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SEED ANNUAL

1882

D. M. FERRY & CO.

DETROIT, MICH.

Any person receiving more than one of our Catalogues, will oblige us by handing his surplus to some one who has none.

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D. M. FERRY & CO'S

ORDER SHEET

FLOWER AND VEGETABLE SEEDS

No Goods Sent C. O. D.

DETROIT, MICH.

Name

Post Office

Express Office (if different from P. O.)

County

State

AMOUNT ENCLOSED, P. O. Order \$
" " Draft \$
" " Postage Stamps \$
" " Cash \$
TOTAL \$
Date 188

Bushels. Quarts. Pints. Pounds. Ounces. Packets.

NAMES OF SEEDS WANTED.

PRICE.

Dolls. Cts.

[illegible]

As this book is unrolled, thousands of people will exclaim, "A new Seed Catalogue from D. M. Ferry and Co! more beautiful even than that of last year, and sent free to every applicant!" Is the trade so enormously profitable that they can afford to distribute gratuitously so beautiful and costly a book simply as an advertisement? The number of firms who have failed, or abandoned the business as unprofitable, and the fact which is evident to the careful observer, that the following pages are too carefully prepared, and the whole book too nicely gotten up to pay as a simple advertisement, give a negative answer. Nor do we claim that it is issued solely for benevolent motives; but the fact that we, in company with every other seedsman in England and America find it necessary to annually send out such a book indicates that there is something in the trade which demands it. How then does this business differ from others? We answer, first in

THE NATURE OF THE GOODS HANDLED.

Among the thousand and one articles offered by the general merchant, there is scarcely one whose value and purity an expert cannot determine by inspection or some quickly and easily applied tests, but it is rarely the case that any true idea of the purity and value of seeds can be formed from the most critical examination of the sample. We may judge of its vitality by tests requiring but a few days to complete, but its real value can only be known from the full development of the plants, a test that requires most careful attention through several months. Thus the purchaser is ignorant of the real value of what he is buying, except as he learns it from the seller. Nor is this difference in value of slight importance. There is not an article of trade where quality is relatively of greater importance than in this. Seeds are in one sense the raw material from which the vegetables and flowers are to come, but unlike the inert wood and iron which the workman shapes into more or less costly articles according to his taste or skill, seeds are *living organisms*, containing within themselves possibilities and limitations of development immutably fixed before they left the parent plant; no culture, no combination of favorable or unfavorable conditions can change the tendency towards a certain character which was wrapped up with the tiny plantlet within the seemingly lifeless seed. Comparatively few people realize the full force of this. To many, all Red Wethersfield Onion seed is equally good, if it is only unmixed and it will all grow, yet we found a difference of over 400 per cent. in the market value of the product of the same length of drill sowed with different stocks of this variety, thinned to the same number of plants to the rod, and treated in every way, as far as possible, precisely alike. We have said few realize the importance of good seed, but every year widens the circle of those who, by careful study and costly experience, have learned that here at least the best is the cheapest, and that success or failure depend very largely upon the quality of the seed they plant; qualities which cannot be seen in the seed itself, and can only be predicated from the history of its growth. Such men rightfully demand of the seller all possible information in regard to the seed they purchase, and it is to meet this demand that we publish our catalogue.

A second reason grows out of the rapid increase and improvement of varieties, each suited to certain conditions of soil, climate or market; and the gardener's success frequently depends upon a wise selection of sorts best suited to his wants. The man who plants Early Kent Peas because he succeeded well with them two years ago, has no right to complain if a better informed or more enterprising neighbor plants Ferry's First and Best and with no better care is enabled to gather and market the entire product in two pickings, clear off the vines and put in a second crop, while the Kents, although furnishing a few pods as early as the other, are still green and growing

D. M. FERRY & CO'S NEW MAMMOTH SEED STORE AND WAREHOUSE.

ERECTED BY THEM IN 1879.

Dimensions, 300 feet on Brush St., 120 feet on Croghan St., and 120 feet on Lafayette St.

Area of Floors, nearly Five Acres.

with half the crop on the vines. It takes but a few such lessons to teach the wide awake gardener to look eagerly for the annual descriptions of the stocks offered for sale, that he may select the sorts best suited to his wants.

Still a third reason for a fresh and inviting annual catalogue grows out of the desire of the seedsman to avoid most unjust and unreasonable complaints that are frequently made against him. We have said that the character of the product is to a great extent determined by the seed used. This is true, and we have no desire to escape the responsibility which this places upon the seedsman, but it is also *true* that under unfavorable conditions the best of seed may fail to grow, or give comparatively poor results, and that a large proportion of the purchasers of garden seeds are ignorant of what constitutes suitable soil for, how, and when to plant, and what kind of culture the different sorts require. It could not be otherwise than that frequent failures should result from this cause; failures for which the seedsman is in no wise responsible, but which are too frequently laid at his door; and we aim to give in the following pages such clear and easily understood directions for culture that such failures need not occur. We send you this catalogue then not as an advertisement simply, but with the honest purpose:

FIRST—Of calling your attention to our earnest desire and endeavor to secure the best seeds; our facilities for doing this surely and economically, and consequent ability to offer you the choicest seeds at the lowest prices.

SECOND.—To give accurate and truthful descriptions of the varieties and stocks we have to offer, to aid you in selecting those best suited to your wants; and lastly to give such directions for the culture of each sort, that any one following them may be reasonably sure of success.

HOW OUR SEEDS ARE GROWN.

There are certain seeds which lose their vitality after being kept but a short time, and others which do not produce seed until the second season, and in which the character of the first summer's growth has a marked influence upon the value of the product. Such seeds we aim to produce upon

OUR GREENFIELD SEED FARMS.

These are located near Detroit, and extend one and a quarter miles on Grand River Avenue in one direction and one mile on the Joy Road in another, the entire area of which has been thoroughly underdrained, and is annually enriched, not only with stable manure from the city, but with large quantities of composted blood, meat and bone from the packing houses. These farms have been pronounced by competent observers to be among the best cultivated fields in America; however this may be, we are certain that from them we get large crops of the finest quality, and that seemingly independent of the season. We have never failed of a fair crop, even in those years when failure was almost universal, and we are unable to buy seed at all equal to that we grow upon these farms. This result we attribute to thorough drainage, liberal and judicious manuring, careful and frequent cultivation, and general good management rather than to particularly favorable soil or climate. There are other sorts of seeds which not only cannot be grown profitably in this section, but are of much better quality when grown in more congenial soil and climate. Such seeds are grown for us under

CONTRACTS WITH EXPERIENCED GROWERS.

There is no subject connected with agriculture upon which the public are more ignorant than that of seed growing. Many farmers who are successful with the common field crops think they could make a fortune in growing garden seeds if they only had the opportunity. Among the many who annually apply to us for contracts, we occasionally find a man whose soil and climate is well adapted to a certain crop, and whose unusual success in farming warrants us in believing he would succeed in seed growing. We furnish him with stock, and in frequent visits and by correspondence, endeavor to give him all the aid in our power, but it is rarely the case that he returns us a first-class article or cultivates the crop to a profit, until he has had several years experience. We do not hesitate to say that there is no department of agriculture which demands more general and especial skill, and where experience is more essential to success than in seed growing. Most of our seeds are grown for us by men who have devoted the greater part of their lives to some especial crop like Sweet Corn, Peas or Melons, for which their soil and climate is well suited. To such men we furnish the finest procurable stock seed, and by frequent visits and careful inspection of the growing crop and their methods of handling them, we endeavor to maintain in such seeds the same high degree of excellence we secure on our own farms. In this work we derive material aid from

SCENE ON D. M. FERRY & CO'S SEED FARM—Hoeing.

OUR TEST GARDENS.

These occupy some seven acres on Woodward Avenue where they are easy of access, not only from our offices but to visitors to the city. As soon as a lot of seed is received from the grower, a sample is sent here for trial, and as the results obtained have excited considerable interest among scientific men, a somewhat detailed account of the methods may be of interest to our readers. Upon the receipt of the sample it is numbered and a record made of the variety, name of grower, year raised, date received, and the sample is only known at the grounds by the number. The first test is as to vitality. For this purpose we have an admirably arranged green-house, along one side of which is an ordinary propagating bench covered with sash and divided into a number of compartments so arranged that any desired amount of bottom heat, or of light, moisture or surface heat can be easily obtained. In testing the seeds we use square earthen pots which are filled with sandy soil, pressed down evenly and firmly; 100 seeds of each sample are carefully counted out and by means of an apparatus designed for the purpose deposited at equal distances apart and at a uniform depth in a perfectly straight line; they are then carefully covered and the pots placed in the compartment having the most favorable conditions for the germination of that species. With each lot of samples are planted one or more of known vitality to furnish a test of the trial, that is, to detect any error arising from unfavorable conditions. The seeds are carefully tended and at the expiration of a proper time the number of plants from each 100 seeds is counted and recorded, thus giving the vitality of the sample. We have made careful experiments in the various methods of testing seeds, practiced in this country and in Europe, and are certain that we obtain more uniform results by this method than by any other; and comparisons made with results obtained from the same samples by such men as Prof. Beal, of the Michigan Agricultural College, and Prof. Johnson, of the Connecticut Experimental Station, convinces us that we have ascertained the actual degree of vitality in each of the 1,200 samples tested in this way during the past winter. As a result of this work, we have refused to receive or have destroyed a number of lots of seed which to the eye seemed perfectly good, and which we knew to be of 1880 growth, but which were of such low vitality as to be valueless.

During the summer we have growing upon the grounds samples from different growers and other seedsmen of every variety we offer. All the samples of each species are planted side by side and treated alike, and during the season daily observations are made, and the slightest difference in value in the samples of the same variety or any especial merit in any sort is carefully recorded. In addition to this we have samples of many new sorts just introduced or not yet in the market, and are thus enabled to select and purchase any that have real merit. We had during the past season over 1,500 samples growing upon these grounds, and the opportunity which the large collection, distinct labeling, and perfect cultivation gave to study the different varieties, was appreciated and enjoyed by hundreds of visitors.

OUR NEW SEED WAREHOUSE.

On another page we give a representation of our new seed warehouse, one of the largest buildings used for mercantile or manufacturing purposes in the city of Detroit. It occupies one-half of the entire block bounded by Randolph, Croghan, Brush and Lafayette streets, and is of easy access to the depots, boats, post office, custom house, the telegraph, electrotyping, lithographing, printing and binding offices, as well as to our seed farms and test garden, with all of which it is often necessary for us to be in hourly communication.

The building extends 300 feet on Brush street and 120 feet on both Croghan and Lafayette streets. It has a very handsome exterior of brick and stone, is four stories high with a deep, light, airy basement under the whole. The aggregate area of the several floors is between four and five acres. As an indication of the growth of our business we would state that if each year since we moved into our store on Woodward Avenue—twenty years ago—we had added one of equal size, their combined floor surface would fall considerably short of that of our new building, to say nothing of the capacity of our large store houses on the seed farms.

We have devoted two pages to interior views of the building. The first shows our mail order department, a room 120 by 140 feet, in which we execute every order we receive which is accompanied by a remittance. The second is a view of a room of the same size, devoted to putting up seeds in papers and assorting boxes for our wholesale trade with merchants.

Our wholesale bulk seed and retail departments are located on the ground floor, and the offices in the second story fronting on Brush and Croghan streets.

SCENE ON D. M. FERRY & CO'S SEED FARM—Weeding Cabbage.

The building is heated entirely by steam, which is supplied from our box factory, which is located directly opposite the Brush street front, and is lighted by gas manufactured by ourselves from naphtha, the carbtorator being sunk in the alley in the rear.

OUR BOX FACTORY.

For some years past we have been obliged to make our boxes at some distance from our offices, but we have now overcome this disadvantage by the erection of a new building for this purpose directly across the street from our new warehouse. It is three stories high, built of brick and stone in the same architectural style as our warehouse.

This box factory, though only a feature of our business, is a complete manufacturing institution in itself. Besides supplying the larger building with heat and, to a limited extent, power, it contains every facility for converting an immense amount of lumber into the boxes which are annually used in our business. Machines designed especially for our use are employed for almost every process necessary for the construction of finished boxes from rough lumber; nevertheless in winter there are usually over 100 men employed in this department alone. We give elsewhere a sketch of the box factory employes.

OUR CANADIAN BRANCH.

We have long felt the desirability of a store in the Dominion for the accommodation of our Canadian friends, and on adoption of their recent tariff law, we at once secured suitable quarters in Windsor, Ontario, opposite Detroit. Seeds in packets and small parcels designed for Canada, whether sent by mail or otherwise from the United States, are subject to a duty of 25%, which virtually debars our Canadian friends from purchasing in this country.

By the establishment of this branch we are enabled to execute promptly all orders in large or small quantities by mail, express or freight, without any of the vexatious delays and expensive processes of entering and paying duties. Our stocks will be imported directly into Canada, and a duplicate will there be found of nearly everything we sell in the States. The advantage of this move to our Canadian friends cannot be overestimated, as it places them on a par with our friends in the States.

Our warehouses in Windsor and Detroit are connected by telephone, and are but twenty minutes distant from each other by ferry across the Detroit river. Never before have we been in so favorable a position for the prompt and accurate execution of Canadian orders, and now that our facilities are unexcelled, we confidently expect an increasing patronage from the Dominion.

THE FORMATION AND MANAGEMENT

—OF—

VEGETABLE GARDENS.

SITUATION AND EXPOSURE.—If possible, the garden should be quite near the house, and in no case should it be in an orchard or have trees or shrubs within it. If the space must accommodate both fruit and vegetables, it is better to set the fruit at one end so as to leave the portion for vegetables unbroken and unshaded, even if it is much smaller. Abrupt slopes in any direction are to be avoided. A gentle inclination to the south and east is the warmest, will give the earliest vegetables and be best for Corn, Melons, Tomatoes, &c., but it suffers more from a spring or early fall frost, because of receiving the direct rays of the morning sun. An inclination to the north and west is later, suffers less in a drought and is the best for Peas, Cabbage, Lettuce, &c. So it is an advantage in a large garden to have both these exposures, but for small gardens a gentle inclination to the south or east or a level surface is the best.

SOIL.—A good garden *can* be made on *any* soil, but that best suited to the purpose is a deep, rich, friable loam—and the more nearly other soils can be made to approach this the better. This may be accomplished in tenacious clays (and must be for a good garden) by good drainage, deep and judicious cultivation, use of coarse manure, and liberal applications of leached ashes, sand, and in some cases of peat. If the soil is naturally too light and sandy, it may be improved by rolling and the use of large quantities of well composted manure and muck, and dressings of clay.

NORTH.

66 feet, or 4 rods wide.

Walk or turning ground, 8 feet wide.													
3 ft.	Asparagus, Artichoke and Rhubarb.												
5 ft.	Parsnip, Salsify and Early Peas, followed by Winter Spinach.												
3 ft.	Peas.												
3 ft.	Early Potatoes, followed by Celery.												
3 ft.	Early Lettuce, etc., from hot bed, Radish, Cress, Mustard, followed by Turnip.												
1½	Onions.												
1½	Lettuce, Endive, Parsley, Sweet Herbs.												
2½	PUSH PEAS.												
2½	Beets and Turnips.												
2½	Early Cabbage and Cauliflower.												
3 ft.	Late Cabbage.												
3 ft.	Early Sweet Corn.												
4 ft.	Late Sweet Corn and Summer Squash.												
5 ft.	Tomatoes and Pole Beans.												
6 ft.	Cucumbers and Musk Melons.												
8 ft.	Water Melon and Winter Squash.												
8 ft.													

Walk or turning ground, 6 to 8 feet wide.													

SIZE AND FORM.—A single bed ten feet square well manured, well spaded, and thoroughly cultivated and cared for will produce more *good* vegetables, be more profitable and give better satisfaction than an acre unmanured, half prepared and poorly cared for. Our golden rule for size is, make your garden *no larger* than you can prepare and care for in the best possible manner. If it all has to be done by hand it will take the entire time of one man to keep in good order a garden of one acre, but if it is so arranged that the horse cultivator can be used, he can care for four times the area. In village gardens the form is usually determined by that of the lot, but where there is a choice a rectangle several times longer than wide, the sides running from north to south, is the most economical; if this can be so placed that a space eight feet wide at both ends or along both sides can be left for a horse to turn in it will be a great advantage.

DRAINAGE.—Nothing is more essential for a good garden than good drainage. It is impossible to raise a supply of fine vegetables without it. If the soil is at all wet it should be well drained with tile, but if this is not possible, something can be gained by ploughing or throwing the soil up into beds from six to thirty feet wide, with smooth-bottomed trenches between them to collect and carry off the surface water.

MANURES.—For garden purposes, there is nothing better than well-rotted stable manure, with which tobacco stems, bones (which after a few weeks in fermenting manure will crumble to powder), leaves or any refuse vegetable or animal matter may be composted with advantage. This should be ploughed in unless the soil is quite sandy and the manure very fine, when it may be applied on the surface and simply harrowed or raked in. Plaster, salt, wood ashes, guano, ground bone, all are valuable and can be used to advantage in connection with the stable manure. Plaster should not be applied until the plants are well up. Ashes and salt should not be mixed with the other manures, and may be sown broadcast and raked in just before planting. Guano, ground bone, and superphosphate give better results if one-half is sown broadcast at planting and the balance when the vegetables are half grown. In some cases, sand, leached ashes and peat on clay soils, and clay and muck on sandy soils will prove as valuable as manures. Occasionally a spot which has been used for a garden for many years will become unproductive in spite of liberal manurings. We know of no other remedy than to abandon it for a garden, seed down to clover and allow it to remain two years when it may be ploughed under, and the garden will be found to have regained its original fertility.

PREPARATION OF THE GROUND.—Thorough preparation of the ground is of vital importance in raising good vegetables; if this work is well done all that follows will be easier. The garden should be well ploughed or spaded, taking care if it is a clay soil that the work is not done when it is too wet. If a handful from the bottom of the furrow moulds with slight pressure into a ball which cannot be easily crumbled into fine earth again, the soil is too wet, and if ploughed then will be hard to work all summer. The surface should be made as fine and smooth as possible by the harrow or rake, and in the case of sandy soils it should be rolled with a heavy roller. Stiff clay soils are frequently wonderfully improved by trenching, that is spading two feet deep in such a way as to leave the surface soil on top. This is accomplished by digging a trench two feet wide across one side and a second one adjoining and parallel with it one spade deep. The remaining earth of the second trench is then thrown into the first and covered with the surface soil from a third trench; the balance of the third is then thrown into the second and covered with the surface of the fourth; and so on until all is worked over when the soil from the first trench is used to fill the last. This is quite expensive, but frequently changes a soil upon which nothing can be grown into one producing the finest vegetables, and its effects last for several years.

ARRANGEMENT.—In city gardens, or where most of the work is done by hand, this may be entirely a matter of taste, but it is quite important to have the garden so arranged that most of the work can be done by horse power. We can best point out the things to be considered in the arrangement by means of an illustration given on the opposite page. The points gained in this plan are:—

First—Ability to cultivate the ground. All but a strip three feet wide between the radish and lettuce can be worked by any common one-horse cultivator.

Second—Placing those vegetables which may stay out all winter side by side, where they will not interfere with next season's ploughing.

Third—Arranging the vegetables very nearly in the order in which they should be planted or set out in the spring—this would be nearly perfect if the beans and early cabbage were to change places.

Fourth—Providing for easy rotation of crops by simply reversing (with the exception of the permanent row of Asparagus, etc.) the plan.

The number of rows of each vegetable and the relative proportion of each may be varied according to the wants of the family, but the proportion given here will be found to about suit most families who depend upon the garden for both winter and summer vegetables.

If necessary, the turning ground at both ends may be filled with winter Squashes, as these are planted so late and at such a distance apart that they would not seriously hinder the turning of a steady horse with a careful driver. Whatever the arrangement followed may be, we earnestly urge that every effort be made to secure straight and perfect rows. There is perhaps no one thing that will make the subsequent cultivation easier, or contribute more to the owner's satisfaction in his garden than this, and a little extra effort in this respect at the first will give pleasure all through the season.

SOWING THE SEED.—There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. A seed consists of a minute plant minus the roots, with a sufficient amount of food stowed in or around it to sustain it until it can expand its leaves, form roots, and provide for itself, the whole inclosed in a hard and more or less impervious shell. To secure germination, moisture, heat and a certain amount of air are necessary. The first steps are the softening of the hard, outer shell, the developing of the leaves of the plant from the absorption of water, and the changing of the plant food from the form of starch to that of sugar. In the first condition the food was easily preserved unchanged, but the plant with its undeveloped leaves and no root was incapable of using it, while in its sugary condition it is easily appropriated; but if not used it speedily decays itself and induces decay in the plant. A seed then may retain its vitality and remain unchanged for years, while after germination has commenced a check of a day or two in the process may be fatal. There is no time from that when the seed falls from the parent plant until it in turn produces seed, ripens and dies

SCENE ON D. M. FERRY & CO'S SEED FARM.—Dinner.

when the plant is so susceptible of fatal injury from the overabundance or want of heat and moisture as that between the commencement of germination and the formation of the first true leaves, and it is just then that it needs the aid of the gardener to secure favorable conditions. These are:

First—A proper and constant degree of moisture without being soaked with water. This is secured by making the surface of freshly dug soil so fine that the smallest seeds may come in immediate contact on all sides with the particles from which they are to absorb the required moisture, and the pressing of the soil over the seeds so firmly with the feet or the back of a hoe that the degree of moisture may remain as nearly as possible the same until the plants are up.

Second—A proper degree of heat, secured by sowing each variety of seed when the average temperature of the locality is that most favorable for its germination. This may be learned from a careful study of the following pages and the experience of the most successful gardeners of your vicinity.

Third—Covering the seed to such a depth that while it is preserved at a uniform degree of heat and moisture the necessary air can readily reach it, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil, and can be learned only from practical experience. In general, seeds of the size of the Turnip should be covered with half an inch of earth pressed down while Corn may be an inch, Beans two or three, and Peas two to six inches deep.

Fourth—Such condition of soil that the ascending stem can easily penetrate it, and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground, and taking care *never to sow fine seeds when the ground is wet*. Occasionally a heavy or long continued rain followed by a bright sun will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that no seed can germinate. In such cases our only remedy is to try again.

CULTIVATION.—Every weed should be removed as soon as it appears, especially while the plants are young; this will require almost daily attention, but if well done early in the season the later work will be light, but mere destruction of weeds is by no means the only object of cultivation. A. J. Downing, who was perhaps the best horticulturist America has known, said if I were to preach sermon on horticulture, I should take as my text: "**STIR THE SOIL**," and certainly the text would contain much of the gospel of successful horticulture; frequent and deep stirring will enable one to grow fine vegetables on comparatively poor and slightly manured soil, while without it one fails to gain much advantage from the richest and finest soil. Care should be taken that the cultivation is not done when the soil is wet, or Peas, Beans and Melons stirred when the leaves are wet with dew, as such disturbance is liable to injure the leaves, and make them susceptible to injury from rust. With this exception, cultivate as often and as thoroughly as possible.

HOT-BEDS.

For early vegetables, some provision for starting certain plants earlier than can be done in the open air is necessary; for this purpose, nothing is better than a good hot-bed, and their construction is so simple and the expense so light that every garden should have one. A hot-bed proper not only protects the plants from the cold, but supplies *bottom heat*; by this term the gardener means that the soil is constantly kept several degrees warmer than the air above, that being the condition so far as heat is concerned which is most favorable for rapid and vigorous growth. It is evident that to produce this we must in some way apply our heat below the surface, and it is usually done by making a compact pile of some fermenting material and covering it with the earth in which the plants are to grow.

HEATING MATERIAL.—The best heating material that is easily available is *fresh* horse manure, containing a liberal quantity of bedding, which may be straw, shavings, or best of all leaves. Such manure if thrown into a loose pile will heat violently but unevenly and will soon become cold. What is wanted in the hot-bed is a steady and moderate but lasting heat. To secure this the manure should be forked over and thrown into a loose pile which should remain undisturbed for a few days and then be forked over again, piled and allowed to heat a second time, when after a few days more it will be ready for use. The object of this repeated forking over and piling is to get the whole mass into a uniform degree of fermentation.

SASH.—Gardeners commonly use sash made especially for hot-beds and glazed with small lights cut from odds and ends and so furnished at very low rates. Such sash can usually be procured in any of our large cities and cost much less than if made to order. For garden use, however, we much prefer a small size that can be easily handled, and the use of better and larger glass. We should recommend that the sash be three by five feet, and that the glass be not less than 10x14, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work it would be well to state what they are to be used for, and that they need to be made like sky-light sash.

THE FRAME.—This may be made of sound, one-inch lumber, the back sixteen to eighteen inches high, the front twelve to fourteen inches. It should be well fitted to the sash so as to leave as little opening as possible and yet allow the sash to be easily slid up and down even when the frame is quite wet.

THE SOIL.—This should be *light, rich, friable*. Any considerable amount of clay in it is very objectionable. If possible it should be quite dry and unfrozen when put into the bed; for this reason it is much better to prepare it the fall before and cover the pile with enough coarse manure or straw to keep out frost.

MAKING THE BED.—This requires careful attention, as future success depends largely upon the manner in which this work is done. Having cleared away all snow and ice and laid out a rectangular bed one foot larger each way than the frame to be used, fill this by carefully shaking out and spreading each forkfull, and repeatedly treading down the manure so as to make the bed as uniform as possible in solidity, composition and moisture; unless this is done one portion will heat quicker than the others and the soil will settle unevenly, making it impossible to raise good plants. The proper depth of the bed will vary with the climate, season and the kind of plants to be raised. A shallow bed will give a quick, sharp heat and soon subside, a deeper one, if well made, will heat more moderately but continue much longer. For general purposes, a bed about two and a half feet deep will be best.

SCENE ON D. M. FERRY & CO'S SEED FARM.—Harvesting.

The bed completed, the frame and sash may be put on and then it should be allowed to stand a few days with the sash partially open to allow the steam and rank heat to pass off. The heat will at first be quite violent, frequently raising in the first few days to 120°, but it soon subsides, and when it recedes to 90° the earth may be put in and the seed planted. If from any reason you are obliged to use frozen soil, it may be placed in small piles upon the manure immediately upon the completion of the bed, but it should not be again disturbed until it has thawed and dried out, and care should be used to give free vent for the escape of the steam and moist air. The importance of allowing this gross heat to pass off before planting the seeds is very great, as every season thousands of hot-beds are failures and their builders blame the seedsmen for sending them poor seed, when the real difficulty was that their seeds were burned up by this first heat.

MANAGEMENT OF THE BED.—The essentials for success are a steady, uniform degree of heat and moisture; keeping the soil at all times a few degrees warmer than the air, and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these seem to be, there are many difficulties in the way of securing them, prominent among which are overheating the air under a bright sun. Without experience, one would scarcely believe how quickly the temperature inside of a well built hot-bed will rise to 90 or 100 degrees upon a still, sunny day even with the thermometer outside is far below freezing, or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open ever so little; besides such a rush of cold air driven over the plants is far more injurious than the same temperature when the air is still. Again, a bed will go several days without watering when kept closed during cloudy weather, but will dry out in an hour when open on a sunny day. The details of management, however, must be learned by experience, but may be easily acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

A COLD FRAME is a simple construction of boards for wintering cabbage, lettuce, cauliflower, brocoli, etc., for planting out early in the spring.

Select a dry, southern exposure; form a frame from four to six feet wide and as long as required. The back should be fourteen and the front six inches high, with a cross tie every six feet. Seeds of the above named vegetables, sown in open borders early in September, will be ready to plant in cold frames about the last of October. The soil should be well prepared and smoothly raked before planting. Admit air freely on all pleasant days, but keep close in severe weather.

TRANSPANTING.—In transplanting, the main points to be regarded are care in taking up the plants so as to avoid injury to the roots, planting firmly so as to enable the plant to take a secure hold of the soil, reducing the top to prevent evaporation, and shading to prevent the hot sun from withering and blighting the leaves. It is most apt to be successful if done just at evening or immediately before or during the first part of a rain, about the worst time being just after a rain, when the ground being wet it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all, it should be used freely and the wet surface immediately covered with dry soil.

WATERING.—The best time to water plants is at sunrise or just at evening, and always use rain water when it is to be had. If well water must be used it should be exposed to the sun a day or two till it rises to the temperature of the air before it is applied. Water may be given to the roots at any time, but should never be sprinkled over the leaves in the hot sun, for it will make them blister and cover them with brown spots wherever it touches. If watering a plant has been commenced, keep on until the necessity ceases, or more injury than good will result from it; one copious watering is better than a little and often. The use of the hoe should always follow the watering pot as soon as the ground becomes dry.

VALUABLE TABLES.

Quantity of Seed required to produce a given number of Plants, or sow on a given quantity of ground.

Artichoke	1 oz. to	500 plants.
Asparagus	1 oz. to	60 feet drill.
Beans, Dwarf	1 qt. to	150 feet drill
		or 300 hills.
" Pole	1 qt. to	200 hills.
Beet	1 oz. to	100 feet drill.
Brocoli	1 oz. to	3,000 plants.
Brussels Sprouts	1 oz. to	3,000 plants.
Cabbage	1 oz. to	3,000 plants.
Celery	1 oz. to	250 feet drill.
Cauliflower	1 oz. to	3,000 plants.
Chicory	1 oz. to	10,000 plants.
Collards	1 oz. to	100 feet drill.
Corn	1 qt. to	250 hills.
Cress	1 oz. to	150 feet drill.
Cucumber	1 oz. to	80 hills.
Egg Plant	1 oz. to	2,000 plants.
Endive	1 oz. to	300 feet drill.
Garlic (bulbs)	1 lb to	10 feet drill.
Gourd	1 oz. to	25 hills.
Kale	1 oz. to	2,000 plants.
Kohl Rabi	1 oz. to	200 feet drill.
Lettuce	1 oz. to	10,000 plants
		or 250 feet drill.

Leek	1 oz. to	250 feet drill.
Marjoram	1 oz. to	10,000 plants.
Martynia	1 oz. to	50 feet drill.
Melon, Musk	1 oz. to	100 hills.
" Water	1 oz. to	25 hills.
Nasturtium	1 oz. to	50 feet drill.
Okra	1 oz. to	50 feet drill.
Onion Seed	1 oz. to	200 feet drill.
" Tops or Sets	1 qt. to	20 feet drill.
Parsnip	1 oz. to	250 feet drill.
Parsley	1 oz. to	200 feet drill.
Peas	1 qt. to	150 feet drill.
Pepper	1 oz. to	1,500 plants.
Pumpkin	1 qt. to	400 hills.
Radish	1 oz. to	150 feet drill.
Salsify	1 oz. to	60 feet drill.
Sage	1 oz. to	250 feet drill.
Spinach	1 oz. to	150 feet drill.
Savory	1 oz. to	500 feet drill.
Squash, Summer	1 oz. to	40 hills.
" Winter	1 oz. to	10 hills.
Tomato	1 oz. to	5,000 plants.
Tobacco	1 oz. to	10,000 plants.
Turnip	1 oz. to	250 feet drill.

SCENE ON D. M. FERRY & CO'S SEED FARM.—Seed Barn.

Quantity of Seed usually sown on One Acre.

(PROVIDED YOU HAVE GOOD SEED.)

Barley (broadcast).....	2½ bu.
Beans, Dwarf.....	1½ "
" Pole.....	1½ "
Beet (Garden).....	12 lbs.
" (Mangle Wurzel).....	8 "
Broom Corn.....	10 "
Buckwheat.....	½ bu.
Cabbage (in beds to transplant).....	¼ lb.
Carrot, drills.....	2½ "
Clover, Alsike.....	6 "
" Lucerne.....	8 "
" Large Red.....	8 "
" Medium.....	10 "
" White Dutch.....	6 "
" Crimson Trefoil.....	8 "
" Bokhara.....	4 "
Corn Salad.....	5 "
Corn, (Field) hills.....	6 qts.
" (Sweet).....	8 "
" drilled (for fodder).....	1½ bu.
Cucumber.....	1¼ lbs.
Flax, broadcast.....	½ bu.
Grass, Blue, Kentucky.....	2 "
" Blue, English.....	1 "
" Hungarian.....	½ "
" Millet.....	½ "
" Mixed Lawn.....	3 "
" Orchard.....	2 "
" Perennial Rye.....	2 "
" Red Top.....	2 "
" Timothy.....	12 lbs.
" Fowl Meadow.....	2 bu.
" Wood Meadow.....	2 "
Hemp.....	½ "
Melon, Musk, hills.....	1½ lbs.

Melon, Water, hills.....	1½ lbs.
Mustard, broadcast.....	6 "
Oats, broadcast.....	2½ bu.
Onion, drills.....	5 lbs.
" (for sets).....	30 "
Parsnip, drills.....	5 "
Peas, drills.....	1½ bu.
" broadcast.....	3 "
Potatoes, hills.....	8 "
Radish, drills.....	8 lbs.
Rye, broadcast.....	1½ bu.
Sage, in beds (to transplant).....	1 lb.
Salsify, drills.....	8 lbs.
Spinach, drills.....	10 "
Squash, hills.....	2½ "
Sugar Cane, drills.....	10 "
Tomatoe, in beds (to transplant).....	2 ozs.
Turnip, drills.....	1½ lbs.
Vetches, broadcast.....	2 bu.
Wheat, broadcast.....	2 "
" drills.....	1½ "

GRASS SEED, FOR MOWING.

