous, forming a round rather spreading head; a good bearer annually of fair fruit of uniform size and excellent quality.

Burlington Pippin.

Fruit medium or above, oblate, slightly conic, slightly angular; skin pale whitish yellow, shaded and mottled with light red, with stripes and broken splashes of dark red, and a few light and grayish dots; stalk medium, slender; cavity broad, deep, slight russet; calyx closed; basin medium, slightly plaited; flesh quite white, sometimes a little stained next the skin, half fine, tender, juicy, pleasant mild subacid, and a little vinous; core medium. October, January.

CHILDS.

Raised by the late Ezekiel Page, Belgrade, Maine; tree vigorous, spreading, and very symetric in form; a good bearer annually.

Fruit medium, oblate to roundish oblate; skin whitish, shaded, striped and splashed with light and dark red over most of the surface; stalk short, small; cavity rather large; calyx open; basin broad, not very deep, slightly corrugated; flesh white, fine; half tender, juicy, sprightly subacid; core medium. December, January.

CLARK'S PROLIFIC.

Raised by W. G. Clark, Albia, Iowa; tree hardy, vigorous; an early and abundant bearer, and is highly esteemed in the neighborhood of its origin.

Fruit medium to large, oblate conic, slightly angular; skin pale whitish yellow, a shade of light red, a few gray and many indistinct light dots; stalk short, small; cavity broad, deep, uneven, sometimes slight russet; calyx small, closed; basin rather small, slightly furrowed; flesh white, fine, very tender, juicy, lively subacid, slightly aromatic; core small. November, February.

CLERMONT.

Jackson's Roman Stem.

Cheese Apple.

The Clermont is said to be a seedling raised by Samuel Medary, near Batavia, Ohio. Tree a moderate grower, an early and good bearer, and a late keeper.

Fruit medium oblate, depressed, sides sometimes unequal; skin yellow, deep orange yellow in the sun, sometimes a shade of bright red, and sometimes nettings of russet, and a few gray dots; stalk very short; cavity rather large, russeted, which sometimes extends out on the fruit; calyx closed; basin rather large, slightly corrugated; flesh yellow, half fine, quite firm, moderately juicy, rich subacid; core close and small. January, May.

CROSS.

Originated with Robert Cross of Fair Play, Maryland; tree vigorous, making a large spreading head; an early bearer, producing large crops alternate years, and a light one the intervening ones; its large size and fine appearance renders it one of the most valuable of its season for market and culinary uses.

Fruit large to very large, roundish oblate, nearly regular; skin whitish, or greenish white, rather thinly striped, splashed and mottled with light and dark red, and a few light and grayish dots; stalk very short; cavity large, deep; basin large, deep, broad, slightly plaited; flesh white, half fine, tender, juicy, mild subacid; core small. Middle of August to middle of September.

DALE'S SEEDLING.

Origin, farm of Christian Dale, near Boalsburg, Pa. ; tree of upright moderate growth ; great bearer alternate years, and valuable for making apple butter.

Fruit medium, roundish oblate conic, sides often unequal ; skin white, shaded, striped and splashed with light and dark rich red, and many whitish dots ; stalk short, small ; cavity medium ; calyx closed ; basin rather small, slightly corrugated ; flesh white, fine, tender, mild subacid, or almost sweet ; core small. September, October.

DEANE.

Nine Ounce.

Origin unknown, supposed to be East Wilton, Maine, where it is considered the best apple of its season ; tree vigorous, spreading, bearing abundantly alternate years, and a light crop the intervening ones.

Fruit medium, oblate to roundish oblate conic, angular, slightly oblique, and flattened at the base ; skin whitish, shaded and rather obscurely splashed and mottled with light red, and moderately sprinkled with yellowish dots, a few being areole ; stalk short, small ; cavity rather large, a little greenish ; calyx closed ; basin medium, slightly corrugated ; flesh quite white, fine, tender, juicy, sprightly subacid or vinous ; core medium. September, October.

EDGAR RED STREAK.

Walbridge.

Origin, in the orchard of Joseph Curtis, Paris, Edgar County, Illinois; this apple has been grown in the West and Northwest for many years under the name of Walbridge, its true name being unknown until lately;

Edgar Red Streak.

tree very hardy, vigorous, upright at first, but spreading with age and weight of fruit; very productive alternate years, and a light crop the intervening ones; not of the best quality, but valuable for its hardiness, productiveness, and late keeping in a cold climate.

Fruit medium, oblate, very slightly conic, regular; skin pale whitish yellow when fully mature, shaded with pale red in the sun, narrow stripes and a few splashes of bright red over most of the surface where fully exposed; stalk rather short, small; cavity medium, sometimes slight russet; calyx small, closed; basin small; slightly plaited; flesh white, fine, crisp, tender, juicy, mild subacid; core small or medium. January, May.

ELLA.

Another of Charles Arnold's seedlings, raised from seed of Northern Spy, crossed with Wagener and Spitzenburg; tree moderately vigorous, spreading, young wood dark brown; bears heavy crops alternate years.

Fruit medium, roundish oblate conic, sides sometimes a little unequal; skin pale yellow, nearly covered with light and dark dull red, some rather obscure stripes and splashes, and a few light dots; stalk short, small; cavity rather large, deep, slight russet; calyx small, closed; basin medium, slightly plaited; flesh whitish, with a greenish tinge, half fine, tender, juicy, with an agreeable aromatic flavor, inclining to sweet; core rather small. December, February.

ETOWAH.

Cooper's Red.

Origin, in the garden of Major M. A. Cooper, Glen Holly, Georgia; tree healthy, moderately vigorous; upright, compact, rather round head; bearing abundantly nearly every year; it is esteemed in the neighborhood of its origin as one of their best late-keeping apples.

Fruit nearly of medium size, oblate conic, slightly oblique; skin pale yellow, almost entirely covered with bright red, some obscure stripes and splashed, a few large light dots, areole; stalk very short, small; cavity large, deep, sometimes slight russet; calyx half open; basin large, very deep; flesh whitish, half fine, tender, moderately juicy, mild pleasant subacid, inclining to sweet; core small. January, March.

FENTON.

Origin, Cheltenham Township, Pa., on the grounds of Samuel Fenton; tree thrifty, spreading; an abundant bearer alternate years, and valued in its locality for the table and cooking.

Fruit rather large, oblate, angular; skin pale whitish yellow, shaded, striped and splashed on the sunny side with light and dark red; flesh white, a little firm, moderately juicy, pleasant subacid; core small. October, November.

FLETCHER RUSSET.

Origin, on the farm of James Fletcher, Acton, Mass.; tree thrifty, upright, with a round rather spreading head; a good bearer alternate years, and much prized as a table apple where known.

Fruit medium, oblate conic; skin greenish yellow, or pale yellow when fully ripe, nearly covered with dull russet, often mixed with brownish red in the sun; stalk short, slender; cavity medium; calyx closed; basin medium, slightly corrugated; flesh whitish, fine, tender, juicy, pleasant subacid and quite rich; core rather small. December, February.

FOOTE'S NONSUCH.

This fine new apple was raised by Asahel Foote, of Williamstown, Mass., from seed of Red Canada or Nonsuch. Mr. Foote writes that the tree is hardy, vigorous, upright, with bright reddish wood, remarkably productive alternate years, and keeps well.

Fruit medium, oblate, regular; skin very nearly covered with dark rich red, and many conspicuous light dots, a few being areola; stalk rather short, slender; cavity rather large, often thinly russeted; calyx small, closed; basin medium, slightly plaited; flesh white, sometimes a little stained next the skin, fine, tender, juicy, mild, rich subacid, slightly aromatic; core small and close. January, April.

FOUNTAIN HILL.

Raised by Suel Foster, Muscatine, Iowa, which he values as a good table apple, and for continuing long in use; tree vigorous, rather spreading; an early and good bearer, evenly through the tree.

Fruit medium or below oblate, regular; skin pale green, shaded, striped and splashed, with dull red nearly over the surface, and many light dots; stalk very short; cavity medium; calyx closed or nearly so. basin large; flesh whitish, fine, crisp, tender, juicy, mild subacid; core small. September, November.

FOX APPLE.

Sheepnose.

Fox Sheepnose.

Originated with Eli Fox, near Coshocton, Ohio; tree strong, vigorous, upright, rather spreading; an abundant bearer, and is esteemed as an amateur fruit.

Fruit medium to large, oblate to roundish oblate, slightly conical, angular, or slightly ribbed; skin whitish, nearly covered with light and dark red, striped and splashed rather obscurely with a darker hue, and many light dots; flesh white, a little coarse, tender, juicy, pleasant subacid, slightly aromatic and rich; core rather large. October, November.

GOFF.

Originated with J. S. Goff, near Bellefontaine, Ohio; tree hardy, vigorous, spreading; an abundant bearer alternate years of fair fruit of uniform size, and valuable as a market and cooking apple.

Fruit medium to large, oblate; skin whitish, a few light and gray dots; stalk short, small; cavity rather large; basin large, deep, slightly corrugated; flesh white, half fine, tender, brisk subacid; core medium. Ripe the last of August and first of September.

GOLDEN DIXIE.

Originated on the farm of James Fitz, township of Rivanna, Virginia; tree thrifty, vigorous, upright, forming a handsome pyramidal head, requiring but little pruning; an early and abundant bearer alternate years, and much esteemed in its locality.

Fruit medium, oblate to roundish oblate, slightly conic; skin light yellow, deep yellow where exposed; stalk short, small; cavity medium, often slight russet; calyx small, closed; basin medium, slightly corrugated; flesh whitish yellow, half fine, rather firm, crisp, juicy, lively rich subacid, slightly aromatic; core small. August.

HARPER.

Of unknown origin, supposed to be Tennessee; tree vigorous, round head; bears moderate crops annually, and popular where known.

Fruit medium to large, oblate, slightly conic; skin whitish yellow,

shaded, striped and splashed with light and dark bright red nearly over the whole surface, with many large and small light dots, a portion being areola; stalk rather short, slender; cavity large, deep, yellowish; basin rather large, slightly wrinkled; flesh whitish, half fine, tender, juicy, mild, pleasant subacid; core small. October, January.

HAVEN.

An old variety of unknown origin, but supposed to have been imported by the Haven family of Portsmouth, New Hampshire, many years since; tree vigorous, rather spreading; not an early bearer, but bearing abundantly alternate years when established; fruit fair of uniform size, which is highly esteemed where known for its excellent quality; the tree requires good cultivation.

Fruit medium, oblate conic, slightly angular; skin smooth, whitish yellow, often a shade of pale red on the sunny side, and a few grayish dots; stalk short, small; cavity large, deep; calyx closed; basin rather large, slightly corrugated; flesh whitish yellow, fine, very tender, juicy, rich, sprightly pleasant subacid; core small. January, March.

HOTTENSTIEN.

Libert.

Lippart.

Origin, Kutztown, Pa., on the lands of Frederick Libert; tree vigorous, spreading; an abundant bearer annually; valuable for culinary uses and for market.

Fruit large, roundish oblate, slightly angular; skin greenish yellow, covered with stripes and splashes of light and dark red, moderately sprinkled with large light dots, a portion being areole; stalk short, small; cavity medium; calyx closed; basin rather shallow, corrugated; flesh whitish, half fine, tender, juicy, mild subacid. October, December.

HUNT RUSSET APPLE.

This favorite old apple is claimed, by those knowing it best, to have originated with the Hunt family, at Concord, Mass., nearly 200 years since; and, being of excellent quality, has been cultivated and disseminated widely under different names; and I am satisfied, from experience and examination, that Golden Russet of Mass., Fay's Russet, and Russet Pearmain are identical with the Hunt Russet, and that the latter is the original name, with the synonyms as stated below.

HUNT RUSSET.

Golden Russet (not of N. Y.)	New England Russet.	Fay's Russet.
Golden Russet of Mass.	New England Golden Russet.	Russet Pearmain.
Mass. Golden Russet.	Bullock's Pippin, or	American Golden Russet
Golden Russet of New England.	Sheepnose.	of New England.
	Incorrectly.	

There is said to be a distinct Russet Pearmain; but those that I re-

ceived as such from Connecticut, many years since, proved to be the Hunt Russet.

The Golden Russet of New York, or Western New York, is quite distinct, and is incorrectly called by some, at the West, English Golden Russet.

HUNTER PIPPIN.

A chance seedling on the land of William Gray Hunter, Westport, N. Y.; tree moderately vigorous, hardy, spreading; a good bearer annually.

Fruit medium, roundish conical, angular or slightly ribbed; skin pale whitish yellow, a few scattered gray dots; stalk short, small; cavity medium, often russeted; calyx small, closed; basin rather narrow, deep furrowed; flesh whitish, crisp, tender, juicy, brisk subacid, slightly aromatic; core rather large. August.

KING SWEET.

Summer Sweet. Thomas Sweet.
Sidney Sweet. King of Sweets.
High Top Sweet, incorrectly.

Origin, on the farm of Ichabod Thomas, Sidney, Maine; tree hardy, thrifty, upright, compact, and requires much inside pruning; not a very early bearer, but produces large crops of fair fruit alternate years, and is highly esteemed where known.

Fruit below medium, roundish conical, inclining to oblong; skin greenish yellow, or pale yellow at full maturity, a shade of pale red where exposed; stalk short, small; cavity medium; calyx closed; basin rather deep; flesh whitish, half fine, tender, juicy, rich honey sweet; core rather small. September, November.

LADY HENNIKER.

This new English apple was raised by John Perkins, Thornham Hall, Suffolk, England; tree healthy, and a great bearer; chiefly valuable as a cooking variety, but useful also in the dessert.

Fruit very large, roundish, slightly conic, angular, with prominent ridges around the eye; skin yellow, shaded with pale red, and broken streaks of crimson on the sunny side; stalk very short; cavity wide, deep, russet; calyx large, open; basin very deep, angular; flesh very tender in the grain, well flavored, and with a pleasant perfume. October, February. (*Journal of Horticulture.*)

LIPKINS SWEET.

Origin unknown, supposed to be near Philadelphia; tree moderately vigorous, upright at first, but spreading with age and bearing; a good annual bearer.

Fruit medium, or nearly so, oblate or slightly conic; skin pale whitish yellow, shaded with light red, many large and small light and brownish

dots, some star-shaped; stalk short, small; cavity rather small; calyx small, closed; basin medium; flesh white, fine, rather compact, moderately juicy, mild sweet, rather rich; core small. December, March.

KAIGN'S SPITZENBURG AND LONG RED PEARMAIN.

For many years these have been considered identical, and Downing so makes it in the second revised edition, but experience and examination have proven them distinct, both in the growth and form of the tree, and of the fruit. The Long Red Pearmain is said to have originated on the property of the Economites at New Harmony, Indiana, many years since; The name and synonyms by which it is known in different localities are given below.

LONG RED PEARMAIN.

Red Pearmain.	Red Winter Pearmain, in-	Red Phoenix.
Kaign's Spitzenburg, in-	correctly.	Pearmain.
correctly.	Scarlet Pearmain, incor-	Kentucky Gilliflower.
Long John.	rectly	Kentucky Bellflower.
Red Spitzenberg.	English Pearmain, incor-	Hudson Red, Streak.
Striped Pearmain.	rectly.	Sheepnose, of some.
Lady Finger, incorrectly.	Red Bellflower, incorrect-	Wabash Bellflower.
Winter Pearmain.	ly.	Russam.
Long Pearmain.	Red Pippin.	Park (not of Kansas).
		Mudhole.
		Pound Royal, incorrectly

The true Kaign's Spitzenberg, so far as I know, has no synonyms, and was first described by William Coxe, in his work on Fruits, in 1817, as having originated in Gloucester county, New Jersey.

Neither of these apples are much cultivated now, as we have better kinds, the object being to correct the mistake.

LUCY SWEET.

Twin Apple.

Originated on the farm of Samuel Jewett, Weybridge, Vermont; tree vigorous, of a pyramid form, producing moderate crops annually.

Fruit medium roundish oblate; skin pale greenish yellow, a shade of pale red where exposed; stalk short, small; cavity deep, sometimes light russet; basin large, deep; flesh whitish, half fine, moderately juicy, mild, rather rich sweet; core small. October, November.

McINTOSH RED.

Originated with John McIntosh, Dundela, Ontario, some seventy years since, but is not widely known; the tree is said to be very hardy, long-lived, vigorous, with a spreading head; a good annual bearer of fair, handsome fruit of excellent quality, and valuable for home use and market.

Fruit medium or above, roundish oblate, regular; skin whitish yellow, very nearly covered with dark rich red or crimson, almost purplish

in the sun, moderately sprinkled with light dots; stalk short, rather small; cavity medium; calyx closed; basin rather small, slightly

McIntosh Red.

plaited; flesh white, fine, very tender, juicy, mild subacid, refreshing, peculiar slight quince-like flavor; core medium. November, February.

McKINNEY.

Origin, on the farm of Luther McKinney, Crawford, N. Y.; tree vigorous, forming a round head; an early and abundant bearer alternate years, and a light crop the intervening ones; fruit fair of uniform size, and valuable as a late keeper.

Fruit medium to large, oblate; skin deep yellow, shaded with pale brownish red where exposed, a few grayish dots; stalk very short; cavity broad, deep, sometimes slight russet; calyx open, or half closed; basin broad, deep; flesh whitish yellow, half fine, rather firm, moderately juicy, mild subacid; core close and small. January, April.

MAGOG RED STREAK.

Raised from seed by William Warren, Newport, Vermont; tree very hardy, thrifty and vigorous, an upright spreading head; bears every year, but large crops in even years; valued for its extreme hardiness, vigor, productiveness, and long keeping.

Fruit medium or nearly so, roundish inclining to oblong; skin light yellow, shaded and faintly striped and splashed with light red over half the fruit; stalk short, small; calyx closed; basin medium, corrugated;

flesh yellowish, a little coarse, moderately juicy, mild subacid; core medium. December, March.

MATHEWS.

Origin, on the farm of Hugh Foster, near Alton Depot, Nelson Co., Virginia; tree vigorous, with an open spreading head; an early and abundant bearer alternate years, and a partial crop the intervening years.

Fruit medium, roundish oblate, slightly conic, regular; skin smooth, whitish almost waxen, shaded with pale dull red where exposed, many large light dots, a portion almost obscure, a few areole; stalk short, small; cavity medium, regular; calyx small, closed; basin rather abrupt, deep, slightly plaited; flesh white, fine, tender, juicy, mild, pleasant, sprightly subacid; core medium. October, January.

MAY SEEK-NO-FARTHER.

An old variety of unknown origin, and the original name also unknown, and was described in Downing's second revised edition, page 270; it was once valuable as a long keeper and a profitable market variety, but now nearly out of use; tree hardy, vigorous, upright and very productive alternate years; it has been grown in different sections of the country, under the following names, in addition to those named in the second revision.

Lopside.
Hoopes.
Hopson.
Hopsey.
Hoopes Pearmain.

Romanite, incorrectly.
Big Romanite, of some.
Black Pennock.
Black Vandervere.
German Spitzenberg.

Greyhouse, incorrectly.
Black Jack.
Red Everlasting.
Hard Red.
Keystone.
Gray Romanite, of some.

MELLINGER.

An old variety of late introduction, found on the Mellinger property, now owned by Dr. Mellinger, Manor Township, Pa., and considered in that neighborhood one of the most valuable and showy apples of its season; tree healthy, vigorous, spreading, bearing large crops alternate years, and a light one the intervening ones.

Fruit medium to large, roundish, or roundish conical; skin smooth, white, mostly covered with stripes and broken splashes of light and dark bright red, some of the splashes of a purplish red, and moderately sprinkled with light dots; stalk short; cavity medium, slight russet; calyx small, closed; basin medium, rather abrupt, deep, slightly corrugated; flesh quite white, half fine, tender, juicy, sprightly subacid or vinous; core medium. September, November.

Mollinger.

Milden or Milding.

MILDEN OR MILDING. •

Origin, Alton, New Hampshire; tree hardy, a strong, vigorous, upright grower, forming a large round head; very productive alternate

years, of large fair fruit, which is highly esteemed where known for market and family use.

Fruit large, oblate, slightly conic, slightly angular; skin smooth, whitish yellow, shaded, striped, splashed and mottled with light and dark bright rich red nearly over the whole surface, and a few light dots; stalk rather short, slender; cavity broad, deep, sometimes thinly russeted; calyx closed or nearly so; basin broad, moderately deep, furrowed; flesh whitish yellow, rather coarse, brittle, tender, juicy, sprightly subacid, slightly aromatic; core medium. December, January.

MORTON'S RED.

Origin, supposed to be on the farm of the late Elkannah Morton, Bill Town, Nova Scotia; tree moderately vigorous, forming a round rather spreading head; an early and good bearer annually, and a favorite apple for market and home use.

Fruit medium, regular, roundish oblate, slightly conic; skin whitish, nearly covered with light and dark rich red, quite dark in the sun, sometimes a few obscure stripes and splashes, and sometimes nettings of russet; stalk medium, slender; cavity medium, slight russet; calyx closed or nearly so; basin small, slightly corrugated; flesh quite white, half fine, tender, juicy, brisk subacid; core large. December, January.

MUMPER VANDEVERE.

Origin, on the farm of John Mumper, near Dillsbury, Pa.; tree strong and vigorous, making a round, rather spreading open head; an abundant bearer alternate years of fair fruit of uniform size; valued chiefly for its late keeping, market, and kitchen use.

Fruit medium, oblate or roundish oblate, regular, flattened at the ends; skin pale greenish yellow, rather faintly shaded, striped and splashed with light red, and moderately sprinkled with large light and gray dots; stalk rather short, small; cavity medium, often a little greenish; calyx large, open; basin broad, rather deep, corrugated; flesh whitish, coarse, compact, moderately juicy, brisk subacid; core close and small. December, April.

MYSTIC.

Origin, Mystic Valley, Conn., on the farm of Alden Fish; tree vigorous, rather late coming into bearing, but produces large crops alternate years when of sufficient age.

Fruit medium, roundish, flattened at the ends; skin pale yellow, shaded and mottled with light red, and some rather obscure stripes and broken splashes of a darker hue, with a few russet dots; stalk long, slender; cavity medium, moderately deep; calyx small, closed; basin large, deep, slightly plaited; flesh white, fine, tender, juicy, pleasant mild subacid; core rather small. October, November.

NANSEMOND BEAUTY.

Origin, somewhat uncertain, supposed to be Suffolk, Virginia; tree vigorous, rather spreading, bearing good crops annually of fair fruit of uniform size, and a good keeper.

Fruit medium, roundish oblate, slightly conic; skin pale yellow, nearly covered with light and dark rich red, sometimes rather obscure stripes and splashes of a darker hue; stalk short, small; cavity quite large, slight russet; calyx half open; basin large, deep, slightly corrugated; flesh quite white, half fine, crisp, tender, juicy, vinous subacid; core small. January, April.

NELSON ROCK.

Rock Apple.

A chance seedling on the farm of the late Henry G. Roberts, near Greenfield, Virginia; tree moderately vigorous, upright at first, but spreading with weight of fruit; an abundant bearer alternate years, and a light crop the odd years; valuable in its locality for its good qualities and late keeping.

Nelson Rock.

Fruit medium to large, oblate, slightly conic; skin pale greenish white, shaded, striped and splashed with light and dark red over most of the surface, and moderately sprinkled with light and gray dots; stalk short, small; cavity large, deep, sometimes slight russet; calyx closed; basin rather broad, shallow, slightly corrugated; flesh whitish yellow, half fine, tender, juicy, rich, mild subacid; core small. December, March.

NEW RIVER BOAT APPLE.

Origin, on the premises of Robert Porter, Sr., Porter's Ferry, Virginia; tree a strong vigorous grower, spreading; an early and great bearer alternate years, and highly prized where known.

Fruit medium, oblate, flattened at the base, sometimes a little oblique; skin bright yellow, rarely with a blush; stalk very short; cavity rather large; calyx closed; basin medium, slightly corrugated; flesh whitish, half fine, tender, moderately juicy, mild, pleasant, peculiar subacid, almost sweet; core small. October, December.

NORTHAMPTON.

A Pennsylvania apple from Northampton County, but exact origin unknown; tree vigorous, upright, spreading, an early bearer, and very productive; it is said the lower half of the tree bears one year and the upper part the next year, and this is more characteristic with trees of some age; valued especially as a table fruit where known.

Fruit medium, oblate, often depressed; skin smooth, pale whitest yellow, shaded, striped and splashed rather thinly over most of the surface with light and dark red, and many large and small light dots, a few areole; stalk short, slender; cavity rather large, deep, regular; calyx closed or nearly so; basin medium, slightly plaited; flesh white, fine, tender, juicy, pleasant mild subacid and very good; core small. October, February.

NORTHFIELD BEAUTY CRAB.

Raised by Leonard D. Cady, Northfield, Vermont, from seed of yellow Siberian Crab; tree vigorous, hardy, forming a compact symmetrical head; a handsome apple of good size, good quality, and promises to be valuable in cold localities.

Fruit medium, roundish oblate; skin smooth, whitish, shaded with light red, rather obscurely striped and splashed with two shades of rich red and a few light dots; stalk short; cavity medium; calyx closed; basin rather small, slightly corrugated; flesh white, half fine, tender, juicy, sprightly subacid; core small. September, December.

ONTARIO.

This handsome and excellent apple was raised by Charles Arnold, Paris, Ontario, from seed of Northern Spy crossed with the Wagener; tree vigorous, somewhat spreading, bears quite young and abundantly.

Fruit large, oblate, slightly conic, slightly angular; skin whitish yellow, nearly covered with bright rich red, some rather obscure stripes and splashes, and moderately sprinkled with light dots; stalk short, rather stout; cavity broad, deep, sometimes slight russet; calyx closed or nearly so; basin large, deep, slightly corrugated; flesh whitish yellow, fine, tender, juicy, subacid, refreshing, slightly aromatic; core small. January, April.

Ontario.

ORANGE PIPPIN.

Origin unknown, considerably grown in some parts of New Jersey, where it is valued as a profitable summer market apple; tree vigorous, upright at first, but spreading with age and bearing; good and sure bearers alternate years.

Orange Pippin.

Fruit medium or above, oblate or roundish oblate; skin smooth, pale yellow, orange red or fawn in the sun, a few gray dots; stalk short, small; cavity large, sometimes slight russet; calyx large, open; basin

large, deep, slightly plaited; flesh white, half fine, tender, juicy, pleasant subacid, slightly aromatic; core small. September.

PERRY RED STREAK.

Origin, Lowville, N. Y., on the premises of Dr. David Perry; tree hardy, vigorous, spreading, forming an open head; an abundant bearer alternate years, and a light crop the intervening ones; it does not continue long in use.

Fruit medium, oblate, slightly angular; skin light yellow, shaded, striped and splashed with light and dark rich red, and moderately sprinkled with light and gray dots; stalk short, small; cavity large, sometimes slight russet; calyx closed or nearly so; basin large, deep, slightly corrugated; flesh whitish, fine, crisp, tender, juicy, mild subacid, slightly aromatic; core medium. October.

PICKET.

Origin, near Arlington, Kentucky, on the farm of William Picket; tree a strong, vigorous, upright grower; an early and abundant bearer annually, and is considered an acquisition in its locality.

Fruit rather large, oblate or roundish oblate, often slightly oblique, somewhat flattened at the ends; skin yellow, nearly covered with light and dark red, some rather obscure stripes and splashes of a darker hue,

Picket.

sometimes with a grayish bloom, a shade of light purple, and moderately sprinkled with light and brown dots; stalk very short; cavity large, deep, slight russet; calyx open; basin deep, round, slightly wrinkled;

flesh whitish yellow, fine, tender, juicy, rich, mild subacid, and very good; core small. December, February.

PIEDMONT PIPPIN.

Dollins Pippin.

Origin, on the farm of the late James Woods, Rockford Township, Virginia, and is supposed to be a seedling of the Albemarle Pippin; tree quite vigorous, upright at first, but spreading with age; not a very early bearer, but giving large crops alternate years when of sufficient age, and promises to be valuable.

Piedmont Pippin.

Fruit large, roundish oblate, conic, angular, sometimes oblique; skin greenish yellow, a few nettings of russet and some brown dots; stalk short, rather small; cavity large, deep, sometimes slight russet; calyx nearly closed; basin large, deep, slightly corrugated; flesh pale yellow, half fine, crisp, tender, juicy, rich subacid, slightly aromatic; core medium. November, March.

PINE APPLE.

Origin uncertain, supposed to be Mt. Laurel, New Jersey; tree of moderate growth, upright, rather spreading, producing good crops alternate years.

Fruit medium or below, oblate; skin pale yellow, shaded and somewhat obscurely striped and splashed with bright red, a few light dots;

stalk short, small; cavity medium; calyx closed; basin medium; slightly corrugated; flesh whitish, half fine, tender, juicy, pleasant mild subacid, slightly aromatic; core small. October, November.

PLUMB'S CIDER.

Origin uncertain, introduced by J. C. Plumb, Milton, Wisconsin; tree hardy, vigorous, round headed; an early bearer, and very productive alternate years.

Fruit medium, roundish, slightly conic; skin greenish yellow, shaded and rather obscurely striped and splashed with dull red, some light dots; stalk short, small; cavity small; calyx small, closed; basin small, corrugated; flesh whitish, half fine, tender, juicy, mild subacid; core small. September, January.

PREWIT.

Origin, farm of William Prewit, Rock Spring Church, Kentucky, tree vigorous, upright, an annual bearer; chiefly valuable for its long keeping.

Fruit medium, oblate, conic, sides unequal; skin yellow, shaded, and rather faintly striped and splashed with light and dark red; stalk very short; cavity large, deep, slight russet; calyx closed; basin deep; flesh yellowish, half tender, moderately juicy, mild subacid; core small. January, May.

PROLIFIC BLUSH.

Origin, on the farm of E. H. Cocklin, Shepherdstown, Pa.; tree a slow stout grower, forming a low head; an early and great bearer alternate years; blooms late; valuable for home use, and a profitable early market variety.

Fruit medium, oblate, slightly conic; skin smooth, white, a blush of bright red; stalk short, small; cavity large, deep, slight russet; calyx closed; basin rather shallow, corrugated; flesh quite white, crisp, juicy, brisk subacid; core medium. August.

PYLE'S RED WINTER.

A chance seedling on the farm of Baynard Pyle, Thornbury Township, Pa.; tree vigorous, spreading; an early and good bearer annually of large fair fruit of uniform size, of excellent quality, and keeping well.

Fruit large, roundish, oblate, slightly conic, sometimes slightly oblique; skin greenish yellow, or pale yellow at full maturity, shaded with pale red over two-thirds its surface, with some rather obscure stripes and splashes of a darker color, and moderately sprinkled with light and brown dots; stalk short, small; cavity rather large; calyx small, closed; basin large, deep, slightly wrinkled; flesh whitish yellow, half fine, crisp, tender, juicy, pleasant lively subacid; core rather small. January, March.

Pyle's Red Winter.

RACE'S RED.

A chance seeding on the farm of Stephen Race, Claverack, N. Y.; tree strong, vigorous, forming a round rather spreading head, bearing large crops alternate years.

Fruit medium, nearly globular, regular; skin smooth, light yellow, nearly covered with light scarlet crimson, many light dots, some rather obscure; stalk short, small; cavity somewhat narrow, deep; calyx closed; basin medium; flesh white, fine, sometimes stained next the skin, tender, juicy, pleasant subacid; core small. August, September.

REED'S GOLDEN PIPPIN.

Origin unknown, from Central New Jersey; tree vigorous, making a large round head, bearing good crops annually, and evenly through the tree.

Fruit medium, roundish, oblate, slightly angular; skin golden yellow, shaded with light bright red where exposed, a few nettings of russet and a few grayish dots; stalk short, small; cavity medium, often russeted; calyx closed; basin medium, slightly corrugated; flesh yellow, fine, a little firm, juicy, rich mild subacid, slightly aromatic; core small. January, March.

REINETTE ONTZ.

Origin, supposed to be Luxemburg, Belgium; tree vigorous, spreading; a good bearer alternate years.

Fruit medium, oblate, slightly conic; skin pale greenish yellow, or pale yellow at full maturity, many grayish dots; stalk short, small,

cavity medium; calyx closed; basin rather shallow, slightly corrugated; flesh yellowish, a little coarse, moderately juicy, subacid; core small. December, March.

ROCKWOOD.

Origin, Belgrade, Maine, on the farm of John Rockwood; tree hardy, healthy, vigorous, upright; an early and full bearer alternate years, and a light crop the intervening ones; it is popular and profitable where known.

Fruit medium, roundish, inclining to oblong, flattened at the ends, angular; skin greenish yellow, nearly covered with light and dark dull red, brownish red in the sun, and numerous yellowish dots, a few areole; stalk rather short; cavity medium; calyx closed; basin medium, corrugated; flesh whitish, half fine, tender, moderately juicy, mild subacid, inclining to sweet; core small. December, February.

SARAH.

Origin, farm of John Tufts, East Wilton, Maine; tree very vigorous, forming a broad spreading top; an early and good bearer, annually, with very large crops alternate years; a valuable and profitable apple for market and home use.

Fruit large to very large, oblate conic; skin yellow shaded and mottled with light red, striped and splashed with dark red, some splashes almost purplish, a few light dots; stalk short, small; cavity broad, deep; calyx closed, or half open; basin medium, slightly corrugated; flesh whitish, coarse, tender, juicy, brisk subacid; core medium. October.

SETTLE PIPPIN.

Superb White.

Adams White.

English Codlin, incorrectly.

Hex's White.

Settle's Superb.

Hick's White.

Gloucester White, incorrectly.

An old apple of unknown origin, supposed to be Maryland or Virginia; it is a popular apple in Winchester and the lower part of the Shenandoah Valley of its season; tree thrifty and vigorous, making a fine head; an early and annual bearer.

Fruit medium or nearly so, roundish oblate conic; skin white, shaded with light red, and sprinkled with a few brown dots; stalk short, small; cavity rather large, deep; calyx small, closed; basin rather shallow, broad, corrugated; flesh quite white, fine, crisp, tender, juicy, mild subacid, refreshing; core small. September, November.

SISK.

Origin, on the the farm of Joseph Sisk, near Preston, Maryland; tree vigorous, upright; not an early bearer, but with age bears good crops, annually; some seasons less alternate years.

Fruit rather large, oblate, somewhat depressed; skin pale yellow, shaded, and rather obscurely striped and splashed with light and dark

red, a few brown dots; stalk short, small; cavity broad, deep; calyx large, open; basin broad, deep, slightly corrugated; flesh whitish yellow, half fine, tender, juicy, pleasant subacid, slightly aromatic. October January.

SMITH'S FAVORITE.

Origin, on the farm of Isaac Smith, Winthrop, Maine; tree vigorous, upright at first, forming a large round head; an annual bearer, but more abundantly alternate years; valuable in its locality for family use and market.

Fruit medium, roundish, sometimes inclining to oblong, slightly angular; skin pale yellow; thinly shaded, striped, splashed, and mottled with light red over half or more of the surface, and moderately sprinkled with light dots; stalk rather long, slender; cavity medium; calyx closed; basin small, corrugated; flesh pale yellow, half fine, half tender, juicy, subacid, slightly aromatic; core medium. October, November.

SOUTHERN PORTER.

Porter.	Kidd.	Jones.
Fall.	Hog Pen.	Long.

An old and valuable apple, which originated about ten miles east of Chesterville, South Carolina; tree hardy, a strong grower, young wood

Southern Porter.

hard and tough, rather spreading; very productive alternate years, and a moderate crop the intervening one; one of the most popular apples of its locality and season, ripening near two months later than the Porter.

Fruit medium, roundish conical, regular; skin bright golden yellow.

and a few gray dots; stalk short, small; cavity medium, deep; calyx open; basin large, slightly corrugated; flesh whitish, fine, half tender, juicy, rich mild subacid, slightly aromatic; core small. September at the South.

STARKEY.

Origin, town of North Vassalboro, Maine, on the farm of Moses Starkey; tree hardy, vigorous, spreading; a regular good bearer, and highly esteemed in its locality as a profitable market variety as well as for home use.

Fruit medium, oblate, slightly conic, regular; skin pale yellow, shaded, striped and splashed with light and dark bright red, and moderately sprinkled with light and gray dots; stalk short, small; cavity medium, sometimes slight russet; calyx closed or nearly so; basin medium, slightly corrugated; flesh whitish, half fine, tender, juicy, mild pleasant subacid; core small. October, January.

STRINESTOWN PIPPIN.

Origin, near Strinestown, Pa., on the farm formerly owned by Christopher Miller; tree hardy, upright at first, but forms a round open head; an early and good bearer alternate years; valued mostly as a late keeping market variety and for culinary uses.

Fruit medium, roundish, conical; skin yellow, a shade of bright red in the sun; stalk short, small; cavity rather narrow; calyx closed; basin large, broad, deep, furrowed; flesh whitish, rather coarse, compact, moderately juicy, brisk subacid; core close and small. January, April.

STRIPED GILLIFLOWER—*Furley*—SCOLLOP GILLIFLOWER.

These apples were formerly considered identical, but time and experience have proven them distinct. The striped variety is a vigorous grower, with long shoots, and generally bears good crops annually. It is a showy fruit, and in some localities, thought much of for market and culinary uses; the fruit is variable in form and size, usually roundish conical, angular, or more or less ribbed; skin white, striped and mottled with bright lively red; flesh whitish, crisp, juicy, with a brisk, subacid flavor. The scollop variety is a moderate, or poor grower, the young shoots much darker colored, the tree more spreading, a poor bearer, and has nearly gone out of use; the fruit is roundish oblate conic, more ribbed, the color much darker, rather dull red, with broader stripes and splashes, the flesh more yellow, of a mild, subacid aromatic, richer in quality, and a month or more later in ripening, than the striped variety; they are known by the following names and synonyms.

STRIPED GILLIFLOWER.

Striped Bellflower.

Scollop Gilliflower, incorrectly.

Red Gilliflower.

SCOLLOP GILLIFLOWER.

Ribbed Gilliflower.

Five-Quartered Gilli-
flower.

Jellyflower.

Red Gilliflower, of some.

SUTTON'S EARLY.

Raised by William Sutton, Port Williams, Nova Scotia; tree vigorous, spreading, productive; young shoots stout, dark, downy; promising as an early apple for culinary uses.

Fruit medium or above, oblate to roundish oblate, slightly conic, slightly angular; skin whitish yellow; stalk short, small; cavity medium, slightly russeted; calyx closed; basin medium, corrugated; flesh white, tender, juicy, brisk subacid; core rather large. September.

TRANSPARENT ZOAR.

A beautiful and very good apple, which originated with the Zoar Society, at Zoar, Ohio; tree vigorous, making a round rather spreading head; an early and abundant bearer nearly every year.

Transparent Zoar.

Fruit large, oblate, regular; skin smooth, a beautiful waxen white, shaded with light pink or carmine where exposed to the sun, a few rather obscure light dots; stalk very short, small; cavity large, deep; calyx small, closed; basin large, round, slightly plaited; flesh white, fine, very tender, juicy, mild subacid, refreshing; core medium. October, November.

VOLNEY.

Origin, orchard of William Munson, near Astoria, Illinois; tree vigorous, with an upright rather spreading head; a good bearer annually, and highly esteemed where known.

Fruit medium, oblate, regular; skin smooth, bright yellow, shaded with light bright red in the sun, many light brown dots, some irregular or star-shaped; stalk short, slender; cavity medium, slight russet; calyx closed or nearly so; basin large, deep, a little wrinkled; flesh whitish yellow, half fine, crisp, tender, juicy, rich subacid; core small. January, April.

WATWOOD.

Origin, on the farm of Nathan Rose, near Blandville, Kentucky; tree vigorous, upright, forming a round head; a good bearer annually, and esteemed in its locality for its quality and long keeping.

Fruit medium, oblate, depressed and flattened at the ends; skin whitish yellow, shaded with pale red over two-thirds its surface, and a few light and gray dots; stalk very short; cavity broad, deep, slight russet; calyx closed; basin rather shallow, slightly corrugated; flesh pale yellow, half fine, rather firm, juicy, pleasant subacid; core small. January, March.

WYTHE.

Illinois Pippin.

Wythe.

Origin, on the farm of Rodolphus Chandler, Wythe, Illinois; tree is said to be hardy, vigorous, round head, blooms rather late, bears good crops annually of fair fruit of uniform size, and keeps well.

Fruit medium, oblate, slightly conic, nearly regular; skin white, shaded, striped and splashed over more than half the surface with bright red and a few light and gray dots; stalk short, small; cavity rather large, deep; calyx small, closed; basin medium, slightly plaited; flesh whitish, fine, tender, juicy, sprightly subacid, slightly aromatic; core medium. January, March.

YARDLEY.

Bucks County Seedling of Some.

Origin, on the farm of Thomas Yardley, Lower Makefield Township, Pa.; tree vigorous, spreading; an abundant bearer alternate years, and a light crop the odd years; a large apple, valuable as an early market variety, and for home use.

Fruit large, roundish oblate, slightly angular; skin greenish white, thinly striped and splashed with pale dull red, and moderately sprinkled with quite large irregular brown dots; stalk short, rather stout; cavity large, deep, slight russet; calyx closed or nearly so; basin broad, moderately deep, corrugated; flesh whitish, rather coarse, tender, juicy, brisk subacid; core small. August and half of September.

ZACHARY PIPPIN.

A chance seedling on the land of John Burbank, Belgrade, Maine, and was introduced the year Zachary Taylor was inaugurated; tree vigorous, spreading; not an early bearer, but when established produces good crops annually of large fair fruit, and esteemed in its locality.

Fruit large to very large, oblate, angular; skin greenish yellow, or yellow at maturity, shaded, striped, splashed and mottled with light and dark red, some of the splashes quite dark; stalk short, rather small; cavity large, quite broad, deep, slight russet; calyx closed; basin medium, slightly corrugated; flesh whitish, a little coarse, tender, moderately juicy, subacid, rather rich; core medium. November, December.

THIRD APPENDIX

TO

SECOND REVISED EDITION.

PREFACE.

WHEN the second Appendix to "Downing's Fruits and Fruit Trees of America" was published it was my intention to revise the whole work, correct the errors in the descriptions of fruits, describe fully the new fruits, and make the whole complete to the present time; but the publishers do not feel warranted in doing so at present, and I am obliged, therefore, to defer the revision. I have, however, at their urgent request, prepared this third Appendix.

To the numerous friends of Pomology to whom I am indebted for specimens of fruit, and for information relating to them, I offer many thanks, and their names would have been acknowledged if the third revised edition had been required by the publishers.

CHARLES DOWNING.

NEWBURGH, 1881.

THE APPLE.

ALERSON'S EARLY.

Origin uncertain, supposed by some to be Ohio, and it may prove to be the Early George or August Tart. Tree said to be hardy, upright, moderately vigorous; an early and good bearer.

Fruit medium, oblate, angular, ribbed or uneven; skin pale yellow; stalk short, rather stout; cavity rather broad, slightly russeted; calyx closed; basin medium, slightly corrugated; flesh white, tender, juicy, sprightly subacid; core rather small. Ripens about the time of the Early Harvest, to which it is inferior as an eating-apple, but superior for cooking.

ANDREWS' FAVORITE.

Origin on the Andrews farm, Berlin, Vt.; the original tree is said to be seventy years old, healthy, vigorous, spreading and irregular; a good bearer annually of handsome fruit, and of good quality.

Fruit medium, roundish, inclining to oblong, slightly angular; skin whitish, shaded, and mottled with light red, with stripes and broken splashes of dark red or crimson, and many light dots, a few being areole; stalk short, small; cavity small, sometimes slight russet; calyx small, closed; basin medium, corrugated; flesh white, half fine, tender, juicy, pleasant subacid; very good; core large and open. December, January.

ANDREW'S SWEET.

Major Sweet.

Of Nova Scotia origin, on the grounds of Major Andrew, of Yarmouth, and it is said to be a very hardy tree for that locality. Tree a free upright grower; an early and annual bearer, but larger crops on alternate years.

Fruit below medium size, round oblate conic, slightly angular; skin whitish or pale yellow; stalk short, small; cavity medium;

calyx closed or nearly so; basin large, deep, slightly corrugated; flesh white, half fine, tender, moderately juicy, mild, pleasant, sweet, rather rich, and very good; core medium. November, December.

AUSTIN APPLE.

Tom Apple.

Originated on the farm of Thomas Austin, of Suffield, Conn., many years since. Tree a good grower, spreading, and produces good crops annually. Its size and color make it valuable as a market apple, and also for home use; the tree requires good cultivation.

Fruit large, roundish oblate conic, regular; skin pale whitish yellow, shaded with light red, splashed with crimson over most of the surface, and thickly sprinkled with large and small yellowish dots; stalk short; cavity medium; flesh white, half fine, tender, juicy, sprightly subacid; good; core medium. Season middle of August to the middle of September.

BANK.

Cave.

This is an old variety, but little known out of its locality, and originated in the orchard of James Hadsell, on the west bank of the Susquehanna River, opposite Ransom, Pa., and is a favorite apple in that neighborhood. The tree is a vigorous grower, with a roundish spreading head; an abundant bearer on alternate years, and a light crop intervening.

Fruit medium, or rather large, oblate, slightly conic, slightly angular, sides sometimes a little unequal; skin whitish yellow, shaded with light red stripes and broken splashes of dark red or crimson, and moderately sprinkled with light and brown dots; stalk short, small; cavity rather large, deep; calyx closed; basin medium, nearly smooth; flesh whitish, half fine, tender, juicy, refreshing, pleasant subacid; core small. Season September, January.

BARNARD.

Its origin is said to be on the farm of John Barnard, near Muscatine, Iowa. Tree very hardy, vigorous, healthy, upright, somewhat spreading, roundish top, rather long, slender branches, valuable for its hardiness, productiveness, long-keeping, and quality; an abundant bearer on alternate years.

Fruit medium, oblate to roundish oblate, slightly oblique; skin whitish yellow, shaded with pale red (dark red where fully exposed to the sun), a few gray dots; stalk short, moderately stout; cavity medium, deep, sometimes light russet; calyx closed; basin rather large, broad, saucer-like shape, corrugated; flesh whitish, rather coarse, crisp, juicy, with a peculiarly mild subacid flavor; core medium. December to May.

BEAUTY OF THE WORLD.

A new variety, raised by John Mace, of Morganton, N. C., or found in an old field of his at the foot of South Mountain—a

spur of the Blue Ridge—a few miles from Morganton. Tree a vigorous grower, rather tall and spreading; bears moderate crops annually; keeps well, and is said to be a valuable variety for that locality.

Fruit medium, oblate, regular; skin yellowish, entirely covered with pale red and yellow, thickly striped and splashed with crimson, purplish crimson in the sun, moderately sprinkled with light, yellowish dots; stalk short, rather small; cavity small or medium, thin russet; calyx closed; basin rather large and broad; flesh white, half fine, rather firm, mild subacid; very good; core small. Ripens in November, and keeps till March.

BELLE DE BOSKOOP.

A new variety, trees of which I received from France; it is said to be of Russian origin. Tree vigorous, spreading, comes into bearing moderately early, and produces abundantly alternate years of fair fruit, good size, very good quality; keeps well, and is a promising variety.

Fruit medium to large, oblate to roundish oblate, sometimes a

Belle de Boskoop.

little oblique; skin yellow, shaded with light and dark red over nearly the whole surface, with some rather obscure stripes and splashes on the shaded side, some specimens more or less mixed with russet, and many small and large yellowish-brown dots, with some irregular ones; stalk short, small; cavity rather large, often russeted, sometimes extending in rays out on the fruit; calyx closed, or partially open; basin large, round, deep, slightly corrugated;

flesh a little coarse, crisp, tender, juicy, brisk subacid, rich, and of very good quality; core small and close. Season February to April.

BLACK TWIG.

The exact origin of this apple is unknown, but supposed to be in the northern portion of Lincoln County, Tenn. It is said to be one of the most valuable and profitable apples grown in that section. Tree very vigorous, spreading, rather an open head, not an early bearer, but giving good regular crops annually.

Fruit medium, oblate, very little conical, slightly angular; skin bright yellow, shaded with light red (dark crimson in the sun), some obscure stripes and splashes on the shaded side, and rather thickly sprinkled with yellowish and brown dots; stalk short, rather stout; cavity medium, slight russet; calyx closed; basin medium, roundish, regular; flesh pale yellow, half fine, tender, juicy, mild subacid, rich; very good; core rather small. October to February.

BLUE BLOOM.

This apple originated in an orchard of seedlings planted by the Rev. Daniel G. Cartwright, in Union, Iowa, about 1840. Tree vigorous, making a round head; a good bearer in alternate years, and a moderate intervening crop.

Fruit rather large, oblate or roundish oblate, slightly angular; skin white, striped, splashed and mottled with light and dark red over most of the surface, with a light grayish bloom, often mixed with russet, and moderately sprinkled with light dots; stalk short, small; cavity large, deep, slight russet; calyx small, closed; basin rather small, slightly plaited; flesh white, half fine, tender, juicy, sprightly subacid, good flavor and rich; core large. September, October.

BREWINGTON PIPPIN.

Breckenridge.

Brewington.

This new apple originated with James Brewington, Garfield, Ky., about 1870. Tree a vigorous grower, upright, becomes spreading with age and bearing; an early and abundant bearer on alternate years, and blooms quite late.

Fruit large, roundish oblate conic, slightly angular; skin yellow, shaded with pale red, striped and splashed with rich crimson over most of the surface, and pretty thickly sprinkled with rather large yellowish dots, a portion being areole; stalk short, small; cavity medium, russeted, sometimes extending out on the fruit; calyx closed; basin rather abrupt, quite deep, slightly plaited; flesh white, half fine, tender, juicy, mild subacid, inclining to sweet; quality very good; core small. Ripe February, March.

BUSHNELL.

Originated in the garden of General Andrew Bushnell, Hartford, Ohio, many years since. Tree hardy, a moderate grower, spreading; an early and prolific bearer on alternate years.

Fruit rather below medium, oblate, slightly angular; skin whitish yellow, having a few small gray dots; stalk short, small; cavity medium; calyx open; basin rather small, slightly plaited; flesh white, fine, tender, juicy, mild, pleasant subacid; very good; core rather small. Season August and September.

CANADA BALDWIN.

This beautiful apple is said to have originated, some years since, in the orchard of Alexis Dery, St. Hilaire, in Rowville County, Province of Quebec, and is probably of the Fameuse type. Tree hardy, vigorous, thrifty grower, upright at first, gradually spreading with age and bearing; it begins to bear rather early, giving heavy and light crops on alternate years; it is a handsome fruit, of very good quality; it is considered one of the most valuable, long-keeping apples of its locality, both for market and family use; it is said to succeed best on heavy soils, while on light, warm soils, and sudden changes of temperature, the trunk is apt to sun-scald, which often causes premature decay.

Fruit medium or below, oblate, slightly angular; skin quite white, thickly striped and splashed with rich red and crimson, purplish crimson where fully exposed, having a slight bloom, and many white dots; stalk short to medium, slender; cavity rather large, deep, regular; calyx small, closed; basin large, deep, slightly corrugated; flesh very white, fine, sometimes a little stained next the skin, and sometimes veined in the flesh, tender, juicy, refreshing, with a mild subacid, peculiar slight quince-like flavor; very good; core small. Season January, April.

CARPENTER'S SWEET.

An old variety which originated on the lands of Ephraim Carpenter, of Woodstock, Conn. Tree a thrifty grower, upright; comes rather early into bearing, and produces large crops alternate years; its size, color, and flavor make it valuable for home use or market.

Fruit medium or above, roundish oblate conic; skin pale yellow, striped with light and dark red nearly over the whole surface, but quite thinly, with a few brown dots; stalk short, small; cavity medium or rather large, sometimes slight russet; calyx closed; basin medium, slightly corrugated; flesh white, fine, tender, juicy, with a mild, pleasant, rich, sweet flavor; very good; core medium. Ripe in September, and continues in use till November.

CARPENTIN.

Carpentin Reinette.

Petite Reinette Grise.

Of German origin. Tree a moderate grower, forming a round, open head, producing moderate crops annually, often growing in clusters; fruit of small size, but regular, handsome, and of fine quality; valuable as an amateur fruit, and when well known will, no doubt, be in demand for the market.

Fruit small, oblate, slightly angular, nearly regular, entirely cov-

ered with a peculiar light red russet, more or less mixed with crimson and russet where exposed, and a few brown dots; stalk short to medium, slender; cavity medium; or rather large, regular; calyx

Carpentin.

closed; basin round, rather deep, slightly plaited; flesh white, fine, crisp, tender, juicy, with a rich, sprightly subacid flavor; very good; core small. November, February.

CENTENNIAL.

An old variety which originated on the farm of Stephen Child, East Woodstock, Conn., but was not brought into notice till quite recently. Tree a thrifty upright grower, somewhat spreading, an abundant bearer on alternate years; fruit always fair, handsome, and desirable for home use or market.

Fruit medium, roundish oblate, slightly conic, slightly angular; skin yellow, shaded with light and dark red, striped and splashed with crimson over the entire surface, and purplish crimson in the sun, with a few light dots; stalk rather short, small; cavity medium, much russeted, sometimes extending its rays out on the fruit; calyx closed; basin rather large, deep, corrugated; flesh white, sometimes a little stained next the skin, half fine, tender, juicy, subacid, with a pleasant, refreshing flavor; very good; core large. Season November, December.

There is another Centennial which originated with J. Z. Schuman, of Upper Berne, Pa., which he states is a new apple, and produced its first fruit in 1875. Tree is vigorous, healthy, and a good bearer; the fruit is large, handsome, striped with red, of an aromatic flavor, and keeps through the winter.

CLARK.

Lewis.

An old variety, but little known out of the neighborhood of its origin; it was raised from seed by Deacon William Clark, of Clark's Green, Pa. Tree a vigorous grower, spreading, and inclining to

droop with over-bearing; an early and profuse bearer on alternate years; it is said to be uniformly fair, very productive, adapted to all purposes, and for a long time, which makes it a favorite and popular fruit where known.

Fruit medium, oblate, slightly angular, slightly conic; skin whitish, often with a blush, and moderately sprinkled with grayish dots; stalk short; cavity small or medium, rather deep, light russet; calyx closed; basin medium, slightly corrugated; flesh white, half fine, crisp, tender, juicy, sprightly subacid, with a pleasant, slightly aromatic flavor; core rather large. Ripening in succession from September to January, and can be kept much longer.

COLUMBIA.

Hyde.

Columbia Hyde.

Granny Hyde.

Originated on the farm of Nathaniel Hyde, Columbia, Conn., about fifty years since. Tree a vigorous grower, upright, with a round top, and long, pendent, rather slender branches; a good bearer on alternate years, with a moderate crop the intervening ones, and is considered, in its locality, valuable for home use and for market.

Fruit medium, oblate, regular; skin light yellow, shaded, striped and splashed with light and dark red over the whole surface, some of the splashes are of a purplish crimson, and a few light dots; stalk quite short, small; cavity medium; calyx closed; basin medium, slightly corrugated; flesh white, half fine, rather firm, moderately juicy, mild subacid; good or very good in quality; core medium. January to March.

CORNWALL GOLDEN SWEET.

This is supposed to have originated in Cornwall, Vt., with a Mr. Bartholomew, one of the old settlers, many years since. Tree very hardy, a vigorous grower, round head, somewhat spreading, an abundant bearer on alternate years; a late fall and early winter apple, fair, uniform in size, and very valuable for culinary purposes.

Fruit rather below medium, ovate, or roundish conical; skin deep yellow, a shade of red in the sun, and a few scattering brown dots; stalk short, small; cavity small, slight russet; calyx small, closed; basin medium, slightly plaited; flesh white, half fine, half tender, moderately juicy, mild rich sweet; very good; core medium. October, December.

DAWES.

Dawes Porter.

Dawes Nonsuch.

The Dawes apple is an old variety, originated on the farm of Francis H. Dawes, of Cummington, Mass., where it is much cultivated, and is considered by some superior to the Porter. Tree hardy, a vigorous grower, making a large round head; not an early bearer, but, when fruiting, bears profusely on alternate years.