Clover, { Together 15 lbs. Clover, 6 lbs.	
Timothy, { for one 5 lbs. or	
Red Top, { acre. 7 lbs. Timothy, 6 lbs.	

GRASSES, FOR LAWNS.

Blue Grass, alone.....	3 bu.
Red Top, alone.....	3 "
Perennial Rye Grass.....	3 "
Mixed Lawn, Central Park Mixture.....	60 lbs.
" Flint's Extra Fine.....	60 "

Much larger quantities of Seed are required to make an elegant Lawn than for other purposes.

Number of Plants or Trees to the Acre at given Distances.

Dis. apart.	No. plants.
½ foot.....	174,240
1 ".....	43,560
1½ feet.....	19,360
2 ".....	10,890
2½ ".....	6,969
3 ".....	4,840
4 ".....	2,722
5 ".....	1,742
6 ".....	1,210
7 ".....	889

Dis. apart.	No. plants.
8 feet.....	680
9 ".....	573
10 ".....	435
11 ".....	360
12 ".....	302
15 ".....	193
18 ".....	134
20 ".....	108
25 ".....	69
30 ".....	49

Weight of Various Articles in the State of Michigan.

Barley.....	per bush. 48 lbs.
Beans.....	" 60 "
Buckwheat.....	" 48 "
Broom Corn.....	" 46 "
Blue Grass, Kentucky.....	" 14 "
" English.....	" 24 "
Bran.....	" 20 "
Castor Beans.....	" 46 "
Clover Seed.....	" 60 "
Corn, shelled.....	" 56 "
Corn, on ear.....	" 70 "
Corn Meal.....	" 50 "
Coarse Salt.....	" 50 "
Charcoal.....	" 22 "
Coal, Stone.....	" 80 "
Cranberries.....	" 40 "
Dried Apples.....	" 22 "
Dried Peaches.....	" 28 "
Flax Seed.....	" 56 "
Hemp Seed.....	" 44 "
Hungarian Grass Seed.....	" 48 "
Irish Potatoes, heaving measure.....	" 60 "
Millet.....	" 50 "
Malt.....	" 38 "
Oats.....	" 32 "
Osage Orange.....	" 33 "

Orchard Grass.....	per bush. 14 lbs.
Onions.....	" 54 "
Peas.....	" 60 "
Plastering Hair.....	" 8 "
Rye.....	" 56 "
Red Top Seed.....	" 14 "
Sweet Potatoes.....	" 56 "
Timothy Seed.....	" 45 "
Turnips.....	" 58 "
Wheat.....	" 60 "
Beef and Pork, per bbl., net.....	200 "
Flour, per bbl., net.....	196 "
White Fish and Trout, net.....	200 "
Salt, per bbl.....	220 "
Lime.....	280 "
Hay, well settled, per cubic foot.....	4½ "
Corn, on cob, in bin.....	22 "
Corn, shelled, ".....	45 "
Wheat, ".....	48 "
Oats, ".....	25½ "
Potatoes, ".....	38½ "
Sand, dry, ".....	95 "
Clay, compact, ".....	135 "
Marble, ".....	169 "
Seasoned Beech Wood, per cord.....	5,616
Seasoned Hickory, ".....	6,960

MAIL ORDER DEPARTMENT OF D. M. FERRY & CO.

Illustrated and Descriptive Catalogue

WITH

GENERAL DIRECTIONS FOR CULTIVATION.

The Terms and Prices of Vegetable Seeds will be found in the Retail Price List, in the last part of this Catalogue.

ARTICHOKE.

French, *Artichaut*.—German, *Artischoke*.

CULTURE.—Sow in seed beds early in spring, in drills twelve inches apart. Prepare permanent beds by trenching or very deep spading and thorough enriching with well decomposed manure, a heavy dressing of leached ashes and two quarts of salt to each three square rods. When the plants are six inches high transplant into beds, setting them about two by three feet apart. Keep well cultivated, and remove the heads for use and cut the stalk to the ground before the scales begin to open, because if the flowers expand it weakens the plant. In the fall cover with manure, which should be spaded in the next spring, taking care not to injure the crowns of the plants. The crop is the largest and best the second year, after which the bed should be renewed by seed or suckers.

Large Globe.—The garden Artichoke is esteemed a great luxury by epicures. The edible portion is the undeveloped flower head, which is only fit for use before it begins to open its bloom; it is about the size and somewhat the shape of a small pine apple.

JERUSALEM ARTICHOKE.

In no way resembling the above, except that its tubers when cooked have the same taste and flavor. The plant yields an immense crop of tubers, which are the richest in fat producing elements of any of our cultivated roots. Cultivate the same as potatoes, and take care to remove all the small roots, for if left in the ground they will come up the next spring and may become a troublesome weed.

ASPARAGUS.

Fr. *Asperge*.—Ger. *Spargel*.

A most valuable vegetable, not only because of its healthfulness but from its being one of the first to come to our tables in the spring. Every garden should contain a bed, but many people are deterred from making one because of the idea that it is very difficult and requires great skill and much labor to prepare and maintain it; yet we think there is scarcely a vegetable on our list that can be produced for a term of years so cheaply and eas-

Asparagus.

ily as this, and any one following the directions given below will be almost certain of success.

CULTURE.—If you wish to raise your own plants, prepare a light, rich spot as early as possible in the spring. Soak the seed twenty-four hours in warm water and sow in drills one foot apart. When the plants are well up, thin to three or four inches in the row and give frequent and thorough cultivation during the summer. The second season prepare a permanent bed by deep spading or trenching, working in a good quantity of well rotted manure. Dig trenches four feet apart and twelve to sixteen inches deep, and spade in at least four inches of well rotted manure in the bottom. Set the plants in the trench eighteen inches apart, covering them with about two inches of fine soil. After the plants are up gradually fill up the trenches, and give frequent and thorough cultivation. The second season, early in the spring, spade in a heavy dressing of manure and about two quarts of salt to the square rod. Cultivate well, and in the fall cut and burn the tops. The next season it may be cut for the table two or three times, taking care to cut *all* as fast as it appears. After the final cutting spade in a liberal dressing of fine manure and sow one quart of salt to the square rod. The next season and ever after that the bed should give a full crop, but should be annually manured after the last cutting and well cultivated through the remainder of the summer.

Conover's Colossal.—A mammoth variety of vigorous growth, sending up from fifteen to forty sprouts from one to two inches in diameter. Color, deep green, and crown very close.

Giant.—The old, favorite variety, producing abundantly. Tops green or purple, according to the soil in which they are raised.

BEANS—Dwarf, Bush or Snap.

Fr. *Haricot*.—Ger. *Bohne*.

Under this name are classed all the low-growing sorts, called in different catalogues *Bush*, *Bunch*, *Snap*, *String* or *Dwarf Beans*.

CULTURE.—They are so extremely sensitive of frost and cold, that it is useless to plant them before the middle of spring, when the ground has become warm and light. Hoe often to stir the ground, but only when dry, because earth scattered on the leaves when they are wet with dew or rain will cause them to rust, and greatly injure the crop. Plant three to five seeds in hills two and a half to three feet apart, or six seeds to the foot in drills the same distance.

D. M. Ferry & Co's Golden Wax.—A variety introduced and named by ourselves five or six years ago,

PAPERING AND PACKING DEPARTMENT OF D. M. FERRY & CO.

Ivory Pod Wax.

and by many thought to be the *very best dwarf bean known*. It is *earlier* than any other variety, and the pods are large, long, brittle, *entirely stringless*, and of a *beautiful, rich, golden wax color*. As a snap bean, it excels in tenderness and rich, buttery flavor, while as a *shell bean for winter use it has few or no superiors*. These two characteristics, we believe, were never before combined in one variety. It is very prolific, and when once introduced becomes a great favorite with market gardeners, taking the place of the old Butter or Black Wax Bean. When ripe, the beans are of medium size, round, purple and white marbled, and are as easily threshed as the common white field bean.

Crystal White Wax.—A new and very distinct variety. The long, round pods are greenish-white, transparent, entirely stringless, crisp, tender and very slow to harden. As they are of fine form, very fleshy, and the white seeds quite small, this variety cannot be surpassed for pickling purposes. The vines are hardy, of slender growth, very prolific and covered with fine, smooth foliage which conceals the pods.

Ivory Pod Wax.—Another variety of recent introduction and of great value for either the home or market garden. The vines are compact, bushy; strong growers and are without doubt the most prolific of any variety of our garden beans. The pods are fit for the table at least a week earlier than the Black Wax, are long and handsome, of a beautiful, transparent, waxy-white color, and entirely stringless until nearly ripe. The ripe beans are medium sized, oval, white and of excellent flavor. They are easily threshed, and are among the best for a shell bean for winter use, while as a snap bean it is perhaps superior to most other varieties in tenderness.

Early China Red Eye.—A hardy and productive variety, especially valuable as a shell bean. The seeds green or ripe are thin skinned, good flavor and easily shelled; a good sort to sow late in the season for green pods and beans.

Early Mohawk.—Valuable on account of its hardiness, standing a light frost without injury, and for this reason is extensively planted for first crop. Vines strong and vigorous, and if the green pods are gathered often, they will continue a long time in bearing. Pods pale green, long and flat, and if gathered early, are tender and of good quality.

Early Valentine.—One of the best green-podded varieties for use as snaps. Vines medium sized with small, light green leaves; very early and productive.

German Wax, White-Seeded.

Pods medium length, sickle shaped, round, fleshy, tender and brittle, retaining these qualities for a long time.

German Wax, Black-Seeded, Butter Bean.—A great favorite with market gardeners. The round, yellowish-white, wax-like pods of this variety are stringless and very fleshy and may be used as snaps until fully grown. Vines early and productive.

German Wax, White-Seeded.—Vines delicate and more subject to rust than the last. Ripe beans are clear white, otherwise the same as the last.

Early Round Yellow Six Weeks.—A variety which has been in cultivation and remained unchanged for over a century. Vines dwarf, yet early and productive. Used as an early snap bean, but of little value shelled.

Early Yellow Kidney Six Weeks.—An old and popular variety. Vines vigorous, branching, productive. Pods long, flat, and when young, of good quality.

Early Rachel.—The earliest of the green-podded sorts. Vines hardy, moderately productive. Of value as an early string bean, but of little value shelled.

Newington Wonder.—Vines remarkably prolific, and remain green longer than any other variety. Pods small, crisp, tender, and when young, of the best quality. The best variety for forcing.

Refugee, or Thousand to One.—A very popular sort. Vines hardy and productive. Pods thick, fleshy and tender in texture. Considered one of the best for pickling.

Golden Cranberry.—The seeds, when ripe, are pale yellow, with an olive-green line encircling the eye, and nearly round; for baking or cooking when ripe, it is much esteemed, but is not equal to some other sorts for using green, shelled, or as snaps.

Large White Marrow, or Mountain.—A large, round, oval, white bean, of excellent quality shelled, green or dry. Very tender, rich, and one of the most productive beans grown in the garden or field.

White Corn Hill.—A half dwarf variety very similar to the last.

Royal Dwarf Kidney.—This is one of the best late kinds, and as a bean for winter use, has no superior. Beans white, round, long and kidney-shaped.

Red French Kidney.—The ripe beans when first harvested are blood red, changing by age to deep purple. They are kidney-shaped, nearly straight, slightly

BOX FACTORY EMPLOYEES OF D. M. FERRY & CO.

flattened. They yield abundantly, and in the Southern States are much esteemed for cooking dry. The plant is of strong growth and half dwarf.

Dwarf White Navy.—Used exclusively for field culture. Seeds small, round, oval shape, of a pure, yet not glossy white color.

BEANS—Pole, or Running.

Fr. Haricots a rames.—Ger. *Stangenbohne.*

CULTURE.—These, even more than the Bush Beans, require a warm, mellow soil, and should not be planted until settled, warm weather. They all need to be supported, which is usually done by poles some eight or ten feet high set in the center of each hill. We prefer to use poles four to six feet high, set at an angle of about twenty-two degrees from the perpendicular, and their tops connected by a rope or inch-square strips. The vines will run along these, producing pods earlier and allowing them to hang free from the leaves and thus be of better shape and more easily seen. Form hills three and a half feet apart by forking in a shovelfull of fine manure; set the poles, and plant six to eight beans, and after the beans commence to run thin to four plants to the hill. If any fail to cling to the poles, note the direction in which the others go around the pole (they all go in one direction and will go in no other), and start these around the same way, fastening the end in a notch cut in the pole.

Dutch Case Knife.—This is the earliest variety of pole beans. Pods long and flat, beans white, flat, kidney-shaped, and of excellent flavor; good green or dry.

London Horticultural.—An old and popular variety. Pods five or six inches long, broad, pale green or white, streaked and blotched with brilliant rose-red, containing five or six seeds. Green beans large, egg-shaped and of the highest quality; the dry beans are very superior for baking or stewing.

Small White Lima, Carolina or Sieva.—Resembles the Large Lima in growth, but is earlier, more hardy, and surer to produce a crop. Seeds small, white, and quite flat.

Deer's Improved Lima.

Large White Lima.—A large, late bean, with broad, rough pods; seeds white, veined with green, very large, broad, thin, and surpassed in quality by no other variety. It is a general favorite wherever it can be cultivated.

Deer's Improved Lima.—The result of several years careful selection from the old Lima. The distinctive improvements are its earliness, remarkable productiveness, delicious flavor, and the forming of the beans so closely in the pod.

Indian Chief, or Tall Wax.—Pods of a fine waxen, semi-transparent white color; crisp, tender and succulent, and continuing so longer than most other sorts.

Giant Wax.—The long, large pods are of a white or pale yellow color and of beautiful waxy appearance. Used only as a snap bean, but for this purpose superior to any other sort, being, in spite of its size, tender and of good flavor.

Southern Prolific.—A very excellent pole bean for cooking in the pod. The pods are produced in clusters, and as it matures in seventy days, the growth is very rapid and the pods brittle and tender. It is one of the most popular snap beans in the Southern States, where it is better known than in the North.

Scarlet Runner.—This variety grows fifteen feet high, has flowers of brilliant scarlet, and is generally cultivated as an ornamental climber.

Carter's Champion Runner.—An improvement on the Old Scarlet Runner. The pods are nearly twice as large as any other runner bean, and hang twice as thick on the vine.

White Runner.—Like the Scarlet, except in the color of the seeds and flowers, which are pure white.

BEET.

Fr. Betterave.—Ger. *Runkel Rube.*

CULTURE.—All the varieties succeed best on a deep, rich, sandy loam, and require to be thinned when small, and kept free from weeds. For early Beets, sow as soon as the ground will admit, in drills fourteen inches apart, and thin to six inches in the row. For winter, sow about the middle of spring. Soak the seed twenty-four hours in luke-warm water before planting, and sow in freshly prepared ground.

Early Turnip Bassano.—Although not maturing as early as some other sorts, this being much the largest of the early varieties reaches a size fit for the table among the earliest. Roots flat, turnip-shape, light red. Will not keep well through the winter. Flesh white circled with pink, coarse-grained, but tender and sweet.

Early Blood Turnip.—The standard early sort. Tops very small; roots blood-red, turnip-shaped, with small tap-root, very tender. A good variety for forcing in hot-beds, early use and for late planting for winter use.

Improved Early Blood Turnip.—This variety originated from the preceding, the earliest and most perfect specimens having been selected for a succession of years, until it has become perfectly pure and of fine

Early Turnip Bassano

D. M. FERRY & CO'S CANADIAN BRANCH HOUSE, 122 and 124 Sandwich St., WINDSOR, Ont.

Improved Early Blood Turnip.

form and shape, and cannot fail to give great satisfaction to the market gardener.

Egyptian Blood Turnip.—This matures quicker than any other sort. Roots of fine, turnip form when

Egyptian Blood Turnip

young, but becoming irregular at maturity. They are of medium size, smooth, and very dark in color. Flesh beautiful, dark purplish-red, fine-grained, crisp and tender, qualities which it retains when the roots are large and old, never becoming coarse and woody.

Bastian's Early Blood Turnip.—Among market gardeners, this valuable new variety is becoming a strong competitor with

Bastian's Early Blood Turnip.

Henderson's Pine Apple.

Half Long Dark Blood
Rough-Skinned. Lane's Improved
Imperial Sugar.

the Egyptian Blood Turnip, being larger and more symmetrical in form, and always grows in good shape, even when the plants stand very close in the row. It is earlier than the Bassano, very tender and sugary, and retains its blood red color after cooking.

Dewey's Early Blood Turnip.

—A favorite with New England marketmen. The roots are of uniform good size, smooth and handsome.

Long Dark Blood.

French White Sugar.

The flesh is quite rich in color, and very tender and sweet.

Henderson's Pine Apple.—The roots are half-long, medium size, well formed, and of a very dark crimson color. Flesh fine-grained, sweet, tender, and excellent for table use.

Half-Long Dark Blood, Rough, or Bark Skinned.—Intermediate between the Long Dark Blood and Early Blood Turnip. Roots medium length but irregular. Skin exceedingly rough. Flesh deep, purplish-red, circled with lighter shades, and the most crisp and tender of any variety. A most valuable sort for home use, but not suited for market because of its appearance.

French White Sugar.—Roots large, half-long; skin white, washed with green at the crown; flesh white, coarse-grained, crisp and very sweet. Although generally grown for stock, it is so very sweet and tender that many people prefer it to any other variety for the table.

Swiss Chard, Silver or Sea Kale Beet.—Cultivated for its leaves. Sown early in the spring it makes rapid growth and is fit to use for greens sooner than any

Swiss Chard.

other variety, and for this purpose it is *very much superior* to the common Beet. Later the leaves grow very large, with broad, flat, beautifully white and wax-like stems and mid-ribs which, when separated from the green portion, are cooked like Asparagus or made into most attractive pickles.

☞ The following varieties are especially valuable for stock, and we can honestly urge our friends to plant them in quantity. On rich soil they give immense crops, are easily raised, harvested and kept through the winter. Sow in drills thirty inches apart, on rich, *well prepared ground*, as early in the spring as possible. Cultivate well, and when the plants are three inches high thin out and transplant so as to leave them one foot apart in the row. In harvesting, take care to break or bruise the roots as little as possible, as they will keep better if unbroken.

French Yellow Sugar.—Grows to a large size, much above ground; roots half-long, yellow; considerably grown in this country for feeding stock. In France, it is cultivated extensively for the extraction of sugar.

Vilmorin's Improved Imperial Sugar.—An improved variety from France, said to afford the largest percentage of sugar of any known variety.

Lane's Improved Imperial Sugar.—This superb variety is the result of a careful selection for several years of the French Imperial Sugar Beet. After careful trial, it is with the greatest confidence recommended as being hardy, productive, and containing a large percentage of sugar.

Long Red Mangel Wurzel.—A large, long variety,

Vilmorin's Improved Imperial Sugar.

grown for stock feeding. It stands a good deal out of ground; color light red, flesh white and rose-colored.

D. M. Ferry & Co's Improved Mammoth Long Red Mangel Wurzel.—An improvement on the old variety, giving the greatest satisfaction. The roots are uniformly straight and well formed, and deeper colored than the common sort. Highly recommended for stock feeding.

Norbitan Giant Long Red Mangel Wurzel.—An English variety of very large size, growing well out of ground. The top is very small for its size, and the roots well formed, straight, smooth, and of a fine scarlet color.

Carter's Warden Prize Yellow Globe Mangel Wurzel.

Yellow Globe Mangel Wurzel.—A large, round, orange-colored variety, of excellent quality, which keeps better than the Long Red, and produces better crops on shallow soil.

Carter's Warden Prize Yellow Globe Mangel Wurzel.—A most excellent, yellow-fleshed, globe vari-

D. M. Ferry & Co's Improved
Mammoth Long Red
Mangel Wurzel.

Norbitan Giant Long
Red Mangel
Wurzel.

ety. The tops are small, and the roots, although large, are of excellent quality. Average weight fifteen to eighteen pounds. Highly recommended for shallow soil.

Red Globe Mangel Wurzel.—Similar to the preceding, except in color, which is of a light red or pink.

BROCOLI.

Fr. Chou Brocoli.—*Ger. Spargel Kohl.*

Brocoli is a species of Cabbage, nearly allied to the Cauliflower.

CULTURE.—Sow thinly in seed-beds about the middle of spring, and transplant and cultivate according to directions for winter Cabbages. The plants in the seed-bed are very apt to run up tall and slender, unless they are thinned and kept free from weeds. When they begin to flower, break the large leaves over the heads, to protect them from the sun, and gather them before they begin running up to seed.

Early Purple Cape.—This is the best variety for our climate. It produces large heads, of a brownish-purple color, very close and compact, and of excellent flavor.

Carter's Summer.—Very early, and well adapted to this climate. Heads solid, firm, and of most delicate flavor.

Leamington.—A very large and close-heading, white variety, the foliage folding well in to protect the flower.

Brussels Sprouts.

Brussels Sprouts.

Fr. Chou de Bruxelles.—*Ger. Sprossen Kohl.*

CULTURE.—The plant grows two or three feet high, and produces from the sides of the stalk numerous little sprouts one or two inches in diameter, resembling Cabbages. The leaves should be broken down in the fall, to give the little cabbages more room to grow. They should be treated in all respects like winter Cabbages, or Kale.

CABBAGE.

Fr. Chou Pommes.—*Ger. Kopfkohl.*

The Cabbage was highly esteemed by the ancient Greeks, one of their fables deducing its origin from the Father of their Gods, who, laboring to reconcile two conflicting oracles perspired, and from this divine perspiration sprang the Cabbage. This hint that Cabbages come only by the sweat of the brow may have had foundation in their day, but in ours there is no vegetable which may be cultivated with more certainty of success than this, and few if any that are so generally useful, as it may be made to follow other crops and will give some return no matter how poor the soil or how negligent the cultivation, while it responds so readily to better care that it claims a place in the finest garden and the attention of the most skillful gardener.

CULTURE.—The requisites for complete success are. *First*, good seed. *Second*, rich, well prepared ground. *Third*, frequent and thorough cultivation. There is no vegetable where the seed has more influence on the quality of the product than in this, and gardeners should invariably select the best procurable.

For Cabbages, the ground must be highly manured, deeply dug or plowed and thoroughly worked to insure good, full-sized heads. A heavy, moist and fresh loam

is most suitable. The early sorts should be sown very early, in hot-beds, hardened off, and transplanted early in the spring. In the milder climate of the Southern States it is better to sow the seed of the early sorts in open ground from middle of September to middle of October, and about the middle of November transplant to cold frames, where they are preserved through the winter, and set out early in the spring. Eighteen inches to two feet apart is the common distance. In transplanting, *they must be set in the ground up to the first leaf, no matter how long the stem may be.*

All through the season the ground should be cultivated *as often as possible*, as success will depend largely upon faithfulness in this particular.

The late autumn and winter varieties may be sown in a seed bed, from the middle to the last of spring, and transplanted when about six inches high, to three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stumps.

Cabbages should be hoed every week, and the ground stirred deeper as they advance in growth, drawing up a little earth to the plants each time, until they begin to head, when they should be well dug between and hilled up. After they are partly headed, it is the practice of some gardeners to lay them over on one side. Loosening the roots will sometimes retard the bursting of full-grown heads.

To preserve Cabbages during the winter, pull them on a dry day, and turn them over on the heads a few hours to drain. Set them out in a cool cellar, or bury them, with the head downwards, in long trenches, in a dry situation. In the Middle States, bury the head and part of the stump in the open ground, and place over them a light covering of straw and boards, to protect them in severe weather.

Little Pixie.—Remarkable for its earliness, its diminutive size and dwarfish character. It is tender in texture, and the flavor mild and delicate.

Early Jersey Wakefield.

Early Jersey Wakefield.—Heads of medium size, generally somewhat conical, but often nearly round, and very compact. A fine early variety, heading readily, and a great favorite with eastern market gardeners.

D. M. Ferry & Co's Extra Early York.—*Earlier* than the Early York, and *larger* than the Large York. Heads heart-shaped, of good flavor. Grows low on the stump, and has few loose side leaves. Being of compact growth, the plants can be grown eighteen inches apart.

Early York.—A very valuable early variety. Heads small, heart-shaped, firm and tender; of very dwarf growth, and may be transplanted fifteen or eighteen inches apart.

D. M. Ferry & Co's Extra Early York.

Early Wyman.—One of the best of first early sorts, and highly desirable for early market use. Heads larger than many of the other early sorts, and of delicious flavor.

Early York.

Early Large York.—Succeeds the Early York, and is equally desirable. It is of larger size, about ten days later, more robust, and bears the heat better.

Early Sugar Loaf.—A very compact-growing variety, and the plants may be set as close as sixteen inches apart each way; very early, but is more affected by the heat than most early varieties.

Early Sugar Loaf.

Henderson's Early Summer.—The earliest, large, leading Cabbage; growth compact, so that it may be set as close as the earlier sorts. Heads large, flat, handsome, and they keep longer without bursting than most of the early sorts. Valuable for both family and market.

Newark Early Flat Dutch.—The favorite second early sort with Long Island market gardeners. Heads large, solid, broad and roundish, but sometimes slightly conical; very tender, fine-grained, and of the best fla-

Henderson's Early Summer.

vor. Not only an excellent summer market sort, but well adapted for second crop for fall and winter use.

Early Dwarf Flat Dutch.

Early Dwarf Flat Dutch.—An excellent second early sort which does particularly well in the Southern

Early Winnigstadt.

States. Head of medium size, solid, flat, grows low on the stump and is of good flavor.

Early Winnigstadt.—One of the best for general use, being a very sure header, and will grow a hard head under circumstances where most sorts would fail. Heads regular conical shape, very hard and keep well both summer and winter.

Early Bleichfield Giant.—This new German Cabbage has been highly commended wherever tried, and is worthy of extensive cultiva-

Filderkraut.

tion. It is short-stemmed, a reliable and very solid header, and of the highest quality.

Filderkraut.—A German variety, which has proven in this country to be one of the most valuable sorts. It is equally good for early or late use, and heads up hard with few side leaves. This variety is largely used in Germany, in the manufacture of "Kraut."

Fottler's Early Brunswick.

Fottler's Early Brunswick.—An excellent, second early sort, and particularly recommended for the South, as it withstands the heat well and is a sure header. Heads low on the stump, compact, solid, weighing from ten to fifteen pounds.

Early Schweinfurt.—Forms a *very large*, showy head of excellent quality, but does not stand the heat well. When grown in perfection, one of the handsomest of the second early sorts.

Imperial French Oxheart.

Imperial French Oxheart.—Grows low on the stump, and heads very close and firm; color yellowish-green.

Stone Mason Marblehead.

Red Dutch, for Pickling.—An esteemed sort for pickling; is also shredded and eaten raw, in vinegar; it

Early Schweinfurt.

forms very hard, oblong heads, round at the top, and, when pure, of a dark red, or purple color.

Fine Blood Red.—Of remarkably deep, blood-red color, and a great favorite with the Germans. It is very true and constant.

Stone Mason Marblehead.—Characterized for its sweetness and delicacy of flavor, and for its reliability for forming a large head. Very hardy, and will endure the cold of extreme northern climates.

D. M. Ferry & Co's Premium Flat Dutch.

Late Flat Dutch.—A low-growing variety; heads large, bluish-green, round, solid, broad and flat on the top, and often tinted with red and brown. An excellent fall and winter variety, and a good keeper.

Early Drumhead.

D. M. Ferry & Co's Premium Flat Dutch.—This we consider superior to any late cabbage in cultivation. It possesses all the good qualities of the Late Flat Dutch and is a sure header. Our stock of this variety is of our

own raising from carefully selected heads, and is at least equal to any other strain of this popular variety.

Early Drumhead.—Similar in form and character to the large late Drumhead, but earlier. Sown at the same time, it will precede it by at least four weeks.

Large Drumhead.—The Drumhead Cabbage is a large fall or winter variety, with a broad, flat or round head, short stump, tender and good flavored, and an excellent keeper; grown extensively for shipping purposes.

D. M. Ferry & Co's Premium Drumhead.—We recommend this sort to market gardeners and growers, for shipping purposes. In good, rich soil, and with a favorable season, the heads will grow to enormous size; very compact and solid, and of excellent flavor.

Marblehead Mammoth Drumhead.—The

Quintal Drumhead.

largest cabbage known, weighing in some instances over *fifty pounds*. Under good cultivation, acres have been grown where the heads would average *thirty lbs.* each.

Quintal Drumhead.—An exceedingly large variety, of French origin. Heads quite flat on the top, with few side leaves; solid, firm, hard, and of good flavor.

Early Dwarf Ulm Savoy.

Green Glazed.—A standard late variety in the South, as it is not affected by the heat. Heads large but rather loose and open. Very desirable from the immunity it enjoys from the attacks of insects.

Green Globe Savoy.

Marblehead Mammoth Drumhead.

Our English friends are inclined to laugh at the idea of our eating such cabbage as we do, as they think the Savoys alone are fit for the table, and no one who has tried a well cooked Savoy can fail to recognize the superior flavor.

Early Dwarf Ulm Savoy.—One of the earliest and sweetest of the Savoys. Heads small, round, solid; leaves small, thick, fleshy, of fine deep green color, and of most excellent quality.

Green Globe Savoy.—This does not make a firm head, but the whole of it being very tender and pleasant-flavored, is used for cooking; leaves wrinkled and dark green; is very hardy, and improved by frost.

Improved American Savoy.

Improved American Savoy.—Closely approaching the Cauliflower in delicacy and delicious flavor. The best of all the Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and is a sure header.

Drumhead Savoy.—Grows to a large size. Heads nearly round, a little flattened on the top; color dark green.

CARROT.

Fr. Carotte.—*Ger. Moehren.*

The Carrot is one of the most healthful and nutritious of our garden roots, and deserves to be much more extensively used for culinary purposes. We think their neglect for this purpose grows out of want of familiarity with the finer varieties, and we urge our readers to give some of the early table sorts a trial. As an agricultural root, the Carrot is not surpassed for feeding horses and milch cows, and every farmer should plant a few for this purpose.

CULTURE.—The Carrot succeeds best on a light, sandy loam, made rich by manuring the previous year. In

Earliest Short
Horn, for
Forcing. Early Scarlet
Horn.

freshly manured land, the roots often grow pronged and ill-shaped. It is better to sow as early in the spring as the ground can be made ready, but if planting is necessarily delayed until late in the season, soak the seed twenty-four hours in tepid water, dry by mixing in sifted ashes or plaster, and sow on freshly prepared soil.

Earliest Short Horn (FOR FORCING.)—The earliest variety in cultivation; used mostly by market gardeners for forcing. Is small, but of excellent quality.

Early Half-Long
Scarlet, Stump-
Rooted. Half-Long
Scarlet Nantes,
Stump-Rooted.

Early Scarlet Horn.—This is the best early variety. It is shorter than most of the other sorts, and the root terminates abruptly, giving it a blunt appearance; flesh deep orange color; fine grained, and agreeably flavored; top small. It is best for table use, and will grow well on shallow soil. Sow six inches apart, in fourteen-inch drills.

Danvers.—Originated in Danvers, Mass. Medium length, rich, dark orange in color, very smooth and handsome, and easily dug. It yields an immense bulk, with smallest length of root.

Early Half-Long Scarlet, Stump-Rooted.—An exceedingly popular early market variety, and continually growing in favor. Of medium size; flesh bright scarlet, brittle and of fine flavor. Will do well in shallow soil.

Half-Long Scarlet Nantes, Stump-Rooted.—Very similar in appearance to the preceding, though somewhat larger, and later in maturing. A fine variety for intermediate use.

New Intermediate.—This is intermediate between the Early Horn and Long Orange.

Long Orange. **Long Red Altringham.**

It is very smooth, of beautiful form, tapering regularly to the root, and is much used as a table variety, coming in after the Early Horn.

Long Red Altringham.—Similar in form to the Long Orange, but of a bright red color, growing with the top an inch or two above ground. Flesh bright orange-red, crisp and breaking in its texture; the heart, in proportion to the size of root, smaller than in other varieties; a very fine sort.

Long Orange.—A well known standard sort; roots long, thickest near the crown, tapering regularly to a point; color deep orange; suitable for the table and main field crop. It requires a deep soil, and the plants should stand eight inches apart, in eighteen-inch drills, for the roots to attain their full size.

Improved Long Orange.—An improvement on the preceding, obtained by careful selection for years, of the best formed and deepest colored roots.

Large White Belgian.—Grows one-third out of the ground; root pure white, green above ground, with small top. It will grow to very large size on light, rich soil, and is very easily gathered. Flesh rather coarse; is raised extensively for stock.

CAULIFLOWER.

Fr. Chou-fleur.—*Ger. Blumen-Kohl.*

This delicate vegetable is little known outside of our large cities; for while it is one of the most delicious of vegetables, success in cultivating it in this country is very uncertain. It needs, to bring it to perfection, a cool, moist atmosphere, and if this condition occurs when the plant is about to head, fine, large heads will result, while, as is often the case, if the air is hot and dry failure will result in spite of the efforts of the gardener. The seed we offer is the finest procurable, and was obtained at great cost from the most careful growers in Europe.

Extra Early Dwarf Erfurt.