Fruit medium, roundish oblate conical; skin light yellow, a shade of light purplish red, and sometimes a few rather obscure splashed

and a few scattering gray dots; stalk rather short, slender; cavity medium, slight russet; calyx small, closed; basin small, slightly corrugated; flesh whitish yellow, half fine, half tender, juicy, sprightly subacid, and of very good quality; core medium. October, November.

DECARIE.

A very handsome and very good apple, said to have originated in the orchard of Jérémie Decarie, in Coteau, St. Pierre, Province of Quebec, and is more than one hundred years old. Tree hardy, vigorous, healthy, forming an erect head, which spreads out gradually, and bears heavy and light crops alternately; it is thought by some to be the same as the Red Autumn Calville, but I believe it to be distinct.

Fruit medium, or nearly so, oblate, slightly conical, flattened at the base; skin white, nearly covered with light and dark rich red,

Decarie.

dark crimson in the sun, moderately sprinkled with light and brown dots, and covered with a thin grayish bloom; stalk short, rather stout; cavity large, deep, slightly russeted; calyx closed; basin round, deep, slightly corrugated; flesh quite white, often stained next the skin, and sometimes in the flesh, fine, tender, juicy, sprightly subacid, having a slight peculiar, quince-like, agreeable flavor; core small. September, October.

DE LONG.

Iowa.

The original tree of this variety was grown by William De Long, near Lexington, Iowa. It is said to be hardy, thrifty and vigorous, forming a roundish regular head; an early and productive bearer, a good dessert apple, and fine for culinary uses.

Fruit rather large, roundish oblate, slightly conical; skin whitish, thickly covered with broken splashes and stripes of bright red, somewhat mottled; stalk medium; cavity rather large, deep; calyx closed; basin medium, slightly corrugated; flesh white, half fine, tender, juicy, sprightly subacid; core medium. Ripens the last of September and first of October.

DR. HOGG.

A new apple raised from seed by Sidney Ford, of Leonardslee, near Horsham, England, and is supposed to be a seedling of White Winter Calville, as the resemblance is close. It is said to be hardy, healthy, and should be in any kitchen garden, as a constant and heavy cropper, being a large and handsome fruit of the finest quality for culinary purposes.

Fruit medium, roundish conical, angular or ribbed; skin whitish or pale yellow, sometimes a shade of red where exposed; stalk medium, slender, in a rather large, deep cavity; flesh white, tender, juicy, sprightly subacid, rich, a first-rate baking apple. September to March. (Flo. & Pom.)

DR. WALKER.

Litsey.

This is a seedling of Rawles' Genet, and originated on the farm of John Litsey, near Springfield, Ky. It is said to be superior in quality to its parent, and an acquisition for its locality. Tree

Dr. Walker.

hardy, vigorous, an early and good bearer annually. It blooms late, and keeps well.

Fruit medium, oblate, inclining to conical, sometimes a little oblique; skin pale yellow; shaded, striped and splashed with light and dark red nearly over the whole surface, and moderately sprinkled

with light dots; stalk short, small; cavity medium; calyx closed; basin rather large, moderately deep, slightly corrugated; flesh whitish, half fine, tender, juicy, quite rich, with a pleasant, mild subacid flavor; core rather small. February to May.

DOYLESTOWN.

Origin somewhat uncertain, but supposed to be on the farm of Elisha Lynn, Otsego, near Doylestown, Wis. The tree is said to be very hardy, moderately vigorous, with long, rather slender, tough branches, upright at first, but spreads out with age and bearing, requiring but little pruning; an early and good bearer annually.

Fruit medium, roundish oblate conical, nearly regular; skin whitish, shaded, striped and splashed with light and dark red over most of the surface, and moderately sprinkled with large and small yellowish dots, some irregular; stalk short to medium, slender; cavity medium, much russeted, and sometimes extending out on the fruit; calyx small, closed; basin medium, slightly plaited; flesh fine, quite white, tender, juicy, sprightly subacid, with a peculiar slight cranberry flavor; core large. October, February.

EDELKONIG REINETTE.

Reinette Edelkonig.

Edelkonig.

Roi Très Noble.

A German apple much valued for culinary uses. Tree very vigorous, upright, productive.

Fruit large, roundish oblate conic, broadly ribbed; skin yellow, nearly covered with dark rich red, sometimes almost purplish in the sun, moderately sprinkled with light dots; stalk rather short; cavity large, deep, slight russet; calyx closed; basin medium, furrowed; flesh quite white, a little stained next the skin, tender, juicy, brisk subacid; good to very good; core large. October, November.

EGYPTIAN QUEEN.

Origin unknown, supposed to be Kentucky. Tree vigorous, upright, a good annual bearer, and esteemed valuable where known.

Fruit large, oblate, slightly conical, sometimes a little oblique, angular, or slightly ribbed; skin smooth, bright lemon yellow, somewhat waxen, sometimes with a shade of bright red, and a few gray dots; stalk very short, small; cavity large, deep, often russeted; calyx closed or nearly so; basin large, deep, slightly plaited; flesh white, a little coarse, crisp, juicy, pleasant subacid; good to very good; core small. January to May.

EUREKA.

Origin somewhat uncertain, but supposed to be Cheshire, Conn. Tree thrifty, upright, rather slender branches, forming a handsome round head; an early and prolific bearer on alternate years, and esteemed in its locality for market or home use.

Fruit medium, roundish oblate, slightly conical; skin whitish, shaded, striped, and splashed with pale and dark red; stalk short,

small; cavity small; calyx closed; basin small, corrugated; flesh white, fine, tender, juicy, mild subacid, and of very good flavor; core medium. September, October.

FALL BROWN.

Brown Fall.

Of unknown origin, considerably grown in southern New Jersey, and is prized as a family fruit. Tree moderately vigorous, with a round spreading head, very productive biennially, and giving a moderate crop the intervening years.

Fruit below medium, oblate; skin whitish, nearly covered with dull red, sometimes nettings of grayish russet, some obscure stripes and splashes, and a few yellow russet dots; stalk medium, slender; cavity medium, often slight russet; calyx small, closed; basin rather small, slightly corrugated; flesh whitish, fine, tender, moderately juicy, mild, pleasant subacid; good to very good. September, November.

FAMEUSE SUCRÉE.

This beautiful and excellent dessert apple is said to have originated on the premises of Maurice Gongen, near Montreal, Canada, and its appearance indicates Fameuse parentage. Tree quite hardy,

Fameuse Sucrée.

healthy, growth of moderate vigor, upright, spreads a little with age and bearing; a good but not a profuse bearer, and is highly esteemed as a table fruit where known.

Fruit rather below medium, oblate, somewhat depressed, slightly angular; skin almost entirely covered with light and dark red and

crimson, often striped and splashed with deep purplish red on the exposed side, and sometimes almost obscure; stalk medium to long, slender; cavity medium; calyx small, closed; basin medium, slightly corrugated; flesh very white, stained next the skin, sometimes a little in the flesh, which is fine, tender, moderately juicy, with a delicate, lively, slight quince-like flavor; of very good quality; core rather small. Ripens from the middle of September to the last of October.

FORNEY.

Perkins.

Fleming.

An old variety, which has not been much disseminated, and is said to have originated in Burke County, N. C., but the particular locality is unknown. Tree vigorous, upright, and bears abundantly nearly every year. It is much esteemed where known for its appearance, excellent flavor, and market value.

Fruit rather large, roundish, inclining to oblong, slightly conical, a little oblique; skin whitish, shaded, striped and splashed with light and dark red, covered with many small and large light dots, a few being areole; stalk short, rather small; cavity medium, rather narrow, deep; calyx closed; basin quite large, round, slightly plaited; flesh white, half fine, tender, moderately juicy, mild, pleasant subacid; quality very good; core medium. October, November.

FRENCH WINE.

This large apple was brought to notice by David H. Merritt, of Highland, N. Y., who informs me that the grafts were brought from Germany, where it was called "French Wine," by a man named Elickhoof, living in the northern part of New Jersey. Tree a strong, vigorous grower, making a round head; an early and abundant bearer on alternate years; the fruit is large, fair, uniform in size, and a profitable apple for culinary purposes and market.

Fruit large to very large, oblate, slightly angular; skin smooth, whitish, shaded with light and dark red, striped and splashed with crimson over a large portion of the surface, with many light dots; stalk short, rather small; cavity broad, deep, slight russet; calyx closed; basin broad, deep, slightly corrugated; flesh white, a little coarse, crisp, juicy, sprightly subacid; of good quality, but not rich; core medium. September, October.

GOLDEN DIXIE.

Originated on the farm of James Fitz, Township of Rivanna, Va. Tree thrifty, vigorous, upright, forming a handsome pyramidal head, requiring but little pruning; an early and abundant bearer on alternate years.

Fruit medium, oblate to roundish oblate, slightly conical; skin light golden yellow, deep yellow on the sunny side; stalk short, small; cavity medium, often with slight russet; calyx small, closed; basin rather abrupt, deep, slightly corrugated; flesh whitish yellow, half fine, a little firm, juicy, brisk, rich subacid, slightly aromatic; good to very good; core small. Ripe about the time of Summer Queen.

GOLDEN PIPPIN.

A variety of the Golden Pippin which originated with Moses Cason, of Kempsville, Va., many years since. It is said to be one of the kinds that succeed well in that locality, and is esteemed there for its good quality and productiveness. Tree a vigorous, healthy grower, making a large round head; an early and prolific bearer on alternate years.

Fruit small, oblate, slightly conical, a little oblique; skin golden yellow, moderately sprinkled with gray dots; stalk short, small; cavity rather large, deep, often a little russet; calyx small, closed; basin large, deep, corrugated; flesh pale yellow, half fine, tender, juicy, sprightly subacid, quite rich, slightly aromatic and of very good quality; core small. October, January.

GOLDEN SPY.

A new variety raised from seed of the Northern Spy, by O. T. Hobbs, of Randolph, Pa. Mr. Hobbs says that the tree is a very stout and very upright grower; it is late coming into bearing, but bears moderate crops annually when the tree has attained some age; the fruit is of very good quality, and a late keeper.

Fruit medium, roundish oblate, slightly conical, slightly angular; skin pale yellow, orange yellow in the sun, and a few small grayish dots; stalk very short; cavity rather large, deep; calyx open; basin medium, rather deep, a little uneven; flesh whitish, half fine, crisp, tender, juicy, mild subacid, rich, and of very good quality; core medium. February, April.

GUILFORD RED.

Origin near Greensborough, Guilford County, N. C., on the

Guilford Red.

Edwards' plantation. Tree a thrifty, strong, upright grower, some-

what spreading, not a very early bearer, but produces good crops annually after it comes into bearing; it is valued for its good quality and late keeping.

Fruit medium, oblate, slightly conical, slightly angular; skin pale yellow, entirely covered with light and dark rich red and crimson (purplish crimson where fully exposed), and moderately sprinkled with yellowish dots; stalk short, rather small; cavity rather large, deep, sometimes slightly russeted; calyx closed; basin medium, corrugated; flesh pale yellow, half fine, rather firm, juicy, subacid, rich, a little aromatic; core medium. January, March.

HAMES.

A seedling raised by Henry S. Hames, West Point, Ga., and is said to be a valuable variety of its season for its locality, especially for the market and all kinds of culinary uses. Tree a vigorous grower, upright, making a round head with age; an early and good bearer annually, ripening about the season of Red Astrachan.

Fruit large, roundish, or roundish oblate; skin whitish, striped, splashed and mottled with light and dark red over most of the surface in well-colored specimens (purplish red where fully exposed), and moderately sprinkled with yellowish and brown dots; stalk short, small; cavity rather large; calyx closed; basin medium, slightly corrugated; flesh white, half fine, rather firm, juicy, brisk subacid; quality good; core medium. Ripens in Georgia from 15th of June to 15th of July.

HIGHLAND BEAUTY.

A new variety which originated in the garden of the late William Roe, Newburgh, N. Y.; it is a beautiful apple, of very good quality,

Highland Beauty.

keeps well, and is a promising addition for the dessert. Tree thrifty, moderately vigorous, forming a round head; an abundant bearer on alternate years, with a light crop the non-bearing season.

Fruit small to medium, oblate, slightly conical, somewhat angu-

lar; skin smooth, almost waxen white, often a shade of bright red or carmine in the sun, and a few scattering grayish dots; stalk short to medium; cavity broad, deep, sometimes a little russet; calyx closed; basin large, deep, corrugated; flesh white, fine, crisp, tender, juicy, mild, refreshing subacid flavor, of very good quality; core rather small. Season January, March.

IMPERIAL RAMBO.

A new variety raised by O. T. Hobbs, of Randolph, Pa. Tree a strong grower, spreading; a regular and moderate bearer; a late fall and early winter apple of fine quality.

Fruit medium, oblate, oblique, slightly angular; skin smooth,

Imperial Rambo.

whitish yellow, rather thinly striped and splashed with light red over most of the surface, with a few scattering light and grayish dots; stalk very short, small; cavity rather large, deep; calyx small, closed; basin large, deep, slightly plaited; flesh white, half fine, very tender, juicy, mild subacid, refreshing and excellent flavor; core small. October, February.

JOHNSON.

This fine winter apple was raised from seed by Thomas Johnson, Ash Ridge, Ill., and is said to be equal to any apple of its season for quality, and for the locality of its origin. Tree a vigorous, upright grower, an early and good bearer annually, and valuable for table and market.

Fruit medium, oblate, sometimes slightly oblique, regular; skin pale yellow at maturity, nearly covered with deep rich red or dark crimson, somewhat purplish in the sun, and moderately sprinkled with light and gray dots; stalk short, small; cavity medium or rather large, russeted; calyx closed; basin broad, not very deep,

slightly plaited; flesh yellowish, half fine, a little firm, moderately juicy, mild subacid, rich, and of excellent quality; core small. December to March.

Johnson.

JULY QUEEN.

A new variety which originated in the nursery of Newman Taunton, near Ophelia, Ga. Tree a vigorous grower, somewhat spreading, not a very early, but a good bearer every year; it ripens soon after the Gravenstein, and is considered an acquisition in the locality of its origin.

Fruit medium, roundish, slightly conical; skin pale yellow, a little greenish, striped and splashed rather thinly and faintly over half the surface in exposed specimens, and but little color where grown in the shade, with a few light and brown dots; stalk short, small, sometimes by a lip; cavity rather small, russeted; calyx closed, or nearly so; basin rather small, slightly plaited; flesh whitish, half fine, tender, juicy, mild, pleasant subacid, slightly aromatic, and of very good quality; core small. Ripens in Georgia from the middle of July till the 20th of August.

KESTNER.

A new apple originated with Marcus Kestner, Hickman, Ky. Tree thrifty, vigorous, upright, tall, but spreading and irregular; an early and good bearer annually, and is considered a valuable acquisition for the locality of its origin.

Fruit medium, oblate, somewhat flattened at the ends, slightly oblique; skin whitish yellow, nearly covered with pale earmine red, many rather obscure stripes and splashes of a darker hue, and a few light and gray dots; stalk very short, small; cavity medium, slight russet; calyx closed or nearly so; basin rather large, slightly corrugated; flesh yellow, half fine, tender, juicy, rich subacid; quality very good; core small. Season December to March.

KEY'S RED.

A new variety which originated with the late Martin Key, of Clay Brook, Tenn., and is said to be an acquisition for the locality of its origin. Tree hardy, a strong, vigorous grower, spreading, and bears good crops annually.

Fruit medium, roundish oblate, slightly conical, sometimes a little oblique; skin pale greenish yellow, nearly covered with dark red, and many rather large yellowish areole dots; stalk short, small; cavity medium, rather deep, russeted; calyx open; basin rather large, deep, slightly plaited; flesh whitish, a little coarse, juicy, sub-acid, slightly aromatic; core small. Ripens from October to February.

KING SWEET.

Summer Sweet, of some.

High Top Sweet, of some.

Thomas Sweet.

Originated on the farm of Ichabod Thomas, Sidney, Me. Tree a hardy, thrifty grower, upright, compact, and requires much inside pruning, bears abundantly on alternate years; esteemed in its locality as an early family fruit.

Fruit below medium, roundish conical, inclining to oblong; skin greenish yellow, often a shade of pale red; stalk short, small; cavity medium; calyx closed; basin rather deep; flesh half fine, whitish, juicy, half tender, rich honey sweet; core rather small. September, November.

KINKEAD.

This large, beautiful, and fine summer apple originated on the

Kinkead.

grounds of J. C. Kinkead, Lancaster, Ohio. Tree a vigorous, stout, upright grower, producing good crops annually. This apple was at

first supposed to be the Western Beauty, or Big Rambo, but it has proved to be distinct, being of better quality, brighter in color, and earlier in ripening.

Fruit large, oblate to round oblate; skin whitish, striped, splashed and mottled with light and dark rich red over nearly the whole surface, and moderately sprinkled with light dots; stalk short, moderately stout; cavity large, sometimes with slight russet; calyx closed or nearly so; basin large, deep, nearly smooth; flesh white, half fine, tender, juicy, mild subacid, refreshing; quality very good; core small. Season all the month of September.

KIRKLAND.

An old variety, but little disseminated out of its locality; it originated on the Kirkland farm, and was named after Dominic Kirkland, a missionary to the Oneida Indians. Tree hardy, a vigorous grower, with a round, rather spreading head; an early and good bearer annually, but more abundantly on alternate years; fruit not of the best quality, but valuable for its hardiness, productiveness, late keeping, market and culinary uses.

Fruit medium or above, roundish, inclining to oblong, angular, or almost ribbed; skin smooth, bright straw color, a shade of pale red where exposed to the sun, and a few small brownish dots; stalk short, small; cavity medium, a little uneven; calyx closed; basin medium, somewhat furrowed or angled; flesh whitish yellow, half fine, crisp, half tender, juicy, with a brisk subacid flavor; core large. January to May.

KNAPP'S HARVEY.

Originated on the farm of Capt. Rufus Knapp, Sutton, Mass. Tree vigorous, spreading, inclining to droop; a good bearer annually.

Fruit large to very large, oblate to round oblate, very slightly conical; skin pale yellow, or light straw color, a shade of pale red in the sun, and many grayish dots; stalk short, moderately stout; cavity large, deep, often five angled, and a little greenish; calyx open; basin medium, slightly plaited; flesh whitish yellow, rather coarse, moderately juicy, pleasant, mild subacid, slightly aromatic, and of good quality; core medium, or rather large. September, October.

LANKFORD.

Vickers.

A chance seedling on the land of Thomas J. Vickers, Lankford, Md., and is much valued in that locality for its vigor, hardiness, productiveness, good quality, and adaptedness to that latitude. Tree vigorous, upright, with rather slender, firm branches, forming a round head, and bearing good crops annually.

Fruit medium, oblate to roundish oblate, sides sometimes unequal, or a little oblique, often flattened at the ends; skin pale green, shaded with pale and dark red over half or more of its surface, and moderately sprinkled with large light and grayish dots—

many areole; stalk rather short, slender; cavity large, deep, greenish; calyx closed, or partially open; basin large, rather deep, slightly

Lankford.

corrugated; flesh whitish, a little coarse, tender, moderately juicy, mild subacid, inclining to sweet; core small. December, May.

LARGE SUMMER QUEEN.

This fine large summer apple is supposed to be of North Carolina origin, but the exact locality is not known. The tree is said to be very vigorous, upright at first, but, with age, spreading and irregular; in the orchard an early and abundant annual bearer, and valuable in its locality for its time of ripening, which is about the time of the American Summer Pearmain.

Fruit large to very large, roundish oblate, nearly regular; skin pale greenish yellow, shaded, splashed and mottled with pale red, and moderately sprinkled with large, light, yellowish dots, a few being areole; stalk very short, moderately stout; cavity rather large, deep, smooth; calyx closed; basin quite large, deep, nearly smooth; flesh whitish, fine, tender, juicy, rich, mild subacid, slightly aromatic; very good; core medium. Ripens in North Carolina from the last of July till the first of September.

LINCOLN PIPPIN.

An old variety, said to have been brought from Connecticut, many years since, to Syracuse, N. Y., by a Mr. Knapp, and lately brought into notice by the late Reuben Lincoln, whose name it bears, the original name being lost. Tree a tall vigorous grower, making a

large, open, spreading head; an early and good bearer annually, but large crops on alternate years; and being hardy, healthy, long-lived, and the fruit of good appearance, large, fair, and uniform in size, makes it valuable for market or family use.

Fruit medium to large, roundish oblate, slightly conical, slightly

Lincoln Pippin.

angular, sides sometimes a little unequal; skin pale greenish yellow, moderately sprinkled with grayish dots; stalk short to long, slender; cavity large, deep; calyx small, closed; basin small or medium, slightly corrugated; flesh half fine, pale whitish yellow, tender, juicy, subacid, slightly aromatic; very good; core rather large. October, December.

LONGWORTH'S RED WINTER.

Originated with William Longworth, Dubuque, Iowa, who writes that the tree is hardy, a vigorous grower, with a roundish head, inclining to be upright; an early and good bearer annually, but larger crops on alternate years.

Fruit medium, roundish oblate conical, regular; skin whitish yellow, shaded, striped and splashed with light and dark rich red over most of the surface, and thickly sprinkled with light dots; stalk medium, slender; cavity rather large, smooth; calyx closed or nearly so; basin medium, slightly corrugated; flesh white, fine, sometimes veins of red around the core, tender, juicy, mild subacid, having a slight peculiar quince-like flavor; very good. November, February.

MAGGIE'S FAVORITE.

King of the Rambos.

An old variety originating on the farm of Anson Purple, Westfield, Penn., and although a first-class summer and fall apple, it appears not to have been widely disseminated out of the neighborhood of its origin. Tree a vigorous grower, making a large spreading head, bearing very full crops on alternate years.

Fruit medium or above, roundish oblate, nearly regular; skin

Maggie's Favorite.

pale yellow at full maturity, shaded with light red, having short stripes and splashes of dark red over half or more of the surface, and many large yellowish and brown dots, a portion being areole; stalk short, rather stout; cavity medium, regular, slight greenish russet; calyx open; basin medium, roundish, deep; flesh whitish, fine, tender, juicy, very pleasant subacid, slightly aromatic and very good quality; core small or medium. Ripens in September and keeps well.

MARY WOMACK.

John W. Walker, of Anchorage, Ky., who sends specimens of this apple, writes that it is a chance seedling on the farm of George Womack, near Middletown, Ky., and named for his wife by the Kentucky Horticultural Society. It is evidently a seedling of the Rambo, the color, form of fruit, and habit of the tree indicate it, yet it is a mild sweet apple of first quality; it ripens in Kentucky in August and September, or just after the Porter and Gravenstein. Tree a thrifty grower, bears full crops on alternate years, and a moderate crop intervening.

Fruit medium, oblate, somewhat depressed, nearly regular; skin

whitish, faintly striped and splashed with pale and bright red where exposed to the sun, and thickly sprinkled with small and large irregular brown dots; stalk short, rather small; cavity large, deep, a

Mary Womack.

little uneven; calyx small, closed; basin large, saucer-like form, slightly corrugated; flesh whitish yellow, half fine, tender, moderately juicy, mild rich sweet; quality very good; core medium.

MERCER.

The origin of this apple appears to be unknown. W. H. Lewis, of Pike County, Miss., writes that it was obtained by the late Jeremiah Smith, a successful fruit-grower on Bogue Chitto River, from a Baptist minister by the name of Mercer, many years ago, but where he procured the grafts is not known. It is more highly esteemed where known than any apple ripening at the same season. Tree a thrifty, strong, upright grower, forming a round head; an early and abundant bearer nearly every year.

Fruit medium, oblate, nearly regular; skin whitish, shaded and streaked with light and dark red rather thinly over half or more of the surface, and a few light dots; stalk short, small; cavity rather large, slightly russeted; calyx large, open; basin large, deep, partially plaited; flesh whitish, fine, tender, juicy, mild, rich subacid; quality very good; core small and close. Ripening all the month of July in Mississippi, or at the same time with the Horse apple.

MOSER'S SWEET.

Originated on the farm of Michael Moser, Cloverdale, Ind., the tree having been obtained as a seedling from the nursery of Mr. Duncan. The tree is said to be a vigorous grower, with rather slender branches, making a round spreading head, and producing good crops on alternate years; it is much valued by those who know it for its uniform size, fine appearance, home use, and for market.

Fruit medium, oblate, a little oblique; skin smooth, bright yellow, with a few scattering brown dots; stalk short, rather small; cavity large, deep; calyx nearly closed; basin quite large, a little uneven; flesh whitish, half fine, half tender, moderately juicy, sweet and rich; core small. December to March.

MOSHER SWEET.

Originated in the orchard of Ephraim Mosher, Washington, N. Y., many years since. Tree very hardy, thrifty, vigorous, making a large spreading head; a good, but not prolific bearer; not a valuable market fruit, but desirable for those who like a good sweet apple either for eating or cooking.

Fruit medium, oblate conical, angular, often considerably ribbed; skin pale yellow; stalk medium, rather stout; cavity large, deep; calyx closed; basin narrow, deep, much corrugated or ribbed; flesh white, half fine, moderately juicy, mild, rich, sweet, aromatic; core medium. Season all of October.

MOTHER'S FAVORITE.

Smith's Favorite.

Big Tree.

A large, showy summer apple, raised by Patrick W. Smith, Hanoverton, Ohio; and his son, L. L. Smith, Brooklyn, Iowa, writes that the tree is hardy, a vigorous grower, making a large round-headed tree; requires very little pruning, and producing full crops on alternate years.

Fruit large to very large, roundish oblate, slightly angular; skin bright yellow, sometimes pale red in the sun, a few brown dots, and many obscure light ones; stalk short, small; cavity large, deep, a little uneven; calyx small, closed; basin large, deep, slightly plaited; flesh pale yellow, half fine, rather firm, juicy, sprightly subacid, aromatic; of very good quality, and one of the best for culinary uses; core small. Season September.

MOUNTAIN BEAUTY.

Originated with the late Stephen Ferguson, near Keswick Depot, Va. Tree vigorous, with stout shoots, spreading, bearing abundantly on alternate years; it is a beautiful apple, and said to be much esteemed in the locality of its origin.

Fruit medium or below, oblate, somewhat depressed; skin smooth, whitish, shaded with light and dark rich red (purplish red where exposed), with some obscure stripes and splashes on the shaded side, and many light dots, a few being areole; stalk very short, moderately stout; cavity broad, moderately deep, russeted; basin broad, not very deep, smooth; flesh white, half fine, tender, juicy, mild subacid, inclining to sweet; quality very good; core small. December, January.

NORTON PIPPIN.

The Norton Pippin originated with James Brewington, of Freedom, Ky. Tree thrifty, a moderate grower, making a round, rather

close head; an early and prolific bearer on alternate years, and a light crop intervening.

Fruit medium or above, roundish, flattened at the ends, sides sometimes a little unequal, nearly regular; skin whitish yellow, shaded with light and dark red over nearly the whole surface, with some obscure stripes and splashes, and moderately sprinkled with

Norton's Pippin.

light dots—a few areole; stalk short to medium, small; cavity medium, often slight russet or greenish; calyx closed, or nearly so; basin large, round, deep, slightly plaited; flesh white, half fine, tender, juicy, pleasant subacid, rich; very good; core rather small. November, December.

ONSTINE GREENING.

Of uncertain origin, supposed to be Ohio; introduced by Seth A. Bushnell, of Oberlin, Ohio, who states that the tree is a vigorous grower, somewhat irregular, spreading open head, bearing good crops annually, and although not a first class table apple, it is of good quality; being a very late keeper, retaining its firmness and freshness to the last, makes it valuable for market and culinary purposes.

Fruit medium, oblate to round oblate, slightly conical, a little angular, often slightly ribbed; skin greenish yellow, moderately sprinkled with grayish and greenish dots; stalk short, small; cavity rather large, sometimes slight russet; calyx open; basin rather shallow, corrugated, or with small ribs; flesh whitish yellow, quite firm, moderately juicy, mild subacid; core medium. January to June.

OXFORD.

Originated in an old garden on the farm of John E. Morgan, of Oxford, Ind. Tree hardy, vigorous, upright, spreading with age; an early bearer, producing good crops annually; it is said to be valuable for its hardiness, keeping, and quality of the fruit.