CULTURE.—For the spring or summer crop, sow the early varieties about the last of winter, in a hot-bed, and transplant into the open air as soon as the ground can be worked, in the spring. For the late, autumn crop, sow the late kinds about the middle of spring, and transplant like winter cabbages. In dry weather, water freely, and as they advance in growth, hoe deep, and draw earth to the stems. After they begin to head, they should be watered every other day. On the approach of frost, those plants which have not headed, may be set out in a cellar, where they can be aired in mild weather. In two or three weeks the strongest will begin to form flower-heads, which will be very tender and delicious.

Like Brocoli, Cauliflowers should be cut for use while the head or "curd" is close and compact. As the plant advances in growth, the head opens, separates into branches, and soon becomes coarse, fibrous, strong-flavored and unfit for use. The leaves are sometimes gathered and tied loosely over the tops of the heads, to facilitate blanching.

Extra Early Dwarf Erfurt.—An extra early variety, and the sort so much prized in Germany for early market use. Scarcely a plant fails to produce a good head. It is of dwarf habit, compact growth, short outside leaves, and can be planted twenty inches apart each

Extra Early Paris.

way. Highly recommended for early market and family use, and we think can be entirely relied upon, as

the seed is selected with extra care, by one of the most careful growers in Germany

Early Snowball.—A variety held in great estimation by market gardeners, for its earliness and reliability as a sure header. Tested with several other varieties, it has proved to be as early, if not earlier than any other sort.

Early London.—This is a standard variety; very tender and quite early; heads compact, solid, and of delicious flavor; good for general use.

Extra Early Paris.—A most excellent French variety, and the popular early sort in the Paris markets. Heads large, white, compact and solid, of excellent flavor, tender and delicious. Leaves large, stalk short. Being so early, it must always be a favorite, especially with market gardeners.

Early Erfurt.

Early Erfurt.—One of the best for general cultivation. Heads close, compact and large, measuring from seven to ten inches in diameter.

Early Walcheren.—An excellent variety, vigorous and hardy, and well adapted to our climate. Stem short, leaves rather pointed and serrated. It not only resists the cold in winter, but the drought in summer, better than many sorts.

Early Paris.—A most excellent French variety with good-sized, uniform, close heads, which are tender and

LeNormand's Short Stem.

delicious. Planted at same time with the Extra Early Paris, it will afford a succession.

LeNormand's Short Stem.—Is of dwarf growth, very early, hardy, and stands dry weather. Is considered by the French gardeners to be one of the very best sorts. The curd is very close and uniform, and well protected by leaves, which renders it desirable for early and late use.

Nonpareil.—A very superior variety, and in great demand by market gardeners, many of whom will use no other sort. A sure header, large, tender and delicious.

Late London.—A fine, large, white, compact variety, taller, and somewhat later than the Early London. It also has larger leaves. Sown at the same time, it will afford a succession.

Veitch's Autumn Giant.

Veitch's Autumn Giant.—An extremely valuable late variety, entirely distinct from any other sort. The heads are very large, beautifully white, firm and compact, and being well protected by foliage, remain a long time fit for use. The plants should be started and transplanted early in the season, to insure their full development.

Thorburn's Wonderful.—This variety is intermediate in its season, and produces very large, solid, beautiful heads, which are unusually well developed. Almost every plant produces a fine head.

CELERY.

Fr. Celeri.—*Ger. Sellerie.*

Celery is one of the most popular salad plants used in this country. Succeeds well throughout the Northern and Middle States, and, in the vicinity of our large cities, is produced of remarkable size and excellence.

CULTURE.—For the principal crop, sow early in spring, very shallow, in a seed-bed, and when the plants are about six inches high, transplant them six inches apart, into trenches, for blanching. Dig the trenches four feet apart, a foot wide, and ten inches deep. Fill in five or six inches of well rotted manure, and mix it thoroughly, half a spade deep, with the earth at the bottom. The tops and roots of the plants should be shortened, and the suckers pinched off before they are set. Earth up to blanch, three or four times during their growth, taking care that no earth falls in the center of the plants. A slight sprinkling of salt applied to the surface of the soil, just after the earthing up, is decidedly beneficial to this crop. The seed is slow to come up, and the plant is greatly improved by superior cultivation.

Before the freezing up of the ground, the most of the crop should be taken up, retaining the roots and soil adhering, and removed to the cellar, where they should be packed in earth or sand, without covering the ends of the leaves. A portion may be allowed to remain in the ground, but they must be protected from wet weather by boards, in the form of a roof. Celery may be taken up for use any time during the winter, when the weather will permit.

ANOTHER METHOD OF GROWING CELERY has lately been successfully adopted, viz: Sow the seed in open ground as soon as it is fit to work in spring, in rows, three feet apart, and keep clear from weeds and well cultivated, cutting down the tops once or twice till the plants have become stocky and strong. At the usual time of transplanting, say from middle of June to middle of July, transplant into rows, *not trenches*, three or four feet apart, and six inches apart in the row, taking care to press the earth firmly around the plants. Unless care is taken in this respect, many plants are apt to die. In about six weeks the earthing up process must be commenced, and continued at intervals during growth; the hand should always be used in pressing the earth firmly around each individual plant, and the process finished with the spade. By this treatment, fine celery can be had for use in early autumn, and we are inclined to think this method will entirely supersede the old plan of growing in trenches.

Crawford's Half-Dwarf.

Crawford's Half-Dwarf.—This variety is now grown more extensively than any other by the market gardeners who supply the New York City markets, and is the kind found on the tables of all first class hotels. When blanched, it is of rather a yellowish-white, and is entirely solid, possessing the nutty flavor peculiar to the dwarf kinds, while it has much more vigor of growth, surpassing most of the large-growing sorts in weight of bunch, when grown under the same conditions.

Dwarf White Solid.—Dwarf, white, of stiff, close habit; solid, crisp and juicy. Said to keep in good

order later in the season than any other variety.

Sandringham Dwarf White.—Originated in the garden of the Prince

Dwarf White Solid.

Incomparable Dwarf Crimson.

of Wales, and is described as being unusually large, but not coarse; crisp, solid, of fine flavor, and a most excellent table sort.

Boston Market.—This forms a cluster of heads, instead of a single large one, and is remarkably tender and crisp. The Boston market gardeners grow this variety almost exclusively, and it has become very popular as a market sort.

Boston Market.

Seymour's White Solid.—A large-sized, vigorous-growing variety; stalks white, round, very crisp, perfectly solid, and of superior flavor.

New Golden Heart.—A new and entirely distinct variety, of sturdy, dwarf habit. It is entirely solid, an excellent keeper, and of fine, nutty flavor. When

blanched, the heart, which is large and full, is of a pure golden yellow, making this an exceedingly showy and desirable variety for both market and private use.

Incomparable Dwarf Crimson.—A dwarf-growing, rich-colored variety; very crisp, and of delicious flavor. The flavor of the red varieties is thought by many to be superior to that of the white, and within the last few years much larger quantities are being raised than heretofore. The red varieties undoubtedly keep better through winter, and this variety, all things considered is probably unsurpassed.

Seymour's Red Solid.—An improvement on the old red. Very compact, large, solid, crisp, and of excellent quality.

Celery, or Turnip-Rooted.

Celery, or Turnip-Rooted.—The root of this variety is turnip-shaped, tender, and marrow-like, having a sweeter taste and stronger odor than other varieties. It is used principally for seasoning meats, and entering into the composition of soups.

CHICORY.

Fr. *Chicoree*.—Ger. *Cichoree*.

Large-Rooted, or Coffee.—Much used in Europe as a substitute for coffee, and large quantities of the prepared root are annually exported to this country for similar use. In the fall, the roots require to be taken up and cut in small pieces and put where they will dry, requiring the same treatment used in drying apples. When required for use, it should be roasted and ground like coffee.

CHUFA.

Spanish Chufa, or Earth Almond.—(*Cyperus esculentus*.)—A little tuber, grown extensively in the South, where its use is becoming general for fattening hogs, sheep and poultry. On good land and with good cultivation, 300 bushels per acre of the tubers have been grown, and even on poor land there is a larger yield than from any other crop. The Georgia State chemist says they have no equal in the properties which help fatten pork, and many who have tried them say a bushel of Chufas is equal to a bushel of corn for hogs; used with corn, both would be improved. The cost of planting and cultivating is small, and

the hogs, if turned into the field, will dig them. The tuber is about three-quarters of an inch long by three-eighths of an inch through, is tender, sweet, not unlike a chestnut, though much sweeter. Besides the tubers, the yield in forage from the tops makes excellent hay, and an abundance of it. It is claimed by those who have tried them, that one acre of chufas is worth \$75 for fattening pork.

CULTURE.—They should be planted a little earlier than corn, in the Northern States, and in the Southern States, in February and March, in rows two and a half or three feet apart, and fifteen inches apart in the row, two or three tubers in a hill, covering one inch deep. Soak the tubers in water eight or ten days before planting, changing the water every two or three days.

COLLARDS.

A species of cabbage, known in different sections as 'Cole' and 'Colewort.' It is almost universally used in the South for 'Greens,' where it continues in luxuriant growth all winter. The seed should be sown in autumn.

True Rosette.—Much esteemed in the Southern States. It forms a loose head having the form of a rose, and is palatable from the time it puts forth a few leaves.

Georgia, or Creole.—This is the variety grown so extensively in the South for greens. It is a species of cabbage, forming a loose head. It is much esteemed in the South, where, if planted in the fall, it will continue growing all winter.

CORN.

Fr. *Mais*.—Ger. *Welschkorn*.

Early Boynton Sweet, or Sugar.—We introduced this variety five years ago, and after repeated trials and tests with other early varieties, we firmly believe this is the earliest variety of sweet corn in existence. The ears are small,

Early Boynton.

Early Minnesota.

rather pointed, and when mature, the kernels are much shriveled. It is of course intended only for first early, and as a week's time makes a great difference in the profits of a market gardener, this variety will be found valuable.

Chicory.

Early Six Weeks.—*Produces corn for the table in six weeks from planting, and matures in two months* It originated in Montana, and will easily mature in our coldest climates. Ears small, handsome, well filled out, kernels white, hard and brittle; uniformly

Crosby's Extra Early.

Russell's Prolific.

eight-rowed. It does not possess the saccharine matter of the sugar corn, but on account of its earliness, is greatly esteemed.

Black Mexican

Early Minnesota Sweet, or Sugar.—This is among the earliest of the sugar varieties, and is much esteemed, not only because it matures so early, but for its excellent qualities as well. Ears rather small, long and pointed.

Early Red Naragansett.—We think this the best red variety of sugar corn grown. It is remarkably early, following the Minnesota; the kernels are much shrivelled, and exceedingly sweet and tender. A good early market variety. Many think the flavor of the red sugar corn is superior to the white.

Crosby's Extra Early.—A most excellent variety, and remarkably early. Ears of large size, medium length, sweet, rich and delicate.

Russell's Early Prolific Sugar.—Comes into use a few days after the preceding. Is of excellent quality, very productive, and one of the best for family use.

Early Sweet, or Sugar.—This variety is used for garden purposes, and is early, very tender and sugary; ears good size, and comes into use quite early. Excellent table variety.

Moore's Early Concord Sweet.—Large, full ears, coming into use after Russell's Prolific. The quality is unexceptionable, and it is valuable as an intermediate variety.

Black Mexican.—Although the ripe grain is black or bluish-black, the corn when in condition for the table cooks remarkably white, and is surpassed by none in tenderness. This by many is considered the most desirable for family use of any of the second early sorts.

Excelsior.—A second early variety. Ears medium in size, but remarkably sweet, succulent and tender. Pronounced by the Chairman of the Committee on Vegetables of the Massachusetts Horticultural Society to be the finest quality of any variety he had ever tried.

New Triumph.—A very valuable new variety which has already gained great popularity. It is the earliest of all the large varieties, and is scarcely surpassed for sweetness, richness and delicacy of flavor. Ears are large, and when cooked, present a fine, white appearance. It is very productive, of vigorous growth, and a superior market variety.

Egyptian Sweet.—A variety of late introduction, noted for its productiveness, the large size of its ears, and for its sweetness and tenderness. It is peculiarly adapted for canning purposes, and the superiority of the canned green corn of this variety has been noticeable, often bringing a half more per can than other sorts. It is said that the stalks will average three ears each. Its season is about the same as the Evergreen.

Mammoth Sweet.

Stowell's Evergreen.

Mammoth Sweet.—This variety produces the largest ears of any sort with which we are acquainted, a single ear sometimes weighing two or three pounds. The quality is excellent—sweet, tender and delicious. For family use, it cannot be excelled.

Stowell's Evergreen Sweet.—This variety is intermediate in its season, and if planted at the same time with earlier kinds, will keep the table supplied till October. It is hardy and productive, very tender and sugary, remaining a long time in a fresh condition, and suitable for boiling.

Early Adams, or Burlington.—An excellent early field variety, and often used for table. Ears about eight inches long, twelve or fourteen rows; kernels white, rounded, somewhat deeper than broad, and indented at the outer end, which is whiter and less transparent than the inner.

Early Canada.—A very early yellow variety, much grown in Canada. Requires less time to mature than most kinds, and on that account is good for localities where the seasons are short. Is frequently used when first planting has failed.

Compton's Early.—Stalks about ten feet high; ears bright yellow, ten to twelve inches long, ten-rowed, often two on a stalk. It has matured in seventy-six days from planting, and yielded one hundred and eighty-one bushels shelled corn per acre.

Lackawaxen.—A new variety of field corn. It is a white flint, eight-rowed variety, with grains very large and deep; cob small. Ears average over a foot in length, and in some cases reach sixteen inches. Usually two ears to the stalk. Height of stalk about eight feet. It completes its growth in ninety-five days, and has yielded one hundred and forty-seven bushels shelled corn per acre.

Improved King Philip.—An exceedingly early variety for field crop, and often used green for boiling. It will afford green corn in sixty days, and mature in three months from planting. Ears ten to twelve inches long, uniformly eight-rowed; kernels dark copper-red, rather large; stalk six feet in height, producing one or two ears.

Early White Flint.—An excellent, productive variety; ears good size, pearly white, and of beautiful appearance. Much used for making hominy.

Large Yellow, Eight-Rowed.—A good kind for general cultivation. Ears large, bright yellow, and well filled out; quite early, and very productive.

Large, Red-Blazed, Eight-Rowed.—An excellent variety for field culture, and thought by some to be earlier than the preceding. Ears large, well filled out at top and end; color yellow, striped with red. A very desirable variety.

Chester County Mammoth.—When genuine seed of this variety is planted on good soil, the yield is from one hundred to one hundred and twenty-five bushels per acre. Ears are large and well formed, each having from fourteen to twenty-four rows of long kernels of a deep, bright yellow color. It is not a hard flint corn, but very sweet and nutritious, yielding a large amount of excellent fodder. It is a sure cropper and hardy, but should not be grown in the extreme north, where the season is not long enough to mature it. It is undoubtedly one of the best large dent varieties, and we think one trial will convince any farmer of its merits.

Blunt's Prolific.—The originator of this variety having formed an idea of what should constitute a perfect variety, by careful selection continued through many years succeeded in fixing the desired characteristics, and we here have what is probably the most prolific corn grown. The ears are short, well shaped, and average three, and frequently run as high as eight to a single stalk. The kernel is white, of the general form of the dent varieties, but harder and makes an extra quality of pure white meal. It is not early, and will not do well at the extreme north.

Rice, for Parching.—A very handsome variety; ears short; kernels long, pointed, and resemble rice; color white, very prolific; used entirely for parching, for which purpose it has no superior.

Boston White, for Parching.—Also used only for parching; ears longer than the preceding, nearly the same size; kernels round and white; a good bearer, and thought by some to be the best in use.

CORN, BROOM.

There are many farmers who might make this a very profitable crop, as an acre will give about five hundred weight of broom and nearly forty bushels of seed, worth nearly as much as oats for feed.

CULTURE.—It requires similar soil and culture to corn, but should be planted later, and it pays better to have the ground in prime condition. It is frequently planted in drills three and a half feet apart, leaving a plant once in six inches.

Dwarf.—Grows from three to five feet high, and produces short, fine brush suitable for whisk brooms and brushes. Our stock is very pure and true.

Improved Evergreen.—Grows to a height of seven to nine feet; early, and produces a very fine brush of good length, and of green color. The grower assures us that it never grows red or red tipped. Our stock is choice, having been established by a careful selection for many years of the finest plants.

Corn Salad, Feticcus, or Lamb's Lettuce.

Fr. Mache, Salade de ble.—Ger. Ackersalat Lam-marsalat.

This small salad is used during the winter and spring months as a substitute for lettuce, and is also cooked and used like spinach. In warm weather, the plants will mature in from four to six weeks.

Improved King Philip.

Tuscarora.

Tuscarora.—A very large variety, eight-rowed; cob red; remains a long time in a boiling state; not recommended for a field crop in the north.

Corn Salad

CULTURE.—Sow the seed in shallow drills about one foot apart during August and September. If the soil is dry, it should be pressed firmly over the seed, in order to secure prompt germination. On the approach of severely cold weather, cover with straw or coarse litter. The plants will also do well if the seed is sown very early in the spring, and like most salad plants, are greatly improved if grown on *very* rich soil, indeed, the ground can scarcely be made too rich for those plants.

CRESS, or PEPPERGRASS.

Fr. *Cresson*.—Ger. *Kresse*.

Curled.—This small salad was formerly much used with lettuce, to which its warm, pungent taste makes a most agreeable addition.

CULTURE OF THE CURLED VARIETIES.—Sow in drills, in very rich ground, as early as possible, and at intervals of a few days, till the close of the season. The

Curled.

True Water

plant comes to maturity very quickly, and is in condition for the table but a few days, and these repeated sowings are necessary to secure a succession.

True Water.—This is quite distinct from the last, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads, and should be planted wherever a suitable place can be found.

CULTURE.—The seed should be sown and lightly covered in mucky lands along the borders of small streams or ditches, and the plants will need no subsequent culture, as in favorable condition they increase very rapidly by self-sown seed and extension of the root.

CUCUMBER.

Fr. *Concombre*.—Ger. *Gurken*.

This is one of those vegetables which can be grown to perfection, by anyone who can control a few square yards of soil which is fully exposed to the sun, and the

fruit is so much better when gathered fresh from the vines than it is when obtained in the market, that every family should be supplied from its own yard.

CULTURE.—Form a low, flat hill of very rich soil by digging a hole some three feet across and six to twelve inches deep, and fill this with rich, black earth from the woods. If such earth can not be obtained, mix a portion of the soil thrown out with an equal bulk of *well rotted* manure, so as to form a flat hill some three feet across and four to eight inches high. On this scatter, and cover one inch deep, fifteen or twenty seeds, and press the earth firmly over them. As soon as the plants are up they will be liable to attack by the striped cucumber beetle. These may be kept off by frequent dusting with air-slacked lime, soot, or sifted ashes diluted with fine road earth; care should be taken not to use too much for if too strong, any of the above materials will kill the vines. When the plants are well established, thin to three plants to each hill. In gathering, pick all the fruit before they begin to ripen as the vines will cease setting fruit as soon as any seed commences to mature. It should be remembered that these plants are very tender, and if it is desired to have them early, provision should be made to protect them, not only from frost, but during *cold* nights. In field culture, plough furrows four feet apart across the field, and similar ones, but omitting every third furrow, at right angles to the first, this will form paths for the distribution of manure and the gathering of the fruit. At each intersection drop a shovelful or more of *well rotted* manure, which should be *well mixed* with the soil, so as to form a low, flat hill. In gathering for pickles, cut the stem, instead of pulling the fruit off, and be careful not to mar the fruit in any way, as if the skin is broken, the pickles will not keep.

Early Russian.—One of the earliest and hardest varieties, and desirable for first planting. Fruit three to four inches long, and generally produced in pairs; flesh tender, crisp and well flavored.

Early Cluster.—A popular early sort, very productive, producing its fruit in clusters; fruit about five inches long; skin prickly; flesh white, seedy, tender.

Early Frame.—Plants very vigorous, healthy and productive; fruit straight and well formed; flesh tender and somewhat seedy, although the young fruit makes excellent pickles. A good variety for forcing.

Early Short Green.—The fruit keeps green longer than that of any other variety and is tender and well flavored.

Early White Spine.—One of the best sorts for table use. Vines vigorous, fruiting early and abundantly;

Early Cluster.

Early Frame.

Early White Spine.

fruit uniformly straight and handsome, light green, with a few white prickles; flesh tender and of excellent flavor.

D. M. Ferry & Co's Perfection Pickling.

D. M. Ferry & Co's Perfection Pickling.—This variety is not only the best for pickles, but is one of the best for the table. Vines vigorous, producing their fruit early and very abundantly; fruit about twelve inches long, of very distinct form, having three distinct ribs; color dark green which they retain as pickles; flesh very crisp and tender.

Bismark.

Bismark.—The result of careful selection of the best plants for many years; fruit very constant in color and uniformly well formed and handsome.

London Long Green.—Vine vigorous, and a good bearer; fruit about one foot long, pointed at both ends; flesh firm and crisp, and the young fruit makes a very hard and brittle pickle.

Long Green.—Fruit shorter than the above, and makes a good pickle, but is less crisp and tender.

Improved Long Green.

Improved Long Green.—Produced by selection from the London Long Green. Vines vigorous and productive, forming fruit fit for the table nearly as early as the shorter sorts; fruit about twelve inches long, firm and crisp, with very few seeds. The young fruit makes one of the best of pickles, while the ripe are the best of any for sweet pickles.

Boston Pickling.—A distinct variety which has obtained a great degree of popularity in Boston markets as a pickle. It is medium long, and a great producer.

Gherkin, for Pickles.—A very small, oval shaped, prickly variety, having somewhat the appearance of a burr. It is grown exclusively for pickling; is the small-

est of all the varieties, and should always be pickled when young and tender. The seed is slow to germinate.

EGG PLANT.

Fr. Aubergine.—Ger. Cierpfplanze.

The Egg Plant, when well grown and properly cooked, is one of the most delicious garden vegetables, and although the plant is so very tender, it should find a place in every garden.

CULTURE.—In this, as in all sub-tropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. Sow the seed quite thickly in a good hot-bed, and when they have formed two rough leaves, transplant to three or four inches apart. Keep the bed closed and very warm, shading from the direct rays of the sun, and giving abundance of water until all danger from not only frost, but from cold nights is past, and the ground is warm. Then harden off the plants by gradual exposure to the sun and air, and decrease the supply of water, and carefully transplant into very warm, rich soil, setting the plants two and a half feet apart. If needed, shade the young plants, and protect them from the potato bug which is very fond of them, and if not prevented, will soon destroy the young plants.

Early Long Purple.—This is one of the earliest varieties; very hardy and productive; fruit long and of superior quality; good for general culture.

Black Pekin.

Black Pekin.—Nearly as early as the Early Long Purple, and as large as the later varieties. Nearly round; skin black, glossy and smooth; more prolific and delicate than the old varieties. Weighs eight to ten pounds; flesh fine grained and white. Very desirable for market gardener's use.

Large New York Purple.—Large, round, of excellent quality; later than the preceding, and highly esteemed in the New York market.

D. M. Ferry & Co's Improved Large Purple.—The best variety in cultivation; fruit remarkably large, often measuring

D. M. Ferry & Co's Improved Large Purple.

twelve inches in depth and nine inches in diameter, and weighing five to six pounds. Skin deep purple, with occasional stripes of green about the stem. Plant hardy and stocky. Not so early as the Long Purple, but superior in flavor, much larger, and of longer duration.

ENDIVE.

Fr. *Chicoree*.—Ger. *Endivien*.

Endive, in its natural state, is very bitter, but when properly blanched, its leaves make a fine salad, and coming as it does after lettuce is past, is very useful.

CULTURE.—It may be grown at any season of the year, but is more generally used late in the fall. Sow the seed during June or July, in drills fourteen inches apart, and when well established, thin the plants to one foot apart. When nearly full grown, tie the outer leaves together over the center in order to blanch the heart of the plant. This will usually be fit for the table in ten days, and continues in condition for use about one week, so that the tying up should be done every few days in order to secure a succession.

Green Curled.—Is the hardest variety, with beautifully curled, dark green leaves, which blanch white, and are very crisp and tender.

Green Curled.

Broad-Leaved Batavian.—Has broad, thick, plain or slightly wrinkled leaves. It is principally used for cooking, and making a larger head, is preferred for stews and soups. If the outer leaves are gathered and tied on the top, the whole plant will blanch nicely, and make an excellent salad for the table.

GARLIC.

Fr. *Ail*.—Ger. *Knobach*.

A bulbous-rooted plant, having a well known, strong, penetrating odor, which is most powerful at mid-day.

Garlic.

In some countries it is much esteemed for seasoning soups, stews, &c., and is useful in various medicinal forms. It should be remembered that the *Bulbs* only, and not *Seed* of garlic are supplied by us. We state this because we frequently receive orders for garlic seed.

CULTURE.—Prepare the ground the same as for onions, and plant the cloves in drills eight inches apart, and four inches apart in the rows, and cover two inches deep. When the leaves turn yellow, take up the bulbs and dry in the shade, and lay them up in a dry loft, as you would onions.

GOURD.

Sugar Trough.—This variety grows to a very large size, and is valuable, when dry, for a variety of household purposes, such as baskets, buckets, cans, &c.

CULTURE.—The gourd is a tender annual, and should not be planted till all danger of frost is over, and not less than six feet apart each way, in good, rich loam. Three plants in a hill will be sufficient to leave at last hoeing. For ornamental varieties, see *Flower Seeds*.

KALE.

Fr. *Chou Vert*.—Ger. *Kraus Kohl*.

German Dwarf Green.

They are generally hardy, and improved rather than injured by frost.

Sea Kale.

Makes excellent greens for winter use. It is dwarf, and easily protected in the winter by planting in the cellar; in the Southern States, it needs no protection, and will grow vigorously all winter, if sown in autumn.

German Dwarf Purple.—A variety of the preceding, and identical with it, except in color, which is a beautiful, deep purple.

SEA KALE. (Fr. *Crambe Martime*.—Ger. *Sel Kohl* *Mur Kohl*.—This is quite distinct from the other

Borecole, Kale, or German Greens are general terms applied to those classes of cabbage which do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the

CULTURE.—As far north as New York, they may be sown in September, and treated like spinach, although at the south they will live and grow throughout the winter without protection, or they may be planted and treated like winter cabbage, and will continue growing until very late. If cut when frozen, thaw out in cold water before boiling.

Tall Green Curled Scotch.—This is very hardy, and improved by a moderate frost. The stems rise about two feet, and produce an abundance of dark green, curled and wrinkled leaves. It stands the winters south and in the Middle States, without any protection.

German Dwarf Green.

Kales, and is grown for its blanched shoots, which are cooked like asparagus.

CULTURE.—Cultivate in every way like asparagus, except that the roots should not be set so deep and should be covered in the spring with eight or ten inches of coarse manure or litter, in order to blanch the shoots. They form good roots at one year from the seed, and may be cut when they have had two seasons' growth.

KOHL RABI.

Fr. Chou-rave.—*Ger. Kohl-rabierber.*

The kohl rabi is a vegetable intermediate between the cabbage and turnip, and combines the flavor of both. The edible part is a turnip shaped bulb formed by the swelling of the stem. When used for the table, this should be cut when quite small, and is then very tender and delicate, but if allowed to reach its full size, it becomes tough and stringy.

CULTURE.—For table use, sow early in the spring, in drills fourteen inches apart, and thin to six inches, and cultivate like turnips or early cabbage.

Early White Vienna.—Dwarf, early. Bulb white, handsome, firm; leaves few and small. The best variety for table use.

Large Green.—Hardy, quite late, and used for feeding stock. Bulbs large, weighing eight to ten pounds; whitish green in color; leaves large and numerous.

Large Purple.—Nearly identical with the last except in color, which is a bright purple, with the leaf stems tinged with purple.

Early White Vienna
Kohl Rabi.

London Flag Leek.

LEEK.

Fr. Poireau.—*Ger. Lauch.*

This is a branch of the onion family, is very hardy, and by some is preferred to the onion.

CULTURE.—Dig trenches eight inches deep, and make the soil at the bottom as fine and rich (it can scarcely be made too rich) as for onions. Sow the seed early in the spring, and cover lightly with earth. Thin to six inches apart, and when the plants are twelve inches high, gather the leaves together, and fill the trench so as to blanch the lower part of the plant. Dig, and store in the cellar, or out of doors like celery, before severe weather.

London Flag.—Is the variety more generally cultivated in this country than any other; is hardy, of good quality, and takes its name from being preferred in the London markets.

LETTUCE.

Fr. Laitue.—*Ger. Lattich-salat.*

There is no vegetable which is more universally used than this, and yet few people know how inviting and appetizing it is when brought to the table fresh and unwilted, a condition in which it is rarely, if ever, found in our markets, and which can only be secured by growing the plants in one's own garden. So we earnestly urge all of our readers who can possibly do so, to grow their own lettuce, if they do nothing else.

CULTURE.—The quality of lettuce depends largely upon rapid and vigorous growth; and to secure this, we need *very rich, mellow soil*, frequent surface cultivation, and an abundant supply of water. For the earliest crop, sow under glass in March, and thin out the plants so as to prevent their becoming crowded. If it is intended to mature the plants under glass, keep the bed quite close, give frequent and abundant watering with liquid manure, and shade during *very* sunny days; if the plants are to be set in the open ground, give all the air possible without freezing the plants, and "harden off" by full exposure and withdrawal of water before transplanting. The plants should be set out as soon as a warm spot can be made very rich and mellow. At the same time the plants are set out, sow seed in drills fourteen inches apart, and thin out as wanted for the table until they stand twelve inches apart. Give frequent hoeings, and if possible, water during a dry time. The Cos varieties should be tied up seven to ten days before using, in order to blanch the inner leaves.

Early Tennis

Ball.—(TRUE BLACK SEED.)—The best variety of head or cabbaging lettuce for growing under glass. Very hardy. Leaves dark green, thick, crisp and tender, forming under glass a small, compact head, but apt to be loose and open when grown in the open air, unless planted very early.

Early Tennis Ball

Black-Seeded Simpson.—The leaves of this variety are very large and form a compact mass, rather than a distinct head. They have the quality of not wilting quickly, and being of a very light green color, the variety is much liked by market gardeners for forcing.

Simpson's Early Curled.—One of the best early sorts for market or family use. Heads large, loose, all the leaves tending to produce a head. Leaves beautifully crimped, dark green, very tender and crisp. Recommended for general cultivation.

Ferry's Early Prize Head.—The best lettuce known. It forms a mammoth head, and remains

Simpson's Early Curled.

Ferry's Early Prize Head.

tender and crisp throughout the season; is prompt to head, but slow to run up to seed; of superb flavor, and very hardy. We desire to call the attention of families and amateurs to this variety particularly, being decidedly the best in cultivation for home use.

Hanson.

Hanson.—A very fine heading variety of the largest size, and standing the sun as well or better than any other sort. The heads frequently weigh two or three pounds, are sweet, tender and crisp throughout, and entirely free from any bitter taste. We have obtained a very fine stock of this variety, and can recommend it as one of the best on our list.

Large India Head.—This variety attains a large size, the plants frequently measuring eighteen inches in diameter. The heads are not solid, but are white within, crisp and tender, and not bitter; withstands heat and drought well.

Early White Head.

Early White Head.—An excellent variety for hot-bed culture, as well as open air; early and hardy. Heads small, white, crisp, very compact, and closely cabbaged.

Early Curled Silesia.—An early variety of very strong growth; leaves large, light yellow, wrinkled. It makes a large, loose head of fair quality. The best variety for cutting and bunching when young.

Frankfort Head.—A dark green, curled variety with close, round heads, which cut open finely blanched and very crisp. It remains a long time in head; seeds black, produced very sparingly.

Large Drumhead.

Large Drumhead.—Heads remarkably large, somewhat flattened, compact; pale green without, and white at the center; crisp and tender; one of the finest summer varieties; seeds white.

Green Fringed.

Green Fringed.—An exceedingly ornamental variety. The inside of the leaves are white, the edges a delicate green, and beautifully fringed and crimped, making the most beautiful variety on the list, and well worthy of cultivation for table decoration, although the quality is quite inferior.

White Paris Cos.

White Paris Cos.—A variety largely grown for the London and Paris markets. The heads are long, upright, with oblong leaves. It is very hardy, of large size, and long in running to seed; tender, brittle, and mild flavored.

MARTYNIA.

A strong-growing, hardy, annual plant, with curious-shaped seed pods, which, when young and tender, are highly prized by many for pickling. The pods are produced in great abundance, and should be gathered when about half grown, or while tender and succulent; after the hardening of the flesh, they are worthless.

Proboscidea.—This is the variety used for pickles. The seed should be sown in April or May, and the plants transplanted to three feet apart each way.

MELON, MUSK.

Fr. Melon.—Ger. *Zucker-Melone*.

The Musk Melon is too universally popular to need any special description.

CULTURE.—The general directions for cucumbers will be equally good for melons, except that the hills should be six feet apart and proportionately larger. The plants are even more tender than the cucumber, and the seeds should not be planted until the ground is warm, or if planted earlier, ample provision should be made to protect them from the cold. *Rich earth* for the young plants is far better than manure, but if the latter must be used, see that it is well rotted.

Early Yellow Canteloupe.—The earliest variety; of good size, nearly round, slightly ribbed. Flesh yellow, thick, but quite variable in quality.

Jenny Lind.—The earliest green-fleshed melon, and we think the sweetest variety in cultivation. Quite small, slightly ribbed, netted. Flesh green, and *very* sweet, but not high flavored.

White Japan.

—An oblong white melon of medium size; by many considered the best for private gardens. Flesh very thick, greenish yellow, very sweet and high flavored.

Surprise.—A new variety, very similar to the above, but the vines are more hardy and productive, the fruit more deeply ribbed and the flesh a deeper color, being a deep salmon. Quality *the very best*

Surprise.

Skillman's Fine Netted.—Fruit round, flattened at the ends, flesh green, very thick, and of delicious flavor.

Green Nutmeg.—For a long time considered the best flavor of any, but now fully equaled by some of the new sorts. Flesh light green, rich, melting and highly perfumed.

Skillman's Fine Netted

Improved Green Nutmeg.—This variety we have established by careful selection for many years, and in it we have the fine flavor and good qualities of the Green Nutmeg, combined with larger size, more vigorous vine, and thicker and firmer flesh.

Pine Apple.—A dark green, oval melon, of medium size, rough netted; flesh thick, firm, juicy, sweet, and of greenish color.

Green Nutmeg, Improved.

Allen's Superb.—Fruit oval-round, large size, thickly netted; flesh green, quite thick, and of the richest and most sugary flavor; comes in early, does not rot on the vines, and is a long time in season.

Bay View.

Bay View.—Fruit of the largest size, frequently sixteen to eighteen inches long, and will ripen up finely if picked quite green, making it one of the best for shipping long distances, and this, combined with its great beauty, makes the variety a favorite with market gardeners. Flesh thick, of rich green color, juicy, and very sweet and rich.

Casaba.

Casaba.—One of the largest and best musk melons in cultivation. Its usual weight, when well grown, is from twelve to fifteen pounds. Flesh green, very sweet, melting and delicious.

Green Persian.—Long, oval shaped; skin very thin and delicate; flesh extremely tender, rich and sweet, and flows copiously with a cool juice, which renders it very delicious.

Long Yellow.—This is a large variety; long, oval shape, deeply ribbed; flesh thick, light salmon colored, and of a peculiar musky flavor. This variety is used in its green state for Mangoes.

MELON, WATER.

Fr. Melon d'eau.—Ger. *Wassermelone*.

The Water Melon is a tropical fruit, and can be produced to perfection only on warm, light soil, and under a bright, hot sun.

CULTURE.—Although the finest melons are produced on light, sandy soil of pure quality, a vigorous start for the young vines is necessary, and for this we need a hill of rich earth, similar to that for cucumbers. If very large fruit is desired, pick off all but one of the fruit.

Early Jersey.—One of the earliest varieties grown. Above the medium size, oval-round, dark green, striped with lighter shades. Flesh scarlet, solid, fine-grained, very sweet and juicy. A most excellent variety, either for market or home use. The rind is quite thin, but it bears carriage well.

Phinney's Early.

Phinney's Early.—A valuable variety for near market. Vine vigorous and productive, fruiting quite early. Flesh pink, *very sweet*, tender and brittle. Rind thin, so that the fruit does not stand carriage well.

D. M. Ferry & Co's Peerless.

D. M. Ferry & Co's Peerless.—*This is unquestionably the best water melon in cultivation. Of medium size, thin rind, light mottled green; flesh bright scarlet, solid to the center, crisp, melting, and sweet as honey.* Our stock of this variety all came from one melon, selected several years ago.

Gypsy.

Black Spanish.—Vine small, so that they may be planted closer than most sorts. Round, very dark green, with scarlet flesh and black seeds. It is not so large as some of the other sorts, but has a very thin rind, and a rich, sugary flavor.

Gypsy.—One of the largest varieties, and stands shipment long distances better than any other. Fruit long, smooth, distinctly striped with mottled light and dark green. Flesh bright scarlet, and very sweet.

Cuban Queen.—Described as one of the largest melons known, specimens having been grown that weighed *eighty-two pounds*. Vine vigorous; skin striped light and dark green. Rind medium thick, but the fruit stands shipment well. Flesh bright red, solid, very crisp and sugary.

Long Island.—This is the variety commonly grown for New York market, and is either round or long; flesh red; seeds dark grey.

Mountain Sweet.—A large, long, oval variety; skin striped and marbled with different shades of green; flesh scarlet, and quite solid to the center; very sweet and delicious.

Mountain Sprout.—A large, long, striped variety, with bright scarlet flesh and drab colored seeds; it differs from the Mountain Sweet in color and shape, is rather late, and will keep longer in the fall.

Orange.—An oval melon; skin green; flesh scarlet, of good quality, and is peculiar in that the flesh may be easily separated from the rind, like an orange.

Ice Cream.—Medium size, scarlet flesh, and very sweet; a good variety for main crop.

Chinese Sculptured-Seeded.—Remarkably early and of most delicious flavor. Flesh cream color; shell light green. The seeds are of singular form.

Citron.

Citron.—Employed in making preserves; grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid; seeds red.

MUSHROOMS.

The Mushroom is an edible fungus, rounded in form, of a white color, changing to brown when old. The gills are loose, of a pinkish red, changing to liver color. It is used in a variety of culinary preparations, and is esteemed a great delicacy. It produces no seed, but instead, a white, fibrous substance in broken threads, which is prepared and preserved in horse manure, being pressed in the form of bricks. Thus prepared, it will retain its vitality for years. The little broken pieces of this manure are planted two inches below the surface, and in due time the mushrooms appear.

CULTURE.—Mushrooms can be grown in the cellar, in sheds, or in hot-beds in open air, on shelves, or out-of-the-way places. Fermented horse manure, of equal temperature, say 70 degrees, is made into beds the size required,

Mushrooms

eighteen inches deep. In this bed plant the broken pieces of spawn six inches apart covering the whole with two inches of light soil and protect from cold and severe rains. The mushrooms will appear in about six weeks. Water with luke warm water, and only when quite dry.

MUSTARD.

Fr. *Meutarde*—Ger. *Senf*.

Mustard is not only used as a condiment, but the green leaves are used as a salad or cut and boiled like spinach.

CULTURE—Should be the same as that of cress, and the seed should be sown at intervals in order to secure a succession.

Southern Giant Curled.—This mustard is very highly esteemed in the south, where the seed is sown in the fall, and the plants used very early in the spring as a salad. The seed is brown, and produces plants which grow about two feet high and form enormous bunches, *six of which will fill an ordinary barrel*.

White English.—This is the kind usually preferred for salad. The leaves are light green, mild and tender when young; seed light yellow.

Brown Italian.—This is a larger plant than the preceding with much darker leaves; seed brown and more pungent.

NASTURTIUM.

Fr. *Capucine*.—Ger. *Kapuzinerblume*.

Tall Mixed.—Cultivated both for use and ornament. Its beautiful, orange colored flowers serve as a garnish

Nasturtium.

for dishes, and the young leaves are excellent for salads. The flower buds scarcely formed, and the green seed pods preserved in vinegar, make a pickle greatly esteemed by many.

CULTURE—Sow early in spring, in drills one inch deep, by the side of a fence, trellis work, or some other support to climb upon. They will thrive in good ground, in almost any situation but are more productive in a light soil. *For other varieties, see Flower Seeds.*

OKRA.

Fr. *Gombo*—Ger. *Ocker*.

This is an annual from the West Indies, cultivated for its green seed pods, which are used in soups, or stewed and served like asparagus. It is

highly esteemed at the south, where it is considered a very wholesome vegetable.

CULTURE—The seeds are sown thinly in dry, warm soil, in shallow drills two feet apart. Cover the seeds lightly. After the plants are up thin them out to nine inches apart; hoe frequently and draw a little earth to the stems as they continue to grow. Gather the pods when quite green, and about an inch and a half long.

Tall White.—About six feet high; pods eight to ten inches long, an inch and a half thick at the stem, tapering to a point.

Dwarf White.—Two and a half feet high, pods a foot long; very productive; is said to produce pods at every joint.

Okra.

ONION.

Fr. *Oignon*.—Ger. *Zwiebeln*.

No vegetable is more extensively known and cultivated than the Onion. It has been the common seasoning for soups and meats, of all nations from time immemorial; and in cooking, it is indispensable. It possesses valuable medicinal properties, and is used in colds and coughs, as an expectorant. It contains considerable nutriment and is tolerably wholesome especially if boiled; raw, fried or roasted, they are not very digestible. Eating a few leaves of parsley will destroy, in a measure, the unpleasant smell they impart to the breath.

There is no vegetable where the quality of the seed exerts a greater influence upon the crop than in onions. On our trial grounds we have found a difference of over 400 per cent. in the marketable product of two rows of onions, planted the same day, side by side, thinned to the same number of plants to the rod, hoed and treated in every way precisely alike, the difference being entirely owing to the seed which were samples of stock offered us by two growers. Here then, if no where else, the greatest care should be taken to secure the best possible seed. Seed grown in the north will be pretty sure to produce better onions when sown in the Southern States, than southern grown seed.

We make a specialty of onion seed, and grow and dispose of many tons annually. The demand for our seed has increased so rapidly that we are yearly increasing our facilities for growing. We harvested over forty thousand pounds of onion seed in one season on our own

seed farm near Detroit, which is by far the largest crop ever grown in America by one firm. Our stock is all grown from choice, selected bulbs, under our own supervision, therefore those who order seed of us will be sure of getting new, choice seed of the best quality. Beware of CHEAP ONION SEED! as much of it is worthless, and is sure to disappoint the purchaser.

ONIONS—HOW WE RAISE THEM.

We receive letters every year, inquiring how to raise onions; and for the benefit of our patrons, we will give the method as practiced on our seed farm.

Any land that will raise a good crop of corn, except stiff clay or gravelly soil, is suitable for onions. We select a sandy loam with a light mixture of clay, as it is easier to work, and produces good crops. Land that has been worked two years previously in hoed crops, and heavily manured for those crops, and kept entirely free from weeds, would be in a desirable condition to commence with. Gather off any refuse that may be on it, and in October apply about fifty cart loads of manure to an acre. The manure should have been twice turned during the previous summer, and well fermented, to destroy any weed seeds that may be in it. Spread the manure evenly on the land, and plow it under taking a narrow furrow, which will mix the manure more thoroughly with the soil. This will be all the preparation needed in the fall. As early in the spring as the ground can be worked without injury, give it a thorough dragging first with an iron drag, then with a brush drag, after which rake the entire piece with steel hand rakes.

Stretch your line perfectly straight along one side of your bed, then with a wooden marker—containing five teeth fourteen inches apart—mark off your ground, running your outside tooth along the line; returning, place the outside tooth in the last mark, and follow it for a guide, repeating this operation until the piece is all marked.

We use a seed drill with a roller attached. Most of the drills have places in the bottom of the feed box numbered. No. 4 usually sowing four pounds of seed to the acre, No. 5 five pounds, No. 6 six pounds. Sow the thinnest when large onions are wanted, provided you can rely on our seed. *Procure good seed at whatever price, for without it all your labor will be lost.* Cover the seed half an inch deep. As soon as the onions are up so they can be seen the length of the row, give them the first hoeing, just skimming the ground between the rows. We use a hoe made expressly for that purpose. The blade is eight inches long and one and a half broad, with a long, crooked shank set in a handle five feet long. The shape of the hoe allows the earth to pass over the blade without moving it out of its place. In a few days after give them the second hoeing, this time close up to the plants, after which weeding must be commenced. This operation requires to be carefully and thoroughly done: the weeder must get down to his work on his knees astride of the row, stirring the earth around the plants, in order to destroy any weeds that have just started and cannot be seen. In ten days or two weeks they will require another hoeing and weeding similar to the last, and two weeks later give them still another hoeing, and if necessary, another weeding. If the work has been thoroughly done, and at the proper time, the crop will not need anything more until ready to gather. When the tops die and fall, the crop should be pulled and spread evenly on the ground to dry: in about a week after being pulled, turn, or rather stir them with a wooden rake, and when the tops have become perfectly dry, cut them off one-half an inch from the bulb. When the crop is designed for market, it should not be exposed to the weather longer than necessary to cure the crop, as the onions will lose their bright color by exposure.

How to Keep Onions through Winter.

The essentials for the preservation of onions are dryness, thorough ventilation, coolness, and freedom from frost, or if frozen, they must not be permitted to thaw and freeze again.

One of the most popular methods of keeping onions, is to spread straw threshed with a flail, to the depth of eighteen inches upon the barn floor, scaffold or garret; upon this spread the onions six to ten inches deep, and cover with straw two feet, laying on old pieces of boards or sticks. If at sufficient depth from frost, they are not affected by the changes of temperature, and will keep in fine condition till May.

A cool, dry cellar of some out-building, barn or carriage house will be found excellent for keeping onions, if it has windows for ventilation. The cellar of a dwelling house is usually too warm. They should be spread on scaffolds, about six inches deep, with room enough between the boards for the air to circulate. On approach of cold weather close the doors and windows, and keep the temperature just above freezing point. With proper care, they can be thus kept without freezing at all, and will come out sound and nice in the spring.

Early Red.

Early Red.—A medium sized, flat variety; an abundant producer, and very uniform in shape and size; moderately strong-flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use.

Early Red Globe.—A comparatively new variety, maturing as early as the flat varieties. It is globe-shaped; skin deep red; flesh mild and tender. Very handsome in appearance.

Large Red Wethersfield.

Large Red Wethersfield.—This is the standard variety, and the favorite onion in the east, where immense crops are grown for shipment. Large size; skin deep purplish-red; form round, flat; flesh purplish-white; moderately fine-grained, and stronger flavored than any of the other kinds. Very productive, the best keeper, and one of the most popular for general cultivation.

Large Yellow.

Large Yellow.—One of the oldest sorts, and, as a market variety, probably better known and more generally grown in this country than any other. Flesh white, fine-grained, mild, sugary and well-flavored.

Yellow Danvers.

Yellow Danvers.—A fine variety, originated in South Danvers, Mass. Above the medium size, globular in form; skin yellowish-brown; flesh white, sugary, comparatively mild and well flavored; a good producer, frequently producing six hundred bushels to the acre, from seed sown in the spring. By careful selection, we have improved the original shape of this variety, so that to distinguish it from the old stock, many seedsmen catalogue it as *Yellow Globe Danvers*.

White Portugal.

White Portugal.—A large, flat onion; skin loose; of a mild flavor; fine for early winter use, and much esteemed for pickling, when small. It is not so good a keeper as some other varieties.

White Silverskin, for Pickling.—This is of small size, silvery white, and used almost entirely for pickling, on account of its small size, handsome appearance and mild flavor.

White Globe.—Yields abundantly, producing hand-

White Globe.

some and uniformly globe-shaped bulbs. The flesh is firm, fine-grained and of a mild flavor.

El Paso, or Large Mexican.—This seed is sent us by one of our customers in Mexico, and in that section is used to the exclusion of all others. It will there grow to a diameter of six inches, and not unfrequently weighs two to two and a half pounds. The flavor is very mild, and they are eaten like apples. Color variable from white to light red; flesh white, rather coarse-grained. In form, it is not unlike a mammoth White Portugal onion.

NEW FOREIGN ONIONS.

The following varieties have been tested in this country, and so far as we have been able to learn, have given perfect satisfaction. While we would not recommend the risking of a large crop of onions by sowing imported seed, we believe the following varieties will be found very desirable for early market and home garden use. The flavor of the Italian varieties is milder, and they seem every way well adapted to culinary purposes.

New Giant Rocca.

New Giant Rocca.—An immense sized onion, having attained nearly four pounds weight. Globular in form; skin light brown; flesh mild and tender. It will produce a large onion the first season, from seed, but to attain the largest growth, the smallest bulbs should be set out in the spring of the second season,

when they will continue increasing in size, instead of producing seed, as is the case with American onions.

New Neapolitan Marzagole.—A large, beautiful, flat, white-skinned variety, said to be the *earliest of all*, and a good keeper. It can be sown in February or March, and will mature a crop very early in the season; or sown in July, the crop will be matured the same season. In the South, the seed can be sown in the autumn, and large onions produced in March.

Giant White Italian Tripoli.

Giant White Italian Tripoli.—A large, white, flat onion of mild and excellent flavor, of most beautiful form, pure white skin, and will produce a somewhat larger onion from seed than our White Portugal; but to attain the full size, small bulbs should be set out the second spring.

New Queen.

New Queen.—A silver-skinned variety, of quick growth and remarkable keeping qualities. If sown in February, it will produce onions one to two inches in diameter early in summer, which will keep good until the following summer; and if sown in July, will be ready to pull late in autumn, and be sound and fit for use till the following autumn. Particularly valuable for pickles, as if sown thickly they will mature perfect, hard onions from one-half to three-quarters of an inch in diameter.

Top Onion.

BULBS.

Top Set, or Button.—Produces no seed, but instead, a number of small bulbs or onions, about the size of acorns, on the top of the stalk. These little bulbs are used instead of seed, and will produce a large onion, maturing much earlier than from seed. The large onion produces the top onion, and the little top onion produces the large onion.

Onion Sets.

Red Bottom Sets.—Produced by sowing the seed of the Large Red Wethersfield very thickly in the spring, and not thinning out. They mature under this method when about half an inch through. They are then used precisely as top onions are, setting them out in the spring, instead of sowing seed.

Yellow Bottom Sets.—Identical with the preceding, except in color. They are used in the same manner and produced from black seed of the Yellow Dutch, or Yellow Danvers varieties.

White Bottom Sets.—The seed of the White Silverskin or White Portugal varieties is used to produce the white set. They do not keep as well as the red or yellow, but produce beautiful, white onions, early in the season.

English Multiplier.—Esteemed by many as the best variety for early use. It is large-sized, of a mild, sweet, sugary flavor; very early, and a large producer. The large onion produces several small ones in clusters around the bulb, growing mostly on the top of the ground.

Potato Onion.—Produces a quantity of young bulbs on the parent root, which should be planted early in spring, in rows eighteen inches apart, six inches apart in the row, and covered one inch deep. They should be earthed up like potatoes as they continue to grow. With this and the preceding variety, the large bulbs produce the small, and the small the large alternately.

Any of the preceding six varieties can be recommended as a small, early crop for family use and early home market, but not as a main crop, the increase of marketable onions over the seed being too small. Of all the various modes of propagation, sowing the seed for a main crop deserves the first rank. Its cheapness, compared with other modes, the facility with which it is sowed, the early season when the crop may be gathered in, and the superior, fine bulbs which it produces, recommend it to general use.

PARSNIP.

Fr. *Panais*.—Ger. *Pastinake*.

The value of the Parsnip as a culinary vegetable is well known, but it is not generally appreciated at its full value for stock feeding. On favorable soil it yields an immense crop of roots, which are more nutritious than carrots or turnips, and particularly well adapted for dairy stock.

CULTURE.—They do the best on a deep, rich, sandy soil, but will make good roots on any soil which is deep and mellow and moderately rich. Do not enrich with fresh manure, as it is apt to make the roots coarse and ill-shaped. Sow the seed as early in the spring as possible, and it is a good plan to sow a few radish seeds with them, as the seed is sometimes very slow in germinating; cover one-half inch deep, and press the soil firmly over the seed: give frequent cultivation, and thin the plants to six or eight to the foot. In digging field crops, they may be thrown out so as to be easily gathered, by running a subsoil plough along on one side of the row.

Hollow Crown

Long White Dutch, or Sugar.

—Roots very long, white, smooth, tender, sugary and most excellently flavored. Very hardy, and will keep through winter without protection.

Hollow Crown.—Roots oblong, ending somewhat abruptly, with a small tap root; grows mostly below the surface; has a very smooth, clean skin, and is easily distinguished by the leaves arising from a cavity on the top or crown of the root.

PARSLEY.

Fr. *Persil*.—Ger. *Petersilie*.

A very useful vegetable for flavoring soups and stews, and for garnishing. For flavoring, the green leaves are used, or they may be dried crisp, rubbed to a powder, and kept in bottles until needed.

CULTURE.—It requires rich, mellow soil, and the seed is slow to germinate. Sow the seed as early in the spring as possible, and when the plants are two inches high, trans-

Carter's Fern-Leaved.

plant. The oftener the plants are transplanted and cut back, the finer and more perfect the leaves will be. When well grown, each plant will form a handsome rosette eighteen inches or more in diameter.

Carter's Fern-Leaved.—A new variety, introduced by Messrs. Carter, of London. It is of most beautiful form and coloring, and is well adapted for garnishing dishes on the table, and also makes a very ornamental plant in the flower garden.

Fine Triple Curled.—A fine, dwarfish, curled variety, long cultivated in England. In some gardens it is grown in such perfection as to resemble a tuft of finely curled moss. It is hardy, and slow in running to seed, but liable to degenerate, as it constantly tends to increase in size, and to become less curled.

Myatt's Garnishing.

Myatt's Garnishing.—This variety is larger, and the plant of stronger habit than the preceding, with foliage as finely curled. The leaves are bright green above, paler beneath. Admirably adapted for garnishing purposes.

PEAS.

Fr. *Pois*.—Ger. *Erbsen*.

The Pea is so generally used that it is needless to give any description of it. The varieties are numerous, and every year adds to their number. These new varieties are tested upon our trial grounds, and a full stock of anything which proves to be superior to those on our list is secured at once, but the great mass of them are found to be no better than the older sorts. The list we offer we believe includes nearly every pea of distinctive merit now in cultivation.

CULTURE.—For early peas, the soil should be light, warm and sheltered, but for general crop, a moderately heavy soil is better. Sow as early as possible a few of the earliest variety on warm, quick soil prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in ripening. The very earliest may be covered only one inch deep, and will be the earlier for it: the other sorts should be covered from two to six inches deep, the deep planting preventing mildew, and prolonging the season. Fresh manure or wet, mucky soil should be avoided, as they cause the vines to grow too rank and tall.

The crop should be gathered as fast as it becomes fit for use. If even a few pods begin to ripen, young pods will not only cease to form, but those partly advanced will cease to enlarge.

ALL WRINKLED PEAS are superior to, and more delicate in flavor than, those that present a full and perfect form; like the sugar corn, the saccharine matter which they contain causes them to shrivel when dried, and they will remain much longer in season than other kinds.

Ferry's First and Best.

EXTRA EARLY SORTS.

Ferry's First and Best.—In this variety we think we have what *will suit the most critical market gardener*. We have been experimenting for years, with a view of obtaining the *earliest* variety, and one that would *ripen all its pods within a very few days*, so that the gardener could clear off the ground and plant another crop after having had the full advantage of the high price for the first peas coming into market. This is the selection of the *earliest ripening* for a series of years, and is recommended with the *greatest confidence* as being unsurpassed for earliness and evenness of ripening, desirable qualities for a market variety. About forty-five days from planting is the average time for ripening the whole crop.

D. M. Ferry & Co's Extra Early.—For family use, this is probably equal to the preceding, though it does not ripen as evenly. Peas large enough to eat are afforded as early as from any known variety, and the pods continue in bearing for a week or ten days, which is a desirable feature for family use.

Laxton's Alpha.—The earliest *wrinkled* pea known, and in some seasons producing pods fit for the table about as early as the smooth sorts. About two and a half feet high, much indented and wrinkled, light blue and of delicious flavor. One of the best in every respect.

Kentish Invicta.—A round, blue pea, about two feet in height, with straight, handsome, well-filled pods. Tested by the side of our Extra Early, it proved only two days later; it is the earliest of the blue sorts, and superior in flavor to any of the white varieties.

Ferry's Extra Early Tom Thumb.—A remarkably early variety, very dwarf, growing but nine inches high. Established by selection from the common Tom Thumb.

Carter's First Crop.—This is an English variety, introduced by Carter & Co., of London. It has been grown in this country several years, and unquestionably ranks among the earliest peas yet introduced, but we fail to discover any superiority over our Extra Early. It grows two and a half feet high, is very prolific, and of good flavor.

Caractacus.—Nearly identical with Carter's First Crop, though perhaps not quite so early: it is a first-early variety, and gives general satisfaction.

Blue Peter.

Blue Peter, or Blue Tom Thumb.—An early, dwarf, blue pea, of robust habit and strong growth. It grows about nine inches high, and needs no sticks; it is a great producer, and is of good flavor. With perhaps the exception of the new variety, Bliss' American Wonder, the best of the *very dwarf* peas.

McLean's Little Gem.

McLean's Little Gem.—A very desirable early, dwarf, green, wrinkled variety. When in a green state, it is very large and of delicious flavor, being full of rich, saccharine matter. It is one of the earliest varieties, grows about one foot high, and is really a very valuable acquisition.

Premium Gem.

Marrowfat Peas.

Premium Gem.—A new and valuable variety, growing about fifteen inches high, and among the earliest dwarf, green wrinkled sorts. The quality is excellent; many people consider it the finest flavored pea grown; but the most remarkable characteristic is its wonderful prolificness, as many as twelve pods often appearing on a single stem.

EARLY SORTS.

Extra Early Kent.—This is a very early variety, growing about two and a half feet high. Pods well filled with good sized peas; productive, ripening nearly all at once. An early market variety, *when true*, but has greatly degenerated of late years. *Our stock is true.*

Extra Early Philadelphia.—A variety somewhat in demand in the vicinity of Philadelphia. We have failed to discover any merit in it over earlier and more prolific varieties.

Early Daniel O'Rourke.—This was at one time considered the earliest sort, but has now been superseded by much better new varieties, and we cannot recommend it. Since the introduction of our Extra Early, it must rank as second early, and quite inferior.

Tom Thumb.—Plants of remarkably low growth, seldom exceeding one foot in height; stout and branching; pods about two and a half inches in length, containing five or six peas, which are of a creamy-yellow color; very productive. It may be cultivated in rows ten inches apart. No sticks required.

Bishop's Early Dwarf.—A very prolific variety, producing pods abundantly from bottom to top of the moderately dwarf vine; the large, smooth peas are of excellent quality.

Bishop's Dwarf Long Pod.—Pods very broad, containing four or five large, white peas of fine quality. Vine medium high, continuing in bearing longer than most sorts.

Dwarf Champion.—This pea has proved quite distinct, and is very much liked by those who have tried it. It is in quality and flavor equal to the Champion of England, while the vine is much more dwarf. Peas white, much shrivelled and indented. We think it quite equal to McLean's Little Gem in all respects, except in point of earliness, it being some ten days later.

McLean's Advancer.—A green, wrinkled variety,

about two and a half feet high, with long pods, which are abundantly produced and well filled to the end. Nearly as early as the Extra Early Kent, and of most excellent flavor. An English variety, and highly recommended.

LATE SORTS.

Yorkshire Hero.—A fine, white, wrinkled pea, very prolific, quite early, and of delicious flavor; grows about two and a half feet high, and keeps a long time in season, in fact, never becomes hard. The seed, when ripe, is of a creamy-white color, much shrivelled and indented, and in its green state, is unsurpassed in sweetness and delicate flavor.

Eugenie.—A most excellent late variety, of delicious flavor. About three feet high; pods single or in pairs, about three inches long, containing five or six peas. When ripe, the peas are of medium size, cream colored, and much shrivelled or indented.

Champion of England.—Universally admitted to be one of the richest and best flavored peas grown, and very productive. Height four or five feet; seed whitish-green and much shrivelled. We consider this equal in quality to any in cultivation, either for the amateur or market gardener, and will always sell, green, better than any other variety.

Large Blue Imperial.—About three feet high, and very strong. Pods large, long, pointed, rather flat, containing eight or nine peas. Seed large, blue and a little flattened. A good bearer, and one of the best varieties for summer use, but requires to be planted early, or they will be apt to mildew.

Dwarf White Marrowfat.—Similar in general character and appearance to the Large White Marrowfat, but of stiffer habit and dwarfer growth, being only three or four feet high. It will do very well without bushing, and is much earlier than the tall Marrowfat.

Large White Marrowfat.—Is an American variety, cultivated more extensively for the summer crop, than all the others. About five feet high, of strong growth. Pods large, round, rough, light colored and well filled; seed large, round and yellow or white, according to the soil in which they are grown. This variety is so well known that it is needless to speak of its good qualities. It is excellent for summer use, and undoubtedly the greatest bearer in the field or garden.

Large Black-Eyed Marrowfat.—An excellent variety, growing about five feet high; pods large and full; a prolific bearer, and can be recommended as one of the very best Marrowfat varieties.

EDIBLE-PODDED SORTS.

Dwarf Grey Sugar, Edible Pods.—*The most desirable of all the edible pod peas.* It is a new variety, growing only one foot high, and is remarkable for its earliness as well as its prolific character. The seeds are large, shrivelled and indented, of a dark brown color. The pods are broad, flat and crooked, and contain five or six peas. A very desirable acquisition.

Tall Sugar, Edible Pods.—About five feet in height; seeds dark colored, very sweet and tender. Designed only to be eaten with pods.

FIELD SORTS.

The Golden Vine, Crown and Blue Prussian are, perhaps, the best varieties on the list for general cultivation, though large quantities of Creepers, Common White and Common Blue are used annually. The Golden Vine can be sown later than any other variety, and on lower land, as they are not liable to mildew. These varieties are used for field culture only. In their dry state they are used extensively for feeding stock, for making soups, and in the manufacture of coffee. It is highly essential to have them as free from bugs as pos-

sible, and for soups and coffee, absolutely necessary. We keep constantly on hand a large stock of all these varieties, obtained from the Province of Ontario, where the bugs do not infest them. Our customers may rely on having the seed pure, and free from bugs.

PEPPER.

Fr. *Piment*.—Ger. *Pfeffer*.

The Pepper is much esteemed for its seasoning qualities. In all the various methods of preparation, it imparts vitality and promotes digestion. It is extensively used for pickling, and is valuable for feeding to fowls during winter, a few chopped up with their feed once a week having a marked influence in increasing the number of eggs.

CULTURE.—Should be the same as for egg plant, and the plants need quite as much heat to perfect them, but taking a shorter time to mature, the seed may be sown later, or even planted out of doors after warm weather has fairly set in. Guano, hen dung, or any other bird manure, applied to the surface and hoed in, when the plants are about six inches high, will be found to increase the product wonderfully.

Chili.—Pods sharply conical, nearly two inches in length, and half an inch in diameter; brilliant scarlet when ripe, and exceedingly piquant. This is the variety so extensively used in the manufacture of pepper sauce. Requires a long, warm season, and plants should be started quite early in hot-bed.

Long Red Cayenne.—A long, slim pod, rather pointed, and when ripe, of a bright red color. Extremely strong and pungent, and is the sort used for commercial purposes.

Large Squash.—Large and thick; flat, tomato-shaped; fruit compressed, more or less ribbed; skin smooth and glossy; flesh mild

and pleasant to the taste, although possessing more pungency than many other sorts; very productive, and the best variety for pickling alone.

Long Red
Cayenne.

Large Squash.

Bell, or Bull Nose.

Large Bell, or Bull Nose.—A very large sort, of square form, mild, thick and hard; suitable for filling with cabbage, &c., and for a mixed pickle. Less pungent than most other sorts; notwithstanding its size, it is one of the earliest varieties.

Sweet Mountain.—Nearly identical with the preceding, though perhaps somewhat larger.

POTATOES.

Every year we receive samples of a score or more of new potatoes, each of which is claimed to be new, distinct, and superior in some respects to any in the market. These are all carefully tested, and are usually found to be practically identical with, or inferior to, some established variety; but among these hundreds of seedlings it would not be strange if one was occasionally found which was really an improvement, and we aim to include in our list all such new sorts, together with the best of the older kinds.

White Star.—This medium early, white potato has been grown several seasons, and seems to be by far the most promising sort yet introduced. It originated in 1875 with Mr. E. S. Brownell, who selected it from a large number of seedlings grown from seed balls of the Excelsior fertilized from the White Peachblow, and has been pronounced by one who has been familiar with all the new sorts that have been introduced in the last fifteen years to be the coming potato. The vine is strong, semi-erect, branching, a single stem being produced from each eye. The foliage is very abundant and vigorous, the leaves medium sized, smooth, dark green, and stand the sun better than those of any variety we know of. The tubers are produced abundantly, in a compact cluster, are large, oblong, of uniform size, and very handsome. The skin is very white, and covered with a minute russet netting. The flesh is white, of the finest quality, either baked or boiled, and the variety is one of the best keeping sorts we have on our list. We can confidently recommend this sort as not only the best of the new kinds, but one that will speedily become as popular as the Early Rose, and those who secure seed this spring will be able to sell all they can raise at a good price. For illustration, see colored plate, and for further description, see supplement.

Early Ohio.

Early Ohio.—The marketmen of this vicinity regard this as their best early potato. With them, it is fully a week earlier than the Early Rose, and a more certain and abundant yielder. The vines are quite similar to those of the Rose, but are more vigorous and less liable to blight. The tubers are nearly round, and about the color of the Rose. The flesh is solid, and cooks dry and mealy, but is not pure white, although of the finest quality.

Beauty of Hebron.—One of the best of the early varieties. In some sections it proves earlier than the Early Rose, and in others it is reported as decidedly later. Vines vigorous, growing very rapidly; productive, the tubers lying compactly in the hill. Tubers similar in shape to the Early Rose, but shorter. Skin tinged with pink at first, but becomes pure white during the winter. Flesh solid to the center, even in large specimens, and of the finest quality.

Clark's No. 1.—Vines the most vigorous of any of the early sorts. Tubers similar to, but lighter colored than,

THE WHITE STAR POTATO

COMBINES MORE GOOD QUALITIES THAN ANY OTHER VARIETY.