Fruit medium, roundish oblate, slightly conical, sometimes sides unequal; skin pale yellow, covered with light red on the shaded side, dark crimson in the sun, mixed and spotted with gray, and many yellowish, conspicuous dots—a few being areole; stalk very short, small, often by a lip; cavity large, deep, thin russet; calyx small, closed, or nearly so; basin rather large, slightly corrugated; flesh whitish yellow, half fine, rather firm, juicy, mild subacid, a little aromatic, and quite rich; core rather small. January, March.

PALMER APPLE.

Pear Apple.

An old variety, of uncertain origin, but supposed to have originated in Washington County, Ga., and said to be little known out of its locality, where it is much esteemed for its quality, market value, and home use in its season, which is a week or two later than Red Astrachan. Tree moderately vigorous, spreading, producing moderate crops annually.

Fruit medium to large, roundish oblate, slightly conical; skin light yellow, streaked and splashed with pale red rather thinly over most of the surface, and sprinkled with numerous rather large light dots; stalk of medium length, slender; cavity medium, slight russet; calyx closed, or nearly so; basin large, deep, slightly plaited; flesh whitish yellow, half fine, a little firm, juicy, pleasant subacid, slightly aromatic; core medium. Ripens the middle of June in Central Georgia.

PEACH BLOW.

Originated on the farm of Davis Jumper, Dexter, Me. Tree hardy, healthy, and vigorous, forming a wide, rather low-spreading head, bearing large crops on alternate years, with a light one intervening; use, culinary and market.

Fruit large, roundish oblate, slightly conical, nearly regular; some specimens angular; skin smooth; deep yellow at maturity, a shade of pale brownish red where exposed, moderately sprinkled with gray dots, and sometimes nettings of russet; stalk short to medium, slender; cavity rather large, russeted; calyx open; basin rather large, deep, slightly corrugated; flesh pale whitish yellow, half fine, half tender, moderately juicy, subacid, slightly aromatic, and of good quality; core medium. Ripens from the middle of October to the middle of November.

PEAR PIPPIN.

The origin of this apple is somewhat uncertain, but it is said to have originated on the farm of the late Thomas Baldwin, near Hightstown, N. J., and considered, where known, a valuable fall

apple for its fairness, large size, and good bearing qualities, either for market or family use. Tree a healthy, free grower, making a round head; an early and abundant bearer nearly every year.

Fruit large, roundish conical, inclining to oblong, slightly angular; skin pale, greenish yellow, or pale yellow at full maturity, with

Pear Pippin.

many rather obscure light and green dots; stalk short to long, slender; cavity large, deep, sometimes slight russet; calyx closed; basin large, deep, slightly corrugated; flesh whitish, half fine, tender, juicy, sprightly subacid, and good quality; core rather large. September.

PEASGOOD'S NONESUCH.

This beautiful apple was raised by Mr. Peasgood, of Stamford, England, and is a fine culinary or dessert apple, and is like a handsome and highly-colored Blenheim Pippin.

Fruit large, roundish oblate; skin yellow, overspread on the sunny side with red, and copiously streaked with bright darker crimson streaks; stalk short, deeply inserted; eye very large and open, set in a deep, round, and even basin; flesh yellowish, tender, very juicy, with an agreeable acid flavor. September, October (Hogg).

RANDOLPH SWEET.

An accidental seedling on the farm of O. T. Hobbs, Randolph, Pa. The tree is said to be vigorous, spreading; not an early, but a good bearer annually, when it has attained sufficient age; it is a late keeper.

Fruit medium or above, roundish oblate, slightly angular; skin pale greenish yellow, a shade of red where exposed, some rather obscure splashes, and a few grayish dots; stalk short, small; cavity deep, rather narrow, slightly russeted; calyx small, closed; basin small, slightly corrugated; flesh whitish, half fine, tender, juicy, mild, rich, sweet; very good; core large. February, April.

RANSOM OR RED STREAK.

An old variety, which is said to have originated in Columbia, Conn., on the Pinneo farm. It is not widely known, but is valued by those who cultivate it; tree moderately vigorous, upright, somewhat spreading, bears abundantly on alternate years, with light crops intervening.

Fruit rather large, roundish oblate, slightly angular; skin pale yellow, shaded, striped, splashed and mottled with light and dark red, with a few light and brown dots; stalk short, small; cavity large, deep, often russeted, and sometimes extending out on the fruit; calyx closed; basin medium, slightly corrugated; flesh yellowish white, half fine, tender, juicy, pleasant subacid, slightly aromatic; very good; core medium. Season September.

RED BIETIGHEIMER.

Of German origin, a large and handsome early autumn apple, valuable for market and culinary purposes. Tree a free grower, having large shining leaves, spreading; an abundant bearer on alternate years.

Fruit large to very large, oblate, slightly conical, regular; skin smooth, whitish or whitish yellow, shaded with light and dark red, (purplish crimson where fully exposed to the sun,) sometimes obscure stripes and splashes, a few grayish and many rather indistinct light dots; stalk short, rather stout; cavity broad, deep, regular, often russeted; calyx closed, basin large, deep, slightly corrugated; flesh white, half fine, quite firm, juicy, with a brisk subacid flavor; core medium or rather large. Season September.

RED WINTER SWEET.

Originated in the orchard of Gen. Isaac Sandford, Vermillion, Ill. Tree vigorous, spreading, not an early bearer, but abundant on alternate years, and a partial crop the intervening years; a late keeper.

Fruit medium or below, oblate, sometimes slightly oblique; skin pale yellow, shaded with light and dark dull brownish red, quite thickly sprinkled with large yellowish dots—many of them areole; stalk short, small; cavity large, slight russet; calyx open; basin large, deep, round; flesh yellowish, rather coarse, moderately juicy, rich, sweet, good; core small. January, April.

ROBINSON.

Originated on the farm of Moses W. Robinson, near Burlington, Iowa. Tree hardy, thrifty, vigorous, forming a handsome round top,

a little spreading, producing good crops annually; it is valued in its locality for hardness, keeping, and good quality as a table apple.

Fruit medium or below, roundish oblate, conical, sides sometimes a little unequal, slightly oblique, a little flattened at the base; skin pale greenish yellow, shaded with pale brownish red over one-third of its surface, and moderately sprinkled with light and brown dots; stalk short, slender; cavity medium, narrow, thinly russeted; calyx closed or nearly so; basin large, deep, slightly corrugated; flesh whitish yellow, half fine, tender, juicy, very mild subacid, or almost sweet, rather rich; quality very good; core rather small. January to March.

ST. HILAIRE.

Cabane du Chien.

Fameuse Baldwin (of some).

This apple is said to have originated in the orchard of Alexis Dèry, Province of Quebec, and is supposed to be a seedling of the Fameuse, which it much resembles in the color and form of the fruit, but is a little larger, more variable in size, bears nearly as early, and quite as heavily, keeps longer, will carry better, and is a favor-

St. Hilaire.

ite in the neighborhood of its origin; tree as hardy as the Fameuse, and similar to it in growth and bearing.

Fruit medium or below, round or round oblate, very slightly conical, skin smooth, white, shaded with light and dark red and crimson (purplish crimson in the sun), sometimes obscure splashes, and sprinkled with a few light and brown dots, more and minute ones near the basin; stalk short to medium, slender; cavity medium, regular;

calyx closed; basin rather small, slightly corrugated; flesh quite white, fine, tender, juicy, sprightly subacid, possessing a slight cranberry flavor; core small. November, January.

SALOME.

A new variety, which originated on the grounds of Elias C. Hathaway, Ottawa, Ill. Tree said to be very hardy, healthy, vigorous; leaves large, thick and firm; young wood very dark, hard, and fine-grained; an upright grower, forming a round head with age; an early and good bearer annually, but more abundantly on alternate years; the fruit adheres firmly until gathering time. Its hardiness, long

Sa ome.

keeping, good quality, uniform size, retaining its flavor quite late, even into summer, will no doubt make it valuable for the West and Northwest.

Fruit rather below medium, roundish conical, slightly angular; skin pale yellow, shaded with pale red, striped and splashed with dark red over most of the surface, and thickly sprinkled with large and small light yellowish dots—a portion areole; stalk short, rather small; cavity quite large, deep, a little greenish; calyx closed; basin rather small, slightly plaited; flesh whitish yellow, half fine, tender, juicy, mild subacid, slightly aromatic; very good; core rather large. January, May.

SANDERSON.

This handsome apple was found in an old field owned by Miss Ella M. Gray, near Holly Springs, Miss., and was introduced by Col. D. D. Sanders. Tree a moderate grower, somewhat spreading; a good au-

nual bearer, ripens just after the Red Astrachan, continues a long time in use, and is considered a valuable market variety for the locality of its origin.

Fruit medium to large, roundish, inclining to oblong, slightly angular; skin whitish, shaded, striped, and mottled, with light and dark red, some specimens entirely covered with deep red or crimson, and purplish red where fully exposed, having a light bloom, and many light dots—a few areole; stalk rather short, moderately stout; cavity medium, deep, sometimes slight russet; calyx closed; basin rather small, slightly corrugated; flesh white, sometimes a little stained next the skin, half fine, tender, juicy, pleasant subacid; core rather small. Season last of July to the 20th of August.

SAUTA.

This apple is supposed to have originated in White County, Ga., on the banks of the Sauta River or Creek, and is said to be popular in its locality, and also in Mississippi and Alabama, for its long-keeping, where only a few varieties are known possessing this quality. Tree thrifty, moderately vigorous, branches rather slender, spreading, a regular and moderate bearer annually.

Fruit medium to large, oblate, a little oblique, sometimes sides unequal, angular; skin smooth, light yellow or straw color, a few scattering gray dots; stalk very short, moderately stout; cavity medium, dull russet; calyx closed; basin rather large, round, quite deep, slightly corrugated; flesh whitish yellow, half fine, tender, juicy, sprightly subacid, and of good, but not high quality; core small. February, April.

SHAFFER.

Schaeffer.

Bender.

Shaffer's Garden.

White King.

A very old variety, which is said to have originated with a Mr. Bender, near Philadelphia. Some forty years since, the late George Shaffer, of Allentown, Pa., obtained grafts and introduced it. Tree thrifty, very vigorous, making a large spreading top; an early and abundant bearer on alternate years; the fruit is large, fair, of uniform size, and although not a first class table apple, is highly esteemed, where known, as profitable for market and for culinary purposes.

Fruit medium to large, or very large, oblate, very slightly conical; skin smooth, pale greenish yellow, or whitish yellow, sometimes a blush in the sun, and a few gray dots; stalk short, small; cavity broad, deep, sometimes slight russet; calyx closed or nearly so; basin rather large, deep, slightly corrugated; flesh white, half fine, tender, juicy, sprightly subacid, and of good quality; core medium. September, November.

SHANNON PIPPIN.

The origin of this apple is disputed, some asserting that it is the Ohio Pippin, taken from Indiana to Arkansas by a Mr. Rector in 1833;

others that it is a distinct variety. Mr. Richard Thurston, of Van Buren, Ark., writes that he has lived in that State over thirty years, is well acquainted with the apple, and that it is distinct from the Ohio Pippin; that Granville Shannon, some thirty-five years ago, bought of a tree-peddler near Evansville, Ark., a number of apple trees of various kinds, and when they fruited, the labels being lost, they were named Shannon Pippin, and there were several of this kind. The tree is said to be a strong, vigorous grower, of a spreading habit; not an early bearer, but when established produces good crops on alternate years, ripening in succession from September to December, and is a popular and valuable apple in that locality.

Fruit large to very large, oblate, slightly conical; skin pale yellow, deep yellow in the sun, and a few gray dots; stalk very short, moderately stout; cavity broad, deep, sometimes slight russet; calyx closed or nearly so; basin broad, moderately deep, slightly corrugated; flesh whitish yellow, rather coarse, juicy, tender, mild sub-acid; good to very good; core small.

SHERIFF.

American Beauty (incorrectly).

This was brought from Pennsylvania, many years since, by James Sheriff—hence its name, the true or original one having been lost. The tree is said to be vigorous and very hardy, one of the iron-clads; this with its crops of fair fruit, although not rich, makes it of value for a cold climate; the tree grows tall, with few branches, forming an open, somewhat spreading, symmetrical top; it comes early into bearing, and bears regular annual crops.

Fruit rather below medium, roundish oblate, flattened at the ends, nearly regular; skin pale yellow, nearly covered with light and dark red, with obscure stripes and splashes, and many small light dots; stalk short; cavity small, russeted; calyx closed; basin large, deep, slightly corrugated; flesh whitish, fine, tender, juicy, mild sub-acid; pleasant flavor, but not rich; core small. December, February.

SIMMONS' RED.

Red Everlasting.

The Simmons' Red originated with the late John W. Davis, near Perry, Houston County, Ga. Mr. Davis planted the seed about 1840. Tree a thrifty, upright, compact grower; an early bearer, and gives good crops nearly every year. It ripens in Georgia the end of June, continuing in use two or three months, and is considered one of their best summer apples.

Fruit medium to large, oblate, slightly conical, sides sometimes a little unequal, slightly oblique; skin pale yellow, shaded with dark crimson where exposed to the sun, and on the opposite side rather obscurely striped and splashed with light and dark red, and pretty thickly sprinkled with yellowish russet dots, small, large, and irregular in form; stalk short, small; cavity broad, deep, a little uneven, with light russet, sometimes extending out on the fruit in rays and blotches; calyx closed, or nearly so; basin round, deep, nearly smooth;

flesh pale yellow, half fine, tender, juicy, mild subacid, slightly aromatic; quality very good; core rather small.

SNEPPS.

Snepps' Nonesuch.

This fine apple is said to have originated near Edinburgh, Ind. Tree moderately vigorous, with short-jointed shoots, forming a round head, producing good crops of fair fruit of uniform size, which is highly prized by those who have grown it, both for the table and for culinary purposes!

Fruit medium, oblate, angular, slightly oblique, or sides a little unequal; skin pale yellow to deep yellow, almost golden yellow in the sun, moderately sprinkled with gray and brown dots; stalk very short, quite small; cavity large, deep, sometimes with slight russet; calyx small, closed, or nearly so; basin medium, corrugated; flesh whitish yellow, fine, tender, juicy, mild subacid, rich, a little aromatic, and inclining to saccharine; quality very good, at least; core small. December, February.

STAYMAN'S WINESAP.

A seedling of the Winesap, originated with Dr. J. Stayman, Leavenworth, Kansas. We give his description: "Tree very vigorous, open, irregular, spreading; wood very dark; dark heavy foliage; an

Stayman's Winesap.

early and very abundant bearer; tree much in appearance like Winesap; fruit hangs well on the tree.

"Fruit medium to large, heavy, oblate conical, regular; greenish yellow, mostly covered and indistinctly splashed, mixed and striped with dark dull red; dots medium, numerous, distinct gray; stem of

medium length, slender; cavity wide, deep, much russetted, extending, regular; calyx large, open, or half open, erect, large; basin rather narrow, abrupt, deep, furrowed; core medium; flesh yellow, firm, tender, juicy, rich, mild subacid, aromatic; quality best. Season January to May."

STEARNS' GREENING.

Stearns' Winter Greening.

This fine winter apple originated with Thomas Stearns, Jackson, Ind. Tree said to be very hardy, a strong, vigorous grower, making around symmetrical head; an early, annual, and abundant bearer, and is highly esteemed where known.

Fruit medium, oblate, slightly flattened at the ends, slightly an-

Stearns' Greening.

gular; skin pale green, with a pale blush of brown in the sun, and a few scattering brown dots; stalk short, small; cavity rather large, deep; calyx closed; basin large, deep, corrugated; flesh fine, pale yellow, tender, juicy, with a mild subacid, rich flavor; quality very good; core small or medium. December, April.

STEVE BALDWIN.

Baldwin's Summer.

Early Russet.

A chance seedling found in the woods on the farm of Stephen Baldwin, town of Seymour, Conn. Tree a strong, vigorous, upright grower, rather an early bearer, producing large crops on alternate years; it is said to be valuable for home use, is highly esteemed where known, and worthy of a place in every orchard.

Fruit medium or below, oblate, very slightly angular; skin whitish, more or less covered with a peculiar net-work of russet; stalk

short, small; cavity rather large, deep, slight russet; calyx closed; basin medium, slightly corrugated; flesh quite white, fine, tender, moderately juicy, mild, rich subacid flavor; very good; core rather small. Season from the last of August and continues five or six weeks, and with care till December.

STEVENSON PIPPIN.

Dwight Apple.

An Arkansas apple, which originated with the Cherokee Indians in what is now Pope County, and was first brought to notice by a Mr. Dwight, of the Dwight Mission, as it was known for a long time. James G. Stevenson, of Crawford County, Ark., obtained trees of the variety, propagated and disseminated them, and they are highly esteemed where known. Tree a vigorous, upright grower, somewhat spreading with age and bearing; not an early bearer, but produces heavy and light crops alternately.

Fruit medium to large, roundish oblate, a little flattened at the ends, nearly regular; skin yellow, shaded with light red, striped and splashed with dark red and crimson rather thickly over the whole surface, and large and small yellowish dots—a portion areole: stalk short, small; cavity rather large, deep, much russeted, sometimes extending out on the fruit; calyx small, closed; basin rather large, slightly plaited; flesh pale yellow, a little coarse, half tender, juicy, pleasant subacid and aromatic; quality very good; core medium. October, February.

STONEWALL JACKSON.

A chance seedling found growing in a stone wall on Silas Jackson's farm, in Clarence, Annapolis County, Nova Scotia, hence the name. The tree is said to be a strong, upright grower at first, but becomes spreading and somewhat drooping with age and bearing; it has quite a local reputation, but is not much known elsewhere; is a very good bearer, and keeps well.

Fruit medium or above, roundish, or roundish oblate, slightly conical, angular, or slightly ribbed; skin yellow, shaded with light and dark rich red, with a still darker hue in the sun, and moderately sprinkled with light and brown dots: stalk rather short, moderately stout; cavity deep, rather narrow; calyx small, closed; basin rather small, corrugated; flesh whitish yellow, half fine, tender, juicy, subacid, slightly aromatic, rich, and of very good quality; core large. January, March.

This is distinct from the Stonewall Jackson of Southern Alabama.

STUART'S GOLDEN.

Stump (incorrectly).

Originated on the farm of the late William Stuart, Rush Creek, O., where it grew near a stump many years since. It is said to be very popular, where known, for home use and a near market. Tree hardy, healthy, moderately vigorous, spreading, making a tree of

medium size, with tough, close-grained shoots; an early and prolific bearer, alternate years, of fair fruit of uniform size, and keeps well.

Fruit below medium, oblate, sometimes a little oblique, nearly regular; skin bright yellow, deep orange red in the sun, with a few

Stuart's Golden.

brown dots; stalk short, small; cavity medium, sometimes slight russet; calyx small, closed; basin rather large, moderately deep, saucer-like shape, smooth; flesh whitish yellow, half fine, tender, juicy, pleasant subacid, rich, and of excellent quality; core small. Season, December to April.

SWEET RHODE ISLAND GREENING.

New Rhode Island Greening.

Curtis' Greening.

The place of origin of this apple appears to be unknown, but is supposed to be Ohio; it was first introduced into Illinois by Joseph Curtis, many years since. Tree very vigorous, spreading; it begins to bear rather early, and produces full crops the even years, and moderate crops odd years; the fruit is of large size, excellent quality, and is said to be the best sweet apple, where known, for December and January, for culinary purposes and market.

Fruit large to very large, oblate, often oblique, sides sometimes unequal; skin greenish yellow, often a shade of pale brown in the sun, and sometimes spotted with red, a few brown and gray dots; stalk very short, small; cavity rather large; calyx closed; basin large, deep; slightly plaited; flesh yellowish, half fine, tender, juicy, sweet, rich, slightly aromatic; very good quality; core small. December, January.

SWEET WINTER SPITZENBERG.

An old variety, supposed to have been raised by the late Samuel Bartholomew, of Cornwall, Vt., and is considered one of the most useful and profitable winter sweet apples of that locality; fruit always fair, smooth, and keeps well. Tree a vigorous, upright grower, and an early and abundant bearer nearly every year.

Fruit medium, roundish, or roundish oblate, conical, smooth and regular; skin golden yellow at full maturity, some rather obscure light and green dots; stalk short to medium, rather slender; cavity broad, not very deep; calyx small, closed; basin rather small, corrugated; flesh deep yellow, half fine, tender, moderately juicy, rich honey-sweet, slightly aromatic; very good; core medium. December to February.

STUMP.

A chance seedling found in an old stump on the grounds of John Prue, Chili, N. Y. Tree a thrifty, vigorous, upright grower, forming a symmetrical, roundish conical head; rather an early and very abundant bearer, on alternate years, of fair, handsome fruit of good quality.

Fruit medium or below, roundish conical, inclining to oblong conical, sometimes sides a little unequal; skin smooth, white, shaded

with bright red, moderately striped and splashed with crimson over most of the surface, a few large and small light dots—a portion areole; stalk very short, rather small; cavity medium, often russeted; calyx small, closed; basin medium, slightly plaited; flesh white, half fine, tender, juicy, pleasantly subacid; quality good to very good; core rather large. September, October.

TANNER'S WINTER.

An old variety of unknown origin. It is considerably grown in Granville County, Ga., where it succeeds and is prized as a winter fruit for general use. The history and original name are unknown.

Tree a good thrifty grower, with slender branches, upright, inclined to spread with age; a good bearer nearly every year.

Fruit medium, oblate, slightly conical, slightly angular; skin whitish yellow, shaded, rather obscurely striped and splashed with pale purplish red; stalk short, small; cavity broad, deep, sometimes thin russet; calyx small, half open; basin large, very deep, nearly smooth; flesh whitish yellow, a little coarse, moderately juicy, mild subacid; good to very good; core small. October, February.

VALLEY.

Van Horn.

Originated with George C. Stamford, Boston, O. The tree is said to be vigorous, healthy, of a roundish, rather spreading top, and has borne abundant crops biennially for sixty years, of smooth fair fruit, and comes early into bearing.

Fruit rather below medium, oblate, sides sometimes unequal, a little flattened at the ends; skin smooth, pale whitish yellow, occasionally a shade of pale red, a few small brown or russet dots, and sometimes a few obscure stripes and splashes on the sunny side; stalk short, small; cavity rather large, deep; calyx closed; basin large, corrugated; flesh whitish, half fine, tender, juicy; mild subacid; core small. December, March.

VICTORIA PIPPIN.

A chance seedling on the farm of John Benge, near Elkton, Cecil County, Md., and being an Englishman, named it in honor of his Queen. Tree a healthy, vigorous grower, making a round, rather spreading head; an early and moderate bearer every year, but full crops on alternate years; it is not a rich, high-flavored table apple, but is highly valued in its locality for culinary purposes and for market.

Fruit medium to large, oblate to roundish oblate; skin yellow, shaded, striped and splashed rather thinly over most of the surface with light and dark red, and pretty thickly sprinkled with grayish and brown dots; stalk short, small; cavity rather large, sometimes slight russet; calyx closed; basin broad, moderately deep, a little uneven; flesh whitish yellow, rather coarse, juicy, sprightly subacid, and of good quality. September, October.

VICTORIA SWEET.

This is quite an old variety, the origin of which is uncertain, although claimed for Chenango County, N. Y.; it may have an older and prior name. Tree a moderate grower, spreading, very productive on alternate years; a beautiful and very good sweet apple of its season.

Fruit medium, oblate, regular; skin entirely covered with light and dark red and crimson, sometimes obscure stripes and splashes of a darker hue, and many rather conspicuous yellowish dots; stalk rather small; cavity medium, regular, sometimes slight russet; calyx

small, closed; basin rather large, moderately deep, slightly plaited; flesh whitish, half fine, tender, juicy, sweet, rich; very good; core small. October, November.

Victoria Sweet.

WESTMORELAND RAMBO.

Grown from seed of the Common Rambo, by Joseph Kern, Greensburg, Tenn. Tree vigorous and a rapid grower, makes a large, spreading, open head, requiring very little pruning; it bears annually fair crops of large fruit of very good quality, and evenly distributed over the tree. There are several varieties of the Large Rambo raised from seed of the Old Rambo, which are much larger in size, more vigorous in growth; most of them ripen earlier, but do not quite equal it in quality.

Fruit large to very large, oblate, somewhat flattened at the ends; skin pale greenish yellow, shaded, striped and splashed with light and dark red over nearly the whole surface, with a few brown dots; stalk short, rather small; cavity large, deep, a little greenish; calyx closed, or nearly so; basin large, deep, slightly corrugated; flesh whitish, a little coarse, juicy, tender, pleasant subacid; quality good or very good; core small. September, October.

WILSON'S SUMMER.

Origin unknown, but supposed to be near Salem, N. C. Tree a thrifty, upright grower, with rather slender wood, making a medium-sized tree when fully grown. It bears young and abundantly on alternate years, and is valued, where known, for its fine quality for summer use.

Fruit rather below medium, oblate, slightly conical, side sometimes a little unequal; skin smooth, whitish yellow, nearly covered with rich bright red, more or less striped and splashed with crimson,

and moderately sprinkled with light dots; stalk short, small; cavity medium, regular, often a little russet; calyx closed; basin medium,

Wilson's Summer.

nearly smooth; flesh white, fine, tender, juicy, mild subacid, rich, and of excellent quality; core small. Season about the time of American Summer Pearmain.

WILLIAMS' RED WINTER.

Originated on the farm of the elder Abraham Williams, East Hartford, Conn., many years since, and is but little known out of its neighborhood. Tree a strong, vigorous grower, forming a very large, spreading head; not a very early bearer, but bearing moderately annually; it is highly esteemed by those who know it best.

Fruit medium, oblate, slightly conical, slightly angular; skin whitish, nearly covered with light and dark red (dark crimson in the sun), somewhat obscurely striped and splashed, and moderately sprinkled with yellow russet dots; stalk very short, small; cavity medium, slight russet; calyx closed; basin large, moderately deep, slightly corrugated; flesh white, fine, tender, juicy, sprightly subacid, not rich, but pleasant and of good quality; core rather small. December, February.

WOLF RIVER.

A new, large, handsome apple, the tree of which was grown by W. A. Springer, and disposed of before fruiting to the late Henry Rifen, near the east bank of Wolf River, Fremont, Wis.; supposed to be a seedling of the Alexander, which it somewhat resembles; not usually so large nor so regular in form, darker in color, and rather better in quality. The tree is said to be very hardy; a strong, vigorous grower, spreading, with large thick leaves; not an early bearer, but producing full crops on alternate years.

Fruit large to very large, oblate to roundish oblate, slightly angular, some of the larger specimens uneven and irregular, but those of average size are regular; skin pale greenish yellow, but becomes

whitish when mature, shaded with light and dark red or crimson where fully exposed, having a thin whitish bloom, and a few light dots; stalk very short, quite small; cavity rather large, greenish, sometimes much russeted; calyx open, or nearly so; basin large, very deep, a little uneven; flesh white, rather coarse, half tender, juicy, pleasant, mild subacid, with a peculiar spicy, slight quince-like flavor; core medium. Season, October, November.

YELLOW PIPTIN.

Origin unknown; specimens under this name were received from B. O. Curtis, Edgar County, Ill., whose father brought it from Adams County, Ohio, some sixty years ago; it is distinct from either the Green or Yellow Newtown Pippin in tree and fruit, and may prove to be the Newtown Pippin of Lewis Sanders, of Kentucky. Tree hardy, a very thrifty upright grower, rather late coming into bearing, but then bears abundant crops nearly every year. Commences to ripen in January and continues in use till April, and longer with care.

Fruit medium, roundish oblate, slightly angular, often slightly oblique, somewhat flattened at the ends; skin deep yellow, sometimes a shade of light red, and many brown dots; stalk short, small; cavity medium, deep, slight russet; calyx open, or nearly so; basin medium, quite deep, a little wrinkled; flesh pale yellow, half fine, half firm, crisp, juicy, rich, subacid, slightly aromatic, and very good; core small. January to April.

ZOLOTOREFF.

One of the new Russian apples lately introduced, which promises to be valuable for a cold climate; it is said to be quite as hardy as the Duchess of Oldenburg; a good upright grower, an early and abundant bearer of large, showy fruit, ripening about a month later than the Duchess.