THE CANEY POT LITH CO DETROIT

PRICE:	1 lb.	2 lb.	3 lb.	$\frac{1}{4}$ Bu.	$\frac{1}{2}$ Bu.	Bu.	Bbl. of 3 Bushels.
	\$1.00	1.50	2.00	2.25	3.50	6.00	16.00

We send by express or mail, *prepaid*, at lb. quotations. Quarter bushels and upwards sent by express or freight, the purchaser paying charges. We cannot become responsible for changes in weather, by which they may become injured en route. All orders for Potatoes must be accompanied with the money. They will be registered and filled in rotation, as soon as weather will permit in Spring. Orders from the South will, however, be executed early enough for early Spring planting.

Beauty of Hebron.

the Early Rose, and they cook mealy, and are of excellent flavor. This variety is very productive, and will yield a good crop on light, sandy ground, where the Early Rose would be an entire failure.

Triumph.

Triumph.—One of the most beautiful potatoes on our list. Vines two feet high, erect, and well covered with their large leaves. Tubers round, and of uniform medium size; eyes slightly depressed. Color a beautiful light red. This variety combines the productiveness and quality of its parents, the Peerless and the Early Rose.

Trophy.

Trophy.—A medium early variety, with strong, erect vines, and thick leaves. Tubers medium size, regular, elongated oval; eyes very few, almost flat upon the surface; very productive, a good keeper, and matures about two weeks later than the Early Rose. Skin russeted, reddish; flesh fine grained, white, and of excellent quality baked or boiled. Received a first class certificate at the London Potato Show, last autumn.

Early Rose.—This was the first of Mr. Breese's seedlings, offered in the spring of 1868, and has now become the standard variety for earliness, quality and productiveness.

Extra Early Vermont.—Similar in color, form and general appearance to the Early Rose. It is, however,

Extra Early Vermont.

much more hardy, a better keeper, more productive, of better quality, and from a week to ten days earlier, and is rapidly taking the place of that popular variety. In many places where the Early Rose has failed to produce a crop, this variety has given the most satisfactory returns. A first class certificate was awarded to this variety in 1873, by the Royal Horticultural Society of London.

Early Snowflake.

Early Snowflake.—This variety ripens about a week later than the Early Rose; shape symmetrical and uniform; size medium; skin white, with russety tinge; flesh fine grain, snow white when cooked, and of a lightness and porosity almost approaching a snow flake. Its mealiness, pure, delicate flavor, and the evenness with which it cooks through, have never been excelled by any potato. It received a silver medal at the Massachusetts Horticultural Society, and always wins a prize wherever it is exhibited.

Magnum Bonum.—This variety is remarkable for combining earliness, large size, freedom from disease and great productiveness, but needs peculiar treatment to get the best results. The seed should be cut in single eyes and then planted ten or twelve inches apart in drills three feet apart. Each eye will throw up a single stalk, producing from four to six large tubers. They are white, nearly round, with a few eyes of a pinkish color. Baked or boiled they are white as snow and very mealy. This is quite distinct from, and very much superior to, the English variety called Sutton's Magnum Bonum.

Mammoth Pearl.—Vines very large and strong-growing, so that in many cases they outstrip the bugs and produce a crop in spite of them. The tubers, which ripen in August, are large, oblong, usually a little flattened, very smooth and uniform. Eyes even with the surface. Skin very white. Flesh as white as that of any variety and cooks as white as snow to the very center. We think that any one who tries this variety will be convinced that the highest quality may be combined with the largest size.

Burbank's Seedling.—A white-skinned, medium early variety, a seedling of the Early Rose, of fine form and good proportions; it has few eyes, which are but

Burbank's Seedling.

little below the surface. Either boiled or baked it is dry and floury, while the flesh is of fine grain and excellent flavor. The vines are very vigorous and healthy, and in some cases have been entirely free from blight when it has destroyed crops of other varieties in the same field.

Dunmore.—A large, smooth, round, white potato of fine quality. Its general appearance somewhat resembles the Peerless, but while fully equaling that variety in productiveness it is of the finest quality, and in many cases it proves to be the most profitable of any of the varieties.

Andrus' White Rose.—Vines medium size, but vigorous and well covered with large leaves, and very productive. Tubers elongated-oval, uniform size. Skin white, slightly russeted. Flesh unusually white, fine grained and of excellent quality. A good keeper, and quite distinct from the other varieties offered under the name of White Rose. Season two weeks later than the Early Rose.

St. Patrick.

St. Patrick.—A most excellent medium early potato, and enormously productive. Very handsome, smooth, white skin and white flesh. Eyes few and shallow; is never hollow; produces few small tubers, the whole crop being uniform in size. A cross between the Early Rose and Garnet Chili.

Pride of America.

Pride of America.—Very productive, growing to a large size. Flesh exceedingly fine-grained and of snowy whiteness; cooks quickly and evenly, dry and floury, and has no hard center or core. The tubers grow compactly in the hill, so that the crop is easily harvested. A remarkable keeper, and free from disease. As a table variety, it is absolutely without a fault.

Improved Peachblow.—A cross between the Jersey Peachblow and Excelsior. This improved variety combines all the good qualities of the old Peachblow, and ripens earlier and is of more compact growth. It fully equals the old favorite in quality, and yields double the quantity per acre. The tubers resemble the Peachblow in form, but are more round and regular. This variety can scarcely fail to come into general favor with the farmers.

PUMPKIN.

Fr. Courge.—*Ger. Kuerbis.*

The Pumpkin more properly belongs to the farm than the garden. It should never be admitted into the precincts of a garden where there are cucumbers, melons, and others of a similar class. It would mix with and contaminate the quality of the more valuable sorts; besides it would occupy more space than most could allow, as their vines sometimes attain an enormous size.

CULTURE.—Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated in a similar manner, though on a larger scale. They are generally raised on cultivated farms between hills of corn, and may be planted with success, in fields by themselves.

Large Yellow.

Large Yellow.—Grows to a large size, and is adapted for cooking purposes and feeding stock. It is irregular in shape and size, some being depressed and flattened at the ends, others round or elongated; of deep, rich yellow color; of fine grain, and excellent flavor.

Cushaw.

Cushaw.—A great favorite in the Southern States, but too tender for general cultivation in Northern climates. In form, much resembling the Winter Crook-neck Squash, though growing to a very large size, frequently weighing seventy pounds; color light cream, sometimes slightly striped with green; flesh salmon colored. Very productive.

RADISH.

Fr. *Radis*.—Ger. *Rettig*.

Very extensively cultivated in gardens for its roots, which should always be eaten before they become pithy and tough. The young seed leaves are also used as a small salad, and a pickle is made of the seed pods, when they are green.

CULTURE.—For the first crop, sow as early in the spring as the ground can be worked, and every two weeks throughout the season, for a succession of crops. A warm, sandy loam, made rich and light by some good, strong manure which is thoroughly rotted, will be most likely to afford them brittle and free from worms. Sow in twelve-inch drills, and thin to two or three inches apart.

It should be borne in mind that radishes must have plenty of room, and be grown quickly, or they will invariably be tough and wormy.

than the common scarlet as to attract attention. The flesh is white, crispy, and it has a very small top. Last season, in New York market, it brought a third more than the Scarlet Turnip. It is equally well adapted for growing in frames, green-house or open ground.

Early Scarlet Turnip, White Tipped.—A beautiful variety, deep scarlet with white tip. It is very ornamental for table use, and is becoming very popular as a market variety. It is of same size and shape as the Scarlet Turnip variety.

Early Scarlet, Turnip-Rooted.—A small, round, red, turnip-shaped radish, with a small top, and of very quick growth. A very early variety, deserving general cultivation, on account of its rich color, crisp and tender qualities; should be used while young. The white and red do well mixed.

Early White, Turnip-Rooted.—Like the preceding in shape, but in color pure white; flesh pure white, and semi-transparent. It is a few days later than the preceding, and will bear the heat longer without becoming spongy.

Elly Long Scarlet Sh't Top, Impv'd.

Scarlet, Turnip-Rooted

French Breakfast

China Winter.

Early Long Scarlet, Short Top, Improved.—This is unquestionably the best standard variety for private gardens and market use. It grows six or seven inches long, half out of ground; is very brittle and crisp, and of quick growth; color bright scarlet; small top; tapers regularly to the root, and is uniformly straight and smooth. Highly recommended.

Wood's Early Frame.—A sub variety of the preceding, not quite so long, and a little thicker; of brilliant scarlet color, mild, brittle, of fine flavor, and the most suitable for forcing and early market garden.

Early Long Scarlet.—Longer and lighter colored than the preceding, with a larger top, and a few days later. This is also a standard sort, and much cultivated.

Early Round Deep Scarlet.—A valuable improvement on the ordinary Scarlet Turnip Radish, and will be found to be very useful for market garden purposes. The color of the skin is very dark red, so much deeper

Golden Globe.—This variety is very popular in the Southern States. It is of quick growth, tender and brittle, of perfect globe shape and golden colored skin. It seems to produce tender radishes in the hottest climates.

Early Yellow Summer Turnip.—An oblong, turnip shaped and russet colored sort, growing much larger than the White or Red Turnip varieties, and having a larger top. The best kind for the South, as it stands the extreme heat and drought better than any other kind.

Grey Summer Turnip.—Round, turnip shaped, though often irregular in form. The skin is mottled with greenish-brown, wrinkled, and often marked with traverse white lines. Flesh mild, of greenish-white color, and tolerably solid. Half-early, and a good variety for summer use.

Early Scarlet, Olive Shaped.—In the form of an olive, terminating in a very slim tap root. Skin fine

scarlet; neck small; flesh rose colored, tender and excellent. Early, and well adapted for forcing or general crop.

New French Breakfast.—A medium sized radish, olive shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the root, which is pure white. A splendid variety for the table, not only on account of its excellent qualities, but for its beautiful color.

D. M. Ferry & Co's Perpetual Market.—This variety continues to hold the good opinions formed of it four years ago, and as a summer and winter variety, it probably has no superior. About seven or eight inches long, three inches in diameter at the crown, tapering pretty regularly to the point; skin white, tinged with brown, making it look greyish; flesh white, very solid, fine-grained, and *brittle at all stages of its growth*. Sown at intervals, it will keep the table supplied the greater part of the year; at no period of its growth, or season of the year, does it become hollow or spongy.

Long White Naples.—Skin white, and of fine texture; flesh fine-grained, crisp, and very good flavor. A late, fall variety.

WINTER VARIETIES.

The general method of culture should be the same as that of the summer kinds, but the seed may be sown as late as September, and the roots can be kept all winter.

Scarlet China, Winter.—Form rather conical, and very smooth; of a lively rose color; flesh firm, like the Black Spanish, but more pungent. Cultivation the same as for that variety.

White China, Winter.—Similar in shape to the preceding, though more regular in form. Average specimens measure about five inches in length by two inches in diameter. Flesh rather piquant, solid and brittle, and skin white and clean; tops large. A most excellent sort for late fall and winter use.

Long Black Spanish, Winter.—One of the latest as well as the hardest of the radishes, and is considered an excellent sort for winter use. Roots oblong, black, of very large size, and firm texture. It is sown rather earlier than the fall turnips, and must be stored in sand, in cellar, for winter use. It will keep good till spring.

Large White Spanish, Winter.—Roots somewhat fusiform, retaining their diameter for two-thirds their length,

Black Spanish.

California Mammoth.

sharply conical at the base, and when full grown, measuring seven or eight inches in length, by about three inches in diameter at the fullest part. Skin white, slightly wrinkled, sometimes tinged with purple, where exposed to the sun. Flesh white, solid and pungent, though milder than the Black Spanish.

California Mammoth White China, Winter.—First introduced into this country by the Chinese, in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the root. The flesh is tender and crisp, and it keeps perfectly well through the winter. A very valuable addition to our list of winter radishes.

RAPE.

This plant is extensively cultivated in England, both for forage and for the seed, from which is manufactured rape seed oil. The seeds are also much used as food for canary birds. It is also sometimes used as a salad plant like mustard. As a forage plant, the yield is abundant, and fed green, it is very nutritious, and nearly all animals are very fond of it. Sow in May, either broadcast or in drills; if the former, ten pounds, and if the latter, four pounds per acre.

RHUBARB, or PIE PLANT.

Fr. Rhubarbe.—*Ger. Rhabarber.*

Rhubarb, familiarly known as Pie Plant, is cultivated in gardens for their leaf stalks, which are used for pies and tarts. Within a few years the cultivation of this very grateful and wholesome vegetable has been extensively increased; immense quantities are now annually sold in all the large markets. No private garden should be without a bed of it.

CULTURE.—Rhubarb succeeds best in deep, somewhat retentive soil. The richer its condition, and the deeper it is stirred, the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall, trench a piece of ground, and manure it well; then transplant the young plants into it three feet apart each way. Cover with leaves or litter the first winter, and give a dressing of coarse manure every fall. The seed cannot be relied upon for the reproduction of the same variety. The stalks should not be plucked till the third year, and the plant never allowed to exhaust itself by running to seed.

Rhubarb, or Pie Plant.

Linnaeus.—The earliest of all, and very productive and high flavored. It possesses little acidity, and has so thin a skin that removing it is scarcely necessary. It continues equally crisp and tender throughout the sum-

mer and early autumn. One of the best sorts for a small garden or family use.

Victoria.—Very large leaf stalks, two or three inches in diameter at the broadest part, and often two or three feet in length. A well developed stalk, divested of the leaf, will weigh about two pounds. They are stained with red at the base, and finely spotted to the nerves of the leaf.

Giant.—This is a very large and late green variety, with round stalks of great length and thickness; produces a succession of stalks the whole season; held in high estimation by market gardeners.

Salsify, or Vegetable Oyster.

Fr. *Salsifis*.—Ger. *Schwarzwurzel*.

Salsify.

The Salsify has a long, white, tapering root, nearly resembling a small parsnip. When properly cooked, it has the flavor of an oyster, and is a good substitute for it.

CULTURE.—It succeeds best in a light, well enriched soil, which should be stirred to the depth of twelve or fourteen inches. If it is necessary to use manure, it should be very fine and well rotted, as if it is fresh and coarse, the roots will grow irregular and ill shaped. Give the general culture recommended for the parsnip. The roots are perfectly hardy, and may remain out all winter. Store a quantity for use packed in earth or sand. Those remaining in the ground should be dug before commencing growth in the spring.

SPINAGE.

Fr. *Epinard*.—Ger. *Spinat*.

The Spinage is very hardy, and consequently a very important vegetable for cold climates. It merits attention from being extremely wholesome and palatable, and from its green color, even after having been cooked. It makes a delicious dish of greens, when served up with the gravy of roast meat, melted butter, &c., or simply boiled and eaten with vinegar.

CULTURE.—For summer use, sow in very rich ground—the richer the better—in early spring, in drills one foot apart. Thin by degrees, commencing when the leaves are an inch wide, and continue regularly till the

Thick-Leaved Summer.

plants stand six inches apart. This sowing must be cut before the approach of hot weather, or it will run to seed. For early spring use, the seed should be sown early in autumn, and every two weeks thereafter, if a succession is desired. In the Northern

States, the plants will require a slight protection of leaves or straw, but in the Southern States, no protection is necessary, and they will continue their growth most of the winter.

Round Summer.—This variety is generally preferred for early sowing, and is the most popular with our mar-

ket gardeners; leaves large, thick and fleshy; not quite so hardy as the Prickly, but stands the winter very well.

Improved Thick-Leaved Summer.—An improvement on the preceding, with larger and thicker leaves, and of more substance. Particularly recommended for market garden use.

Savoy-Leaved.—The leaves of this variety are large, of good substance, and much wrinkled or curled, like the Savoy cabbage. It is a winter variety, and growing in favor; in the Southern States, it is preferred to all others. It is said by Southern market gardeners to yield twice the bulk of leaves of any other sort.

Prickly Winter.

Prickly Winter.—The hardiest variety, and will withstand the severest weather, with only a slight protection of leaves or straw. The seed is prickly, leaves triangular, oblong, or arrow shaped. It is employed for fall sowing, which in this latitude, is made about the first of September.

SQUASH.

Fr. *Courge*.—Ger. *Kuerbis*.

The Squash is one of the most nutritious and valuable of all our garden vegetables. The summer varieties come to the table early in the season, and are very palatable, while the winter sorts can be had in perfection from August until the summer varieties are again in condition. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash, costing no more to cultivate, and much less to secure, will give twice as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose.

CULTURE.—The plants are very tender and sensitive to cold, and planting must be delayed until settled, warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted six feet apart each way, and the winter sorts eight by eight; three plants are sufficient for a hill; and care should be taken not to injure or break the stem from those intended for winter use, as the slightest injury will increase the liability to decay.

Early Yellow Bush Scallop.—An early, flat, scallop shaped variety; color yellow; flesh pale yellow, tolerably fine grained and well flavored; very productive; used when young and tender for boiling, and at maturity for making pies.

Early White Bush Scallop.—Identical with the preceding, except in color, which is white.

Early Bush Scallop.

Summer Crookneck.—The richest and best sort for summer; very early and productive. It is small, crooked neck, covered with watery excrescences, the more the better; color bright yellow; shell very hard when ripe. The best of the summer kinds.

Summer Crookneck.

WINTER VARIETIES.

Improved American Turban.—An excellent variety for use in the autumn and early winter. Flesh orange yellow, thick, fine-grained, sugary, and well flavored. Generally a light yellow color, but occasionally greenish yellow striped with white. In form, resembling a turban, or Turk's cap. This variety is not to be confounded with the French Turban variety, which is more showy, but inferior in quality.

Essex Hybrid.

Essex Hybrid.—A new and excellent variety, a cross between the Hubbard and American Turban, having the color, shape and good qualities of the Turban, with the dryness and hard shell of the Hubbard. It is one of the finest-grained of all the squashes, and, although ripening very early, it will keep till the following June. The flesh is very rich colored, thick and solid, and it is heavier than most other sorts of same size.

Boston Marrow.

Boston Marrow.—A fall and winter variety, very popular in the Boston market. Of oval form; skin thin; when ripe, bright orange; flesh rich salmon yellow, very dry, fine-grained, and for sweetness and excellence, unsurpassed.

Hubbard.—This is a superior variety, and the best winter squash known; flesh bright orange yellow, fine-grained, very dry, sweet and rich flavored; keeps per-

Hubbard.

fectly good throughout the winter; boils or bakes exceedingly dry, and is esteemed by many to be as good baked as the sweet potato. We have secured an unusually fine strain of this variety, and can recommend our stock as equal to, and probably superior to any other in the market.

Butman.—This new squash is a cross between the Yokohama and Hubbard. The flesh is between a salmon and a lemon color. It has all the qualities of a first class squash, being very dry, fine-grained, and of excellent flavor. Size medium; color light stone, distinctly striped and splashed with yellowish white.

Marblehead.—It is unquestionably an excellent keeper, and is finer-grained and drier than any sort we have seen. About the size of the Hubbard, with shell of bluish green, and bright orange flesh. Requires the whole season to mature.

Perfect Gem.—The vines of this variety grow at first like those of the summer squash, and usually produce a few fruits near the root; if these are picked when green and used like summer squash, the plant will throw out long runners, bearing a great number of squashes which may be allowed to ripen. The fruits are small, nearly round, slightly ribbed, and have a thin, smooth, creamy-white skin. The flesh is fine-grained, dry, very sweet, and of delicious flavor. It is remarkable for its keeping qualities.

Winter Crookneck.—The most certain to produce a crop of any, the strong growing vines suffering less from insects than those of the other sorts. Color varying from dark green to clear yellow, frequently changing to the latter after being gathered. Flesh variable, sometimes close grained and fine flavored, and in other cases, coarse and stringy. If kept from cold and damp, they will keep the entire year.

Early Amber.

SUGAR CANE.

Early Amber.—This comparatively new variety is now being successfully grown in our extreme northern latitudes. It may be planted as late as the 15th of June, and will be ripe enough to manufacture in September. It is the earliest variety with which we are acquainted. The beautiful, amber colored syrup it produces is thought to be superior in flavor to any other, and for sugar, it is unsurpassed. There are many varieties that can be profitably grown where the seasons are long, but this can be grown wherever Indian corn will grow. It is useless to

plant cane seed before the weather is warm in spring. Three or four pounds are required per acre.

SUNFLOWER.

Large Russian—*Helianthus*.—The Sunflower, during the past few years, has attracted considerable attention as a profitable field crop. It is claimed that it produces a larger return in forage than almost any other

Large Russian.

crop; the leaves being the parts used for stock. The seed has also a commercial value, being used for manufacturing oil. It is also being planted in low, swampy ground, as an absorbent of the miasma of those sections, and with highly gratifying results.

TOBACCO.

All the species of Tobacco are annual plants, and can be grown in more or less perfection wherever there is a summer. In the short, hot, dry summers of the north the plant attains a smaller size than in the long, warm, moist summers of the south, though the quality and flavor are thought to be better.

Conn Seed Leaf.

CULTURE.—The seed should be sown very early in the spring, as early as possible after the danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring, on the ground intended for the seed bed, then dig and thoroughly pulverize the earth, and mix with the ashes, after which the seed

may be sown and covered very lightly. When the plants are about six inches high, transplant into rows six feet apart each way, and cultivate thoroughly with plow and hoe.

Connecticut Seed Leaf.—Best adapted to the climate of the Middle and Northern States, as it is more hardy, and endures the cold better than the tender varieties grown south. In many of the Northern States, and in Canada, this variety is a staple crop.

Yellow Oronoko.—This variety has smaller leaves than the preceding, and is intermediate in size and vigor.

Silky Pryor.—Used very largely in the manufacture of bright wrappers, for which purpose this variety and the preceding are unexcelled.

White Burley.—Especially desirable for the manufacture of cigars, as the leaf of this kind readily absorbs a large quantity of manufacturing material.

Havana.—Pure Cuban grown seed, raised in the famous district of Vuelta de Abajo. When grown in this country commands a high price for cigar stock.

Maryland Broad Leaf.—A well known standard sort, valuable for cigar wrappers.

Virginia.—Used in the south in the manufacture of the finer grades of smoking.

TOMATO.

Fr. Pomme d'Amour.—*Ger. Liebesapfel.*

This vegetable is too well known to need any description. There has been a great improvement in it during the last few years, and the varieties now offered are greatly superior to those known a few years ago.

CULTURE.—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous, unchecked growth during the early part of the season. Sow in hot-beds during March, or from six to eight weeks before they can be set out of doors; when the plants have four leaves, transplant into shallow boxes, setting them four or five inches apart; give plenty of air, and endeavor to secure a vigorous, but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky, about as broad as high. A slight check while the plants are small, will materially diminish their productiveness. Set out of doors as soon as danger from severe frosts is over, but before doing so, harden off the plants by gradually exposing them to the night air and the withdrawal of water until the wood becomes hard and the leaves thick and of dark green color. Transplant carefully, and cultivate well as long as the vines will permit. The fruit is improved in quality if the vines are tied to a trellis or to stakes.

Little Gem.—The earliest variety. Vine vigorous, spreading, productive. Fruit in clusters of six or eight; bright, clear red, round, smooth, and about one and one-half inches in diameter. It is very uniform and handsome, but of second rate quality, and only valuable on account of its earliness.

Hundred Day.—Nearly as early as the last; larger and of better quality. The best *very early* variety. Vine vigorous, productive, and well covered with large leaves. Fruit of medium size, of distinct bright scarlet-vermilion color; flat, with broad, shallow corrugations at the stem, but perfectly smooth and of a regular wavy outline at center. Quality very good.

Early Conqueror.—Not only one of the earliest, but

Early Conqueror.

one of the most productive varieties. Vine medium size, but vigorous. Fruit in large clusters, medium size, irregular and frequently slightly corrugated; of a beautiful crimson-scarlet color, sometimes dotted and splashed with gold. Quality good.

Canada Victor.

Canada Victor.—Very early. Vines large, spreading, productive. Fruit of light scarlet color, round, smooth, of medium size, solid, and ripening up well. A very popular variety.

Ferry's Improved Early Large Smooth Red.

Ferry's Improved Early Large Smooth Red.—A valuable variety for general crop. Vines vigorous and productive. Fruit medium size, oval form, light crimson color, and of excellent flavor.

Hathaway's Excelsior.—Quite early. Vines large, vigorous, continuing productive through the season. Fruit a little below medium size, always round, smooth, and when fully ripe, of a dark, rich color. Many prefer this to any other variety.

Hubbard's Curled Leaf.—Vines very dwarf, so that the plants can be set closer than most. Leaves broad and thick, but curling up at the edges as the fruit ripens. Fruit in small clusters, of rich, dark color, irregular in shape, and of fair quality.

Acme.—One of the most popular varieties, both with marketmen and consumers. Vines large, and continuing to produce abundantly until frost. Fruit in clusters of four or five, invariably round, smooth, and of good size, ripening evenly and without cracking, and stands shipping well. Color purplish pink. Flesh solid, and of good flavor.

Essex Hybrid.—A new variety similar to the above, but with larger, darker colored fruit which is always smooth and handsome. Quality among the best. An improved Acme.

Paragon.—Vine very large, vigorous and productive, and continuing so until killed by frost. Fruit large, round, of a very dark rich crimson-scarlet color, with occasionally a purplish tinge. It ripens up evenly, and the flesh is thick and fine flavored.

Livingston's Perfection.—A new variety similar to the last, but an improvement upon it, it being a little earlier, and invariably smooth and handsome. It is probably the handsomest tomato grown, and all who have tried it pronounce it of the highest quality.

Trophy.

Trophy.—Well known as one of the best. Vines of medium size, but producing compact clusters of fruit in immense quantities. Fruit large, smooth, of bright red color. Solid, and of good flavor. Our stock is from carefully selected specimens grown from seed procured direct from the originator.

Gen. Grant.—A variety extensively grown for canning. Vines medium size, very productive, and quite early. Fruit round, slightly flattened, very regular, firm, and keeps in condition a long time. Color brilliant glossy crimson. Flesh solid, and evenly ripened.

Large Red Fegee.—Fruit large, bright pink, usually ribbed. Flesh solid. A profitable variety for market, and not excelled for making catsup.

Golden Trophy.—A sport from the well known Trophy, ripening about a week earlier. Flesh firm and solid, containing but few seeds. About the size of the Trophy, of a beautiful light yellow, or straw color, occasionally faintly streaked with red. Resists drought better than any other variety.

Green Gage.—An English variety, highly recommended for preserving, and equally desirable for table, cooked or raw. In flavor, it combines the apple and tomato, is piquant, and highly agreeable. Of medium size, plum shaped, and of a bright yellow color.

Red Cherry.—A small, round, red tomato, of the shape and size of cherries; cultivated mostly for pickling; is very early.

Red Pear Shaped.—This variety is beautiful in appearance, bright red; in form, like a pear. It is used mostly for pickling, but not undesirable for table use.

Turk's Turban.—A new and singularly ornamental variety, with beautiful, scarlet fruit in the form of a Turk's cap. Said to be excellent for table use, besides being a curiosity on account of its form.

Turk's Turban.

TURNIP.

Fr. *Navet.*—Ger. *Rueben.*

This wholesome and agreeable vegetable has been cultivated from time immemorial, as a field crop, and is one of the staple products of the farm. It is most easily

affected in its form and flavor by soil, climate, and mode of culture. There are a great many varieties, but we have selected the following as the best for the garden or farm.

CULTURE.—All the sorts are propagated by seeds, which should be sown where the plants are to remain, as they do not succeed well when transplanted. Sow in drills fourteen inches apart, and half an inch deep, or broadcast, and be sure to have the ground freshly dug before sowing. Keep them perfectly free from weeds, and when the bottoms begin to enlarge, brush away the earth from about the roots to the depth of half an inch or more, and give them a light dressing of wood ashes. This is the surest mode of obtaining fair and smooth turnips in old gardens, where they are almost certain to grow wormy if the earth is allowed to remain in contact with the roots. For the spring and summer crops, it is important to get them started very early so that they may have time to grow to sufficient size before the hot weather, when they will soon become tough and strong.

TURNIPS.—For the fall and main crop, sow, in the Middle and Western States, from the middle of July to the last of August, as directed for the spring sowing. In the field, turnips are more generally sown broadcast, though much the larger crops are obtained by drill culture.

RUTA BAGAS.—The ruta бага is usually sown from the 20th of June till the 15th of July, in two-foot drills, and thinned out to ten inches apart. It is necessary that the ground should be dry, and made very rich. To preserve turnips in good order for winter, store them in barrels placed alongside the wall of a cool cellar, and cover them with sand or turf to keep them fresh. Another method is to put them in a cellar or dry pit, and cover with straw, and then earth over to the depth of eight or ten inches. Thus protected, they will keep well till spring.

For feeding stock in fall and winter, there is nothing superior to turnips and ruta bagas, and they will yield a larger amount of food than almost anything else, on the same space of ground. We cannot too earnestly recommend farmers to largely increase their sowings, for we are sure no crop will prove more remunerative.

WHITE-FLESHED SORTS.

Early Purple Top Munich.—A very handsome, early turnip, decidedly earlier than any other sort. Color white, with bright purplish-red top; of fine quality when young, but becoming bitter with age; we can recommend this variety as the best for first crop.

Early White Stone.—This is an English, garden variety, of round shape, firm texture, quick growth, medium size, and is cultivated extensively as an early market variety.

Jersey Navet.

Jersey Navet.—An exceedingly delicate, sweet, white turnip for table use. It is very popular in Paris markets, where it is esteemed one of the best. Grows long, somewhat like a parsnip in form.

Early White Flat Dutch.—A medium size, white, flat turnip, of quick growth, juicy, and of excellent quality when young; sow in spring or fall. It is designed for table use, and is spongy and inferior when overgrown.

Early White Flat

Dutch, Strap-Leaved.—A most excellent, early, garden variety, much used in the Southern States. Is sure to bottom; makes a very sweet, tender and rich early table sort. The seed we offer is our own growing, from selected bulbs.

Early Purple Top, Strap-Leaved.—This is very similar to the preceding except in color, being purple, or dark red on the top. It is of good quality, and recommended highly for a garden turnip. The seed of this variety is imported.

D. M. Ferry & Co's Improved Purple Top, Strap-Leaved.—This is a very early variety, and is rapidly taking the place of all other flat turnips, for table use; form round, flat, medium size; very small top, with but few leaves, which are of entire upright growth, more resembling horse-radish leaves in shape; flesh fine-grained, and of exceedingly rich, buttery flavor; a purely American variety. *Of this variety, we harvested eight hundred bushels of seed in one season, grown from selected bulbs, set out in the spring, on our own seed farm.*

D. M. Ferry & Co's Improved Purple Top, Strap-Leaved.

White Egg.—A new, quick-growing variety, perfectly smooth, and nearly egg-shaped. In color it is pure white; of extraordinary firmness and solidity. Grows about half out of ground, has small top and rough leaves. It is particularly adapted for fall market purposes, as it does not require washing, the skin being so smooth and white, and it is of such quick growth, that good

White Stone.

Cow Horn.

sized turnips can be had early in the season. The flesh is very sweet, firm and mild, never having the rank, strong taste of some varieties.

Cow Horn, or Long White.—This variety is car-

rot-like in form, growing nearly half out of the ground, and generally slightly crooked. It is pure white, except a little shade of green near the top. It is delicate and well flavored, of very rapid growth, and has obtained considerable favor as a market sort for fall and early winter use. It is in increasing demand every year.

Improved Purple Top Mammoth.—Globe shaped, large, firm in texture, juicy, and of exceedingly quick growth, and very hardy.

Large White Flat Norfolk.

Large White Flat Norfolk.—A standard sort for field culture, and is extensively grown all over the world for stock feeding. It is round, flat; color white; often attains to a very large size. The seed should be sown a little earlier than the table sorts. It is allowed to stand out during the winter at the south and southwest, where the tops are used for greens.

Red Top Flat Norfolk.—A handsome, flat shaped root, purple above ground, with small top and tap root. An excellent variety, grown both for table use and stock, differing but little in shape from the Strap-Leaved, except in the form of the leaf, though not of so fine a quality.

Pomeranean White Globe.—Is one of the most productive kinds; in good, rich soil, the roots will frequently grow to twelve pounds in weight; it is of the most perfect globe shape; skin white and smooth; leaves dark green, and of strong growth.

Pomeranean White Globe, Strap-Leaved.—This is an American variety which has become very popular, especially in the Southern States, where it is much grown for table use and for stock. The roots grow fully as large as those of the English variety, and being acclimated, it is almost certain to produce a large crop. The leaves are of entire upright growth.

Purple Top White Globe.—A variety of the purple top flat turnip, from which it originated. It is globular in form, and quite as large as the Pomeranean White Globe; of beautiful appearance, of most excellent quality, and equally desirable for table or stock. It keeps well, and is a fine market sort.

Sweet German.

Sweet German.—This variety is very popular in many sections, notably so in the New England States. It partakes largely of the nature of the ruta бага, and should be sown a month earlier than the flat turnips. The flesh is white, hard, firm, and sweet, and it keeps nearly as well as the ruta бага. Highly recommended for winter and spring use.

Seven Top.—Cultivated extensively in the south for the tops, which are used for greens. It is very hardy, and will grow all winter, but does not produce a good bulb, and is only recommended for the tops.

Early Yellow Finland.

YELLOW-FLESHED SORTS.

Early Yellow Finland.—An early, yellow-fleshed variety, of beautiful form, medium size, flat shape. The flesh is remarkably fine and close grained, and of rich, sugary flavor. A most excellent early, garden variety, and said to be never troubled by worms eating the roots.

Early Yellow Malta.

Early Yellow Malta.—This is a beautiful, symmetrical, early variety, of medium size. Skin very smooth, bright orange yellow; flesh pale yellow, fine grained, and exceedingly rich and buttery. Foliage small, and bulbs can be grown quite close together. One of the best yellow summer turnips in every respect.

Orange Jelly, or Robertson's Golden Ball.—Undoubtedly among the most delicate and sweetest yellow-fleshed turnip yet introduced. Not of large size, but firm, hard, and of most excellent flavor. Keeps well, and as a table variety, has no superior.

Purple Top Yellow Aberdeen.—Roots medium size, round form; flesh pale yellow, tender and sugary; hardy and productive, and keeps well. It is an old, esteemed variety, considered as approaching very nearly to the ruta бага in hardness and firmness of texture.

Large Amber Globe.—One of the best varieties, either for table use or for a field crop for stock. Flesh

yellow, fine grained and sweet; color of skin yellow, with green top. Hardy, keeps well, a good cropper, and grows to a very large size. Very popular in the Southern States.

SWEDES, or RUTA BAGAS.

Yellow Swede, or Ruta Baga.—This and the following form a distinct class, and should be sown at least a month earlier. Shape oblong; dull reddish color

D. M. Ferry & Co's Improved Purple Top
Yellow Ruta Baga.

above ground, and yellow underneath; is hardier than the common turnip, and will keep solid till spring.

Carter's Imperial, Hardy, Purple Top, Yellow Ruta Baga.—A most excellent sort for either table use or feeding stock. Flesh yellow, solid, firm, sweet and rich. It is a hardy sort, yields heavily, with no tendency to long necks.

D. M. Ferry & Co's Improved Purple Top Yellow Ruta Baga.—The best variety of Swedish turnip in cultivation; hardy and productive; flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong, terminating abruptly with no side or bottom roots; color deep purple above, and bright yellow under the ground; leaves small, light green, with little or no neck; the most perfect in form, the richest in flavor, and the best in every respect.

Bangholm Ruta Baga.—A very superior variety, both in form and quality, and held in high estimation in many parts of England. Of large size, small neck, few or no side roots, and yields well. Flesh yellow, sweet, and solid; skin yellow, with purple top.

Sweet Russian, or White Ruta Baga.—This variety is a most excellent kind, either for the table or stock. It grows to a very large size; flesh white, solid, firm texture, sweet and rich; keeps better than any of the preceding, and is becoming very popular where known.

AROMATIC, MEDICINAL AND POT HERBS.

GENERAL CULTURAL DIRECTIONS.—Most of the varieties thrive best on rich, sandy soil, which should be carefully prepared and well cultivated, as the young plants are for the most part delicate and easily choked out by weeds. Sow as early as the ground can be made ready, in drills sixteen to eighteen inches apart; or they may be planted as a second crop—the seed sown in beds in April, and the plants set out in June. Most of them should be cut when in bloom, wilted in the sun, and then thoroughly dried in the shade.

Anise, (*Pimpinella anisum*). Fr. *Anis*.—Ger. *Anis*.—An annual herb, cultivated principally for its seeds, although its leaves are sometimes used for garnishing and flavoring. The seeds have a fragrant, agreeable smell, a sweetish, pleasant taste, and have the property of increasing the secretion of milk. They are also used for dyspepsia and colic, and as a corrective of griping and unpleasant medicines. Sow early in the spring, and thin the plants to three inches in the row.

dalm.

failing to perfect its seeds at the north. The seeds are

Balm, (*Melissa officinalis*). Fr. *Melisse*.—Ger. *Melisse*.—A perennial herb. The leaves have a fragrant odor, similar to lemons, and are used for making balm tea for use in fevers and a pleasant beverage called Balm Wine. Plant early, and thin to ten inches apart.

Bene, (*Sesamum indicum*). Fr. *Bene*.—Ger. *Bene*.—A native of India, naturalized at the south, but

used for food, and furnish a large quantity of oil similar to olive oil, but which will keep a long time without becoming rancid, and has a marked effect in softening and whitening the skin. The leaves abound in a gummy matter, and one or two of them immersed in a tumbler of water will convert it into a rich bland mucilaginous drink, much used at the south for cholera infantum, diarrhoea, &c. Do not plant until settled warm weather, and allow the plants to stand two feet apart.

Borage, (*Borago officinalis*). Fr. *Bourrach*.—Ger. *Boretsch*.—A hardy annual, used as a pot herb, and its beautiful blue flowers as a garnish. The leaves immersed in water give it an agreeable taste and flavor. It is also sown for pasturage, its abundant bloom furnishing a large amount of honey. Sow in April, and thin to eight inches apart. In some places this becomes a troublesome weed.

Caraway, (*Carum carvi*). Fr. *Carvi*.—Ger. *Kum-mel*.—Cultivated for its seeds which are used in confectionery, cakes, &c., and the leaves are sometimes used in soups. Sow early, and thin to ten inches apart, or sow in August. The plant never seeds until the second year, but the August sown plants will give a fair crop the next season.

Catnip, (*Nepeta cataria*). Fr. *Nepeta*.—Ger. *Katzenkraut*.—A hardy perennial, well known as a valuable mild nerve for infants. The plant should be dug up by the roots when in full flower, and dried in the shade. The seed may be sown in drills twenty inches apart, either in fall or spring.

Chamomile, (*Anthemis nobilis*). Fr. *Camomile*.—Ger. *Kamille*.—A hardy perennial, the flowers of which are valuable for their medicinal properties, being in small doses a mild tonic; and used as a cold infusion, they are valuable in cases of enfeebled digestion and general debility. The flowers should be gathered on a dry day and dried in an airy situation as quickly as possible. It succeeds best on light, poor soil, and may be sown in drills sixteen inches apart.

Coriander, (*Coriandrum sativum*). Fr. *Coriandre*.—Ger. *Koriander*.—A hardy annual, cultivated for its

seeds which have an agreeable taste, and are used to disguise and correct the griping qualities of medicines. They are also extensively used in confectionery. Sow early in the spring, and gather on a dry day, bruising the stems and leaves as little as possible, as when injured they have a disagreeable odor which they impart to the seed.

Dandelion, (*Taraxacum densleonis*). Fr. *Pissenlit*.—Ger. *Loewenzahn*.—*Improved Curled*.—Those who only know the Dandelion as the persistent weed of our roadsides and lawns, know no more of its real value than one who has only seen the poisonous wild parsnip or carrot, knows of the value of these vegetables. *The improved variety makes one of the earliest and best greens in cultivation*. For this purpose, sow early in the spring, on very warm, rich soil, in drills eighteen inches apart; thin the young plants to five inches in the row, and cultivate well, and they will be fit for cutting the next spring. It is also grown extensively for its roots; for this purpose, sow in September, and cultivate well during the fall and the following season, and the roots will be fit to dig in October.

Dill, (*Anethum graveolens*). Fr. *Aneth*.—Ger. *Dill*. An annual, cultivated for its seeds which have an aromatic odor, and a warm, pun-

Dill.

gent taste. They are good for flatulence and colic in infants, and are sometimes added to pickled cucumbers to heighten the flavor. Sow early in spring, and keep clear of weeds.

Horehound, (*Marrubium vulgare*). Fr. *Marrube*.—Ger. *Andorn*.—A perennial herb with a strong, aromatic smell, and a bitter, pungent taste. It is a tonic,

Hyssop.

and is useful in asthma, and a favorite remedy in pulmonary complaints, entering largely into the composition of cough syrups and lozenges. Will thrive in any soil, but is stronger if grown on light, poor land.

Hyssop, (*Hyssopus officinalis*). Fr. *Hyssope*.—Ger. *Isop*.—A hardy perennial with an aromatic flavor, and warm, pungent taste. It is a stimulant and expectorant, and is used in asthma and chronic catarrh. The flowering summits and leaves are the parts used. It likes a dry, sandy soil, and the plants should be thinned to eighteen inches apart.

Lavender, (*Lavandula vera*). Fr. *Lavande*.—Ger. *Wohlrriechende spicke*.—A hardy perennial, cultivated for its fragrance. Its long flower spikes are used for the distillation of lavender water, or are dried and used to perfume linen. The flowers should be picked before fading, and quickly dried. The plants are hardy, and easily raised.

Pennyroyal, (*Hedeoma pulegioides*). Fr. *Pouliot*.—Ger. *Flochkraut*.—Small, branching annual herbs, common in gravelly stubble-fields. It has a warm, pungent, aromatic taste; and an infusion of its leaves is stimulating, causing perspiration, and is beneficial in colds and chills. Sow early in the spring, and when in flower, pull up by the roots and dry in the shade. This

Horehound.

Rue.

is quite distinct from the Pennyroyal of Europe (*Mentha pulegium*), but is the plant exclusively used and known by this name in America.

Rosemary, (*Rosemarinus officinalis*). Fr. *Romarin*.—Ger. *Rosmarin*.—A hardy perennial with fragrant odor, and a warm, aromatic, bitter taste. May be easily raised from seed, but does not reach a size fit for use until the second season. The dried leaves deteriorate rapidly by keeping.

Rue, (*Ruta graveolens*). Fr. *Rue*.—Ger. *Raute*.—A hardy perennial with a peculiar smell. The leaves are bitter, and so acrid as to blister the skin. It is a stimulant and anti-spasmodic, but must be used with great caution, as its use sometimes results in serious injury. It must not be suffered to run to seed, and does best on poor soil.

Saffron, (*Carthamus tinctorius*). Fr. *Saffran*.—Ger. *Saffran*.—A hardy annual from Egypt, but which has become naturalized in many parts of the country. Cultivated for its flowers, which are used in dyeing and to make the cosmetic powder called *rouge*, also, to adulterate the valuable European saffron, which is the flower of the *Crocus sativus*, and has strong medicinal properties. Sow early, and gather the flowers before fading, drying them in the shade.

Sage, (*Salvia officinalis*). Fr. *Sauge*.—Ger. *Salbey*.—A hardy perennial, possessing some medicinal properties, but cultivated principally for use as a condiment,

Saffron.

Sage.

Summer Savory.

it being used more extensively than any other herb for flavoring and dressing. Sow early in spring, on very rich ground, cultivate often, and thin the plants to sixteen inches apart. Cut the leaves and tender shoots just as the plant is coming into flower, and dry quickly in the shade. The plants will survive the winter, and may be divided, and will give a second crop of superior quality to the first.

Sweet Basil, (*Ocimum basilicum*). Fr. *Basilic*.—Ger. *Basilikum*.—A hardy annual from the East Indies. The seeds and stems are used in flavoring soups and sauces, and have the flavor of cloves.

Sweet Fennel, (*Foeniculum vulgare*). Fr. *Fenouil*.—Ger. *Fenchel*.—A hardy perennial. The leaves are largely used in Europe in soups, fish sauces, garnishes and salads, the seed being sometimes used in confectionery. Sow and cultivate like anise.

Sweet Marjoram, (*Origanum marjanna*). Fr. *Marjolaine*.—Ger. *Marjoram*.—A perennial plant, but not hardy enough to endure the winter at the north. The young, tender tops are used green for flavoring, or they may be dried for winter use. Sow in drills, as early as possible, and thin out the plants to ten inches. They will not bear transplanting.

Summer Savory, (*Satureja hortensis*). Fr. *Sarriette annuelle*.—Ger. *Bohnenkraut*.—A hardy annual, the dried stems, leaves and flowers of which are extensively used for flavoring, particularly in dressings and soups. Culture the same as that of Sweet Marjoram.

Tansy, (*Tanacetum vulgare*). Fr. *Tanaïsie*.—Ger. *Wurmkraut*.—A hardy perennial plant from Europe, but growing wild in many parts of the country. The leaves, when green, have a peculiar aromatic odor which they lose in drying. Cultivated for its medicinal properties, which are those common to bitter herbs.

Thyme, (*Thymus vulgaris*). Fr. *Thym*.—Ger. *Thymian*.—This herb is a perennial, and is both a medicinal and culinary plant. The young leaves and tops are used for soups, dressing and sauce, and a tea is made of the leaves, which is a great remedy in nervous headache. Sow as early as the ground will permit.

Wormwood, (*Artemisia absinthium*). Fr. *Armoise*.—Ger. *Wermuth*.—A perennial plant, of strong and fragrant odor, and aromatic, but intensely bitter taste. The leaves are used as a tonic and vermifuge, and also for fresh bruises. Is raised from seed, and propagated by cuttings or dividing the roots. A dry, poor soil is best adapted to bring out the peculiar virtues of this plant.

Sweet Basil.

Sweet Marjoram.

Thyme.

FRUIT TREE SEEDS.

Apple.—Apple seeds do not reproduce the same varieties, but generally give a hardy, though inferior sort, and upon these seedlings are grafted or budded the finer varieties. The seed may be planted in the fall, or at any time through the winter when the ground is sufficiently open, or they may be planted in early spring, but in that case the seed must first be mixed with damp

sand and frozen, after which care must be taken that they do not become dry before planting. The soil should be deep, rich and well prepared, and the seed sown quite thickly in rows two feet apart. As soon as the plants are up, they should be well cultivated, and every effort made to secure a vigorous growth the first season. If this is done, the plants will be large enough to set in nursery rows the next spring, but on poor ground, and under poor cultivation, they will require

two years' growth. They should be set in nursery rows three feet apart, the plants twelve inches apart in the row, and may be budded that summer or grafted the following spring, after which they will require from one to three years' growth before setting in the orchard.

Cherry, mazzard.—This is the stock used for standard trees. Success is much more certain if the seed is planted in the fall, as it is very difficult to keep it in good condition through winter. The general culture should be the same as for the apple, except that the plants should be budded the first summer after setting in nursery rows, as grafting them is difficult and uncertain.

Cherry, mahaleb.—Used as stocks when dwarf trees are wanted. Culture same as the above.

Pear.—Success will depend very largely upon having a deep, rich, moist soil, as this is essential to vigorous growth. Plant and cultivate like the apple, except that it generally takes two years to get them large enough to set in nursery rows, and at that time they should be cut back to the ground and budded (pears are seldom grafted) the same summer. Every effort should be made to secure a rapid and vigorous growth from the first.

Peach.—Plant three inches deep, in nursery rows three feet apart, in the fall, or if delayed until spring, crack the pits and plant the kernels only. They should be large enough to bud the first season, and may be profitably set in orchards two years from planting.

Quince.—Quinces generally produce the same variety from seed, but occasionally vary. The general culture, and requirements of soil are the same as for the pear, except that they are not budded.

FOREST TREE SEEDS.

Any one who has had experience, will admit that forest trees grown from seed in the nursery, transplant easier, grow faster, and are in every way superior to those taken from the woods. The seeds we offer are all those of rapidly growing species, and of easy culture, and by means of them any one can, in a few years, furnish his farm with an abundance of trees for shade or wind breaks.

Honey Locust, (*Gleditsia triacanthos*).—On account of its rapidity of growth and the value of its timber for fuel, posts, furniture, &c., we regard this as one of the most valuable of our native trees. It is not so liable to injury by the borer as the common locust, and does not sprout from the root to a greater extent than do most of our forest trees. Before planting, pour boiling water over the seed, and let it stand until cool, when a part of the seed will have swelled; pick these out and scald the rest again, and continue to do so until all have swollen. Without this preparation, the seed may lie from one to three years in the ground without sprouting. Take up and heal in or cover the plants in the fall, and set out the next spring. After the first season, they are perfectly hardy.

Black Locust, (*Robinia pseudacacia*).—This tree grows so rapidly that railroad ties may be cut ten years from the planting of the seed, while the durability of its timber is well known, fence posts of it having stood for sixty years. Culture same as the above.

Box Elder, (*Negunda aceroides*).—Grows very rapidly, specimens having been known to attain a diameter of six inches in seven years from the seed, and it is claimed that it will produce the largest amount of fuel in the shortest time of any of our hardy trees. Soak the seed before planting. For timber culture, mark out as corn, and open a hole for the tree by simply setting in the spade and pressing it to one side. Insert the young tree and press the earth firmly about its roots.

Hardy Catalpa, (*Catalpa speciosa*).—Quite distinct from, and much harder than, the common catalpa. Not only a rapidly growing timber tree, but one of the best for ornamental planting.

Soft Maple, (*Acer rubrum*).—Well known as a shade tree, and also extensively planted for timber. Soak the seed in tepid water until sprouted, and then plant in moist earth.

Scotch Pine, (*Pinus sylvestris*).—Very hardy, and growing surely and rapidly on nearly every variety of soil, forming a beautiful tree, and invaluable as a wind break. Prof. C. S. Sargent says: "It is the most valuable tree farmers can plant for screens and wind breaks about their fields and buildings."

Norway Spruce, (*Abies excelsa*).—Well known as one of our most beautiful evergreen trees. It is hardy, of rapid growth, and forms a dense, close screen, or hedge. Culture: The seeds of the evergreen trees should be kept dry until planted. In planting, prepare a bed four feet wide and as long as desired, raising it some four inches above the general surface. It should be made as fine and smooth as possible, and the seed planted in drills eight inches apart across it, the seed being covered one inch deep and the soil pressed firmly over them. Now prepare a frame or frames four feet wide, and to these nail lath two inches apart. This should be supported on stakes about eight inches above the bed, in such a way as to be easily removed to allow cultivation and weeding, and to shade the young plants, snail being essential to their growth.

Australian Blue Gum, or Fever Tree, (*Eucalyptus globulus*).—This wonderful tree is now being extensively planted in our Southern States, and in California, where it has become famous for draining damp soils, and destroying malaria. Prof. Bentley, in speaking of this tree for the Royal Horticultural Society in London, says: "The first and most important influence which the tree exerts, and that which has brought it more especially into notice, is its power of destroying the malarious agency which is supposed to cause fever in marshy districts, from which circumstance it has been called 'The Fever-destroying Tree.' It is in this respect commonly regarded as being serviceable in two ways—first, by the far spreading roots of this gigantic tree, acting like a sponge, as it were, and thus pumping up water and draining the ground; and secondly, by emitting odorous antiseptic emanations from its leaves." It is believed by many that when this tree has been extensively planted in the swampy and malarious districts in the Southern States, that they will be equally as healthy as any other portion of the country.

Eucalyptus Globulus.

HEDGE SEEDS.

Osage Orange, (*Machura aurantiaca*).—How to PLANT, CULTIVATE AND MAKE A HEDGE.—The Osage Orange is a native of Texas, but can be grown and cultivated advantageously in most parts of the United States. The ground should be thoroughly pulverized

by either plowing or spading, before the seed is planted. The surest way is to sprout the seed before planting, as it is very slow to germinate when put into the ground without being sprouted, sometimes taking a whole season to come up. To sprout the seed, put into a vessel and cover with warm water, *not hot*. Keep the vessel in a warm place, and change the water once a day. Let the seed soak about five or six days, after which pour off the water and cover the vessel with a damp cloth. Keep in a warm room and stir the seed occasionally. In about one week more they will begin to sprout, and are ready for planting. There are about ten thousand (10,000) seeds in a pound, and it is fair to presume one-half of them will grow, or that a pound will produce five thousand (5,000) plants if properly managed. The seed should be sown in April or May, with twelve good seeds to the foot, in drills twenty inches apart. They should be kept free from weeds, as the young plants are very tender and delicate until they get from three to five inches high. They can be set out in permanent hedges the following spring in rows, placing them six inches apart in the row, but should be cut back to within an inch of the ground before they are set out; and to make a thick hedge, it will be necessary to cut back the first three years' growth, leaving only about eight inches of the season's growth. This system must be pursued every season until the hedge is of the desired height and form. Under proper treatment, a good hedge that will turn all kinds of stock, can be grown from seed in from three to four years.

CLOVER SEEDS.

The soils best adapted to Clover are tenacious or stiff loams. It is a fertilizer, as its long, powerful tap roots loosen the soil, admit air, and when the roots decay, add largely to the black mass of earth. It helps destroy annual weeds by its luxuriant foliage, and by shading the surface of the soil, increases its fertility. Clover seed is sown in spring or fall, though there is a growing sentiment that the spring is a better season to sow it, especially in the Eastern, Western and Middle States, on account of its liability to freeze out during winter. It is often sown upon the late snows of March or April, and soon finds its way down to the soil, where, aided by the moisture of early spring, it quickly germinates, and rapidly shoots up its leaf stalks.

Mammoth, or Large Red Clover, *Trifolium pratense*.—This variety is the best for plowing under for manure. It grows five or six feet high, and its stalks are so coarse and large that stock will eat only the leaves. By its judicious use, lands which have been exhausted can be reclaimed, and unexhausted lands preserved. Green manuring has rarely or never failed of producing satisfactory results. Sow at the rate of about eight pounds per acre. Sixty pounds per bushel.

Medium Red, or June Clover, *Trifolium pratense*.—This is by far the most important of all the varieties for the practical purposes of agriculture. It is grown for hay culture, and for milch cows it is better than timothy, while it improves the lands on which it grows. It has become

an indispensable ingredient of all mixed grasses. Sow in spring or fall; and when no other grasses are used, at the rate of eight to ten pounds per acre, more being required on old, stiff soils, than on new and lighter ones. Sixty pounds per bushel.

Alsike, or Swedish Clover, (*Trifolium hybridum*).—This valuable variety is comparatively new, but is fast gaining great popularity. It is the most hardy of all the varieties, perennial, and absolutely refuses to winter kill; is alike capable of resisting the extremes of drought and wet. The roots are fibrous, the heads globular, resembling more the white than the red clover, with flesh-colored heads. It is very sweet and fragrant, being much liked by the Italian bees. On rich, moist land it yields an enormous quantity of hay or pasture, and may be mowed several times in a season. It is excellent for sowing on hill-sides or sloping lands that are liable to wash and gully, as it has a great mass of long, strong, fibrous roots which take firm, deep, and wide-spread hold into the soil, and prevent washing; farmers can hardly raise a better hay or forage crop. Sow in spring or fall, at the rate of six pounds per acre, where used alone. Sixty pounds per bushel.

Crimson Trefoil Clover

Crimson Trefoil, or Scarlet Italian Clover, (*Trifolium incarnatum*).—This is an annual variety, in common use in Italy and the south of France, for feeding green. Indeed, it may be said the stock in those countries is largely sustained during the summer months by this and a few other sorts. The yield in fodder is immense, and after cutting, it at once commences growing again, and continues till severe cold, freezing

White Dutch Clover.

weather. In warm climates, four or five cuttings are made during the season. It grows about one foot high; the roots are nearly black; leaves long; blossoms long, pointed, and of a very deep red, or carmine color. Makes good hay. Sow in April or May, eight pounds of seed per acre.

White Dutch Clover, (*Trifolium repens*).—A small, creeping, spreading, perennial variety, with white, very fragrant blossoms. Its chief value is as a pasture grass, for which purpose it is as valuable as the larger varieties for hay or soiling. It accommodates itself to a variety of soils, but prefers moist ground. In conjunction with blue grass, it forms the most nutritious food for sheep or cows. Sow in spring, at the rate of six pounds per acre, or when used with other grasses, half that amount will be sufficient.

Lucerne, or Alfalfa Clover, (*Medicago sativa*).—This is perhaps the most valuable variety for permeable subsoils, consisting of loam, sand or gravel, as its roots

penetrate to a great depth, far below the average of other plants. It is more difficult to establish the first year, requiring a fine, mellow soil, but will then produce a profitable crop from five to twelve years. It yields a prodigious amount of green fodder for cattle, and should be cut when first commencing to bloom. It is no sooner cut than it pushes out fresh shoots, and the after-growth is something wonderful. In the driest and most sultry weather, when every blade of grass withers, Lucerne is as fresh and green as in spring, because the roots go down to the moisture in the ground. It may be cut and used green, or cut and used like ordinary clover hay. Although such a prodigious yielder, it does not exhaust the soil, but rather improves it. It should not be sown on compact, clay soils, even with a light subsoil. It grows two to three feet high, and has purple blossoms.

One of our customers writes us from Utah as follows: "I have had years of experience, both here and in California. We always sow broadcast, twenty-five pounds per acre; the thicker it is sown the finer your hay will be. If it is planted thin, it stools out and the stalks are thick and not relished by stock. It requires no hoeing whatever when sown as above. We cut four crops a year, and its yield is enormous. The fall is the best time for sowing here—about the first of September. This gives it a good start, and it will stand the winter and do much better the following season than when sown in the spring. The above is my experience for fifteen years."

In some sections it is sown in the spring, in drills twelve inches apart. This process requires about eight pounds of seed per acre, and it can be hoed as soon as up, and after each cutting; it will completely cover the ground.

GRASS SEEDS.

Timothy, (*Phleum pratense*).—As a crop to cut for hay, this is probably unsurpassed by any grass in cultivation. Thrives best on moist loamy soils of medium tenacity, and is not suited to light sandy or gravelly soils. It should be cut just as the blossom falls. Sow either in spring or fall, at the rate of twelve pounds per acre, if alone, but less if mixed with other grasses. Forty-five pounds per bushel.

Orchard Grass, or Cock's Foot, (*Dactylis glom-*

Timothy.

Orchard Grass.

erata).—One of the most valuable of pasture grasses, on account of its quick growth and valuable aftermath. It is ready for grazing in spring two weeks sooner than most grasses, and when fed off is again ready for grazing in a week. It is palatable and nutritious, and stock eat it greedily when green. It stands a severe drought, keeping green when many grasses wither, and will endure considerable shade. It is less exhausting to the soil than timothy, and will grow more in one day, in summer, than timothy will in a week. When sown with clover, it makes excellent hay, as it blossoms at the same time, and they should be cut together. It has a tendency to grow in tufts, which can be prevented by close cropping. For grazing, it has no equal, and should be used more than it is. When sown alone, two bushels are required per acre; if sown with clover, half that amount. It ought not to be sown alone, except for seed. It is perennial, and will last for years, but its habit of growth unfits it for lawns. Fourteen pounds per bushel.

Red Top.

Fowl Meadow.

Red Top. (*Agrostis vulgaris*).—In some sections this is called **RUDD ISLAND BENT GRASS**. In Pennsylvania and States farther south, it is known as **HERD'S GRASS**, a name applied in New England and New York to timothy. It is a good, permanent grass, standing our climate well, and makes a good pasture when fed close. Is valuable for low, wet meadows, producing a large return in good hay. Is often sown with timothy and red clover, in which case it makes a close sward in time. When sown alone, two bushels per acre is required, sown in spring or fall. Fourteen pounds per bushel.

Fowl Meadow, or False Red Top, (*Poa serotina*).—Grows tall and thick, and makes a more pliable hay than timothy, and is more fit for pressing in bales, to ship. It yields well when sown on low, moist land, and will not suffer if not cut at the exact time. It can be mowed almost any time from July to October. When three feet high it falls down, or lodges, and after a little time every joint puts forth new branches. The stalk is always sweet and tender, and cattle and sheep are fond of it. It thrives best when mixed with other grasses. Though resembling red top in some respects, it is distinct, and we think superior in every respect. Requires about the same amount of seed per acre as red top, sown in spring or fall. Twelve pounds per bushel.

English Blue Grass, or Meadow Fescue, (*Festuca pratensis*).—This is one of the most valuable pasture grasses we are acquainted with, as its long and tender leaves are much relished by stock of all kinds. It succeeds well, even in a poor soil, and as its roots penetrate the earth twelve or fifteen inches, it is not affected except by exceedingly dry weather, and is as valuable a fertilizer as red clover. When cured like timothy, it yields a very superior quality of hay.

Notwithstanding its acknowledged merits, this grass has been sown only to a limited extent in this country. It is deserving of much more attention than it has hitherto received from American farmers.

Sow one bushel per acre, in spring or fall. September is the best season for sowing south of the Ohio river. Twenty-four pounds per bushel.

Kentucky Blue Grass, (*Poa pratensis*).—This is known in some sections as **GREEN MEADOW GRASS**, and **JUNE GRASS**, but should not be confounded with *Poa compressa*, called by some **JUNE GRASS**, or **WIRE GRASS**. It makes an excellent pasture grass for our soil and climate, succeeding finely on our hill lands, and producing the most nourishing food for cattle, retaining its qualities till a late period in winter, and further south affording abundant food throughout the winter. In conjunction with white clover, it forms the finest and closest of lawns; for this purpose, an extra quantity of seed should be used, say two bushels of blue grass and six pounds of white clover per acre. If sown by itself, two bushels will be required, sown early in the spring, or in October or November. Fourteen pounds per bushel.

Perennial Rye Grass, (*Lolium perenne*).—A very valuable variety for permanent pasture, and makes a large return in hay; very nutritious, and stock are very fond of it. Succeeds best on moderately moist land, for

Kentucky Blue Grass.

Perennial Rye Grass.

which it is peculiarly adapted. Large quantities are raised in England, and nearly all of Europe. It is also largely used for lawns, in conjunction with other grasses. One and a half to two bushels' per acre in the spring. Twenty pounds per bushel.

Wood Meadow Grass, (*Poa nemoralis*).—Grows from one and a half to two feet high; has a perennial, creeping root, and an erect, slender, smooth stem. Its chief value is in that it will produce a good crop of hay in moist, shady situations, where it frequently grows quite tall. Cattle are fond of it, it is succulent and nutritious, and is perhaps the best variety for sowing in orchards, under trees, and shaded situations, either for hay or pasturage, and for parks and pleasure grounds. About fourteen pounds per bushel. Two bushels per acre.

Sweet Vernal Grass, (*Anthoxanthum odoratum*).

Wood Meadow Grass.

Sweet Vernal Grass.

—One of the earliest of grasses in spring, as well as the latest in autumn, and about the only grass that is fragrant. As a pasture grass, mixed with other species, it is valuable on account of its earliness, and mixed with blue grass and white clover, it is an invaluable adjunct for lawns, presenting a beautiful appearance, and exhaling a delightful fragrance when in blossom. Should form a part of the mixed grasses in every lawn and door yard. About ten pounds per bushel.

Common Millet, (*Panicum miliaceum*).—Requires a dry, light, rich soil, and grows two and a half to four feet high, with a fine bulk of stalks and leaves, and is excellent for foraging. Sow in drills, or broadcast, from May 1st to June 20th, if for seed, or until the last of July, if for hay. For grain, sow in drills, one-quarter bushel per acre; if for hay, sow broadcast, one-half bushel per acre. Fifty pounds per bushel.

German, or Golden Millet.—An improved variety, medium early, growing three to five feet high. The heads are closely condensed, though the spikes are very numerous. The seeds are contained in rough, bristly sheaths, and are round, golden yellow, and beautiful in appearance. Though this variety has been in cultivation some three or four years, we have never heard a single complaint about it.

Egyptian, or Pearl Millet.

Egyptian, or Pearl Millet, (*Penicillaria spicata*).—This is perhaps the most wonderful forage plant that has ever been introduced. Four years ago it was very generally distributed and planted for test purposes, especially in the Southern States. The general summing up of reports appears to be that it requires a longer and hotter season than we usually have in the north, to fully mature, though some seasons are so warm that it succeeds admirably in Maine. The *Rural New Yorker* publishes its experience with pearl millet on its trial grounds. From a single seed, fifty-two stalks

are produced, weighing forty-two and a half pounds. The highest stalk was ten feet one inch, and the circumference of the plant was thirteen feet nine inches three feet from the ground. Several plants were cut August 1st, and the subsequent growth was nine pounds per plant, making over fifty pounds of green fodder from a single seed. When the plant first comes up, the stems are prostrate, but assume an upright position when two feet long. Stock eat it with great avidity. In the south, it can be cut three or four times, sprouting readily and growing rapidly after each cutting. It should be sown in drills, dropping about two or three seeds two feet apart in the drill; the drills should be three feet apart, as plenty of room is required for its growth. Two pounds of seed is sufficient for an acre.

Hungarian Grass, (*Panicum Germanicum*).—This is a species of millet, growing less rank, with smaller stalks, often yielding two or three tons of hay per acre. It is very popular and valuable with those who are clearing timberlands. Like the millet, it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow and cultivate like millet. Forty-eight pounds per bushel.

Fine Mixed Lawn Grass.—The essentials for a fine lawn are proper drainage, a careful preparation of the soil, thorough rolling, and a selection of the seeds of such

Hungarian Grass. grasses as will present a luxuriant verdure from early spring till late in autumn; and then frequent mowings with a lawn mower. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. We have found the **CHARTER OAK LAWN MOWER** the best for cutting lawns. Too much care cannot be bestowed however on the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sorts is required for a perfect, carpet-like lawn. These we can supply ready mixed, in proper proportions of each. The quantity sown varies according to the variety of grasses from forty to sixty pounds per acre, much more being required than for hay or pasture. The seed can be sown in spring or autumn.

Flint's Extra Fine Mixed Lawn Grass, FOR PERMANENT LAWNS.—This mixture is the result of much thought and experimenting, and is undoubtedly the very best mixture that can be obtained for permanent lawns, resisting the severe droughts of our climate better than any other. The mixture is composed of sixteen selected grasses, and the quantity required per acre is sixty pounds, sown in spring or fall. Though a little more expensive at the outset, it will undoubtedly be found the cheapest in the end, and it can hardly fail to please the most critical.

MISCELLANEOUS FARM SEEDS

WINTER WHEAT.