Fruit large, roundish, very slightly conical, slightly angular; skin pale greenish yellow, or light yellow at full maturity, shaded, splashed and mottled with light and dark red over most of the surface; stalk short, rather stout; cavity rather narrow, deep; calyx closed or half open; basin large, deep, corrugated; flesh whitish, half fine, tender, juicy, sprightly subacid, and of good quality; core rather large. Season middle to the last of September.

YELLOW TRANSPARENT.

A new Russian variety, which was imported from St. Petersburg in 1870 by the Department of Agriculture, Washington, D. C., and promises to be valuable for a cold climate as an early fruit of good quality, ripening before the Tetofsky, with more tender and delicate flesh, but does not continue long in use. It is said that the tree so far has proved to be very hardy, moderately vigorous, upright, an early and good bearer annually.

Fruit medium, roundish oblate, slightly conical, slightly angular; skin clear white at first, becoming pale yellow when fully mature.

moderately sprinkled with light and greenish dots, somewhat obscure; stalk short to medium, rather slender; cavity rather large, sometimes a little greenish; calyx closed; basin medium, slightly corrugated, sometimes small protuberances; flesh white, half fine,

Yellow Transparent.

tender, juicy, sprightly subacid; quality good to very good; core medium. Season early in August, and a week or two before Tetofsky.

There appears to be some confusion regarding some of the new Russian apples, a few not being true to name, and others having proved synonymous with older varieties; some of the new varieties are large and handsome, and if the trees prove as hardy as is claimed for them, they will be valuable acquisitions for the North and Northwest.

APPENDIX.

GRAPES, PEACHES, PEARS, &c.

For specimens of Fruit, and information relating to many of the varieties in this Appendix, I am indebted to many of the leading Pomologists in many parts of the country, who will please accept my cordial thanks.

CHARLES DOWNING.

GRAPES.

ALLEN'S HYBRID.

ORIGINATED with J. Fisk Allen, Salem, Mass. It is a hybrid between the native and foreign, and is one of the best in quality, and has peculiar crumpled leaves. The vine is not hardy, and requires winter protection, but is vigorous and productive, ripening quite early, and in sheltered situations is a desirable variety.

Bunch medium to large, shouldered, compact; berry medium to large, round, sometimes depressed; skin thin, white, changing to pale yellow when fully ripe; flesh tender, juicy, sweet, rich, with a delicate slightly vinous flavor, and one of the best in quality.

JANIE WYLIE.

A new hybrid between Clinton and foreign, raised by Dr. A. P. Wylie, of Chester, S. C., who kindly sent us specimens, and writes that the vine is vigorous and has a pretty large, thick, deep green foliage, and so far free from mildew; an early and productive variety, hangs well and late. It may require protection at the north during winter.

Bunch large, shouldered; berry varying from medium to large, roundish oval; some of the larger ones are nearly globular; color dark red, with a thick grayish bloom; flesh rather firm and meaty, juicy, sweet, rich, slightly vinous, refreshing; skin thick yet tender; very good.

KALAMAZOO.

Said to have originated with—Dixon, of Steubenville, O., from seed of Catawba, which it somewhat resembles in color, but the bunch and berry are larger, and it ripens a week or ten days earlier, and is a showy grape.

Bunch large, long, often shouldered, compact; berry large, round; skin rather light dull red, with a lilac bloom; flesh soft, but not quite tender, and adheres a little to the seeds, juicy, sweet, vinous.

PETER WYLIE.

This fine new early grape was raised by Dr. A. P. Wylie, of Chester, S. C., from a seedling of a hybrid. The Doctor informs us when sending the specimens of fruit that the vine is one of the most rapid growers, free from mildew and rot, entirely native in its appearance; wood short jointed; leaves not large, but thick and leathery, hold well and late, and the fruit one of the first to ripen.

Bunch medium; berry medium to small, round, transparent, yellow, with a rather thick whitish bloom; flesh soft, juicy, sweet, rich, slightly vinous, with a Frontignan flavor; skin thin but tough; very good or best.

SENASQUA.

This new grape was raised by Stephen Underhill, of Croton Point, N. Y., and is a hybrid between Concord and Black Prince. The vine is vigorous and hardy, and the fruit similar to Black Prince, and of fine quality; but in consequence of its thin skin and compactness of bunch the fruit is sometimes apt to crack, especially in wet weather.

Bunch large, often shouldered, very compact; berry large, round; skin deep black, with a thick blue bloom; flesh quite firm, but tender, breaking, juicy, sweet, rich, slightly vinous; ripens about the time of Concord, or soon after.

PEACHES.

ATLANTA.

RAISED by Dr. E. W. Sylvester, Lyons, N. Y. Tree vigorous, productive; reniform glands.

Fruit medium, roundish, slightly compressed, regular, suture large, distinct, extending nearly round the fruit; cavity quite deep; skin whitish, shaded, and mottled with deep red, almost purplish in the sun; flesh white, a little red at the stone, juicy, melting, sweet, rich, adheres partially to the stone. Ripe last of September.

BLACK'S EXTRA EARLY PEACH.

An accidental seedling found on the farm of Dr. J. Stayman, Leavenworth, Kansas. Tree a good grower, hardy, and productive.

Fruit large, round with a slight point, suture distinct, shallow all around; color clear rose pink, shaded maroon, and slightly mottled with light yellow, very handsome; flesh stained red to the seed, to which it slightly adheres; juicy, tender, with rich subacid; excellent.

This is the earliest peach we are acquainted with, ripening this season (1871) before the 4th of July, being ten days before Hale's Early, and it is of larger size and better quality.—*Pomologist and Gardener*.

EARLY RIVERS.

Raised by Thomas Rivers, Sawbridgeworth, England. It ripens a few days earlier than the Albert or Alfred, and quite equal to them in flavor. The tree is thrifty, healthy, and productive; glands reniform, flowers large.

Fruit medium, roundish oblong, slightly compressed, suture slight, ending at the apex, which is a little sunk, and has a very small nipple; skin creamy white, shaded with light red in the sun, cavity deep; flesh white to the stone; juicy, melting, sweet, rich, refreshing, slightly vinous; very good; separates freely from the stone. Ripe middle of September.

FOSTER.

Originated with J. T. Foster, Medford, Mass. Tree said to be hardy, vigorous, and productive; a good market variety.

Fruit large, slightly flattened, with a slight suture, stem moderately depressed; flesh yellow, very rich and juicy, with a pleasant subacid flavor; freestone of medium size; color a deep orange red, becoming very dark red on the exposed side. Ripe from the middle to the last of September.—*Jour. of Hort.*

FREE MASON.

This new late peach originated with Nathan Todd, Denton, Caroline County, Md. Tree a vigorous grower, rather spreading; leaves serrated, without glands; flowers small.

Fruit medium, roundish inclining to oblong, a little compressed, suture slight, apex small; skin white, shaded with red where exposed to the sun; flesh white, deep red at the stone, juicy and good. Ripens just after the Smock.—*Hearth and Home.*

LAPORTE.

Raised by M. Laporte at Ecully, near Lyons, France. Tree moderate vigorous, productive, a curious resemblance to the blood peach.

Fruit medium to large, a little oval, tapering to the apex; suture large, extending a little beyond the apex, which is a little swollen; skin yellow, covered and washed and strongly striped and splashed with dark red; flesh white, reddish, or rose tint, but darker towards the pit, fine, juicy, sugary, melting, delicate and agreeable; very good.—*The Verger.*

MOUNTAIN ROSE.

This new peach is said to have originated in Morris County, N. J. Tree vigorous and very productive. It ripens about the same time as Large Early York, is more highly colored, but not quite as rich. Glands globose. Flowers small.

Fruit large, roundish, slightly compressed; suture distinct, extending a little beyond the apex; skin whitish, nearly covered with light and dark rich red; flesh white, slightly stained at the stone, juicy, sweet, slightly vinous; very good; separates freely from the stone.

PARKS' CLING.

A chance seedling on the grounds of A. L. Parks, Alton, Ill. Tree vigorous, productive, leaves with globose glands, ripens eight or ten days later than Heath Cling.

Fruit very large, broader than deep; suture deep, extending quite around the fruit; skin slightly downy, light creamy yellow, mostly covered with red; flesh also of a light creamy color, stained with red, but deeper red at the stone, very juicy, but not of the highest flavor; adheres to the stone.—*Prairie Farmer*.

RICHMOND.

Raised by Dr. E. W. Sylvester, Lyons, N. Y., who writes that the tree is vigorous and very productive, and ripens a few days later than Crawford's Early, is less acid, and a promising market variety. Glands reniform.

Fruit medium to large, roundish, slightly compressed; suture slight but distinct, ending at the apex, which is a little swollen; skin fine yellow, shaded and mottled with dark rich red; flesh yellow, a little red at the stone, juicy, melting, sweet, vinous; very good; separates from the stone, which is of medium size. Ripe last of September.

SALWAY.

Originated with Thomas Rivers, Sawbridgeworth, England. Tree vigorous, very productive, ripens soon after the Smock. Flowers small. Glands reniform.

Fruit large, roundish oblate; suture broad, deep, extending beyond the apex; skin downy, creamy yellow, with a warm, rich, clear crimson red cheek in the sun; flesh deep yellow, stained with red at the stone, which is free, juicy, melting, rich, sweet, slightly vinous; very good.—*R. N. Yorker*.

SOUTHWICK'S LATE.

An accidental seedling on the grounds of T. T. Southwick, Dansville, N. Y., and is said by those who have it to be very juicy and rich. Tree vigorous and productive. Flowers small.

Fruit large, roundish, a little depressed at the summit; suture quite distinct, mamelon small, sunken nearly to a level with the parts around; skin yellowish white, sprinkled with minute red dots in the shade, and streaked and clouded with red towards the sun; flesh white, parting freely from the stone, very juicy, melting, with a fine delicate flavor; stone very small. Last of September.—*Jour. of Hort.*

PEARS.

BEURRE LADE.

ORIGINATED by M. Gregoire-Nelis, of Jodoigne, Belgium, and dedicated to M. le Consul Lade. Tree vigorous, an abundant bearer, and fruit holds well to the tree.

Fruit rather large, oblong obtuse pyriform; skin fine yellow, shaded with carmine in the sun; stalk long, curved, inserted in a slight depression; calyx and basin rather small, surrounded somewhat by pointed knobs; flesh white, almost fine, melting, juicy, sugary, with a delicate aroma. October, November.—*Revue Horticole*.

BONNE DU Puits ANSAULT.

Originated at Angers, France, in the nursery of Andre Leroy; for specimens of this and several other new varieties, we are indebted to Messrs. Ellwanger & Barry, Rochester, N. Y. Tree moderately vigorous, very productive.

Bonne du Puits Ansaunt.

Fruit medium or below, roundish oblate, inclining to obtuse pyriform, surface a little rough, uneven; skin light greenish yellow, mostly covered with a thin light russet; stalk short; cavity medium, uneven; calyx small, closed; basin deep, rather narrow; flesh white, fine, juicy, melting, sweet, vinous, and rich; very good. September.

BROCKWORTH.

A new English variety raised by Mr. Lawrence, Brockworth Park, and the English journals say it is of excellent quality.

Fruit large, oblong obtuse pyriform; skin smooth pale yellow, slightly flushed and streaked with red on the exposed side; stalk an

inch long, rather stout, obliquely inserted without any depression; calyx small, closed; basin shallow; flesh white, buttery, melting, very juicy, vinous, and rich.—*Lon. Jour. of Hort.*

BRONZÉ D'ENGHIEM.

Originated by M. Paternoster, in the province of Hainaut, Belgium. Tree moderately vigorous, productive.

Fruit medium, oblong ovate pyriform, regular; skin rough, deep yellow, nearly covered with brown russet and slightly bronzed in the sun; stalk long, slender, curved, cavity shallow; basin small, uneven; flesh yellowish, a little coarse, juicy, half melting, vinous, slightly astringent; good. November, January.

COLMAR DELAHAUT.

Raised by M. Gregoire, of Jodoigne, Belgium. Tree vigorous, spreading, moderately productive; young shoots olive brown.

Fruit medium, roundish acute pyriform; skin pale yellow, partially netted and patched with russet and many russet dots; stalk long, curved, slender, joined to the fruit without depression; calyx half closed; basin small, uneven, russeted; flesh white, juicy, half melting, sweet; good. November, December.

DELPIERRE.

Beurre Delpierre.

A chance seedling in the garden of M. Delpierre, of Jodoigne, Belgium. Tree very vigorous, very productive; young shoots dark olive brown.

Fruit large, roundish obtuse pyriform; skin pale yellow, partially blotched and netted with russet and thickly sprinkled with small russet dots; stalk rather long, generally curved; cavity medium; calyx closed; basin medium, nearly smooth; flesh white, a little coarse, juicy, melting, sweet, slightly vinous; good to very good. September.

DOCTOR KOCH.

Originated in the nurseries of Andre Leroy, Angers, France. Tree moderately vigorous, very productive.

Fruit medium, roundish pyriform; skin pale yellow, a shade of red when fully exposed, a few traces of russet and many small russet dots; stalk long, rather slender, curved; cavity shallow; calyx half closed; basin rather small, uneven; flesh whitish yellow, half fine, juicy, melting, slightly vinous; good. October.

DUC DE MORNAY.

A seedling of M. Boisbunel, Rouen, France. Tree vigorous, productive; young shoots dark olive brown, many grayish specks.

Fruit medium, roundish pyriform, a little obtuse; skin pale yellow, sometimes a shade of red in the sun, a few traces of russet, and many

small russet dots; stalk of medium length, inclined, curved, cavity very small; calyx open; basin medium, a little uneven; flesh yellowish; half fine, juicy, half melting, vinous; *good*. November, December.

Delpierre.

DUCHESSE DE MOUCHY.

A chance seedling discovered by Florentin Delavier, of Beauvaise, in a garden at Breteuil, France. Tree vigorous, upright, moderately productive.

Fruit medium roundish, inclining to obtuse pyriform; skin deep yellow, shaded with light orange red in the sun, slight nettings of russet and small russet dots; stalk rather short, stout; cavity small; calyx half open; basin medium, a little uneven; flesh white, half fine, half melting, moderately juicy, sweet; *good*. April, May.

DUCHESSE PRÉCOCE.

Originated in the nurseries of Andre Leroy, Angers, France. Tree strong and vigorous, moderately productive.

Fruit medium to large, long pyriform, a little obtuse; skin pale yellow, shaded and mottled with pale red where exposed to the sun, and covered with many small russet dots; stalk of medium length, rather stout, inclined, inserted in a slight depression, sometimes small cavity; calyx large, open; basin shallow, uneven; flesh whitish, a little coarse, juicy, half melting, sweet, slightly vinous, and a little astringent; good. Ripe first of September.

EASTERN BELLE.

Raised by Henry McLaughlin, Bangor, Me., from whom we received specimens, which were of excellent quality. Tree hardy, vigorous, and a regular bearer; young shoots yellow brown.

Eastern Belle.

Fruit medium, obovate pyriform, somewhat obtuse; skin pale yellow, often shaded with light red in the sun, a few nettings and patches of russet, and many russet dots; stalk short, stout, inclined, and sometimes fleshy at its insertion in a slight depression, much russeted; calyx open; basin medium, nearly smooth, slight russet; flesh whitish yellow, a little coarse at the core, juicy, half melting, very sweet, rich, slightly aromatic, and a peculiar slight musky perfume; very good. September

EGERIE.

A chance seedling in the grounds of M. Tavenier de Boullongue at Angers, France. Tree moderately vigorous, rather upright, a good bearer.

Fruit medium, roundish pyriform, slightly obtuse; skin pale yellow, partially netted and patched with russet, and many russet dots; stalk rather long, slightly curved; cavity small; calyx open; basin medium, regular, russet; flesh white, half fine, juicy, half melting, sweet, slightly vinous; good to very good. October.

ELIOT'S EARLY.

A new early pear, raised by Charles Eliot, of Windsor, Ontario. Specimens received from James Dougall, who writes that the tree is very hardy, a strong, vigorous grower, an early bearer, very productive, and ripens a week or more before the Madeline.

Fruit small pyriform, regular; skin pale greenish yellow, brownish red when exposed to the sun; stalk long, slender, curved; cavity small, russeted; calyx closed or partially open; basin small, slightly plaited; flesh whitish, half fine, juicy, melting, sweet, slight perfume; good to very good. July.

INDIAN QUEEN.

Raised by Henry McLaughlin, Bangor, Me., who writes that the tree is perfectly hardy, a vigorous grower, productive, and a good market variety, although not of the best quality.

Fruit rather large, long pyriform, somewhat acute, surface a little uneven; skin pale yellow, often shaded with light red where exposed to the sun, slight nettings of russet, and many russet and brown dots; stalk of medium length, rather stout, set in a slight depression; calyx open; basin medium, uneven; flesh whitish yellow, a little coarse, moderately juicy, half melting, sweet, but not rich. September.

JACQUES CHAMARET.

A seedling of the late Leon Leclerc, at Laval, France. Tree strong, vigorous, erect, moderately productive; young shoots light reddish brown.

Fruit medium, roundish, inclining to acute pyriform; skin pale yellow, sometimes thinly shaded and marbled with light red in the sun; stalk rather long, curved, a little swollen at its insertion, sometimes by a lip; calyx open; basin shallow, uneven; flesh whitish, fine, juicy, half melting, sweet, slightly vinous; good to very good. October.

JOSEPHINE DE BINCHE.

Raised at Binche, Belgium, from seed of Josephine de Malines. Tree very vigorous and very productive, branches smooth, of a yellowish brown, with grayish dots.

Fruit medium, roundish obtuse pyriform; skin smooth, clear yellow, netted with brown and russet; stalk of medium length, small, inserted

in a moderate cavity; eye large, deeply sunk; flesh half fine, half melting, very juicy, sugary, of an exquisite perfumed flavor. October, December.—*Illus. Horticole.*

LORIOLE DE BARNY.

Originated in the nurseries of Andre Leroy, Angers, France. Tree vigorous, upright, very productive.

Fruit medium to large, oblong pyriform, slightly obtuse; skin pale yellow, a few nettings and patches of russet, and numerous russet dots; stalk of medium length; cavity small; calyx closed; basin medium, slightly corrugated; flesh whitish, half fine, juicy, melting, sweet, pleasant; good to very good. September.

LOUIS VILMORIN.

Originated with Andre Leroy, Angers, France. Tree vigorous, rather spreading, very productive.

Louis Vilmorin.

Fruit medium, pyriform, a little obtuse; skin deep yellow, considerably netted with russet, many russet dots, and sometimes a shade of red where exposed; stalk short, curved; cavity small, sometimes broad and

shallow; calyx large, open; basin medium, uneven, russet; flesh white, half fine, juicy, melting, sweet, slightly perfumed; good to very good. December.

MADAME ANDRE LEROY.

Raised by Andre Leroy, Angers, France. Tree moderately vigorous, but healthy, with long shoots, productive.

Fruit rather large, oblong pyriform, somewhat obtuse, inclined or sides unequal; skin pale whitish yellow, sometimes a shade of red in the sun, and many brown dots; stalk rather long, set at an inclination in a small cavity, sometimes by a lip; calyx closed or half open; basin medium, uneven; flesh whitish yellow, a little coarse, juicy, melting, vinous, a little astringent; good to very good. Last of September and first of October.

MADAME CUISSARD.

A seedling of M. Cuissard, of Ecully, near Lyons, France. Tree moderately vigorous, productive.

Fruit medium, roundish obtuse pyriform; skin pale greenish yellow, with many green and brown dots; stalk rather long, curved; cavity small; calyx closed or nearly so; basin medium, slightly corrugated; flesh white, a little coarse, juicy, melting, sweet, very slight acid or vinous; good. Last of August and first of September.

MADAME FAVRE.

A chance seedling discovered by M. Favre, of Chalons, France. Tree very strong, upright, pyramid, an early and abundant bearer.

Fruit large, roundish obovate, a little obtuse; skin pale greenish yellow, with numerous traces and splashes of russet; stalk rather long, quite strong, set in a slight depression; calyx large, open; basin quite deep, and rather abrupt; flesh whitish, fine, melting, juicy, sweet, and of a delicate flavor. October, November.—*Illustrated Monthly*.

MADAME LORIOLE DE BARNY.

Originated in the nurseries of Andre Leroy, Angers, France. Tree vigorous, upright, productive.

Fruit medium, oblong pyriform, a little obtuse; skin greenish yellow at first, changing to a deep yellow, slightly bronzed, sometimes a shade of red in the sun; stalk short; cavity small, or slight depression; calyx closed, or nearly so; basin rather shallow, a little uneven; flesh yellowish, a little coarse, melting, juicy, slightly vinous; good to very good. October, November.

MANNINGTON.

Originated in the garden of James M. Hannah, of Salem, Mannington Township, N. J., who writes that the tree is rather a slow grower, forming a compact symmetric head; branches strong, short jointed;

ripens two or three weeks later than Seckel, of the best quality, and keeping remarkably well.

Fruit rather small, ovate acute pyriform; skin pale greenish yellow, a shade of brownish red in the sun, slight nettings of russet and many russet dots; stalk short, slightly curved, joined to the fruit without depression; calyx open; basin shallow, uneven; flesh white, juicy, melting, sugary, rich, aromatic; very good or best. September, October.

Madame Lorial de Barny.

MARÉCHAL VAILLANT.

Originated with M. Boisbunel, of Rouen, France. Tree vigorous, upright, very productive.

Fruit large, broad obtuse pyriform; skin greenish yellow, a few nettings of russet and many russet and brown dots; stalk rather short, moderately stout, curved; cavity broad, not very deep; calyx open; basin large, deep, uneven; flesh whitish, half fine, melting, sweet, slightly vinous; very good. November, December.

MAURICE DESPORTES.

Originated in the nurseries of Andre Leroy, Angers, France. Tree vigorous, moderately productive; young shoots yellow brown.

Fruit medium to large, long acute pyriform; surface somewhat un-

even; skin pale yellow, nearly covered with thin light russet, often a shade of red in the sun; stalk long, rather slender, curved, joined to the fruit acutely without cavity, sometimes by a ring or lip; calyx open; basin medium, slightly corrugated; flesh white, fine, juicy, melting, sweet, slightly perfumed; very good. September, October.

Maréchal Vaillant.

PETITE MARGUERITE.

Originated in the nurseries of Andre Leroy, Angers, France. Tree moderately vigorous, very productive; young shoots olive brown.

Fruit nearly of medium size, oblate obtuse pyriform, surface slightly uneven; skin greenish yellow, or pale yellow when mature, shaded with brownish red on the sunny side, and many greenish dots; stalk long, slightly curved, set in a narrow, rather deep cavity; calyx half open; basin quite large, slightly corrugated; flesh white, half fine, buttery, juicy, melting, sweet, slight perfume flavor; very good. Ripens last of August.

PRÉMICES D'ECULLY.

Originated with M. Luizet, at Ecully, near Lyons, France. Tree moderately vigorous, very productive.

Fruit nearly of medium size, obtuse pyriform; skin pale yellow, a few nettings of russet, and many russet dots; stalk of medium length, a little inclined; cavity broad, shallow; calyx closed or half open; basin rather shallow, russet; flesh whitish, a little coarse, juicy, half melting, sweet, slightly aromatic; good. September.

Maurice Desportes.

PROFESSOR HORTOLES.

This new pear originated with M. Morel, at Lyons, France. Tree very strong and vigorous, and a very good bearer.

Fruit medium to large, roundish oblate, inclining to pyriform, slightly obtuse; skin deep yellow, slight nettings of russet, and many large dark brownish red dots, and often brownish red in the sun; stalk short, stout; cavity medium; calyx large, open; basin rather wide, quite deep; flesh fine, juicy, melting, sugary, vinous, and of the highest quality. September, October.—*Illustrated Monthly*.

Petite Marguerite.

ROGERS.

Dean.

A chance seedling in the garden of the late Capt. Rogers, of Boston, Mass., and introduced by A. J. Dean, of the same place. Tree vigorous, somewhat spreading, productive.

Fruit medium, oblong ovate obtuse pyriform; skin yellowish green, sometimes a shade of dull red in the sun, and many green and russet dots; stalk long, curved, inserted in a slight depression or small cavity; calyx half open; basin rather small, slightly corrugated; flesh whitish yellow, a little coarse, juicy, half melting, sweet, slightly vinous, and slightly aromatic; good to very good. September.

SAINT GERMAIN VAN MONS.

Origin Belgium, one of Van Mons' seedlings. Tree moderately vigorous, moderately productive.

Fruit medium or nearly so, roundish obovate pyriform; skin light greenish yellow, many brown dots; stalk long, curved; cavity very small; calyx open; basin small, russet; flesh whitish, buttery, melting, juicy, sweet; good. October.

SAM BROWN.

Originated with Samuel Brown, Jr., at Walnut Hills, Md. Tree a free grower, an early and regular bearer.

Fruit nearly of medium size, roundish oblate, a little uneven; skin pale yellow, partially covered with thin russet, sometimes a little

Rogers.

brownish in the sun; stalk short, rather stout, inserted in a large cavity; calyx open or partially closed; basin large, deep; flesh white, a little coarse, juicy, melting, vinous, and rich; very good. September.

SOUVENIR FAVRE.

A variety raised by M Favre, of Chalons, France. Tree vigorous, moderately productive.

Fruit medium, obovate pyriform; skin greenish yellow, sometimes a shade of red in the sun, many brown and green dots; stalk short, inserted at an inclination in a slight depression by a lip; calyx open;

basin small or medium, uneven, slightly russeted; flesh whitish, half fine, juicy, melting, sweet, slightly perfumed; good to very good. October.

Sam Brown.

Therese Appert.

THERESE APPERT.

A new variety raised by Andre Leroy, Angers, France. Tree strong, vigorous, an abundant bearer.

Fruit medium, rather long pyriform to roundish obovate pyriform, a little obtuse; skin deep yellow, partially netted, dotted, and patched with russet, sometimes a shade of rich brownish red in the sun; stalk short, a little inclined; cavity small, often without; calyx open; basin rather shallow, smooth; flesh whitish yellow, half fine, juicy, melting, sweet, slightly vinous; very good. September.

QUINCE.

SWEET QUINCE.

ORIGIN said to be Chambersburg, Pa., many years since. Tree a good grower and an abundant bearer. The fruit is less acid than other kinds, keeps late, and cooks tender.

Fruit medium to large, roundish oblate, angular or somewhat ribbed; skin deep yellow; stalk short, set on a swollen projection in a broad, shallow depression; calyx open, with long, broad segments; basin large, deep, corrugated; flesh firm, deep yellow, with the same juice and acid astringency of the apple-quince, but much less of it.

RASPBERRY.

HERSTINE.

THIS new raspberry originated with D. W. Herstine, Branchtown, Pa. The plant is said to be hardy, is very vigorous, and very productive, and is a promising market variety, except for carrying long distances I fear it will not be quite firm enough; canes strong, erect; spines short, strong, scattering, greenish white, slightly purple.

Fruit large, roundish obtuse conical, bright scarlet; flesh moderately firm, juicy, sweet, rich, separates freely from the core.

NARRAGANSET.

A new variety raised by John F. Jolls, of Providence, R. I., which is said to be very large, very productive, and a promising variety for market, being large and keeping in good condition for a long time; the berry is scarlet, of a conical form and fine flavor. We have not seen the fruit.

ONTARIO.

A variety of the Black Cap found on the grounds of E. E. Lord, Fairport, N. Y. Plant hardy, vigorous, and very productive, and, being firm, it will bear carriage to a distant market. The fruit is quite large of its class, deep black, with a very thick bluish bloom, juicy, sweet, and very good.

SUSQUECO.

Brandywine.

Of unknown origin, but said to be a good market sort for Delaware and Maryland.

Fruit medium, roundish obtuse conical, bright red ; flesh quite firm, moderately juicy, sprightly subacid.

SECOND APPENDIX

TO

SECOND REVISED EDITION.

PEACHES, PEARS, &c.

PEACHES.

ALEXANDER'S EARLY.

A chance seedling on the farm of O. A. Alexander, near Mount Pulaski, Illinois. This new peach ripened here last season, towards the last of July, two weeks before Hale's Early; tree vigorous, productive; the fruit showy, of good flavor, and promises to be an acquisition as an early market variety and for home use; leaves with globose glands; flowers large.