It is an encouraging fact that our farmers are beginning to appreciate the importance not only of good seed grain, but of selecting the variety best adapted to their farm and methods of culture, and as a result we now have a score or more of new varieties of winter wheat, each claiming to be the best. Realizing the importance of the subject, we have, during the past summer, made most careful inquiries concerning these new sorts, and

now have growing on our trial grounds, samples of over thirty varieties. We have also made arrangement to have the most promising sorts tested by skillful farmers of our own and adjoining States. We hope by this means to be able to offer our customers in the fall of 1882 the best seed grains procurable in this country, and ask that any one who may wish choice seed wheat, to correspond with us. The following varieties are at present the most popular sorts:

Clawson.—A bald, white, winter variety, and one of the best yielders; medium length berry, very hardy, and liberal yielder.

Fultz.—A superior amber variety, well known and much esteemed in Pennsylvania and eastern Ohio. Berry round and reddish-yellow, chaff white. This variety, though not yielding so abundantly as the Clawson, is a good cropper, and is a desirable kind for millers' purposes.

SPRING WHEAT.

White Russian.—The White Russian, introduced by us in 1879, is a bald, white chaff wheat, of a much lighter color than most varieties of spring wheat. The straw is long, strong, healthy, and stands upright several days after ripening. The heads are long, open, well filled, the variety frequently yielding a good crop where other sorts are a complete failure. All who have tried it are more than satisfied, and it is rapidly becoming the standard spring wheat of the United States.

Barley, Common.—Barley succeeds best on lands more sandy and lighter than those adapted for wheat. It is sown in the spring, and can be grown farther north than any other grain. Unless intended for seed, it should be cut before fully ripe, as it is then heavier, of better quality, and less liable to shell. The land should always be rolled immediately after sowing; or perhaps a better method is to roll the ground when the plants are one or two inches high. The quantity of seed sown per acre is about two and a half bushels, sown broadcast. The weight per bushel is forty-eight pounds, though it is almost always sold by the 100 pounds. The product is from forty to sixty bushels per acre, according to cultivation.

Barley, Naked, or Hulless.—This is a peculiar grain, and not generally known. The corolla is not attached to the grain, and it thus resembles wheat. It is a splendid grain for all purposes for which barley is used, and will make excellent bread when bolted and ground like wheat, while the yield is much greater than wheat, and fully equal to common barley. Nothing can surpass this grain for grinding into meal for stock, as it produces from forty to sixty bushels of solid grain per acre, and is a very certain crop.

Russian White Oats.—In the summer of 1880 we found that a number of farmers in different sections of the country were growing what they called the Russian White Oats, which they assured us was not only a new and distinct variety, but decidedly superior to any other sort, giving immense crops of grain of the finest quality in places where other varieties are a complete failure; after, by careful investigation, we had assured ourselves that its claims of superiority were well founded, we secured a stock and distributed it in nearly every state in the Union. During the summer of 1881 we were told that what we had sent out as Russian White Oats were not new, but identical with a sort which had been cultivated to some extent for several years in certain parts of Canada under the name of White Australian, or New Zealand Oats. We immediately took a good deal of pains to examine crops of this variety, and found that they resembled the Russian Oats so nearly that it is quite possible they may originally have come from the

same stock; but we were unable to find any stocks of them which were at all equal in purity, vigor or productiveness to our stock of *Russian White Oats*, and some of our most careful experimenters, who have planted the two side by side, declare they are quite distinct. It is with renewed confidence then, that we offer our stock of *Russian White Oats* as decidedly the hardest, most productive and best oats now grown in America, and earnestly urge every farmer who has not already done so, to secure seed at once. From every part of the United States comes the unanimous report that they out-yield and are in every way superior to any sort previously cultivated.

The Russian White Oats are prolific without parallel, and with ordinary cultivation will yield 100 bushels per acre. They are extremely hardy, enduring the coldest climate in our country without injury, and are absolutely rust proof. The straw is large and strong enough to support the enormous heads of this variety. The grain is heavy and the chaff light, so that a measured bushel weighs considerably more than a bushel of ordinary oats. All things considered, this is the most valuable variety of oats now grown, and is destined, when known more widely, to become the standard sort.

Bohemian Hulless Oats.—A comparatively new variety, lately introduced into this country. Will yield from fifty to sixty-five bushels per acre. Do not shell out while ripening, or while being harvested. The berry comes from the head clean, and without chaff adhering, and is larger and fuller than ordinary oats. Certainly a great acquisition to the farmer.

Rye.—The time for sowing is from the middle of August to last of September. One plowing is given, and the seed sown broadcast, at the rate of one and a half bushels per acre, and dragged in. Harrowing and rolling in the spring are recommended. Cut before fully ripe, the grain makes better flour and more in quantity. If intended for seed, it should be fully ripe. Some sow rye among standing corn hoeing it in, leaving the ground level as possible, and after the corn is removed, rolling the ground. It succeeds best on sandy soils. It is frequently sown in the spring, but the fall seems to be preferable.

Buckwheat, Common.—Buckwheat should be sown about the 20th of June, broadcast, at the rate of from one to three pecks per acre. The average yield is from twenty-five to thirty bushels per acre. It should be threshed as soon as dry, on the ground or barn floor. If allowed to stand in mass, it quickly gathers moisture.

Buckwheat, Silver Husk.—This improved variety is said to be much better than the old sort. It is in bloom longer, matures sooner, and yields double the quantity per acre. The husk is thinner, the corners less prominent, and the grain of a beautiful light grey color. The flour is said to be better and more nutritious.

Field Peas, (*Pisum sativum*).—The varieties of field peas have never been very numerous, nor are they much increasing. The kinds mostly used are the Golden Vine, Crown, Blue Prussian, Common White, Common Blue and Creeper. Field peas, in general, may be sown broadcast or in drills, after the manner of field beans, about three bushels per acre.

Spring Vetches, or Tares, (*Vicia sativa*).—A species of the pea, grown extensively in England, and to a considerable extent in Canada, for stock, but not much used in the States. Culture same as field peas, two bushels per acre.

Flax, (*Linum usitatissimum*).—Sow late enough in the spring to avoid frost; and early enough to secure the early rains. A fair average quantity of seed to be sown on an acre is one-half bushel, when cultivated for seed; if for the fibre, a larger quantity should be sown. Cut

before quite ripe, and, if the weather be dry, let it lie in the swath a few hours, when it should be raked, bound and secured from the weather; thresh early in the fall, and in dry weather.

Hemp, (*Cannabis sativa*).—If raised for manufacturing, must be sown broadcast, at the rate of one-half bushel to the acre; if for seed, should be planted in hills four feet apart, and the plants thinned out to three or four most vigorous stems in each hill.

BIRD SEEDS.

' **anary Seed**, (*Phalaris canariensis*).
femp Seed, (*Cannabis sativa*).
Maw, (*Papaver rhæas*).
Millet Seed, (*Panicum miliaceum*).
Rape Seed, (*Brassica napæ*).
Lettuce Seed, (*Lactuca sativa*).

FLOWER SEEDS.

BRIEF HINTS ON SOWING AND CULTIVATING.

SELECTION OF VARIETIES.—Success in flower culture depends quite largely upon a judicious selection of varieties. Every sort we offer is, under certain conditions, attractive and desirable, but some of them, while exceedingly beautiful under favorable circumstances, will be most unsatisfactory and little better than weeds under others; we therefore urge our friends to carefully study the following pages before ordering, that they may select the sorts best suited to their wants.

THE SOIL.—Another great object to be considered is the soil into which flower seeds are to be sown. The soil best adapted to flowering plants generally, is a light, friable loam, containing a sufficient amount of sand to render it porous. A great many varieties will *live* in almost any kind of soil, except it be extremely dry, calcareous, or of a stiff, heavy character; still, to give them a fair chance for development, some little pains should be taken in adding to the soil, as much as possible, what may be wanting in it. Most flowers are better if produced on plants of most vigorous growth, so the greater portion of the garden should be prepared by deep digging, thorough pulverization, and liberal enriching with large quantities of *well rotted* manure. On the other hand, some sorts do best on very poor soil, so a portion of the garden should be left without enriching at all. As the process of germination is shorter or longer in the different kinds of seeds, the patience of the cultivator is often sorely tried with seeds of a slowly germinating character; the patience of a devoted florist, however, is never exhausted in these manipulations, and the certainty of his final success repays him fully for the trouble.

SOWING THE SEED.—Nine-tenths of the failures in flower culture come from improper treatment of the seeds and young plants, and we urge every purchaser of our seeds to carefully study the cultural directions printed on each package, and the following general rules:

Do not plant any of the seeds when the ground is wet. Make the surface as fine and smooth as possible.

Cover each sort of seed to a depth proportionate to its size; the finest, like portulaca, not more than one-quarter inch deep, those the size of a pin head one-half inch, and those as big as a pea one inch.

Press the soil down firmly over the seed. After making the soil as fine as possible with the rake, make it, for the smaller seeds, still finer, by crumbling the lumps up in the hands.

Procure a bit of lath (it would be better if planed smooth) about two feet long, press the edge down into the soil evenly, so as to make a groove as deep as the seed is to be planted; scatter the seed along this, allowing four or five of the larger to fifteen or twenty of the smaller seeds to the space one plant is to occupy when grown. *Take care not to spill any of the seeds between the rows.* Cover the seed by pinching the earth together over it, then turn your lath flat-ways, and *press the soil down firmly and evenly.*

Put a little stick at each end of each row, so as to mark it; then *pull up all weeds* that appear between the rows the first day they can be seen. Do not pull plants out of the row unless you are sure they are weeds.

All flowers raised from seed are usually known as Annuals, Biennials, or Perennials.

Annuals are those plants which flower or ripen their seeds or fruits the season they are sown, and then perish. This class of plants is again divided by the cultivator into two classes—the hardy, and half-hardy or tender kinds.

HARDY ANNUALS are those which require no artificial heat at any period of their growth, every stage of their development from germination to ripening of the seed, being passed in the open ground.

They are the most easily cultivated of all plants; the number of their varieties is large, and their flowers, when properly grown, are frequently of most attractive beauty and elegance. It is only to be regretted that they are not generally cultivated to that extent to which their merit justly entitles them. The seed may be sown from the first of April to the middle of June, along the border, in little patches four or six inches square, or in drills, on the spot where they are wanted to blossom; and in doing so, care should be taken to have the different varieties arranged in such a manner as to produce a pleasing effect when they are in bloom.

HALF-HARDY ANNUALS are those species that flower and ripen their seeds in the open air, but need the assistance of artificial heat in the earlier stages of their growth. They should be sown in a hot-bed, or in pots in a green-house, if one is available, or in a sunny window. Keep them well shaded, which will prevent absorption by the rays of the sun, and the consequent necessity of frequent watering, which bakes the soil, and does much mischief to seeds of slow growth. Towards the middle or end of May, many of the seedlings will be ready for transplanting to borders; but previous to this exposure, it will be necessary to harden them, preparatory to removal, by gradually admitting air to the frame both day and night.

BIENNIALS AND PERENNIALS.—Biennials are those plants that do not generally flower the first year, and are only in perfection one season. Perennials continue to flower several years in succession. The seed may be sown as has already been stated, at times when the ground is moist, but not very wet, from the first of April to August. Many of them may be raised in the open ground, like hardy annuals, and transplanted; but ter

der or half-hardy kinds should be sown as directed for half-hardy annuals. As they do not generally bloom the first year, they may be thinned out or removed from the seed bed as soon as they are well rooted, and planted either in different parts of the garden, or into nursery beds, in rows a foot apart. The half-hardy or tender biennials must be kept during winter in a green house or dry cellar, and tender perennials must be protected from frost by a cloth or mat being fastened or tied around them, and covered afterwards with leaves or litter.

BRIEF DIRECTIONS FOR SOWING are printed on the different seed packages: still, to render success more certain, a careful observance of the above directions, which are based on the practical experience of growers, will be found of great benefit to inexperienced florists.

HOT-BED CULTURE.—Many varieties of flowers can scarcely be brought to perfection without the assistance of hot-bed or cold-frame, and much care is often necessary in transplanting, sheltering, and pricking out the young plants. It is a work that requires much experience, and no doubt many disappointments will naturally occur. Still, a hot-bed is a necessity, without the aid of which many of our choicest and most beautiful flowers cannot be successfully grown. Experience is a rapid teacher, and the lover of flowers is an apt scholar.

Planting in Frame where little Air is given.

Seedlings under Glass Bell, tilted with Pot Hook.

DESIGNS FOR FLOWER BEDS.

TERMS OF FLOWER SEEDS.

Until recently it was our custom to have a uniform price for all varieties of Flower Seeds, viz: ten cents per packet, or one dollar per dozen packets. As the value of nearly every commodity has been reduced, ten cents per packet is too high for the ordinary varieties which are used by the majority of the people, and we have accordingly reduced these to five cents; again, there are many expensive green-house sorts, used by florists and others, in which, when sold at ten cents per packet, there are not enough seeds to supply their wants. We have therefore adopted a scale of prices in accordance with the cost and value of the seeds, and hereafter each variety will be priced. We shall fill the packets with a liberal quantity of good, new seed, imported from the largest, the oldest, and most experienced seed growers in Germany, France, England, &c., and we believe that when *quality* and *quantity* are considered, our *prices* will be found to *compare favorably* with those of any *reliable seedsmen* in this country. The packets will be tastefully put up, most of them having a colored illustration of the flower printed or lithographed on the paper.

CLUBS.—In every community there can usually be found some lady who is extremely fond of flowers. Her neighbors look to her for assistance in procuring seeds, and instructions in cultivating. Her advice is nearly always gratuitous, for it is a pleasure to her to assist in cultivating a taste for the beautiful; but in order to encourage the growing of flowers, and as a slight compensation for such service, we have arranged the *following premium list, which applies to Flower Seeds in PACKETS ONLY, and at CATALOGUE PRICES, and not to seeds in bulk* :—

Send us \$1.00, and select packets to the value of \$1.15	Send us \$5.00, and select packets to the value of \$6.15
" 2.00, " " " " 2.35	" 10.00, " " " " 12.50
" 3.00, " " " " 3.60	" 20.00, " " " " 26.00
" 4.00, " " " " 4.85	

SEEDS BY MAIL.—At catalogue prices, all Flower Seeds will be sent by mail, *post paid*, unless otherwise ordered.

REMITTANCES.—Remittances may be made by Post Office Order, Draft on New York, by Express, or by Registered Letter, but P. O. Order is preferable. When the amount is small, say one or two dollars, the currency can usually be sent safely with the order.

SIGN YOUR NAME.—In sending for seeds by mail, please use our order sheet and envelope, and *give your Name, Post Office, County and State*, and write every letter so plainly that there can be no mistaking it. It is surprising how many fail to comply with above instructions, and then blame us for not receiving their seeds promptly.

The Cash must ALWAYS be sent with the Order.

OUR COLLECTIONS FOR 1882.

(SEE COLORED PLATES.)

Many persons are not familiar with the varieties of Vegetables and Flowers, and often ask our assistance to make a judicious selection. We have therefore made a few careful selections of Vegetable and Flower Seeds, with a view of enabling any one to reap the best possible results. They are four in number, and are represented by the *Four Colored Plates* in this Seed Annual.

Collection No. 1 represents twelve standard varieties of Vegetables, each variety the best of its species. It is the finest possible selection for small gardens, where space is limited.

Collection No. 2 represents a very choice assortment of twelve Annual Flowers for small yards or gardens. They will afford a regular succession of bloom, as well as an abundance of cut flowers the whole season. They are selected with especial reference to making the finest display of bloom at the least expense, and they will

succeed with only ordinary culture, and in almost any soil.

Collection No. 3 represents nine choicest varieties of Pansies. These flowers are such universal favorites that they will commend themselves to all.

Collection No. 4 represents six of the most popular hardy Perennials for out-door culture, blooming for several years in succession in open border, and six of the most beautiful tender Perennials for pot culture in the parlor or green-house.

The above collections will all be sent by mail, *post paid*, on receipt of price:

Collection No. 1, amounting to 60 cents.	sent on receipt of 50 cents.
" 2, " 90 "	" " 75 "
" 3, " \$1.35	" " \$1.00
" 4, " 2.15	" " 1.50
The four collections " 5.00	" " 3.50

Collection No. 4 may be divided, and we will send the six hardy Perennials, amounting to 85 cents, on receipt of 60 cents; or the six tender Perennials, amounting to \$1.30, on receipt of \$1.00.

Any single variety in these collections will be sent at catalogue price.

COLLECTION N^o 2.

CONSISTING OF TWELVE MOST POPULAR ANNUAL FLOWERS.

PORTULACA.
Fine Mixed, Price 5 Cts.

PETUNIA.
Choicest Mixed, Price 15 Cts

ASTER.
Mixed Peony Flowered, Price 10 Cts

PHLOX DRUMMONDII.
Extra Choice, Mixed, Price 10 Cts.

AMARANTHUS.
Joseph's Coat, Price 5 Cts.

ALYSSUM.
Sweet, Price 5 Cts.

BALSAM.
Double Solferino, Price 10 Cts.

SWEET MIGNONETTE.
Price 5 Cts.

CANDYTUFFT.
Fine Mixed, Price 5 Cts.

CYPRESS VINE.
Mixed, Price 5 Cts.

SWEET PEAS.
Price 5 Cts.

PINK.
Hedderwig's Double, Price 10 Cts

THE WHOLE SET AMOUNTING TO 90 Cts. FOR 75 Cts.
THE ABOVE SELECTION IS ENOUGH FOR ANY SMALL YARD OR GARDEN AND WILL BE
FOUND VERY VALUABLE.

CATALOGUE OF CHOICE IMPORTED FLOWER SEEDS.

The figures at the right of the column show the price of a packet of seeds. Thus, 5 is five cents per packet; 10 is ten cents per packet, &c.

ABOBRA.

A rapid growing and very beautiful climbing gourd. Foliage delicate and of a very dark green; fruit oval and bright scarlet, forming a striking contrast with the glossy foliage. Half-hardy perennial. Start in hot-bed. *Abobra, viridifolia*.....10

ABRONIA.

Abonia.

husky covering, which remove before planting, and transplant to one foot apart. Half-hardy annual. Start under glass.

- Abonia, umbellata*, delicate lilac, white center. ...10
 " *arenaria*, waxy-yellow; fragrant.....10
 " mixed, above mixed.....10

ABUTILON.

Very popular, perennial, green-house shrub, with bell-shaped, drooping flowers, which are borne in profusion nearly the entire year. Well adapted to house culture, and desirable for bedding out in the summer. There are several varieties, the flowers of which vary from pure white and yellow to deep orange and crimson streaked with yellow. Can be propagated by cuttings, in sand, under glass, during summer. If seeds are sown

Abutilon

Charming trailer, with verbenalike flowers; leaves light green, of long, oval shape; the stem is fleshy, lying prostrate on the ground. May be trained to sticks or left to its natural mode of growth. Very fragrant, and a long time in bloom. The seeds are enclosed in a

before April, under glass, plant will bloom the first season.

Abutilon, finest mixed..... 25

ACROCLINIUM—(Everlasting).

Very pretty half-hardy annual from Swan River, with rose and white daisy-like flowers. These are "Immortelles," which bloom in August and September, and are a fine acquisition for winter bouquets and wreaths. The flowers should be gathered for drying when partially opened. They grow about one foot high, and should be planted four inches apart.

- Acroclinium, album*, pure white. 5
 " *roseum*, light rose; good for mixing.. 5

ADLUMIA—(Climbing Fumitory).

A most beautiful and graceful climber, thriving in a sheltered situation, and clinging by its numerous tendrils to any object within its reach. It is sometimes known as Mountain Fringe, Wood Fringe, and Alleghany Vine. The beautiful pink and white flowers are produced in abundance during the three summer months. It is biennial, and makes but little growth the first season. Sow the seed in April, and the following autumn transplant to the place where they are to blossom. Hardy biennial climber; fifteen feet high.

Adlumia, cirrhosa, white and pink10

ADONIS FLOWER.

Known as Pheasant's Eye. The flowers are very brilliant but not very freely produced. The foliage is pretty, delicate, and many parted. It will grow readily in a shaded place under a tree or by the fence, and requires no extra care in planting or cultivating. Hardy annual; one foot high.

Adonis, autumnalis, dark blood red..... 5

AGERATUM.

A valuable plant on account of the length of time it remains in bloom, and for contrast of color with the more brilliant varieties. It blooms constantly all summer in the garden, and if removed to the green-house, all winter. Desirable for cut flowers for bouquets. Grows one and a half feet high, and the plants should stand two feet apart. Colors light blue and pure white. Start the seeds under glass, and transplant. Hardy annual.

Acroclinium.

Adlumia.

Adonis.

Ageratum.

Alonsoa.

- Ageratum, Mexicanum**, light blue..... 5
 " **Imperial dwarf white**, *new*..... 5
 " **Tom Thumb, dwarf blue**, *distinct variety*;
 desirable for edging..... 5
 " **Lasseauxii, rose colored**..... 10
 " **conspicuum**, valuable for winter; white..... 5
 " **mixed**, seeds of the above varieties mixed..... 5

AGROSTEMMA.

Perfectly hardy plants, producing pretty, pink-like blossoms on long, slender stems. Very useful for cutting for bouquets, and pretty in masses, in beds. The annual variety is known as *Rose of Heaven*; the perennial as *Rose Campion*. About one and a half feet high.

- Agrostemma, coronaria**, crimson; perennial..... 5
 " **cœli rosa**, rose, white center; annual..... 5

AGROSTIS—(Ornamental Grass).

A hardy, ornamental grass, much used in connection with everlastings, for winter bouquets. Grows easily in any common garden soil. Hardy annual; about one and a half feet high.

- Agrostis, nebulosa**,
 fine and delicate..... 10
 " **pulchella**, ex-
 ceedingly graceful..... 10

Agrostis.

ceedingly graceful..... 10

Agrostemma.

Alyssum, sweet.

Amaranthus, tricolor.

ALONSOA.

Showy plants, and fine for mixed beds. The flowers are remarkably brilliant, and are scarcely equaled among the crimson and scarlet flowers. Properly green-house plants, but bloom finely in open ground when treated as tender annuals. Grow from one and a half to two feet high. Plants removed to green-house in autumn, will bloom all winter.

- Alonsoa, grandiflora**, deep scarlet..... 5
 " **Warszewiczii**, bright crimson..... 5
 " **mixed**, seeds of the above varieties mixed..... 5

ALYSSUM.

- Alyssum, sweet (maritimum)**. A desirable hardy annual, flowering from early spring till killed by frost, and all winter in the green-house, if sown in August. Flowers pure white, in racemes, and of a peculiar delicate fragrance. Most effective in masses, with plants one foot apart. Useful in all kinds of small bouquets. Grows one foot high..... 5
 " **golden (saxatile)**. Flowers brilliant golden yellow, completely hiding the foliage. Plants about one foot high; desirable for rock work, and quite showy in masses. Hardy perennial. 5

AMARANTHUS.

Valuable for its varieties of handsome foliage, whether grown in the conservatory or garden. The colors will be more brilliant if planted in moderately rich soil.

- Amaranthus, melancholicus ruber**, beautiful, blood red foliage, suitable for masses or edgings. Hardy annual; two and a half feet high. 7

Amaranthus, Salicifolius.

A. Henderi.

Anagallis.

- Amaranthus, tricolor**, leaves yellow, red and green; well known as "Joseph's Coat." Very showy in beds alone. Hardy annual; two feet high 5
- " **bicolor olbiensis**, dark purple foliage, edged at the terminals with bright crimson; handsome specimens for mixed borders. Four feet high.....10
- " **atropurpureus**, a most remarkable and grand variety from Calcutta, growing five feet high, and producing long spikes of rich purple bloom.....10
- " **salicifolius**, two and a half to three feet high, pyramidal in form, branching close to the ground. Leaves beautifully undulated, varying from green to bronze, and later to a bright orange-red color, forming magnificent, bright colored plumes, which give the plants an elegant appearance.....10
- " **Henderi**, a splendid novelty of 1877; beautiful, drooping foliage, richly colored in many shades.....10

AMMOBIUM—(Everlasting).

One of the hardiest of everlastings, and desirable for the garden, but more valuable for forming winter bouquets in connection with grasses and other everlastings. Grows two feet high. The stems are stiff and angular, and have a curious winged attachment. The flowers are rather small, pure white, and should be gathered before fully opened, to preserve for winter. Hardy annual.

Ammobium, alatum..... 5

ANAGALLIS.

Interesting plants of easy culture, and remarkable for the beauty of their flowers. Even the wild variety, known as Pimpernel, or Poor Man's Weather Glass, is exceedingly pretty. They are well adapted for rock work or border plants. Planted under glass and transplanted into light, rich soil, in a sunny situation, they will cover the ground all summer with a profusion of bright, rich colored flowers. Half-hardy annual; about six inches high.

- Anagallis, grandiflora, Garibaldi**, vermilion.....10
- " **grandiflora, Eugenie**, light blue, shaded white.....10
- " **Napoleon III**, rich crimson maroon.....10
- " **mixed**, above mixed.....10

ANTIRRHINUM—(See Snapdragon).**AQUILIGIA—(See Columbine).**

.Argemone.

ARGEMONE.

Free blooming plants, sometimes called Prickly Poppy. The flowers are large, brilliant, and resemble the single poppy. The leaves are armed with slender prickles, and marked with white stripes, and are rather pretty. They should, however, occupy an inconspicuous position in the back-ground. Hardy annual; two feet high.

- Argemone, grandiflora**, white; large..... 5
- " **Mexicana**, bright yellow..... 5
- " **Hunnemanni**, carmine and yellow..... 5
- " **mixed**, all best colors..... 5

Aster, peony-flowered.

Aster, Imbricated Pompon.

A. Victoria.

A. Betteridge's Choice.

ASPERULA.

A profuse blooming annual of dwarf habit, only attaining a height of twelve inches. Flowers sweet scented, produced in clusters and of a delicate, lavender blue color. Very beautiful in bouquets, and entirely hardy.

Asperula, azurea retosa..... 5

ASTER.

No family of plants bears such distinct marks of progress as the Aster, and none are more eagerly sought. An almost endless variety, always reliable, it is not strange that they should become a necessity. The kinds found in the flower garden are usually French or German, and when circumstances for their growth are favorable, present a constant varying succession of blossom till frost comes. The taller varieties should be supported by stakes or trellis. The seed should be sown early in spring, and the young plants transplanted from one to two feet apart, according to the height and size.

Aster, Truffaut's peony-flowered, very large flowers, brilliant in color and unsurpassed in habit of plant. One and a half feet high. *Twelve colors mixed*.....10

" *Truffaut's peony-flowered, Perfection*. The highest and most perfect type of this class. Seed saved from the perfect of Mr. Truffaut's magnificent strain. One and a half feet high. *Twelve distinct and brilliant colors mixed*. 15

" *mixed peony-flowered*. The flowers of this variety are remarkable for their perfect form and immense size, being four or five inches in diameter, oval in shape, not showing an open center till the last stages of growth, on account of the many closely set reflexed petals. The colors run through *twelve shades*. Two feet high.....10

" *Imbricated Pompon*, the flowers are of very perfect form, so double as to appear a sphere, and densely imbricated. Plants are of pyramidal growth, and about one and a half feet high. *Twelve distinct colors mixed*.....10

" *mixed Victoria*, one of the most beautiful asters in cultivation. Flowers very large, globular in form, and beautifully imbricated. Plants of pyramidal growth, about two feet high, and a single plant will often produce ten to twenty perfect flowers. *Thirty distinct colors mixed*.....15

" *mixed rose-flowered*, flowers large, brilliant, very double, and regularly imbricated; they are oval in form, and somewhat resemble a double rose. Plants one and a half feet high. *Fifteen colors mixed. One of the very best sorts*. 15

Aster, mixed Dwarf Pyramidal Bouquet, a magnificent dwarf variety, about one foot high. When well grown, a single plant forms a complete bouquet of pyramidal shape, and covers itself with blossoms, often numbering 150 to 200 flowers, and entirely hiding the foliage. Fine for edging and small beds. *Six distinct colors mixed*.....10

" *mixed dwarf chrysanthemum*, a dwarf variety, growing only about ten inches high; is also late, and valuable for succession. The flowers are very large, three or four inches in diameter, and freely produced. A single plant is a bouquet of itself. *There are twenty-five distinct colors mixed*..... 15

" *Porcupine, or Hedgehog*, the distinguishing feature of this variety is the quills, or sharply pointed petals. The flowers are very curious in appearance, and quite showy. Plants grow about two feet high. *Twelve distinct colors mixed*.....10

" *Reid's Improved Quilled*, remarkable for the globular form of its singular flowers. The single petals consist of tubes or quills, and the outer courses are blossom petals, which are slightly reflexed. Plants are one and a half to two feet high, and there are *eight distinct colors mixed*..... 10

" *mixed German Quilled*, very double, of oval form; the petals have the appearance of quills or tubes; the outer ring is sometimes slightly reflexed, so as to form a sort of guard petal. The colors run through *twelve shades*. Flowers large, brilliant, and freely produced. One and a half to two feet high..... 5

" *new dwarf Bouquet, (Boltz)* about eight inches high, very constant in height and habit of plant, which is a valuable quality. Extremely pretty, and flowers freely. *Six splendid sorts mixed*.....10

" *Betteridge's Choice*, this celebrated strain of quilled asters has been brought to perfection by Mr. Betteridge, and has taken *ten first class prizes. Fifteen colors mixed*.....10

" *Giant Emperor, snowy white* flowers, very double, of enormous size, and good form. Good for bouquets; two feet.....10

" *Mont Rose, splendid variety*, with flowers of a charming *peach color*. The blossoms are freely produced, of enormous size, and most perfect form. Plants of robust, branching habit.....20

" *Mont Blanc*, similar to the Mont Rose, but having enormous white flowers.....20

Aster, Dwarf Pyramidal Bouquet.

A Hedgehog.

Auricula.

- Aster, new Washington**, a new, remarkably large variety, exceeding all the other varieties in size, frequently measuring five to six inches across the blossom, of robust growth, and most perfect in form and color. The colors are very delicate, and run through various shades. A valuable acquisition.....20
- " **new crimson**, an *entirely new variety*; very brilliant and conspicuous. Its extremely large blossoms are valuable for florists; of same type and habit as Mont Rose.....25
- " **newest Bismarck**, in growth, like the Dwarf Pyramid, with dark foliage. The flowers have a peculiar shining lustre, and are of various colors.....20
- " **newest Shakespeare**, a new, dwarf aster of wondrous beauty. The plants form a compact bush of ten or twelve inches in diameter, and six inches high. Flowers extra double, and well imbricated. Extremely full blooming and keeps in flower till frost comes. *Twelve colors mixed*.....20
- " **Trophy**, plants twenty inches high, very hardy, regularly branched, forming fine, self-supporting, globular bushes, studded with beautifully imbricated, symmetrically formed, perfectly double, globular flowers of exquisite beauty. Extremely showy. *Twelve colors mixed*.....25
- " **Diamond**, a *novelty of the highest merit*, especially recommended by the floral committee of the London Horticultural Society, of London, last autumn. Plants eighteen inches high, with very large flowers of the greatest perfection; constant in habit and color. *Thirteen colors mixed*.....25
- " **Meteor**, a *beautiful novelty*, quite new in habit; the profusely branching plant represents a dense globular bush, fifteen inches in diameter, covered with small, globular, extremely double, finely imbricated, *bright crimson flowers*.....25

AURICULA—(Primula).

A favorite with florists, and much in demand in England and Scotland, where it is to be found in perfection. Does not bear well the extremes of heat and cold. The flowers all have various colored eyes; the light ones with dark ground colors are considered preferable. The best soil to grow them in is leaf mold and sand, enriched with decomposed manure. The seed should be sown early in spring, in pots in hot-bed, and transplanted one foot apart. Tender perennials.

- Auricula, Alpine**, a native of the Alpine regions of Switzerland, improved by cultivation, and the most hardy variety.....15
- " **finest prize**, collection of the best sorts, embracing all choice known varieties; selfs, grey, white, and green edged.....20

AZALEA.

Spring-flowering shrubs, universally admired for their beautiful flowers, which are invariably produced in great profusion. The flowers are of all conceivable colors, and for brilliancy, are unsurpassed. Need hot-house culture. Plant in April in cold-frame; prick out the seedlings the year following, in beds, four inches apart, to remain till they flower. It is well to cover the plants in the fall, with straw or mulch, as the late frosts sometimes destroy the young, early shoots.

Azalea

- Azalea, indica**, *finest mixed*. Green-house, evergreen shrubs; flowers very beautiful.....25
- " **pontica**, *finest Ghent varieties*. Hardy deciduous shrubs, producing flowers of surpassing beauty, and all conceivable colors.....25
- BACHELOR'S BUTTON—(Centaurea).**
- A perfectly hardy border plant, succeeding finely in any common garden soil, but the flowers are more brilliant if grown in gravelly ground. In Europe it grows wild in the corn fields, and is known as Corn Bottle and Blue Bottle, and produces only blue flowers. Under cultivation, it is really a handsome flower, sporting into varieties of white, purple, pink, parti-colored, &c. Hardy annual; two to three feet high.
- Centaurea, cyanus**, single, mixed.....5

BALLOON VINE—(Cardiospermum).

Remarkable for its inflated membranous capsules, and sometimes called Love-in-a-Puff. The flowers are insignificant, but the plant is a rapid and graceful climber. The seed is round, and marked with a white, heart-shaped spot. Sow in open ground, from 1st to 15th of May, and give plant support to run upon. Tender annual; six feet high.