Fruit medium, nearly globular, slightly depressed; suture shallow, ending at the apex, which is slightly sunk; skin greenish white, nearly covered with deep rich red, almost purplish in the sun; flesh whitish, with a tinge of green, sometimes a little stained next the skin; a little firm, or half melting, juicy, sweet, slightly vinous, white at the stone, to which it adheres slightly, and which is small.

AMSDEN'S JUNE.

A chance seedling on the grounds of L. C. Amsden, near Carthago, Missouri; tree vigorous, productive, and it is said to ripen two or three weeks earlier than Hale's Early, but not having fruited it here, cannot say as to time. Fruit received July 13 from the originator, where the season is earlier; leaves with globose glands; flowers large.

Fruit medium, roundish, slightly depressed; suture rather broad, shallow, extending a little beyond the apex, which is slightly sunk; skin greenish white, nearly covered with light and dark red, almost purplish in the sun, and somewhat mottled in the shade; flesh greenish white, while at the stone, to which it slightly adheres, and which is small; flesh half melting, juicy, sweet, slightly vinous and very good.

COOK'S LATE WHITE.

A chance seedling in the garden of an unknown person in Philadelphia, but was introduced by Joseph Cook of Salem, New Jersey; it is a large peach, highly esteemed and popular, where known, for market and family use; tree vigorous, an abundant bearer; flowers small.

Fruit large, roundish, a little inclining to oblong; skin pale whitish yellow, a shade of pale red where exposed; suture small, extending a little beyond the apex, which is a small point; flesh white, a little stained with red next the stone, juicy, melting, sweet, rich and delicious; free stone. Ripe last of September.

EARLY ASCOT.

Raised a few years since by Mr. Standish, of the Royal Ascot Nursery, England, and is considered a choice peach; leaves with small roundish reniform glands; flowers small.

Fruit medium, roundish, somewhat depressed; suture shallow; skin flushed with bright red on nearly all parts, suffused on the shady with crimson and on the exposed side with deeper blood red; flesh slight red at the stone, from which it parts freely, pale greenish straw color, with abundant juice, and an excellent flavor. Ripe first of September. (*Florist and Pomologist.*)

FETTERS.

A new variety, raised by John Feters, near Lancaster, Ohio; tree vigorous, a good and regular bearer and fine quality; glands globose; flowers small.

Fruit medium to large, roundish, inclining to oblong; suture distinct but not deep, extending a little beyond the apex, which is a small point; skin creamy white, with a slight blush where exposed; flesh white, a slight tinge of red at the stone, juicy, melting, sweet, rich and excellent; freestone. Ripens the first of September.

HIGH'S EARLY CANADA.

A seedling raised by Abraham High, Jordan, Ontario, who claims that it is as early or a few days earlier than Early Beatrice, larger and better quality: and the fruit he sent me was very similar in size, form, color and quality to Alexander's Early, Amsden's June and Honeywell, and I am inclined to think they are all seedlings, varying slightly, of one kind—probably Hale's Early.

HILL'S CHILI PEACH.

Synonyms:

Cass.....	Seagrove.
Climax.....	Seagrove's Smolk.
Connecticut.....	Stanley's Late.
Jenny Lind.....	Smolk.
Leopold.....	Sugar.
Madison.....	Wilcox.
Queen of Sheba.....	

It is now pretty well ascertained that this peach originated on the farm of Deacon Pitmann Wilcox, of Riga, Monroe County, N. Y., more than sixty years since, and is still healthy and bearing fruit; it was first called Connecticut Peach. The tree is hardy, vigorous, very productive, and is considered a valuable market variety. It is also said to reproduce itself from seed, and the many names by which it is called in different localities is no doubt the result of its reproduction.

Fruit medium oval; suture slight, ending a little beyond the apex, which is a small point; skin deep yellow, shaded with dark red, often dark spots or blotches of brownish red where exposed; flesh deep yellow, red at the stone, moderately juicy, half melting, sweet, vinous; separates freely from the stone, which is rather small; ripens the last of September and first of October.

HONEYWELL.

A new variety, raised by John Honeywell, Randolph, Ohio; a handsome early peach, ripening a week or two before Hale's Early, and growing here last season side by side with Alexander's Early was two or three days earlier; tree is vigorous and productive, and promises to be valuable; leaves without glands, flowers large.

Fruit medium, nearly globular, a little flattened; suture slight, rather shallow, extending a little beyond the apex, which is small; skin greenish white, nearly covered with light and dark rich red; reddish purple where fully exposed; flesh whitish, juicy, half melting, sweet, slightly vinous and very good; adheres slightly to the stone, which is small and not stained.

MRS. BRETT.

A chance seedling in the garden of Mrs. Maria Brett, Newburgh, N. Y.; tree vigorous, productive; glands reniform; flowers small; glands globose.

Fruit medium, roundish; suture broad and shallow, extending a little beyond the apex, which is a small swollen point; skin whitish, shaded with dark rich red where fully exposed; flesh white, red at the stone; juicy, melting, sweet and rich; free stone.

MUSCOGEE.

A variety of the Columbia, raised by J. C. Cook, Columbia, Georgia; the tree much resembles the Columbia in all its parts; flowers small.

Fruit large, roundish, slightly depressed; suture rather broad and distinct, extending a little beyond the apex, which is a small point; skin downy, dull yellow, more or less striped, splashed or mottled with dull or brownish red; the splashes vary in form and size; flesh whitish, a little coarse, sometimes a little stained and veined with red; juicy, sweet, slightly vinous; free stone, which is nearly round and of medium size. Ripens at the South the first of August, and a month later at the North.

NIX'S LATE WHITE.

Origin said to be Newtown County, Georgia; tree vigorous, productive, and ripens a week or two later than Heatheling; leaves with reniform glands; flowers large.

Fruit large, roundish, inclining to oblong; suture medium, extending

to the apex, which is slightly sunk ; skin white, downy, a shade of red in the sun ; flesh white to the stone, to which it adheres ; rather firm, juicy, sweet, vinous and rich. Ripe middle and end of October.

PETIT'S IMPERIAL.

Imperial Yellow.

This was raised by David Petit, Salem, N. J. ; it is a large, handsome late peach, one of the richest of the yellow-fleshed varieties, and continues in use longer than most kinds ; tree vigorous, a moderate bearer generally, but some seasons produces good crops ; flowers small.

Fruit large to very large, roundish, slightly depressed ; suture shallow, extending a little beyond the apex, which is small ; skin deep orange yellow, shaded and mottled with dark rich red ; flesh yellow ; red at the stone, juicy, melting, rich, sweet and high flavored ; free stone. Ripe last of September.

THURBER.

A new variety, raised from the seed of Chinese Cling, by Dr. L. E. Berckmans, Rome, Georgia, and named after his friend, Dr. George Thurber ; it is a handsome and very promising variety, and as it is said to carry well, and being of good size, it will be an acquisition for market and general use ; tree very healthy, vigorous and symmetric in form ; flowers small.

Fruit large, roundish, inclining to oblong ; suture slight, extending to the apex, which is slightly sunk ; skin slightly downy, creamy white, shaded and mottled with pale red and carmine where fully exposed ; flesh white, a little red at the stone, which is free ; fine grained, very juicy, melting, slightly vinous, rich and delicious. Ripe from middle to the end of July in Georgia.

PEARS.

CALEBASSE D'OCTOBRE.

Of Belgian origin; tree vigorous, upright; promises to be an abundant bearer.

Fruit large, elongated pyriform, a little obtuse, some specimens acute, when the stalk is inserted by a lip, without cavity; skin smooth, pale yellow, a shade of rich crimson where fully exposed; stalk long, inclined, curved; cavity small; calyx closed; basin shallow, slightly corrugated; flesh white, fine, juicy, melting, with a pleasant, rather rich flavor. Ripens in October.

Colonel Wilder.

COLONEL WILDER.

A new seedling raised by B. S. Fox, San Jose, California, and is said to be a valuable late variety.

Fruit medium to large, roundish obtuse pyriform; skin light yellow, a shade of light orange red in the sun, slight nettings of russet, and numerous small russet and brown dots; stalk rather short; cavity small; calyx small, open, or nearly so; basin rather shallow, slightly plaited; flesh whitish yellow, a little coarse around the core, juicy, melting, very sweet, with a peculiar slight musky and slightly aromatic flavor. December, January.

COURTE QUEUE D'AUTOMNE.

Originated with Andre Leroy, Angers, France; tree vigorous, somewhat spreading, very productive.

Fruit medium, oblate to roundish oblate, slightly elevated, surface rough, uneven and irregular; skin pale whitish yellow, sometimes a shade of pale red in the sun, and many russet dots; stalk short, stout, a little inclined; cavity medium; calyx closed; basin broad, corrugated; flesh whitish, fine, melting, sweet, slightly vinous, and a slight cinnamon perfume. Last of September and first of October.

DOCTOR HOWE.

Origin, in the garden of Dr. John J. Howe, Birmingham, Conn.; tree healthy, vigorous, spreading, with numerous branches of firm texture and persistent foliage; very productive; a new promising variety of its season.

Fruit medium, roundish, inclining to pyriform, slightly obtuse; skin greenish, but becoming light yellow at maturity; slightly netted and patched with russet, and many russet dots; stalk medium; cavity small; calyx open; basin medium, a little uneven; flesh whitish, half fine, juicy, melting, with a sweet, rich, slightly vinous flavor. Ripens the last half of October.

DOCTOR LINDLEY.

Origin unknown; tree vigorous; an abundant bearer of handsome, high-flavored fruit.

Fruit nearly medium, oblate pyriform, or broadly turbinate; skin pale yellow, a shade of bright red where exposed, thinly netted and traced with russet, and many russet dots; stalk rather long, inclined, set in a small cavity, sometimes by a lip; calyx open; basin medium, slightly plaited; flesh whitish, fine, juicy, melting, sweet, rich and excellent. November.

DUHAMEL DU MONCEAU.

Raised by Andre Leroy, Angers, France, and dedicated to Duhamel du Monceau; tree vigorous, spreading, and a good bearer.

Fruit medium, roundish pyriform; skin pale whitish yellow, a shade of brown in the sun, partially netted and patched with russet, and sprinkled with many russet and brown dots; stalk long, inclined, set in a slight de-

Duhamel du Monceau.

pression, sometimes by a lip; calyx open, or half closed; basin shallow, a little uneven; flesh whitish, half fine, buttery, juicy, melting, sweet, slightly vinous, and very good. November.

ELIZABETH MAURY.

A chance seedling on the ground of Reuben Maury, Charlottesville Virginia, and named after his grand-daughter, Elizabeth Maury; tree vigorous; an abundant bearer.

Fruit small, oblate, slightly elevated; skin pale greenish yellow, sometimes a shade of brown in the sun, and many greenish dots; stalk short to medium; cavity small; calyx small, open or half open; basin rather small, slightly plaited; flesh whitish, half fine, tender, juicy, melting, sweet, slightly vinous. August.

FREDERICK CLAPP.

Clapp's No. 22.

This fine new pear was raised by Lemuel Clapp, (brother of the late Frederick and Thaddeus Clapp, who produced Clapp's favorite pear, and upon the same farm) Dorchester, Mass., from seed of Urbaniste crossed with Beurre Superfin, which it much resembles in flavor, only a little more vinous. Mr. Clapp writes that the tree is vigorous, with rather slender branches, somewhat inclined to spread; a good bearer, and keeps remarkably well.

Frederick Clapp.

Fruit medium to large, roundish, inclining to obovate pyriform, but often variable and irregular in form; skin smooth, bright yellow, without blush or russet, but many minute brown dots; stalk of medium length and thickness, sometimes a little fleshy inclined, set in a slight depression or small cavity; calyx nearly closed; basin medium, regular; flesh whitish yellow, fine, very juicy, melting, rich, highly vinous and slightly aromatic. Ripens from the middle to the last of October.

HARRIS.

This is another of the fine pears raised by Lemuel Clapp, of Dorchester, Mass., from seed of Urbaniste, supposed to be crossed with Beurre Bose. Mr. Clapp states that the tree is 'moderately vigorous, short-jointed wood, and naturally inclined to make a compact pyramid, and very productive.

Fruit medium, oblong, obtuse pyriform; skin smooth, thin pale yellow, nearly covered with light cinnamon russet, sometimes a shade

Harris.

of crimson where fully exposed; stalk medium, or rather long; curved, set in a slight depression; calyx open or nearly so; basin shallow, regular; flesh white, fine, buttery, juicy, melting, sweet, rich, slightly aromatic and vinous. Ripens from the middle to the last of September

HOMESTEAD.

A new pear, raised by Asahel Foote, of Williamstown, Mass., from seed of the Virgalieu or White Doyenne; tree vigorous, upright, a good bearer, annually. Mr. Foote has raised many seedling pears which promise well, and when fully tested will be noticed, if worthy.

Fruit medium or above, oblong obtuse pyriform; skin greenish yellow, often pale yellow when fully matured, sometimes a shade of brownish red where exposed, slightly netted and patched with russet, and many russet dots; stalk long, curved; cavity small; calyx large, open; basin shallow, regular; flesh whitish, a little coarse around the core; half fine, juicy, melting, sweet, slightly vinous and slightly aromatic. Ripens from the first week in November to the middle of December.

Horace Greeley.

HORACE GREELEY.

Origin, in the garden of Dr. John J. Howe, Birmingham, Conn.; tree a strong, vigorous grower, holding its foliage well; very productive and promising.

Fruit medium or above, roundish, inclining to obtuse pyriform; skin pale yellow at maturity, partially netted and blotched with russet, and many russet dots; stalk rather long, inclined, curved, set in a slight depression or small cavity; calyx open; basin medium, rather shallow, and a little uneven; flesh a little coarse, juicy, melting, sweet, rich and slightly ruinous. Ripe last half of October.

HOUSATONIC.

Origin, in the garden of Dr. John J. Howe, of Birmingham, Conn.; tree healthy and vigorous, rather upright; a good bearer, and a good late variety.

Fruit rather large, roundish pyriform; surface a little uneven; skin greenish yellow, many green and brown dots; stalk rather long, curved; cavity small; calyx small, closed; basin rather shallow, slightly plaited; flesh white, half fine, juicy, melting, rich and vinous. November.

LONGUE DU BOSQUET.

Origin, in the nurseries of Andre Leroy, Angers, France; tree moderately vigorous; an early and good bearer.

Fruit medium, roundish acute pyriform; skin bright straw color, shaded and mottled with pale red or carmine, a few traces of russet and many small russet dots; stalk long, slender, curved, joined to the fruit acutely; calyx closed or half open; basin shallow, a little uneven; flesh whitish, fine, melting, juicy, sprightly, with a slight musky perfume. September.

LUCIE ANDUSSON.

Raised by Alexis Andusson, Angers, France; tree vigorous, upright, somewhat spreading, moderately productive.

Fruit medium or above, roundish pyriform, obtuse; skin pale yellow, much netted and patched with russet, and many small russet dots, stalk medium, inclined; cavity small; calyx open; basin rather shallow, slightly corrugated; flesh white, fine, juicy, melting, sweet, rich, slightly aromatic. Ripens the last of October and first of November.

LUCY GRIEVE.

A new pear raised from seed by Lucy Grieve, Guilford, England.

Fruit medium, oblong obtuse pyriform; skin clear, deep lemon-yellow, thinly marked with russet dots, and slight russet around the stem and calyx; stalk of medium length and thickness, set at an inclination in a shallow, uneven cavity; calyx closed; basin shallow, regular; flesh moderately firm, fine grained, tender, melting, very juicy, rich, slightly vinous. October. (*Florist and Pomologist.*)

MADAME APPERT.

Raised by Andre Leroy, and dedicated to his oldest daughter; tree vigorous, upright, pyramidal; a good bearer.

Fruit medium or above, roundish acute pyriform; skin pale green,

sprinkled with many brown dots; stalk long, curved, slender, joined to the fruit acutely, sometimes by a lip; calyx half open; basin small, slightly plaited; flesh whitish yellow, fine, juicy, melting, sweet, slightly perfumed, and quite rich. Last of September and first of October.

MADAME BAPTISTE DESPORTES.

Origin, in the nurseries of Andre Leroy, Angers, France; tree moderately vigorous; an abundant bearer.

Fruit medium, roundish oval; skin pale yellow, sometimes a shade of brownish red, partially patched and netted with russet, and many russet dots; stalk long, rather stout, inclined, set in a small cavity; calyx open; basin large, deep, slightly corrugated; flesh white, fine, juicy, melting, sweet, rich, slightly aromatic. October.

MARIA.

Curran.

Origin, in the garden of the late Cuthbert M. Curran, Windsor, Nova Scotia, and was brought to notice by the late Hon. C. R. Prescott, and named by him in honor to his wife; tree hardy, moderately vigorous, or of slow growth; a good bearer.

Fruit below medium, roundish, a little elevated around the stalk; skin pale yellow, often shaded with light bright red; stalk long, curved; cavity small; calyx open; basin rather small, slightly corrugated; flesh white, fine, buttery, juicy, melting, sweet, vinous, rich. Ripens a week or two earlier than the Bartlett.

P. BARRY.

A very promising new variety, raised by S. B. Fox, San José, California. Mr. Fox has raised several seedling pears of great merit, at least as grown with him; how they will succeed elsewhere has yet to be tested. We give descriptions of Colonel Wilder, P. Barry and S. B. Fox, from specimens received from Ellwanger & Barry and Marshall P. Wilder.

Fruit large, elongated pyriform, a little obtuse; skin deep yellow, nearly covered with rich golden russet; stalk of medium length and thickness, inclined, set rather obliquely in a medium cavity, sometimes by a lip; calyx small, open; basin small, regular; flesh whitish, fine, juicy, melting, sweet, slightly vinous and rich. December.

PUEBLA.

Origin, in the nurseries of Andre Leroy, Angers, France; tree strong, vigorous, rather upright; a good bearer.

Fruit large, roundish pyriform, a little obtuse; surface rough, uneven; skin pale greenish yellow, sprinkled with many brown and green

dots; stalk medium, stout; cavity small; calyx closed or nearly so; basin medium or broad, corrugated; flesh white, a little coarse, buttery half melting, juicy, slightly vinous. Last of September and first of October.

P. Barry.

ST. THERESE.

Originated in the nurseries of Andre Leroy, Angers, France; tree a good grower, upright, somewhat spreading.

Fruit medium, oblong pyriform, slightly obtuse; skin whitish yellow, shaded with bright red, slight nettings of russet, and many russet and brown dots; stalk of medium length and thickness, inserted in a slight depression, or small cavity; calyx open; basin medium, a little uneven;

flesh whitish yellow, a little coarse, juicy, melting, buttery, sweet, and very good. October.

B. S. Fox.

This is thought by some to be one of Fox's best late fall varieties.

Fruit large, oblong, obtuse pyriform; skin clear bright yellow, nearly covered with rich golden russet; stalk rather short, stout, inserted obliquely by a lip in a slight depression; calyx small, open; basin medium, uneven; flesh whitish, fine, juicy, melting, sweet, rich and excellent.

SUTTON'S GREAT BRITAIN.

A seedling of the Bartlett, raised by William Sutton, Cornwallis, Nova Scotia; the tree is said to be hardy, with stout short-jointed, dark colored young wood; fruit large, showy, very productive, and is becoming popular as a market fruit.

Fruit large, pyriform, a little obtuse; skin greenish yellow or pale yellow, often with a shade of red where exposed, slight nettings and patches of russet, and many russet dots; stalk long, rather stout, a little inclined, set in a small cavity; calyx open; basin shallow, a little uneven; flesh whitish, a little coarse, half melting, juicy, sweet and pleasant. Ripens about ten days later than the Bartlett.

TALMADGE.

Northford Seckel.

A chance seedling in the garden of Levi Talmadge, Northford, Conn. Tree hardy, vigorous, symetric; an early and abundant bearer.

Fruit rather small, obovate; skin yellow, more or less netted and patched with russet; stalk long, inclined; cavity medium; calyx small, open; basin small, regular; flesh whitish, half fine, juicy, melting, sweet, slightly aromatic. September.

CORRECTIONS.

ANANAS OR ANANAS D'ÈTÈ PEAR.

There is much confusion in regard to the pears *Ananas*, *Ananas d'Ètè* *Ananas de Courtrai*, and *Henry the Fourth*. The three first having proved identical with me, and the latter distinct, I have received trees and grafts of *Ananas de Courtrai* from many sources, both in Europe and this country, and when in bearing have proved to be *Ananas d'Ètè*. From all I can learn of its history, it is a very old variety, and was first called *De Bonchet*, but was afterward named *Ananas*, which is still retained, with the synonyms annexed:

Ananas.

De Bouchet.....	Pouchet.
Ananas d'Etè.....	Comperette.
Ananas de Courtrai.....	Beurre Ananas.
Summer Pine Apple.....	Ananas Française.
Favori Musque.....	
Favori Musque du Conseiller, V. M.....	
Henry IV., incorrectly.....	

The Henry the Fourth pear has but two synonyms, viz., Henry Quatre and Jacquin, and as we received it from Europe, and as it is generally known in this country, is a small pear of very good quality; but Andre Leroy, in his *Dictionnaire de Pomologie*, describes Henry the Fourth as a large pear of second quality; which of the two is correct, I am unable to decide.

Additional Synonyms.

Pears.

Abbe le Berriays.....	Syn. to Berriays.
Anaude regenerie.....	" Walker.
Baron de Geer.....	" Henri Van Mons.
Belleville Baking.....	" Harrison's Fall.
Beurre d'Apremont.....	" Beurre Bosc.
Beurre Dilly.....	" Beurre Dellannoy.
Beurre de Paques.....	" Bonne de Soulers.
Beurre Robert.....	" Doyenne du Comice.
Beurre Sceringe.....	" Doyenne de Saumur.
Duc d'Orleans.....	" Marechal de la Cour.
Early Bergamont of Wisconsin.....	" Passans du Portugal.
Eanes of Kentucky.....	" Windsor.
Esturion.....	" Winter Nelis.
Francis Borgia.....	" Onondaga.
Henkel d'Automne.....	" Henkel.
Humboldt's Butterbim.....	" Beurre Bosc.
Jackson's Seckel.....	" Jackson's Elizabeth.
Josephine Bouvier.....	" Beurre Navez.
Lauren's Summer.....	" English Jargorelle.
Marquis d'Hem.....	" Hampden's Bergamotte.
Nana.....	" Manning's Elizabeth.
Phillip Goes.....	" Barronne de Mello.
Retour de Rome.....	" Nouveau Poiteau.
Smith's Superior.....	" Windsor.
Sylvestre d'Automne.....	" Frederick de Wurtemberg.
Sylvestre d'Hiver.....	" " "
Turner's Early of Illinois.....	" Rousselet Hatif.
Wredow.....	" Delices de Charles.

PLUMS.

BODDAERT'S GREEN GAGE.

Reine Claude Boddaert.

Of foreign origin; tree vigorous, rather upright; branches smooth, brownish; productive.

Fruit large, roundish, inclining to oblong; suture slight, apex a dot; skin pale greenish yellow, with broad splashes of green, and covered with a thin whitish bloom; stalk medium, rather stout; cavity small; flesh light yellow, melting, juicy, sugary and delicious. Ripens the end of August.

EARLY YELLOW GAGE.

A new early plum, raised by Asahel Footh, Williamstown, Mass., tree a strong, upright grower; an early and abundant bearer; branches smooth, dark brown.

Fruit medium, roundish oval, narrowing a little towards the stalk; suture broad, shallow, extending to the apex; skin greenish yellow or pale yellow at maturity, covered with a whitish bloom; stalk medium, slender; cavity small; flesh greenish yellow; a little coarse, juicy, sugary and rich; adheres slightly to the stone.

HUNGARIAN PRUNE.

Datte de Hongrie.

Of Belgian origin; tree vigorous, spreading; branches smooth, grayish brown; a good bearer.

Fruit medium, elongated oval, slight neck, sides compressed, one edge considerably flattened, and the other much rounded; suture shallow, apex a pointed dot; skin dark purplish black, with a thick blue bloom; stalk long, slender, curved at the end; cavity small; flesh greenish yellow, juicy, sugary, rich, separates freely from the stone. Ripens the first of September.

PRECOCÉE DE LUCAS.

Of foreign origin; tree vigorous, upright; branches smooth, grayish; very productive.

Fruit medium, oval, narrowing a little towards the apex; suture a line; stalk rather long, slender; cavity very small; skin deep black, thick blue bloom; flesh greenish, juicy, sweet, slightly vinous; separates from the stone. Ripens the last of August.

PRUNE TARDINE.

Origin unknown; tree vigorous, upright; branches smooth, light reddish brown; very productive.

Fruit below medium, oval, narrowing a little at the ends, one side a little enlarged; suture a line, apex a point; skin black, with a thick blue bloom; stalk rather long, slender; cavity small; flesh greenish yellow, juicy, sweet, slightly vinous; separates from the stone. Ripens the middle of October.

ROYAL DE BRAUNAC.

Of foreign origin; tree vigorous, upright; branches smooth, grayish, slightly downy at the ends; a good bearer.

Fruit medium, roundish oval, regular, almost without suture; skin light reddish in the shade, purplish black in the sun, thickly dotted with brown dots, and covered with a thick lilac bloom; flesh greenish yellow, a little coarse, rather firm, juicy, rich; adheres to the stone. Ripens the first of September.

SULTAN.

Raised by Thomas Rivers, Sawbridgeworth, England; tree vigorous; very productive.

Fruit medium, round; suture rather shallow; skin dark, purplish red, dotted with minute brown specks, and covered with a thin bluish bloom; stalk medium; cavity large; flesh greenish yellow, firm, brisk, sweet, pleasant flavor; adheres partially to the pit. Ripe middle of August. (*Florist and Pomologist.*)

VIOLETTE DE GALOPIN.

Origin unknown; tree vigorous, upright; branches smooth, brownish, short-jointed; an abundant bearer.

Fruit medium, nearly globular, slightly oval at the apex; almost without suture; apex slightly sunk; stalk of medium length, rather stout; cavity small, deep; skin dark purple, almost black, thick blue bloom; flesh deep yellow, juicy, sugary, rich; adheres slightly to the pit on one side. Ripens the last of August.

NOTE.

There have been many new grapes, strawberries and raspberries introduced during the past few years, some of which are very promising, but further experience and examination is necessary before deciding fully as to their merits.

THIRD APPENDIX

TO

SECOND REVISED EDITION.

CHERRIES, GRAPES, PEARS, &c.

CHERRIES.

BARNHART.

This new cherry originated on the farm of Louis Shepler, of Belle Vernon, Pa., and is much grown by the Shepler Brothers, who have a large collection of cherries and other fruits, which are grown in quantities for the market, and it is said this cherry commands a higher price than any other variety. The fruit is large, handsome, firm flesh, and of excellent quality; the tree is healthy, vigorous, and an abundant bearer.

Fruit large, obtuse heart-shaped, a little compressed; suture slight; cavity large, deep; stalk rather long, slender; skin whitish yellow, shaded and mottled with light and dark rich red; flesh firm, juicy, sweet, with a sprightly, rich flavor. Ripens the last of June and the first of July.

BURGHLEY PARK.

Origin Burghley Park, Stamford, England; a Duke cherry of moderately vigorous growth; a shy bearer at first, but abundantly productive in a few years.

Fruit large, usually round, with an obscure suture, but occasionally compressed or flattened; skin very thin, transparent, the color deep rich red, with shades of maroon; the flesh is of a tawny color, juicy, melting, a little astringent at first, but very pleasant, refreshing, subacid flavor when fully ripe. It belongs to the Red Duke class, and, in general characteristics, nearest to Reine Hortense, though it appears to combine the best qualities of both.—*Gardeners' Weekly*.

DYCHOUSE.

Origin unknown; was introduced by H. T. Harris, of Stamford, Ky., and was found growing in an old Morello orchard, on the farm of a Mr. Dychouse, in Lincoln County, over thirty years since; it is still grown there from suckers, and is claimed to be hardy, moderately vigorous, somewhat spreading, of the Morello type, but partakes both of the Morello and Duke in growth, wood, and fruit; a very early and sure bearer; ripens a week before Early Richmond, is about the same size, of better quality, and quite as productive.

Fruit medium, oblate or roundish oblate, slightly depressed, without suture; apex slightly depressed; skin bright red, dark red

in the sun; stalk of medium length, slender; cavity rather large, smooth; flesh soft, juicy, tender, sprightly subacid, rather rich; pit very small; sometimes the stalk adheres to the pit.

EARLY LYONS.

Rose Hative de Lyon.

Guigne Hative de Lyon.

A very large and handsome cherry of excellent quality. The fruit is roundish, obtuse heart-shape, with a faint depression or suture on the flattened side, and having the stalk, which is an inch and three-quarters long, set in a rather shallow cavity; the skin is blackish crimson-purple, or glossy blackish mahogany color: the flesh is of a very dark brownish-red, sweet, tender, juicy, and well-flavored. It is an early variety, ripening about the end of June. (Flo. & Pom.)

EARLY RIVERS.

A new early cherry raised from seed of Early Purple Guigne, by Thomas Rivers, Sawbridgeworth, England. Tree luxuriant, healthy, and an abundant bearer; fruit as large as its parent, very rich and good, and a trifle later.

Fruit medium to large, roundish heart-shape, and somewhat uneven on the surface, slightly pitted on the apex, with a distinct style point; suture not well defined; skin deep black; stalk long, rather slender; cavity small, rather deep; flesh very tender, sweet, and agreeably perfumed; stone very small; a very excellent cherry. Ripe the end of June. (*Lon. Jour. of Hort.*)

GLOIRE DE FRANCE.

This beautiful cherry originated with Auguste Bonnemain, Étamps (Seine-et-Oise), France, and is of the Mayduke type. Tree moderately vigorous, erect, with rather slender branches, making a regular, roundish, conical head, moderately productive.

Fruit rather large, roundish oblate, somewhat depressed; suture broad, shallow, often very slight; apex rather large, a little sunk; skin bright scarlet or crimson, almost transparent; flesh pale red, tender, very juicy, sprightly, and when fully ripe of a rich, refreshing acid flavor. Season the first of July.

IDA.

A new and promising variety, raised by E. H. Cocklin, of Shepherdstown, Pa., who says that it is a seedling of the Cocklin's Favorite, and has borne good crops for fifteen years; it is considered worthy of general cultivation; it is named after his daughter Ida. Tree vigorous, upright, an abundant bearer.

Fruit medium, or rather large, obtuse conical, slightly compressed; suture slight; skin pale whitish yellow, nearly covered with bright red, more or less mottled; stalk of medium length, slender, inserted in a rather large, deep cavity; flesh very tender, juicy, rich; very good, if not best quality; pit very small. Season about the time of the Mayduke.

LANCASTER.

An accidental seedling in the grounds of Daniel Smeyeh, Lancaster, Pa. The tree is said to be a vigorous, upright, compact grower, a prolific bearer, and the fruit continues in use a long time.

Fruit medium, heart-shape, regular; suture very slight; apex very small; skin bright red; stalk long, slender; cavity medium, smooth; flesh half tender, juicy, sweet with a sprightly good flavor; the flesh adheres slightly to the pit, which is of medium size. Ripens during the month of June.

LARGE MONTMORENCY.

Montmorency, Large Fruited. Montmorency à Longue Queue.

According to Andre Leroy, this is a very old variety, and is supposed to have originated near Paris or Montmorency, France, more than 200 years since. Tree hardy, a vigorous grower of its class, and bearing abundantly.

Fruit medium to large, roundish oblate, slightly flattened at the base, regular, almost without suture; apex small; skin dark, rich red; stalk of medium length, moderately stout; cavity medium, or rather large, smooth; flesh soft, tender, juicy, rich acid, becoming subacid when fully mature. Season a week or ten days later than Early Richmond.

The Morello cherries appear to have been neglected of late years, probably on account of the introduction of so many choice varieties of sweet cherries. The Morellos are now becoming more popular, as they are more hardy, more certain bearers, less subject to rot, continue a longer time in use, are more valuable for canning, drying, and for various culinary purposes; also many of the kinds when fully ripe are good table fruits.

LEIB.

This fine Morello cherry is said to have been brought from Germany thirty years ago and planted in the garden of a Mr. Leib, in the city of Galena, Ill., where it still stands and is over thirty feet high; it is said to be very hardy, thrifty, healthy, upright in growth, bearing abundantly annually. The fruit is as large or larger than Early Richmond, a little later, much less acid, of better quality, and commands a better price in market.

LOVE APPLE.

Tomato.

A vigorous growing variety of the Duke cherry, which is said to have originated in Spain; it has borne abundantly here, and is a promising kind of its class.

Fruit rather large, roundish oblate, often depressed, or tomato-shape; suture shallow; apex a dot; skin yellowish, shaded with light red, bright rich red in the sun; stalk rather long, slender; cavity quite large, broad, moderately deep; flesh pale yellow, tender, juicy, sprightly subacid, rich; very good. Ripens the first half of July.

MARIE THERESE.

A new seedling of M. de Luigné, near Chateaugontier (Mayenne), France, and was dedicated to his daughter Marie Therese. Tree strong, vigorous, with rather long slender branches, forming a beautiful head; moderately productive, of excellent quality, and well worthy of cultivation.

Fruit medium or above, roundish, flattened at the ends; suture broad, shallow; apex small, a little sunken; stalk long, slender; cavity very small; skin fine, strong, transparent, clear red in the shade, a cornelian red in the sun, slightly dotted with whitish gray; flesh yellow, compact, melting, very juicy, sugary, deliciously acid and perfumed; first quality. 'Ripens the last of August. (Leroy.)

OLIVET.

A new French cherry, with the following description from the catalogue of Transou Brothers, of Orleans, France:

"This sort takes a place not occupied up to the present among the list of early cherries. Nearly all the early sorts that we possess are sweet, amber, or red varieties, with a limited fruiting season. The Olivet cherry is a large, globular, very shining deep red sort. The flesh is red, with a rose-colored juice, tender, rich, and vinous, with a very sweet subacidulous flavor. It ripens in the beginning of June, and continues till July without losing its quality. It possesses the fertility of the best of the Duke tribe, and is perhaps the largest of that class."

A friend writes that it fruited with him the past season, but being very dry the fruit was small, otherwise it sustained its foreign reputation.

Daniel B. Wier, of Lacon, Ill., has been engaged for many years in growing and testing seedling cherries of the Morello class, in large numbers, for the purpose of obtaining varieties suited to a cold climate, and of equal if not superior quality to those now in use. He states that he has been successful beyond his expectations, and is offering some of the most valuable of them to the public. The following are his descriptions of three which he values highly:

FLAGG, OR WIER'S EARLY KENTISH.

"Fruit medium, heart-shaped; black; ten days earlier than Early Richmond; in quality when fully ripe equaling the finest of the dark-colored sweet cherries, combining all the desirable qualities for kitchen or table; flesh firm; skin strong; at first rich subacid, but becoming very rich and sweet, and so strong that it has hung upon the tree for a full month after being fully ripe without decaying or dropping; pit small. Tree a slender, short-jointed, regularly conical, moderate grower, entirely hardy, and enormously productive; should have high, dry, light soil, and an airy situation."

Mr. Wier sent me specimens of this variety in 1876, which were of medium size, black color, with purplish-red flesh, tender, juicy, having a rich subacid flavor, of very good quality.

GALUSHA, OR No. 11.

"One of the finest of cherries; fruit above medium; light and subacid at first, very good, but as it matures, growing darker, firmer, richer, sweeter, until at last a very dark bright red, and one of the sweetest and most delicious of cherries; three days earlier than Early Richmond; hangs on the tree for a long period after being fully ripe without any rot. Tree hardy, foliage entirely free from disease, a vigorous and strong grower in the orchard, a very abundant bearer."

NORTHWEST, OR No. 29.

"This is undoubtedly the most valuable of all cherries for the Northwest for market and home use. Fruit dark bright red, a little larger and six days earlier than Early Richmond, and the tree almost exactly similar in general appearance. This variety in time will supersede all other sour cherries of its season. Its fine size, color, richness, earliness, firmness, and great productiveness, with entire hardihood of tree and fruit-bud, and perfect health of foliage, will make it the cherry both for North and South. The fruit is a brisk, pleasant acid, entirely without the intense sourness of the English Morello. Pit small; fruit globular; stem long, adhering quite firmly to the fruit; and ripening very evenly and quickly after coloring, and hangs on the tree for weeks without becoming soft or rotting.

"I have found all cherries ripening earlier than Early Richmond free from the attacks of the plum curculio."

GRAPES.

BEAUTY.

"ONE of the seedlings of Jacob Rommel, of Morrison, Mo., and is a cross between Delaware and Maxatawney; has been vigorous and healthy so far; a strong grower and very productive; bunch full medium, compact, shouldered; berry about the size and color of Catawba, oblong, covered with lilac bloom; ripens here the last week in August; sweet exquisite flavor; thin but rather tough skin; tender pulp; this promises to keep well, and as the bunches are very even and attractive in appearance, it may be a very valuable market grape, as it is superior in quality to Delaware; and as it excels the Catawba in fine and delicate flavor, is without its harshness and austerity in pulp. I consider it the most promising of all our varieties of the *Labrusca* class." (Husmann.)

BRIGHTON.

This handsome and fine grape was raised by Jacob Moore, of Brighton, N. Y., being a cross of the Concord and Diana Hamburg; vine hardy, a rapid vigorous grower, with medium to long-jointed

shoots, which ripen early; leaves large, thick, dark green, coarsely serrated, occasionally lobed; very productive, and if the small bunches were taken off early in the season it would be a great benefit to the others.

Bunch medium to large, shouldered, occasionally double shouldered, moderately compact; berries medium to large, round, light bright red at first, changing to a dark crimson, or maroon when fully mature, sometimes almost black, and covered with a thick lilac bloom; the berries adhere well to the peduncle; skin thin but tough; flesh tender, very slight pulp, sweet, juicy, slightly aromatic, very slightly vinous, and of very good quality for an early grape. It has its best flavor when it is first ripe, but becomes pasty and loses its sprightly flavor when fully ripe. Ripens nearly as early as Hartford Prolific and before the Delaware.

DUCHESS.

This fine grape was raised by A. J. Caywood, Modena, N. Y., who states that "it was produced by crossing a White Concord seedling with Delaware or Walter, the pollen of both being applied at the same time." The vine is a vigorous grower, with moderately short-jointed shoots; leaves large, light green, rather thick, coarsely serrated, adhere to the vine very late in the season; vine abundantly productive.

Bunch medium to large, shouldered, occasionally double shouldered, compact; berries medium, roundish, inclining to oval; skin rather thick, light green at first, but pale greenish yellow when mature, sometimes a golden yellow where fully exposed and gathered late, and covered with a thin whitish bloom: flesh tender, free from pulp, juicy, sweet, spicy, rich, and of excellent quality; the berries adhere strongly to the peduncle, and the fruit keeps a long time after being gathered. Ripens soon after the Concord.

EARLY DAWN.

An early black grape of fine quality, which originated with Dr. Wm. A. M. Culbert, of Newburgh, N. Y., being a cross of Muscat Hamburg and Israella; vine healthy, vigorous, and very productive; wood moderately short jointed; leaves large, thick, and firm, roundish, broadly, but not deeply serrated, sometimes slightly lobed.

Bunch medium to large, long, shouldered, occasionally double shouldered; berry medium, round, black, with a thick blue bloom; skin thin but firm; flesh tender, juicy, sweet, slightly vinous, rich, and of very good quality; the fruit adheres well to the peduncle, keeps well, and is a valuable addition to the early grapes, either for the table or market. Ripens a week or more before the Hartford Prolific.

EARLY VICTOR.

"A chance seedling that originated with John Burr, of Leavenworth, Kansas, about ten years ago, of the Labrusca class. Vine very hardy, healthy, vigorous, and very productive; wood dark gray, rather long jointed; foliage thick, medium, dark green, deeply

lobed, partaking somewhat of the character of the Delaware and Hartford Prolific—not as pubescent as the latter. The original vine has not been injured by the severe cold and sudden changes of our climate, and has shown no rot or disease; it is not only the very best early market, but also the best wine grape that we know of in cultivation, making a rich, high bouquet, claret wine.

“Bunch above medium, compact, often shouldered, and sometimes double shouldered; berry medium, round, black, with a heavy blue bloom; adheres to the peduncle until it shrivels; flesh slightly pulpy, juicy, sprightly vinous, agreeably sweet, without any foxiness. Season at least a week earlier than Hartford Prolific.” (Dr. J. Stayman.)

JEFFERSON.

This new, handsome, and excellent grape was raised by James H. Ricketts, Newburgh, N. Y., and is a cross of the Concord and Iona; it is healthy, very vigorous; wood rather short jointed; leaves large, thick and downy; very productive.

Bunch large, shouldered, often double shouldered, compact; berry medium to large, roundish oval; skin rather thick, light red, with a thin lilac bloom; flesh meaty, yet tender, juicy, sweet, slightly vinous, aromatic and rich; the berries adhere strongly to the peduncle, and the fruit maintains its freshness for a long time after being gathered; it is of fine quality, and very promising either for market or home use. It ripens about the time of the Concord, or soon after.

LADY WASHINGTON.

This beautiful and very good grape was raised by James H. Ricketts, Newburgh, N. Y., and is a seedling of Concord crossed with Allen's Hybrid; vine healthy, vigorous, short jointed; leaves large, roundish, coarsely serrated, occasionally lobed, thick and downy.

Bunch large to very large, compact, shouldered, often double shoulders; berry medium to large, being very nearly uniform in size, round; skin pale yellow, with a tinge of delicate pink where exposed to the sun, having a thin whitish bloom; flesh soft, tender, juicy, sweet, very slightly vinous, and of very good quality; the berries adhere well to the peduncle, and the fruit continues a long time in use. Ripens about the time of the Concord, or soon after, and is a very promising variety for the table or for market.

NIAGARA.

This new grape originated with Hoag & Clark, of Lockport, N. Y.; not having seen the vine in its growing and bearing state, I give Mr. Hoag's description of it: “Vine a cross of Concord and Cassady, hardy, healthy, very vigorous, and very productive; wood rather long jointed; leaves very large, thick, leathery, downy, lobed, sometimes double lobed.”

Bunch medium to large, compact, occasionally with small shoulders; berry large, roundish, slightly inclining to oval, quite uniform

in size; skin pale green at first, but changing to pale yellow when fully ripe, with a thin whitish bloom; flesh soft, tender, sweet, pleasant, and in quality about the same as Concord, and ripening with it or soon after; it has quite a foxy odor when first gathered, but loses much of this when fully ripe.

POCKLINGTON.

This large showy grape was raised from seed of the Concord by John Pocklington, Sandy Hill, N. Y., and as I have not seen the vine in a growing and bearing condition, I give Mr. Pocklington's description: "Vine very hardy, healthy, very vigorous, with short-jointed shoots; wood close and firm; leaves large, thick, tough, and downy; very productive."

Bunch medium to large, or very large, generally shouldered, compact; berry large to very large, roundish, whitish yellow, pale yellow when fully mature, covered with a thin light bloom; flesh with considerable pulp, juicy, sprightly, but not rich; perhaps not fully ripe when tested. The originator claims that when fully ripe the "flesh is not hard, but tender, juicy, sweet, rich, and superior to Concord, and ripens at the same time."

PRENTISS.

This promising grape is a seedling of the Isabella, raised by J. W. Prentiss, Pultney, N. Y. Not having seen the vine during its growth and bearing, I give Mr. Prentiss' description of it, viz.: "A hardy, healthy and good grower; wood rather short jointed; leaves quite large, thick, slightly downy; very productive and inclined to overbear. It ripens with Concord, except when overloaded, when it is a little later."

Bunch medium, occasionally with small shoulders, compact; berry medium, round, inclining to oval; skin thick, greenish white, pale yellow when fully mature, with a thin whitish bloom; flesh with a slight pulp, tender, juicy, sweet and pleasant; the berries adhere well to the peduncle, and keep well in good condition; its firm skin makes it valuable for market, where it has so far commanded a high price.

QUASSAICK.

This fine black grape originated with James H. Ricketts, of Newburgh, N. Y., and is a seedling of the Clinton fertilized with Muscat Hamburg; vine vigorous, short jointed; leaves large, roundish, moderately thick, lobed, coarsely serrated; bunch large to very large, shouldered, sometimes double shouldered, compact; berry medium to large, roundish oval; skin thin, but firm, black, with thick blue bloom; flesh meaty, crisp, tender, juicy, very slightly vinous, rich and refreshing; the fruit adheres well to the peduncle, and continues a long time in use; very productive, and is a valuable table or market grape. It ripens about the middle of September, or soon after the Concord.

ROCHESTER.

One of Ellwanger and Barry's seedlings; I give their description of it: "Vine a remarkably vigorous grower; wood short-jointed and hardy; foliage large, thick, healthy; the habits of the vine are similar to those of the Diana, and it requires ample room and rather long pruning.

"Bunch large to very large, shouldered, frequently double shouldered, very compact; berries medium to large size, round, dark purple or purplish lilac, peculiar, with thin white bloom; flesh very sweet, vinous, rich and aromatic. Ripens usually the first week in September; has never failed to ripen well in the worst of seasons since it first bore."

TRIUMPH.

This new hybrid of the Concord and Chasselas Musqué was raised by George W. Campbell, Delaware, O., and considered by him too late for that locality, and wanting in character. George Husmann, in his new work on grapes, etc., says that "it ripens in perfection in Missouri, and is certainly one of the most attractive white grapes for the table I have yet seen.

"Bunch large and heavy, shouldered, moderately compact; berry very large, golden yellow, transparent, with delicate bloom; skin thin; pulp tender, sweet, juicy, and excellent. Ripens about with Catawba; it seems to be hardy and tolerably healthy."

Samuel Miller, of Bluffton, Mo., writes me that "it is the finest table grape I have for open air cultivation."

T. V. Munson, of Dennison, Texas, has fruited the Triumph for six years, and pronounces it a great acquisition to the grapes for the South. "Had bunches weighing one and a half pound each, fine as Golden Chasselas in quality, vigorous, and very productive."

PEACHES.

ANNIE WYLIE.

A new seedling raised by the late Dr. A. P. Wylie, Chester, S. C. It is of the Heath Cling type, valuable for the South, but ripens too late here, except in very favorable seasons. Tree healthy, vigorous, and a good bearer; leaves without glands, but finely serrated; flowers small.

Fruit large, nearly globular; suture shallow, extending a little beyond the apex, which is a small point; cavity rather narrow, deep; skin whitish, or a creamy white, pale red in the shade, dark crimson red in the sun; flesh white, rather firm, juicy, melting, vinous, rich, and of excellent quality; adheres to the pit, which is a little stained. Ripens at the South from the first to the 10th of September; here the middle of October.

EARLY SILVER.

This fine peach was raised from seed of the White Nectarine by Thomas Rivers, of Sawbridgeworth, England. Tree vigorous and productive; one of the best for family and home use, but too delicate for market purposes; leaves with reniform glands; flowers large.

Fruit medium, roundish, inclining to oval; suture small, extending a little beyond the apex, which is a little sunken, with a small point; cavity rather small, deep; skin thin, of a delicate cream color, sometimes with a marbled blush; flesh white, juicy, melting, sweet, rich, with the vinous flavor of its parent; flesh white at the stone, from which it separates freely. It ripens the last of August.

EARLY VICTORIA.

A new peach raised from seed of the Large Early York by Thomas Rivers, of Sawbridgeworth, England; rather earlier in its time of ripening; a healthy and productive sort; named in honor of Queen Victoria; leaves without glands; flowers large.

Fruit medium, roundish, marked on one side with a shallow suture; skin very thin, pale yellow on the shaded side, and dark dull maroon on the side next the sun; flesh yellowish white, very tender, melting, very juicy, with a sweet and luscious flavor. A first-rate early peach, ripening the beginning of August.—*Hogg's Fruit Manual*.

FAMILY FAVORITE.

A new seedling peach of Texas, which is said to be of superior quality, but not having seen the fruit, by request, T. V. Munson, of Dennison, Texas, has furnished the following description: "The Family Favorite originated with W. H. Locke, of Bonham, Fannin County, Texas, and is a seedling of the Chinese Cling, but a free-stone, two weeks earlier, of finer color and quality, firmer, not as liable to rot, very large. Tree exceedingly vigorous, with very large leaves; the original tree has borne six successive crops, yet is in good health; very productive; flowers small; leaves with reniform glands.

"Fruit large, inclining to oblong; but not as much so as its parent; suture shallow; apex medium; skin cream color, with a blush on the sunny side; flesh with red streaks next the stone, firm, yet juicy, high aromatic flavor, but not very sweet, resembling the Chinese Cling in this respect, and it possesses that same peculiarly agreeable perfume when thoroughly ripened."

HOPKINSVILLE.

Quisenburg. Styles.

Raised from seed by James Quisenburg, near Hopkinsville, Ky., and it is said to be the most popular of any peach in that section of the country for family use. Tree moderately vigorous, very productive, and is remarkable for reproducing itself from seed; flowers small; leaves serrate, without glands.

Fruit rather large, inclining to oblong; suture small, with a

swollen point at the apex; skin dull white, quite downy, shaded and mottled with red and crimson; flesh white, slightly red at the stone, juicy, melting, sweet, rich, and of excellent flavor; separates freely from the stone. Season about the first of September.

LEVY'S LATE.

Henrietta.

A new late Clingstone, which originated in the garden of W. W. Levy, Washington, D. C., and it is said to be a valuable and profitable variety for the market at the South; leaves with globose glands; flowers small.

Fruit large, roundish, slightly depressed; suture large, extending a little beyond the apex, which is a very small point; cavity medium, deep; skin deep yellow, a shade of rich brownish red in the sun; flesh deep yellow, rather firm, juicy, half melting, sweet, a little vinous, and very good. Ripens in Kentucky the middle of October, and continues into November, and will seldom ripen in this latitude.

NECTARINE PEACH.

A new peach, which was raised by Thomas Rivers, of Sawbridge-worth, England, from the seed of a Nectarine; a very fine and handsome peach, which ripens just after the Royal George; it may be carried almost any distance, on account of its firm substance; flowers large; leaves with reniform glands.

Fruit large, ovate, terminating at the apex in a pointed nipple; suture well marked, particularly near the nipple; skin nearly quite smooth, like a Nectarine, yellow, with a bright mottled red cheek next the sun; flesh semi-transparent, with a brilliant red next the stone, from which it separates freely; very richly flavored, and with a fine refreshing briskness. Season middle of September.—*Hogg's Fruit Manual*.

RAISIN.

A Southern peach, of uncertain origin, but supposed to have originated in Coweta County, Ga., and is probably a cross between the Columbia and Heath Cling; it often reproduces itself from seed, except that it varies in its time of ripening. Tree healthy, very prolific, and lives to a good age; glands reniform; flowers large.

Fruit large, roundish; suture distinct, but small, ending at the apex, which is a small point; cavity rather deep; skin whitish, nearly covered with pale red, purplish red in the sun, with more or less narrow stripes and a few splashes of purplish red on the shaded side; flesh white, stained next the skin, and sometimes through the flesh, rather firm, juicy, sweet, slightly vinous, and rich; adheres to the pit. Ripens the first of September at the South, and the first week in October at the North.

SALLIE WORRELL.

Originated on the farm of C. W. Westbrook, Wilson, N. C., and was raised from seed by an old lady named Sallie Worrell;

it is regarded in that locality as one of the largest and best peaches they cultivate, either for market or family use. Tree healthy, vigorous, and an abundant bearer; leaves serrate, without glands; flowers small.

Fruit large, roundish, one side a little enlarged; suture shallow, but distinct, extending a little beyond the apex, which is a small swollen point; cavity rather narrow, deep; skin creamy white, shaded and mottled over half the surface with light red; flesh white, juicy, melting, slightly vinous, rich, and of excellent quality; the flesh is red at the stone, from which it separates readily. It ripens with the Stump of the World, or the last of September.

SENER.

A handsome yellow peach, which originated with Gottlieb Sener, many years since, and it is said that it reproduces itself from seed with scarcely any variation since its first introduction. Tree healthy, vigorous, and bears full and regular crops; glands reniform; flowers small.

Fruit large to very large, nearly globular, regular; suture shallow; cavity medium; skin deep yellow, with a dark red check; flesh yellow, juicy, melting, sweet, with a rich aroma, and is one of the very best of the yellow-fleshed peaches; red at the stone (from which it separates freely), which is rather flat and small in proportion to the size of the fruit. Season September.

STEADLY.

This new late peach originated with John Steadly, Bluffton, Mo. Tree healthy, vigorous, and bears abundantly; it is a very promising late variety, of good size, handsome, and of excellent quality; leaves with globose glands; flowers small.

Fruit medium, roundish, inclining to oblong; suture rather shallow, extending a little beyond the apex, which is a small swollen point; skin whitish, or creamy white, shaded and mottled with light and dark red where fully exposed to the sun; cavity medium; rather narrow, deep; flesh white, juicy, melting, sweet, slightly vinous, with a little of the Rareripe flavor; flesh white at the stone, from which it separates freely. Season first half of October.

TUSKENA.

Origin uncertain, but it is said to have originated in South Mississippi, while others say in Alabama; it is a beautiful early Clingstone, ripening at the South soon after the Early Tillotson, and is esteemed in its locality the best of its season, either for home use or market. Tree vigorous and a good bearer; leaves with globose glands; flowers large.

Fruit medium, roundish, inclining to oblong; suture distinct, but small, ending a little beyond the apex, which is a small or medium sharp point; cavity rather large, deep; skin deep yellow, nearly covered with light and dark rich red and crimson, sometimes mottled and splashed with brownish red in the sun; flesh rather firm, deep

yellow, juicy, vinous, subacid, rich, and of very good quality. Ripens the last of August.

WAGER.

Originated with the late Benjamin Wager, West Bloomfield, N. Y., many years since, and is considered in that section valuable as a market fruit, and for canning purposes. The tree is hardy, healthy, very productive, and bears good crops in unfavorable seasons when many other kinds fail; it is claimed that it often reproduces itself from seed, or nearly so.

Fruit medium, oblong oval, varying in form, one side often enlarged; suture medium, extending to the apex, which is a small point, or a little beyond; cavity medium, rather narrow; skin quite downy, of a light golden yellow when fully mature; flesh bright yellow, rather firm, moderately juicy, sweet, slightly vinous, not very melting or rich; separates freely from the stone. Season the first of September or a little later than Crawford's Early.

WATERLOO.

A new early peach raised by Henry Lisk, Waterloo, N. Y., who says that the tree is a healthy, vigorous grower, a prolific bearer, and the fruit uniform in size; flowers large; glands reniform.

Fruit medium, roundish; suture rather large, distinct, extending a little beyond the apex, which is a small point; cavity of medium depth; skin greenish white, dark purplish red in the sun, pale red in the shade, where it is mottled with some short splashes of a darker hue; flesh greenish-white, juicy, melting, sweet, slightly vinous; quality very good; adheres partially to the pit, where the flesh is white. Ripens the last week in July.

WHEATLAND.

This fine new peach is a chance seedling on the grounds of Daniel E. Rogers, Scottsville, N. Y. The tree is said to be remarkably vigorous, healthy, and somewhat resembles Crawford's Late, but more sturdy and strong, more spreading in its growth, and with larger foliage; it bears large crops of fruit of large size, showy, and ripens nearly at the same time; it is a very promising late variety for market, being quite firm, will endure distant shipment, and is valuable for all purposes in the family; the leaves have reniform glands; flowers large.

Fruit large to very large, roundish; a distinct suture on one side, but not large; cavity medium; skin deep golden yellow, shaded with dark red or crimson on the sunny side; flesh yellow, rather firm, juicy, sweet, and of fine quality; the flesh is light red around the stone, which is small, and from which it separates easily. It ripens between the Early and Late Crawford.

WIRT.

A chance seedling in the garden of William Wirt Smith, Newburgh, N. Y. Tree thrifty, vigorous, an abundant bearer of fair fruit, of fine quality.

Fruit rather large, nearly globular, suture very slight, ending at the apex, which is a small point; cavity of medium size; skin shaded and mottled with light and dark red, purplish red where fully exposed; flesh white, juicy, melting, sweet, rich, slightly vinous and of excellent quality; flesh white to the stone, from which it separates freely. Ripens the second week in August.

Many new varieties of peaches, much earlier than those before known to the public, have been introduced within the last ten or twelve years. The Alexander was exhibited in 1872 by J. Capp & Son, of Mt. Pulaski, Ill., and found to be nearly two weeks earlier than Hale's Early, or any of the older varieties; this was followed the next season by Amsden's June, grown by L. C. Amsden, near Carthage, Mo.; these are so nearly alike in size, form, color, flesh, and quality, that good judges are seldom able to find any marks of distinction between them. The Honeywell, High's Early Canada, and many other early varieties, claimed attention about the same time, or soon after, but while all of them are noted for earliness in ripening, they are so nearly alike in all respects, that the planter of one named sort can have no advantage over another.

It is supposed that most of these early kinds are reproductions of Hale's Early and Alexander, and so nearly alike that the distinction of name is not worth retaining. It is probable that after a few years of fruiting, many of the new seedlings will show the same failing as Hale's Early—"soon ripe, soon rotten." They adhere, more or less, to the pit, and our effort should be directed to correcting this fault, and obtaining a fruit as early as the Alexander and of as good color, size and quality, free from rot. That this desirable result will be ultimately secured, we have no reason to doubt, and the originator will be giving the country a valuable contribution, and bring honor and credit to himself.

PEARS.

CHAMBERS.

Origin uncertain, but report says was brought from Maryland by Judge William Chambers to Middletown, Kentucky, many years since, where it has the reputation of being the most profitable early market pear in that locality; it ripens a week after the Madeleine, but is not equal in quality to many of the later varieties. Tree a moderate grower, spreading, and said to be perfectly hardy, free from blight; a good and regular, but not an early bearer.

Fruit medium, or nearly so, roundish obovate, regular; skin smooth, pale yellow, shaded and mottled with light red where fully exposed, and many greenish dots; stalk medium, moderately stout; cavity medium; calyx open; basin rather shallow, slightly plaited;

flesh white, a little coarse, moderately juicy, half melting, sweet and pleasant, but not rich. Ripens in Kentucky the first half of July, here the last of July.

EUGENE APPERT.

Origin in the nursery of Andre Leroy, Angers, France. Tree moderately vigorous, with slender shoots, somewhat spreading and irregular; moderately productive.

Fruit medium or below, roundish oblate, inclining to obtuse pyriform; skin greenish yellow, considerably netted and patched

Eugene Appert.

with russet, and thickly sprinkled with russet dots; stalk short to long, rather slender; cavity medium, smooth; calyx quite large, open; basin small or medium, nearly smooth; flesh white, half fine, juicy, melting, sweet, rich, with a slight aroma; quality very good. Ripens the middle of September.

FALL BEURRE D'AREMBERG.

A seedling of the Beurre d'Arenberg, raised by Asahel Foote, Williamstown, Mass., and is a promising variety. Tree moderately vigorous, an early and good bearer.

Fruit medium, roundish oblate, inclining to obtuse pyriform; skin pale greenish yellow, orange yellow where fully exposed, some-

times a blush in the sun, slight nettings and patches of russet, especially around the stalk and calyx, and thickly sprinkled with russet dots; stalk short to medium, set at an inclination in a shallow cavity; calyx open, or partially closed; basin shallow, slightly corrugated; flesh whitish, a little coarse, juicy, melting, sweet, vinous, with a peculiar slight musky flavor; quality very good. October.

GENERAL DE BOUCHAMP.

A chance seedling in the garden of M. Penneton, Saint-Florent-le-Vieil (Maine-et-Loire), France. Tree moderately vigorous, thrifty, rather upright, moderately productive.

Fruit medium, roundish pyriform, a little obtuse, regular; skin greenish yellow, a shade of red where exposed to the sun, a few nettings and traces of russet, and many russet dots; stalk short, small, inclined, sometimes obliquely set in a shallow cavity; flesh white, fine, juicy, buttery, melting, sweet, slightly vinous, and slightly aromatic. Season November.

GRAND ISLE.

A chance seedling in the garden of Benjamin Macomber, Grand

Grand Isle.

Isle, Vt. Tree vigorous, upright, somewhat spreading with age and bearing; it has proved quite hardy so far, and bids fair to be

valuable for a cold locality; a good and regular bearer annually, but more abundant on alternate years.

Fruit medium, roundish oblong, obtuse pyriform; skin smooth, bright straw color, covered with many small russet dots; stalk of medium length, rather slender, a little inclined, set in a small cavity; calyx small, open; basin small, nearly smooth; flesh whitish, half fine, juicy, melting, sweet, slightly vinous, and of very good quality. It ripens from the last of September to the middle of October.

HOOSIC.

A promising new variety, raised from seed of Hacon's Incomparable by Asahel Foote, of Williamstown, Mass. Tree vigorous, upright, very productive.

Fruit large, roundish, inclining to obtuse pyriform; skin green-

Hoosic.

ish yellow, deep yellow where exposed and fully mature, some traces and nettings of russet, and many russet dots; stalk long, curved, set at an inclination in a small cavity; calyx open; basin rather broad, moderately deep, a little uneven; flesh whitish, half fine, juicy, melting, quite rich and aromatic; very good. Season October.

JULES D'AIROLES (De Leon Leclerc).

A seedling of Leon Leclerc, raised at Laval, France, and dedicated to his friend, M. de Liron d'Airoles. Tree moderately vigorous, rather upright, a good but not very prolific bearer.

Fruit medium, roundish pyriform, a little elongated, and slightly obtuse, regular; skin pale greenish yellow, often shaded with crim-

Jules d'Airoles.

son in the sun, partially netted and traced with russet, and many russet dots; stalk long, slender, curved; cavity small, nearly regular; flesh whitish yellow, half fine, juicy, melting, sweet, a little vinous, slightly aromatic, and of very good quality. Ripening the last of November and the first of December.

JULES D'AIROLES (De X. Gregoire).

This pear was produced at Jodoigne (Belgium), in 1857, by Xavier Gregoire, a distinguished pomologist. Tree quite vigorous, with rather long, stout branches, making an upright, regular head; moderately productive.

Fruit above medium, slightly inclining to turbinate; stem long, slender, curved at the upper end; cavity small; basin shallow; skin a little rough, thick, bright yellow, partly covered with large dots, marbled, and streaked with brownish red; flesh yellowish white, fine, melting, a little coarse at the core, juicy, sugary, slightly vinous, and pleasantly perfumed. Season last of October to the last of November. (Leroy.)

M. de Liron d'Airoles having accepted the dedication of these two pears, it is necessary to be careful that the two be not confounded.

KEIFFER.

Keiffer's Hybrid.

This new and unique pear was raised by Peter Keiffer, Roxbury, near Philadelphia, from seed of the Chinese Sand pear, accidentally crossed with *Beurre d'Anjou*, or some other kind grown near it. Tree remarkably vigorous, having large, dark green, glossy leaves, and is an early and very prolific bearer; the fruit is of good size, good color, good quality, and is a promising variety for the table or market.

Fruit medium, roundish oval, narrowing at both ends, with the largest diameter near the centre, some specimens roundish, inclining to oblong obtuse pyriform; skin deep yellow, orange yellow in the sun, a few patches and nettings of russet, and many brown russet dots; stalk short to medium, moderately stout; cavity medium; calyx open; basin medium, a little uneven; flesh whitish, a little coarse, juicy, half melting, sweet; quality very good, partaking slightly of the Chinese Sand pears. Ripens all of October and a part of November. To have it in perfection, it should be gathered when fully grown, and ripened in the house.

MARSHALL.

This pear is said to have originated on the farm of William Marshall, Cambridge, N. Y., some years since. Tree a moderate grower, making a roundish, rather spreading head, and bearing abundantly.

Fruit medium, roundish, inclining to obtuse pyriform; skin yellow, netted and patched with russet over nearly the whole surface, and thickly sprinkled with russet dots; stalk long, curved, rather slender; cavity small; calyx open; basin rather shallow, a little uneven; flesh white, half fine, juicy, half melting, slightly vinous, and slightly aromatic; very good. Ripens the last of September.

PLUMS.

CANADA ORLEANS.

Canada Egg?

The origin of this fine plum is obscure; it has been grown in and around Hamilton, Ontario, for many years as the German Prune, but bears no resemblance to it, and is believed to have originated with the old settlers, and is grown by them from suckers. Tree grows strong, vigorous, and makes short-jointed wood, with prominent buds, and is very productive; it is highly esteemed where known for its handsome appearance, fine quality, market value and family purposes; branches smooth, brownish gray.

Fruit medium to large, nearly globular; suture broad, shallow,

Canada Orleans.

ending at the apex, which is a little depressed; stalk long, slender; cavity small; skin dark reddish purple, covered with a thick blue bloom; flesh pale yellow, juicy, melting, very sweet and rich; adhering to the stone, which is small. Ripens early in August and keeps well.

The Canada Egg, highly valued in some localities in Michigan, is no doubt this variety.

FRANKFORT PEACH.

Of German origin; tree moderately vigorous, spreading, very productive; branches rather slender, slightly downy, grayish brown.

Fruit medium or above, oval, narrowing a little toward the apex; sides a little unequal; suture shallow; skin black, covered with a thick blue bloom; stalk medium, rather stout; cavity small; flesh orange yellow, a little coarse, juicy, sweet, vinous, and of good quality; separates freely from the pit, which is oval and thin. Season first half of September.

FROGMORE DAMSON.

This plum originated, as its name implies, in the Royal Gardens at Frogmore, England, and although a few years have elapsed since it was raised and distributed, it is not as well known as it deserves to be; the habit of the tree is different from that of the usual type, since it has broader leaves, is of spreading growth, and has its shoots less thorny; it is an enormous bearer.

The fruit is a trifle larger than that of its class, of a purplish black color, and inclining to obtuse oval in shape; the flesh is tender and richly flavored; it is suitable for all purposes to which Damsons are applied.—(*Flo. & Pom.*)

GLASS.

Raised by Alexander Glass, Guelph, Ontario. Tree hardy, very vigorous, upright, with thick dark green foliage; very productive; a showy fruit of second-rate quality, but valuable for market and culinary purposes; branches smooth, brownish gray.

Fruit large, oval; suture large and broad, one side often enlarged; stalk of medium length, slender; cavity large; skin dark purple, almost black, with a thin blue bloom; flesh greenish yellow, a little coarse, moderately juicy, sweet, good; separates freely from the stone. Ripens in September.

GREEN ITALIAN.

Of German origin; tree moderately vigorous, fairly productive; branches slightly downy, brownish, short-jointed.

Fruit medium, oval; suture very shallow or a distinct green line; apex a dot; skin pale greenish yellow, streaked and blotched with green; covered with a thin grayish bloom; stalk long, slender; cavity small; flesh green, a little coarse, juicy, sweet, quite rich, and very good; adheres partially to the pit, which is long and thin. Season first half of September.

GUII.

Gwei—Guei—Blue Magnum Bonum—Big Blue—Bradshaw, incorrectly.

This plum is said to have originated with a Mr. Hagaman, Lansingburgh, N. Y., about fifty years since; it was cultivated largely by John Goeway (Guii), and was generally called by this name, but was not much disseminated until quite recently; it is now quite extensively grown for market, having proved to be one of the most profitable for that purpose; tree hardy, a very strong, vigorous upright grower, spreading with age and bearing; an early and very abundant bearer; branches smooth, light brown, grayish.

Fruit large, roundish oval, narrowing a little at the apex, which is a dot or small point; suture slight, often without any; skin dark purple, covered with a thick blue bloom; stalk long, slender; cavity large, deep; flesh pale yellow, a little coarse, rather firm, juicy, sweet, sprightly subacid; not a rich table fruit, but valuable for culinary purposes and market; free stone, but often adheres slightly to the pit; season last of August and first of September.

MOORE'S ARCTIC.

A new hardy plum which originated on the Highlands of Aroostook County, Me., about forty miles north of Bangor, on the grounds of A. T. Moore, Ashland, Me., where, unprotected and exposed to Arctic colds, it has for many years borne enormous crops, and is claimed to be the hardiest plum known, and so far free from black knots; tree healthy, vigorous, an early and abundant bearer; branches smooth, olive brown, grayish.

Fruit below medium, roundish, slightly inclining to oval; suture nearly obscure, apex a dot; skin purplish black, thin blue bloom; stalk medium, rather slender; cavity small; flesh greenish yellow, a little coarse, juicy, sweet, pleasant flavor, but not rich, adheres a little to the stone; season first half of September.

PRIDE OF WATERLOO.

A new variety raised by A. H. Doles, Waterloo, N. Y., from

Pride of Waterloo.

seed of Smith's Orleans; a vigorous upright grower, very productive.

and promises to be valuable for market and culinary uses; branches smooth, reddish brown.

Fruit large, oval, narrowing a little toward the stalk, regular; suture scarcely visible, apex a dot, skin light reddish purple, with a thin blue bloom and many brown dots; stalk of medium length and thickness; cavity rather large; flesh deep yellow, rather coarse, juicy, sweet, sprightly, but not rich; it adheres slightly to the pit; ripens the middle of September.

RASPBERRIES.

BAUMFORTH'S SEEDLING.

A new variety raised from the seed of the Northumberland Fillbasket by John Baumforth, of Pontefract, England; the plant is of a stronger constitution than its parent, and more prolific; the fruit is large and handsome, being remarkable for their broad, roundish, rather than conical outline; it is about ten days earlier, and at least one-third larger—that is, broader, more uniform in shape and size, and of a deeper and richer crimson color, while the separate succulent carpel or drupes; of which the fruit is composed, are large and prominent; the color of the drupes, which are of large size, and very juicy, is of a deep lake crimson, and the flavor is rich and full, with a fine aroma. The plant frequently bears fruit in the autumn from the current season's growth. (Flo. & Pom.)

CAROLINE.

This fine new raspberry was raised by S. P. Carpenter, New Rochelle, N. Y., and is supposed to be a seedling of Brinckle's Orange and a Golden Cap. Mr. Carpenter informs me that it has proved very hardy, and the plant is an Antwerp in nearly all its characteristics; suckers quite freely and can with care be propagated from the tips; canes very strong, vigorous, sometimes branching, light red in the sun, having a thin whitish bloom, and a few slender green spines. It is a very prolific bearer and is an acquisition worthy of a place in the home garden, but is too soft for shipping.

Fruit quite large, roundish oblate, deep orange yellow, or salmon color, with a slight bloom, grains of medium size; flesh soft, juicy, sweet, rich, and of very good quality; it continues a long time in use.

CUTHBERT.

Queen of the Market.

A chance seedling in the garden of the late Thomas Cuthbert, Riverdale, N. Y. It is said to be hardy, and is generally so, but I have seen it more or less killed in severe and changeable winters, or when the canes were not well ripened; it has so far proved a valua-

ble market variety, also one of the best for family use; it is very productive; canes strong, vigorous, upright, sometimes branching; spines short, stout, purplish, rather numerous; it suckers freely, too much so for the benefit of the plant and fruit.

Fruit medium to large, scarlet crimson, roundish, obtuse-conical; grains rather small, compact, separates freely from the stalk; flesh quite firm, juicy, sweet, sprightly, having a slight flavor of the common Red, which is probably one of its parents.

GREGG.

Great Western.

This is one of the largest, if not the largest of the Black Cap family; it originated with R. & P. Gregg, Randolph, Ind. It is a hardy, strong grower, with round, heart-shaped, coarsely serrated leaves; canes strong, branching, with a few sharp greenish spines.

Fruit large, oblate or roundish oblate, black, with a slight bloom; grains large, compact; flesh quite firm, moderately juicy, sweet, and rich; the fruit ripens evenly, making the picking season short; it is much like the McCormick or Mammoth Cluster in growth, bearing, etc.; the fruit is a little larger, darker in color, and firmer, but not quite as sweet, nor quite as juicy.

MONTCLAIR.

This new variety is a chance seedling on the grounds of E. & J. C. Williams, Montclair, N. J.; canes strong, vigorous, light red, often branching, spines quite numerous at the base, rather slender, purplish; leaves thick, roundish, deeply veined or crumpled; very productive; it promises to be valuable as a market variety, and for family use; it propagates moderately by suckers.

Fruit medium to large, roundish or roundish oblate, dark red or crimson, grains rather small, compact; flesh quite firm, juicy, sweet, and sprightly, and of very good quality; separates readily from the stalk in picking.

NEW ROCHELLE.

A seedling of the Catawissa, raised by S. P. Carpenter, New Rochelle, N. Y.; plant hardy, or nearly so, a very strong, upright, stocky grower, short-jointed and much branched, spines rather numerous, short, stiff, green and light red; it is very productive, firm, and bears carriage well, but lacks the bright color so attractive to the popular taste; propagated by tips.

Fruit medium to large, roundish, obtuse-conical, brownish red, or dark maroon, with a slight bloom; flesh quite firm, juicy, with a rich subacid flavor, making it valuable for canning and all culinary purposes, as well as for the table; it continues a long time in use.

PRIDE OF THE HUDSON.

A chance seedling in the garden of the late William Roe, Newburgh, N. Y.; canes rather strong, vigorous, a few short purplish spines; leaves large, deeply veined or corrugated; very productive;

one of the best varieties for family use, but not firm enough for distant market; it requires good cultivation, which well repays the labor bestowed.

Fruit large, roundish conical, a little obtuse, grains rather large; color scarlet crimson; flesh moderately firm, juicy, sweet, rich, and of fine flavor; separates freely from the stem.

RELIANCE.

A seedling of the Philadelphia, raised by O. L. Felton, Merchantville, N. J.; it is hardy, healthy, and vigorous, very productive, one of the largest of its class; canes strong, branching, with a few small greenish spines.

Fruit large, nearly globular, or roundish oblate, dark red or crimson; grains large; flesh quite firm, juicy, sweet and sprightly, but not of high flavor; separates freely from the stem.

TURNER.

Southern Thornless. Baldwin's Choice.

A hardy variety which originated in the garden of Prof. J. B. Turner, Jacksonville, Ill.; it appears to succeed in more localities than any of the red varieties, and less subject to changes of heat and cold; the canes, foliage, and fruit possess many characteristics of the native red berry, and it suckers quite as freely; canes vigorous, light reddish on the sunny side; upright, seldom with branches; very few short purplish spines; foliage quite large and abundant; very productive.

Fruit medium or above, roundish conical, bright scarlet; grains of medium size, compact; flesh rather soft, sweet, pleasant, but not rich; a good berry for home use, but not quite firm enough for a distant market.

The Black Cap family is now numerous, and of large size and good quality; Gregg, McCormick, or Mammoth Cluster among the best, yet there are growers who claim to have produced varieties as large and of better quality. The Sweet Home is said to be equal in size, rather more productive, and, report says, of better quality, although the distinction is hardly perceptible. The Surprise and Elsie are nearly or quite as large, more conical in form, of a brighter color, and richer. Duncan's Black Cap, or Kentucky Prolific is highly extolled in its locality as the best and largest of Black Caps. The Hamilton Black Cap of Shelby County, Tenn., has the reputation of being a very large berry of the finest quality.

There are many other varieties before the public not named above, for the reason that they are so near alike in growth, color, quality, and season of ripening as to require no separate description.

Effort has been made to obtain a perfectly hardy, bright-colored red raspberry, of high quality, and flesh sufficiently firm to bear transportation for a long distance, and many think they have it in the Cuthbert, but it will require the test of time and experience to decide upon these points. The cultivator who is so fortunate as to produce a variety to meet all the requirements of the grower and marketman ought to be, and I think would be, richly rewarded.

But while continuing the work of seed-planting for this desirable result, it is to be regretted that the foreign tender varieties of such delicious flavor as the Antwerps—Franconia, Brinckle's Orange, Fastolff, and Belle de Palluau—are being neglected. The little extra care and labor of covering in the fall is more than repaid by the large size and luscious fruit. For family use they are much superior.

STRAWBERRIES.

BIDWELL.

This fine variety is a Michigan seedling, receiving its name from a Mr. Bidwell, although its origin is a matter of uncertainty and somewhat in dispute. It has received favorable notice from the Michigan Pomological Society; it has received considerable attention on account of its very promising character, especially on light soils; it is very vigorous, with light green leaves; very productive, and continues long in bearing. An early berry; with hill culture or the narrow row system, rich soil, and removal of runners, it makes large stools and fine fruit; staminate.

Fruit medium to large, the first berries sometimes irregular in form, being round conical and long conical, often with an uneven surface, and a slight neck, somewhat glossy; color bright crimson; flesh light red, quite firm, juicy, sprightly subacid, quite rich, and very promising for family use and market.

BLACK DEFIANCE.

One of the seedlings of E. W. Durand, Irvington, N. J.; plant vigorous, with dark green foliage, productive in heavy soils; requiring high culture in hills or narrow rows and removal of runners to obtain the fruit in quantity and perfection; staminate.

Fruit large, roundish obtuse conical, regular; color dark crimson; flesh dark red, firm, juicy, sprightly and rich; rather early, fine for the amateur, and gives promise of being a good variety for shipment to a distant market.

CHAMPION.

Windsor Chief.

These were sent out as two distinct varieties, and this claim is still made by some, while others who have grown them near each other and examined them carefully, have been unable to detect any difference. It originated with Dr. J. C. Neff, Carlisle, Pa.; it requires high cultivation to produce good crops; it is a vigorous grower, with healthy deep green foliage; very productive; pistillate.

Fruit large, conical, or roundish obtuse conical, regular, except a few of the first berries, which are a little uneven; color deep scarlet

or crimson, flesh dark red, rather soft, sprightly, rich acid, and of good quality; it holds its size well to the end, and is a fine variety for the amateur and a near market.

CRESCENT SEEDLING.

The Crescent originated with William Parmelee, New Haven, Conn. It is a hardy, strong, vigorous grower and very productive; leaves of medium size, dark green; the plant requires much room to give good results; it ripens early and continues late, holding its size tolerably well, and although not of high flavor, its fair size, good color, and moderately firm flesh has given it a near market value; pistillate.

Fruit medium to large, roundish conical, the first berries a little irregular or uneven; bright scarlet; seeds yellow and brown, near the surface; it requires less time and attention than most varieties, and is well calculated for those who cannot and will not give the necessary labor to produce the better kinds.

CUMBERLAND TRIUMPH.

The Cumberland Triumph is a fine large strawberry, originated by Amos Miller, Carlisle, Pa.; the plant is a vigorous grower, with dark green foliage; a good but not prolific bearer; when grown in hills and the runners clipped, it makes heavy stools, giving large, handsome, regular fruit; staminate.

Fruit large, oblate, broadly conical, very regular, light scarlet; seeds yellow and brown, near the surface; flesh pale red, rather soft, juicy, sweet; very good, but not of high quality; a fine variety for the amateur and family use, but too soft and light-colored for market.

DUCHESS.

This excellent early strawberry was first found in the garden of D. H. Barnes, Poughkeepsie, N. Y. The plant is very vigorous, foliage of medium size, dark green and healthy; very productive; when grown in hills or narrow rows it stools and makes large plants, thus saving the labor of replanting; staminate.

Fruit medium to large, roundish, obtuse-conical, regular in form, bright scarlet or crimson; flesh light red, quite firm, juicy, sprightly subacid, and of fine quality; one of the earliest to ripen, and continues a long time for an early variety; it retains its size quite well to the last; is valuable for early market, also for general use in the family.

FOREST ROSE.

Originated in the garden of John A. Fetters, Lancaster, O.; it is a vigorous grower and good bearer, succeeding well with good culture; the foliage sometimes a little affected with unfavorable and changeable seasons of heat and cold; a good variety for home use and a fancy market; staminate.

Fruit medium to large, roundish conical, a little obtuse, sometimes oval, and some of the first berries a little uneven; bright

scarlet; flesh light red, moderately firm, juicy, sweet, sprightly and rich; rather early, and retains its size well through the season.

GLENDALE.

The Glendale is an accidental seedling, found by W. B. Storer in the Glendale Cemetery, Akron, O. Plant hardy, healthy, vigorous, with large, dark green leaves; very productive; it promises to be a valuable market variety, as it blooms late, has quite a firm flesh and a large calyx, which is favorable for carriage; rather late in ripening, and of fair quality; staminate.

Fruit medium to large, long conical, regular in form, sometimes with a slight neck; color light scarlet; flesh firm, sprightly, of good but not best flavor; it holds its size well to the end; it separates readily from the stalk, making it easy to gather.

GOLDEN DEFIANCE.

The Golden Defiance originated with Amos Miller, Carlisle, Pa. Plant very vigorous, with large, thick, dark green leaves when mature, deeply veined, and moderately serrated; very productive; it is said to be hardy, stands the drought, and the leaves endure the sun well; it is a handsome berry of excellent quality, and worthy of a general trial; it succeeds either in hills or narrow rows; pistillate.

Fruit large, roundish obtuse-conical, regular, sometimes with a slight neck; color dark scarlet or crimson; seeds yellow, near the surface; flesh scarlet, quite firm, juicy, subacid, rich, and of very good quality. Season rather late. It is a good variety for the market or family use.

MINER'S PROLIFIC.

Miner's Great Prolific.

This originated with the late T. B. Miner, Linden, N. J. Plant hardy, vigorous, and healthy, with light green foliage; very prolific bearer, and gives the greatest success under the hill and narrow row system of culture; a promising variety for family use and near market; staminate.

Fruit medium to large, roundish conical; surface somewhat irregular or uneven; color dark scarlet or crimson; flesh light red, moderately firm, juicy, subacid and of fair quality. Ripens medium to late and holds out well in size to the end.

MONARCH OF THE WEST.

This highly praised strawberry was raised by Jesse Brady, of Plano, Ill. Plant very vigorous, with large, pale green leaves, moderately productive; a good variety for home use and a near market; it requires high cultivation and a rich soil to produce large fruit abundantly and of good quality; it should be grown in hills or narrow rows.

Fruit large, sometimes very large, roundish conical, nearly regular; a few of the first berries are coxcomb shape, and a little irregu-

lar; light scarlet; flesh light red, rather soft, juicy, sprightly subacid, rich; quality very good.

PIONEER.

The Pioneer, raised by E. W. Durand, of Irvington, N. J., is said to be one of the best of the strawberries grown by him. Plant tall and vigorous, although the foliage is said to burn in some localities occasionally; leaves large, light green; ripens rather early, and maintains size well; but like most of the Durand seedlings requires good culture and removal of the runners to make it fairly productive; yields best under the narrow row system; very good for home use and near market; staminate.

Fruit medium to large; roundish oval, with a slight neck; seeds mostly dark, a little below the surface; color light scarlet; flesh light red, moderately firm, juicy, sweet, rich, with a delicate flavor.

PRIMO.

A new seedling raised by Daniel Smith, Newburgh, N. Y.; plant very vigorous, with large, roundish dark green leaves, deeply veined; foot-stalks stout and heavy; berries large and handsome; productive and promising good returns for home use and a near market; a new variety not extensively tested; staminate.

Fruit large, roundish oblate, obtuse-conical, regular; color dark scarlet; flesh white, moderately firm, juicy, sweet and pleasant; ripening with the early varieties.

SHARPLESS.

This large, showy strawberry originated with J. K. Sharpless, of Catawissa, Pa.; it is very vigorous, with large dark green, coarsely serrated, and deeply veined leaves; very productive, and is best adapted to the hill system, making large stools; it also succeeds when cultivated in narrow rows; staminate.

Fruit large to very large, variable in form, from irregular coxcomb shape to roundish conical and oval; bright scarlet, somewhat glossy; flesh light red, quite firm, moderately juicy, sweet, rich, and of very good flavor; medium to late in ripening. The Sharpless is very promising, either for market or family purposes.

TRIPLE CROWN.

This excellent strawberry was raised by William Hunt, of Waterloo, N. Y.; it is a strong, vigorous grower, and a very good bearer; it should be grown in hills or narrow rows to have it in perfection; staminate.

Fruit medium to large, oval conical, often with a neck; a few of the first berries are of wedge or coxcomb shape, the surface somewhat uneven and irregular; crimson; flesh light red, quite firm, juicy, sprightly, rich and of high flavor; separates readily from the calyx; one of the most promising varieties for market, also for any use in the family; it holds its size very well through the season.