Cardiospermum, halicacabum, white; from India.10

Bachelor's Button.

Balloon Vine.

Balsam, double camellia.

BALSAM.

The Balsam, or Lady's Slipper, is an old favorite, but has been so much improved by cultivation as to be scarcely recognized. The blossoms are double, though some semi-double and single ones will be pretty certain to appear, and such plants should be removed. The prevailing colors are red and white, the former running into all shades of crimson, scarlet, rose, and purple, spotted and striped. The flowers will be improved by planting in a hot-bed, and transplanting when two leaves have formed, one to two feet apart. Pinch off a portion of the shoots, which will increase the size of the flower and vigor of the plant. Needs good, rich soil, and good cultivation, well repaying for both with the abundance of its magnificent flowers.

Double Solferino.

- Balsam, double Solferino, satiny white, streaked and spotted with crimson and lilac. *Very choice.*.....10
- " double camellia, as double as a camellia, which they resemble; white blotched with various colors.....10
- " mixed double rose, the peculiarity of this variety is its perfectly double, rose-like blossoms of almost every shade of color.....10
- " double dark red, (*atrosanguinea plenissima*) a very double, dark red variety, highly recommended.....10
- " double pure white, well adapted for florists, for bouquets; nearly every flower is perfectly double, and pure white.....20
- " double white perfection, a special strain of perfectly double, round, large blossoms of great solidity, and almost as useful to florists as the camellia.....25

- Balsam, mixed double dwarf, grows only about one foot high. *Twelve best colors mixed.*.....10
- " mixed double tall, grows about two feet high, and embraces *twelve of the best colors.*.....5

BARTONIA.

A very pretty flowering plant, from California, of the Gentian family, producing a profusion of fine, bright metallic-yellow blossoms, about two and a half inches across. The leaves are thistle-like, and dark green, covered with down. It succeeds best when planted in a hot-bed, and transplanted into rich, moist ground, but suffers from dry weather. Tender annual; about one foot high.

- Bartonia, aurea*, golden yellow.....5

BEGONIA.

Ornamental foliage green-house and stove plants, with many-colored, succulent leaves, oblique at their base. Very useful for ferneries, green-houses, and parlor decoration. Some of the varieties, in addition to their beautiful foliage, produce magnificent blossoms. They have been so much improved, and so many new flowering sorts introduced, that we almost fail to recognize the species. Some are propagated from seed only, others from cuttings; all require a rich soil.

Begonia seeds are so very small as to be scarcely perceptible to the naked eye, besides being exceedingly costly; therefore a very large quantity of seed cannot be afforded to a single packet, but by actual count, more are sent than in many large-seeded varieties.

- Begonia, Non Plus Ultra*, (*Benary*), new variety, introduced by a celebrated florist in Prussia; flowers bell-shaped, gracefully pendulous, of enormous dimensions, and of a dazzling light scarlet; they are produced by threes, and each flower stalk is terminated by this number of blooms.....25
- " *Pearcei*, beautiful, variegated foliage, and bright orange blossoms. Two feet high. Propagated from seed only.....25
- " *Sedeni*, flower buds on the point of opening, measure an inch and a half in length, and the developed flowers are over three inches in diameter, in clusters of five to ten, of a beautiful, rich carmine; one of the finest.....25
- " *Sedeni Victoria*, splendid hybrid of *B. Sedeni*; flower of bright carmine scarlet, susceptible of producing a gorgeous effect when planted in masses; admirable acquisition for bedding purposes, and remarkable alike for dazzling color, and persistent blooming.....25

Bartonia.

Begonia.

Belvidere.

Begonia, new varieties mixed, a very choice collection of the many new sorts, embracing those which are remarkable both for foliage and flowers; *very choice*.....25

BELVIDERE—(Summer Cypress).

An ornamental, cypress-like plant, with inconspicuous, green flowers, nearly hidden by the foliage. It is well adapted for growing in cemeteries. Hardy annual; one and a half to two feet high; from Egypt.

Belvidere, (*Chenopodium scoparium*)..... 5

BOCCONIA.

Magnificent, stately, half-hardy evergreen shrubs, with ornamental foliage; well adapted for lawns, either singly or in groups. They will require some protection through the winter, by straw or mulch. Easily cultivated in loamy soil, and increased from seed, and cuttings in sand, in gentle heat, under glass.

Bocconia, Japonica.

Bocconia, **Formoso Veitchi**, half-hardy perennial, growing two feet high, and producing white and yellow flowers of great beauty.....15

" **Japonica**, from Japan; quite hardy; from four to six feet high; splendid foliage, and clusters of pure white flowers; one of the finest10

" **frutescens**, the well known shrubby Celandine, having such beautiful foliage, and white and yellow blossoms; grows six feet high; from West Indies.....15

BRACHYCOME—(Swan River Daisy).

A dwarf-growing plant from Swan River, flowering the greater part of the season. Very effective in edgings, beds, or rustic baskets. Requires light, rich soil. Half-hardy annual; one-half foot high.

Brachycome, **iberidifolia**, blue.....10

" **alba-flora** white10

" **mixed**, seeds of the above varieties mixed10

BRIZA—(Ornamental Grass).

Very useful ornamental grass, much sought for in forming winter bouquets and wreaths; one foot high.

Briza, **maxima**, large attractive..... 5

" **gracilis**, slender, dwarf..... 5

BROWALLIA.

Handsone, profuse-blooming plants, covered with pretty blue and white blossoms throughout the whole summer. Sow in hot-bed and transplant to border in June, one foot apart. The plants are quite minute when they first come up, and should be protected from the hot sun, or they will be destroyed. Half-hardy annual; one and a half feet high.

Browallia, **elata**, **alba**, white.....10

" **elata**, **cœrulea**, blue10

" " **grandiflora**, sky blue; large. 10

" " **Roezlii**, this variety makes a compact plant eighteen inches high, and produces pure white and blue flowers of twice the size of the older sorts. 25

" " **fine mixed** 10

CACALIA—(See Tassel Flower).

CALANDRINIA.

Fine, dwarf plants for growing in masses, having fleshy leaves and succulent stems like the portulaca, and producing an abundance of blossoms which, when fully expanded, make a beautiful appearance, and suitable for edgings, rockeries, and clumps; in bloom a long time. The seed should be sown in hot-bed, early in spring, and planted

Calandrinia.

Brachycome.

Briza.

Browallia.

out in June, in rich, sandy loam, in masses. Tender annual, but perennial if protected in winter; one-half to one foot high.

Calandrinia, grandiflora, rosy lilac 5
 " **umbellata**, crimson..... 5

CALEMPELIS.

A beautiful, tender climber from Chili, with delicate foliage, and bright orange blossoms in racemes, freely produced late in the season. The plants should be started early in hot-bed, and potted when five leaves have formed and planted out in June. The seed is difficult to vegetate. Tender perennial; fifteen feet high.

Calempelis. (Eccremocarpus) scaber 10

CALCEOLARIA.

A favorite and universally admired genus, remarkable for their large, beautifully spotted blossoms, which are very showy, and from which an almost countless number of hybrids have been raised. They are perennial, are grown in pots in the conservatory, green-house, and garden; but few flowers are held in greater esteem. They prefer a turfy loam, a mixture of peat and sand, or a rich, open garden mold, and are propagated from seed or cuttings. Some of them are herbaceous perennials, others shrubby evergreens.

Calceolaria, hybrida grandiflora, flowers of immense size; seed saved from finest specimens.

Very choice

25

Calceolaria, hybrida tigrina, flowers of the largest dimensions; beautifully maculated or spotted. Seed saved from *choicest collection*..... 25
 " **rugosa**, bedding variety; shrubby; grown in and out of doors. Mixed seed, saved from the *finest shrubby sort, only* 25

Calceolaria Flower.

Calempelis.

Calceolaria Plant.

Calliopsis

- Calceolaria, rugosa tigrina**, a new tigered or spotted variety of the shrubby sorts; *beautiful*...25
- " **hybrida pumila compacta tigrina**, a new, very dwarf variety, only ten inches high, and of compact habit. Flowers of *fine form and beautiful color*; desirable for contrast with taller sorts.....25
- " **James' International Prize**, one of the finest prize sorts. Flowers beautifully spotted, of large size, and perfect form. *Very desirable*. 25
- " **finest hybrids mixed**, seed saved only from the *most perfect flowers*, embracing many of recent introduction; all desirable25

CALENDULA—(See Marigold).

CALLA.

An old and very desirable plant, either as an aquatic, or for the ornamentation of the drawing room and conservatory. Thrives in any light, rich soil when plentifully watered. The seeds, which should be sown in green-house in early spring, produce small bulbs in the fall, which should be repotted in rich soil. The production of large plants from seed takes some time, but the beautiful creamy-white flowers are an ample reward for the care and patience bestowed. Half-hardy perennial.

Calla, æthiopica.....25

CALLIOPSIS, or COREOPSIS.

A very showy border plant, producing flowers in nearly every shade of yellow, orange, crimson, red, and brown. If the seed pods are removed as soon as they appear, the plant will remain in bloom much longer. Sow where they are to remain, and thin to two feet apart. Hardy annual; two feet high.

- Calliopsis, tinctoria bicolor**, crimson, brown center 5
- " **tinctoria marmorata**, brown and yellow..... 5
- " **atrosanguinea**, blood red..... 5
- " **filifolia**, thread-leaved; yellow..... 5
- " **Burridgi atropurpurea**, yellow, purple, and scarlet..... 5
- " **cardaminifolia**, yellow..... 5
- " **fine mixed**..... 5

CALLIRHOE.

A pretty plant, resembling the scarlet Linum, produc-

Callirhoe.

ing an abundance of rich violet-purple blossoms, each blossom having a white eye. The leaves are subdigitate, and the plant begins to flower when six inches high, and continues to yield a succession of its attractive blossoms till frost. Succeeds better when planted in hot-bed and transplanted two feet apart. Hardy annual; one to two feet high.

- Callirhoe, involuocrata**, trailing; purplish-crimson. 5
- " **pedata**, purple, white eye..... 5
- " **nana**, dwarf; one foot..... 5

CAMELLIA.

All species of Camellias are universally admired on account of their beautiful, rose-like flowers, and elegant,

dark green, shining, laurel-like leaves. They are hardy green-house shrubs of easy culture, requiring only to be protected from frost. The best soil for them is an equal quantity of good, sandy loam and peat. They are propagated by inarching, cuttings, grafting, and from seed, the latter being the only method of obtaining new varieties. When the plants are not growing, they should receive but little water, and when growing freely, can scarcely receive too much. A regular succession of flowers may be obtained from autumn till July, if attention be given to removing the potted and growing plants from a warm to a cooler atmosphere. When the growth is completed, and flower buds formed, a cool, sheltered situation is best, for they will be seriously injured if exposed to the rays of the sun.

Camellia, Jouble.

Camellia, Japonica, fine double mixed, seed saved from the *finest double varieties*, and will undoubtedly produce some very valuable kinds, of various colors.....25

- " **Japonica, single**, well adapted for raising stocks for grafting15

CAMPAÑULA—(Bell Flower).

Very handsome little plants from Italy, giving an abundance of pure white and bluish-purple flowers about two inches across. The flowers are bell-shaped, and when the plant is cultivated in masses, the flowers are very showy and ornamental, and continue in bloom a long time. Hardy annual; about nine inches high.

- Campanula, lorei**, blue..... 5
- " **lorei, alba**, white..... 5
- " **fine mixed**..... 5

(See also Canterbury Bell.)

CANARY BIRD FLOWER.

(*Tropæolum canariense*.)

A beautiful climber, the charming little canary-colored blossoms bearing a fancied resemblance to a bird with its wings half expanded. The plant has a fine, luxuriant, rambling character, and if the seeds are planted by the side of an arbor or trellis, to run upon, it will run twenty feet high, and blossom from July till frost comes. The flowers will be more numerous and brilliant in light, moderately rich soil. Tender annual; twenty feet high.

Canary Bird Flower.....10

Candytuft.

Campanula.

Canary Bird Flower.

Carnation.

CANDYTUFT.

Universally known and cultivated, and considered indispensable for cutting. All the varieties look best in beds or masses. Seed sown in the autumn produces flowers early in spring; when sown in April, flower from July to September, and some of the sorts till frost comes. All the varieties are hardy, and easy to cultivate. Single plants transplanted look well, and bloom profusely. Hardy annual; one foot high.

Candytuft, new carmine.

Candytuft, purple.....	5
" white.....	5
" Rocket, white.....	5
" fragrant, white.....	5
" new crimson, fine.....	5
" fine mixed.....	5
" new carmine, a splendid novelty of dwarf, compact habit. The plant presents one perfect mass of vivid and rich bloom; a valuable acquisition, and very choice.....	25
" perennial (<i>Sempervirens</i>).....	10

CANTERBURY BELL—(Campanula Medium).

Hardy, hardy biennial of stately growth, rich color, and profuse bloom. Succeeds best in light, rich soil, and should be transplanted two feet apart. Their large, bell-shaped flowers are freely produced throughout the summer, and are strikingly effective.

Canterbury Bell, double white.....	10
" " " blue.....	10
" " " mixed, blue and white.....	10

CANNA.

Stately and highly ornamental plant desirable not only for the beauty of its spikes of flowers, but for its

elegant foliage. The leaves are a rich, deep green, three feet long and six inches wide, very handsome as they unfold themselves. Start the plants in hot-bed, in pots, and transplant in June, and blossoms will appear in July or August. Soak the seed thoroughly before planting, and keep in a warm spot. The roots can be kept in the green-house from year to year, and then it becomes perennial. Tender annual in open ground; four to six feet high.

Canna, Indica (Indian Shot), scarlet blossoms.....	10
" gaboniensis, yellow flowers; fine.....	15
" nigricans, orange blossoms.....	15
" Warszewiczii, bright red flowers; striped foliage; very beautiful; four varieties mixed.....	10

Canna.

CARDIOSPERMUM—(See Balloon Vine).**CARNATION and PICOTEE—(Dianthus Caryophyllus).**

No flower can surpass in delicacy of marking, form, or delicious fragrance, the richly-hued Carnation. It has always been one of the most esteemed of the florist's collection, and there is no flower more desirable for the garden. The seed will not produce all double flowers, though a good percentage will be double, and of all shades and colors, many being very fragrant. Sow under glass in green-house or hot-bed, and when of sufficient size, transplant two feet apart each way. New and choice varieties are obtained from seed. Half-hardy perennial; one and a half feet high.

Castor Bean.

Catananche.

Celosia, pyramidalis plumosa.

Carnation, fine double selves, one color.....	15
" fine double striped	20
" double dwarf, early flowered.....	20
" " perpetual-flowered, seed saved from choicest double flowers	25
" English seedling	10
" choicest white ground	50
" " yellow ground	50
" " Italian.....	50
" " German.....	50
" " Tree, or Perpetual	50
" double Grenadin, a splendid variety for flor- ists; very early, charming double scarlet flow- ers. Exceedingly valuable for making bou- quets, as the color is so brilliant as to render it very conspicuous	25
" extra fine mixed double Picotee	25
" extra choice double mixed, seed saved from the choicest French, German, Italian and English stocks. A large proportion of this seed will produce double flowers, and will be appreciated by the florist	25
" double mixed, good seed, producing many dou- ble flowers of all shades and colors, many being very fragrant.....	10

CASSIA.

A very handsome genus of ornamental shrubs, useful for either green-house or conservatory decoration. We have selected a few of the most desirable, low-growing

varieties, which will be found very beautiful. Sow the seed in March or April, in heat, in sand.

Cassia, floribunda , stove annual, from Northern Spain, growing four feet high; flowers yellow; very ornamental.....	10
" grandiflora , green-house shrub, from North America, growing six feet high, and producing yellow flowers in August and September.....	10
" six finest varieties mixed , these comprise all the most desirable green-house varieties.....	10

CASTOR BEAN—(Ricinus).

Tall, majestic plants for lawns, with leaves of glossy green, brown, or bronzed metallic hue, and long spikes of prickly capsules of scarlet and green. An elegant plant for a lawn, and of very quick growth in rich soil. Plant in hot-bed, and transplant when three leaves have formed, or plant where they are required. Tender annual; eight to ten feet high.

Ricinus, sanguineus , splendid red fruit in clusters; blood red stalks.....	10
" tricolor , leaves spotted	10
" mixed	10

CATANANCHE.

A plant from the south of Europe, and takes its name from the fact that it *compels admiration*. The flowers are white with violet center, and blue with purple center, quite double, somewhat resembling a pink, and extremely showy. It will blossom more freely in light

Catchfly.

Centaurea, gymnocarpa.

Celosia, Huttonii.

well drained soil; will begin to bloom in July or August from seed sown in April. Hardy perennial; one and a half to two feet high.

Catananche, cœrulea, blue, purple center.....	5
" bicolor, white, violet center.....	5
" mixed.....	5

CATCHFLY—(Silene).

An easy growing, free flowering plant, producing dense umbels of white, red and rose pink-like blossoms. The plant is covered with a glutinous moisture from which flies cannot disengage themselves, hence the name Catchfly. After having been once grown, the seed will sow itself in the ground. Hardy annual, one foot high.

Silene, armeria, alba, white.....	5
" rubra, red.....	5
" rosea, rose.....	5
" mixed.....	5

CHLOSIA.

Magnificent plants for green-house or conservatory decoration, producing elegant, plume-shaped spikes of flowers; look well in vases out of doors in summer. Sow in good, rich soil, and transplant at proper period. Half-hardy annuals; one to three feet high.

Celosia, argentea, long spikes of silvery-white, shaded with flesh-color; splendid.....	10
" aurea pyramidalis, bright golden spikes in pyramidal form; exceedingly beautiful.....	10
" few crimson feathered, crimson spikes; beautiful.....	10
" pyramidalis plumosa, beautiful, long plumes, pyramidal in form, of red, yellow, violet, &c.; very striking.....	10
" Huttonii, bushy habit, pyramidal form, profusely branched, each leading branch being tipped with a small spike of bright crimson flowers. The upper side of the leaf is a deep claret color, while the under side is a bright crimson shade.....	15
" cristata, (see Cockscomb).

Centaurea, candidissima.

CENTAUREA.

An exceedingly interesting genus of plants, embracing annuals, biennials and perennials. Some of the varieties are magnificent foliage plants, while others are noted for their beautiful flowers. All the kinds named below are worthy careful cultivation.

Centaurea, gymnocarpa, silvery-grey foliage; drooping habit, very graceful.....	15
" candidissima, fine, ornamental plant of great beauty. Silvery-white. deeply cut foliage. Half-hardy perennial.....	25
" Clementei, foliage white, deeply cut, and altogether very beautiful. Half-hardy perennial.....	25
" Americana, hardy annual from Arkansas, two feet in height, and of strong, robust growth; flowers deep red; very pretty.....	5

Centaurea, Clementei.

Centaurea, cyanus, (see Bachelor's Button).	
" meschata atropurpurea, (see Sweet Sultan).	

CHAMEROPS—(See Palm).

CHIERANTHUS—(See Wall Flower).

CHLORA.

A popular novelty; glossy, oblong, handsome foliage, and abundant, bright yellow flowers. Half-hardy annual. Chlora, grandiflora, new, and highly recommended; one foot.....

Centaurea, Americana. Chrysanthemum.

CHRYSANTHEMUM.

The following are the old garden varieties, producing flowers white, yellow and variegated, single and double. They flower in autumn, and are desirable where there are large collections, as they are brilliant and striking. The single sorts are quite as handsome as the double. Hardy annual; one and a half to two feet high.

Chrysanthemum, coronarium, double white....	5
" coronarium, double yellow.....	5
" Burridganum, crimson, white center; single..	5
" coronarium, mixed.....	5

The following varieties are for pot culture, for blooming in the house in winter, and for florists, for cutting for bouquets:

Chrysanthemum, Indicum, fl. pl., half-hardy perennial; very double; mixed colors.....	25
" grandiflorum golden, an entirely new variety, with immense flowers of a deep gold color, and dark, velvety, oval shaped center. Grows from two to three feet high; highly recommended; hardy annual.....	15
" Japonicum, fl. pl., new, Japanese variety. Flowers of very peculiar form, and much beauty, combining numerous shades of color. Very interesting. Half-hardy perennial.....	25

Cineraria, single

C. maritima candidissima,

C. dwarf, flower.

CINERARIA.

A very pretty genus of plants growing from one to three feet high. The flower and foliage are both fine, and some of the varieties are of wondrous beauty. A soft, white down covers the leaves. Green-house perennials, which can be planted out in summer. They thrive best in a mixture of loam and peat, and young cuttings root freely under glass.

Cineraria, maritima candidissima, extremely handsome, silvery white foliage; very ornamental as a decorative pot plant, or for bedding purposes.....10

Cineraria, hybrida, very dwarf, new, dwarf variety, growing only four inches high. Plants globular in shape, and blossom profusely in many colors; very desirable.....25

" hybrida flore pleno, a successful attempt at producing double Cinerarias seems to have been accomplished. The flowers are perfectly and evenly double, being entirely made up of ligulate florets, as in double Jacobaea. The colors run through all the shades peculiar to Cinerarias, and it is the acquisition of the age...30

" choicest mixed, from the best named varieties. Flowers from this seed have obtained many first class prizes. Extra choice.....25

CLARKIA.

The Clarkia is held in great estimation in Europe, and especially in England, where it is as common as Candytuft. The flowers are very pretty, and of many colors, double and single. As the plant is apt to suffer in hot, dry summers, it is better to sow the seed in September, and the plants will be large enough by spring to make good bloom. Hardy annual; one and a half feet high.

Clarkia, pulchella, flore pleno, double; beautiful, rich magenta color.....5

" pulchella integrepetala, rosy crimson.....5

" elegans flore pleno, double; rosy purple.....5

" mixed, best and finest varieties.....5

Cineraria, double.

Clarkia.

Clintonia.

Cockscornb, variegated.

Clianthus

Cobæa.

Cockscomb, Japan.

CLEMATIS.

Well known and universally admired climbers, some of the varieties being remarkable for the beauty and fragrance of their blossoms. Fine for covering arbors, verandas, &c., as they cling readily to almost any object. Most of the kinds are hardy, herbaceous perennials, but some little protection in Northern latitudes, through winter, is advised. Will do well in any good garden soil.

Clematis, Pitcheri, new; elegant habit, neat foliage, and exceedingly pretty, bright red blossoms; hardy climber.....25

" *Virginiana* (Virgin's Bower), a rapid climber, with white blossoms, growing twenty feet in a single season; is hardy, dying down in winter, but starting up again in the spring. It is equally remarkable when in fruit, the long, feathery tails of the fruit separating like tufts of wool.....10

" *Verticillata*, produces beautiful blue flowers from June to September, on long panduncles from the axis of the leaves; rather bell-shaped and nodding. Grows eight to ten feet in a season.....10

" *Flammula*, a luxuriant climber with clusters of small, white, fragrant flowers in August and September. Sometimes called Sweet Virgin's Bower.....10

CLIANTHUS.

Curious, green-house shrubs, with singularly beautiful foliage, and magnificent clusters of long, drooping flowers, somewhat resembling a parrot's beak. About three feet high, and succeeds best in loam, peat and sand mixed; does well planted in a border of the conservatory, or will flourish against a south wall, if protected from cold and frost. *Among the most magnificent blooming plants in cultivation.*

Clianthus, Dampieri, bright scarlet blossoms.....20

CLINTONIA.

Charming little trailing plants, suitable for baskets, pots, or rock work. The flowers are somewhat like the *Linaria*, blue, purple and spotted, about half an inch in diameter. The seed is exceedingly small, and should be sown with great care, covering very slightly with earth, and shading from the rays of the sun till firmly established. Tender annual; six inches high.

Clintonia, elegans, light blue.....5

" *pulchella*, blue, yellow and white.....10

" " *atropurpurea*, violet-purple, center of yellow, margined with white.....10

" fine mixed.....10

COBÆA.

A fine, rapid growing climber, with handsome foliage, and large, bell-shaped flowers, green at first, but rapidly changing to a beautiful, deep violet-blue. Seeds should be started in hot-bed, in rather dry soil, as they are apt to rot in open ground. A well established plant will run fifty feet in a season, covering a large veranda with handsome foliage and beautiful flowers. Tender perennial.

Cobæa, scandens.....10

COCKSCOMB B—(Celosia).

Highly ornamental plants, producing crested heads of flowers, somewhat resembling a cock's comb. There are many colors and shapes, but the scarlet and crimson ones are the most brilliant and rich. To produce fine combs, the soil cannot be too rich, and the plants should be forwarded in hot-bed, though showy plants may be raised from seed planted in open ground in May. The oftener they are transplanted or shifted, the larger and more beautiful they grow. Should be three feet apart. Tender annual; two feet high.

Cockscomb, new dwarf-crested.

Celosia, cristata, mixed tall, twelve of the most splendid tall varieties mixed.....10

" *cristata, dwarf*, crimson, brilliant.....10

" " " rose, deep rose.....10

" " " yellow, fine.....10

" " " mixed.....10

" new Japan, (*Celosia Japonica*) *Vick*, the comb is finely cut, delicate as lace, and wonderfully brilliant.....10

" new variegated, variegated in branch, leaf, and comb; very handsome.....10

" *Japonica, cristata nana*, (*new, dwarf-crested Cockscomb*), we had the pleasure of first introducing this remarkable variety three years ago, and under our own growing this season it has fully sustained its characteristics. The striking features of this singular variety are its perfectly symmetrical growth, the leaves covering the entire stem with dark bronze red, half drooping leaves, forming a compact mass,

Coleus.

Columbine, double.

Convolvulus, Minor.

which, in contrast with white-leaved plants, produces a most striking effect. The color of the comb is an *intensely brilliant shining carmine*, rendering it very conspicuous, even among most brilliant colored flowers, like scarlet geraniums, roses, carnations, &c. The three to five little combs form themselves on separate side stems in a perfectly symmetrical manner around the plant, keeping about eight inches lower than the head, and in no way interfering with the gracefulness of the leaves. The most characteristic feature is the leaflets which grow on the neck of the comb, and form a beautiful circle or collar around each comb, as true in the small as the large flower, all standing out perfectly horizontal.29

COLEUS.

Probably there is no other kind of ornamental foliage plant so well known and universally admired as the Coleus. The leaves are of all shapes, shades and colors, and nearly all have a rich, velvety appearance of extraordinary beauty. No yard should be without these decorative plants. They are green-house evergreens, and can be planted out as soon as danger of frost is over. They will continue to grow and thrive till cut down by frost in autumn. Slips should be taken from the finest, which will grow finely all winter, if potted and placed in green-house or conservatory.

Coleus, mixed, *twenty-five best named sorts*.....25
 " new hybrids mixed.....25

COLUMBINE—(Aquilegia).

The old single varieties of Columbine have been known and admired for centuries under the name of Honey-suckle. The new double sorts are very beautiful and embrace a great variety of colors and forms. They are nearly all hardy, and seed can be sown in open ground in spring or autumn and they can also be increased by dividing the roots. Hardy perennial; two feet high.

Aquilegia, alba plena, double white.....10
 " caryophylloides, white, nicely striped with reddish-crimson; a beautiful double variety.....10
 " Skinneri, crimson scarlet and orange.....10
 " vervaeneana fol. variegatis, one of the few striking variegated plants, reproduced with certainty from seed. Double, rose-colored blossoms; exceedingly beautiful.....15
 " mixed double, *best and finest colors*.....10

COMMELINA—(Day Flower).

The splendid white and blue flowers of this plant cannot be excelled, and its profusion of blossoms renders it worthy of cultivation. The roots can be taken up and kept in the cellar, like Dahlias, and replanted in spring, and will produce larger and more blossoms. Plant in any good garden soil, and thin to six inches apart. Tender perennial; one and a half to two and a half feet high.

Commelina, coelestis, sky blue.....5
 " alba, white.....5
 " mixed.....5

CONVOLVULUS.

A magnificent class of trailing annuals, some of which produce flowers of wondrous beauty. Useful for verandas, lattice, &c., and grows freely in any good garden soil.

Convolvulus, mauritanicus.

Convolvulus, aureus superbus, very large, golden yellow flowers; grows six feet high; *new*....15
 " mauritanicus, hardy, trailing plant, about one foot high, and produces an abundance of rich satiny, lavender blossoms. Especially adapted for rock work or baskets.10
 " Major, (see Morning Glory).

CONVOLVULUS MINOR—(Dwarf Morning Glory).

Dwarf plants of trailing, branching habit, each plant occupying a space of two feet. At mid-day it is completely covered with a mass of most brilliant, many colored blossoms, which remain open till evening, in dry weather. The colors are pure white, blue passing into white yellow, red, purple, &c. Will do well in any common garden soil. Thin to three feet apart each way. Half-hardy annual; one foot high.

Convolvulus Minor, tricolor, bright blue, shaded to pure white, next to the golden center.....5

Commelina.

Cyclamen, James' Prize.

Cypress Vine.

Convolvulus Minor, alba, pure white.....	5
" Minor, striata, finely striped.....	5
" " mixed.....	5
" " flore pleno, a new, double variety.....	10
" " unicaulis, a single, upright stem without a branch, and a compact head of flower buds in great profusion, which expand into blossoms of immense size, of very rich, purplish-blue color, and continues in bloom the whole season.....	10

COIX—(See Job's Tears).

CREPIS.

Very pretty, unobtrusive plants, bearing double flowers of a variety of striking colors. Are known in some sections as Hawk Weed. Any good common soil suits them, and if sown in open border early in spring, they will flower from July to October. Grown in masses and thinned to eighteen inches apart, they are very effective. Hardy annual; one foot high.

Crepis, barbata, yellow, purple eye.....	5
" rubra, bright red.....	5
" flore albo, white.....	5
" mixed.....	5

CUCURBITA—(See Gourds).

CUPHEA.

A favorite bedding plant with green-house men; familiarly known as Cigar Plant, on account of the fancied resemblance to a lighted cigar. The colors are fiery red and crimson brown. Planted on gentle heat and transplanted to the garden, it will continue to blossom

all summer, and on the approach of frost may be removed to the green-house or conservatory, and will continue to bloom all winter. Tender perennial; one and a half feet high.

Cuphea, silenoides, dark crimson-brown.....	10
" Zimpanii, violet-red.....	10
" mixed.....	10

CYCLAMEN.

Well known and universally admired bulbous-rooted plants, producing exceedingly handsome red and white flowers. The seed should be sown in spring, and by autumn will produce a bulb, which if potted and placed in conservatory or green-house, will blossom the following spring. Propagated only from seed.

Cyclamen, persicum, mixed, green-house variety of great beauty, and many colors.....	25
" James' Prize varieties, saved from Mr. James' choice collection; very fragrant.....	50
" giganteum roseum.....	50
" " superbum.....	30

(The last two varieties of this very popular flower produce unusually large blossoms of two lovely shades of rose. They have been pronounced to be strains of great merit, by some of the most competent authorities in Europe.)

CYPRESS VINE—(Ipomœa Quamoclit).

A most beautiful climber, with delicate, dark green, feathery foliage, and an abundance of bright, star-shaped, rose, scarlet and white blossoms, which, in the bright sunshine, present a mass of beauty. Planted by the side of veranda, tree or stakes, and trained properly,

Crepis.

Cyclamen, giganteum.

Cuphea.

there is nothing prettier. The seed will germinate more freely if warm water be poured on the ground after planting. Tender annual; fifteen feet high.

Cypress Vine, scarlet.....	5
" " rose.....	5
" " white.....	5
" " mixed.....	5

Dahlia.

DAHLIA.

This exceedingly beautiful genus comprises an almost endless number of varieties, all more or less showy in the flower garden in the autumn, when most other flowers have faded. They are all of easy cultivation, growing freely in almost any soil, from seed sown in spring. The seed should be sown in shallow pans, in March, and the seedlings transplanted to small pots. As soon as danger of frost is over, plant out, one foot apart. These plants will make a tuber, which should be taken up in the fall and kept through the winter in a cool, dry place, away from frost, and planted out in the spring, when it will blossom the following autumn. New varieties are constantly being produced from seed, some of them of exquisite beauty.

Dahlia, finest double, mixed, seed saved from:
choicest double flowers..... 15

DAISY—(Bellis).

Charming little plants for edgings and borders. The flowers are quilled and flat-petaled, white, pink, red and variegated. Not all will come double from seed,

Daisy, double.

and the single ones should be pulled out. Sow early in hot-bed, and when large enough, transplant to a rich, cool, partially shaded situation. Set the plants six inches apart. Roots can be divided any time. Flowers are most abundant in spring. Tender perennial; six inches high.

Daisy, double mixed, choice..... 15

DATURA.

Large, branching plants, producing handsome, double and single, trumpet-shaped blossoms, yellow, white, lilac and blue, and of exquisite fragrance. Some of the flowers are equal in beauty to our choicest lilies. Sow in hot-bed, and transplant to three or four feet apart each way. The blossoms open during the night, remain open one day, and then perish. Roots can be kept all winter in cellars. Tender perennial; three feet high.

Datura, Wrightii, pure white at the center, passing into lilac and blue at the border; very fragrant 5
 " chlorantha, fl. pl., magnificent, large, double, yellow blossoms, richly scented..... 5
 " fastuosa alba, fl. pl., flowers double, pure white..... 5
 " mixed, seeds of the above varieties mixed..... 5

DELPHINIUM—(See Larkspur).**DIANTHUS—(See Pink).**

DIANTHUS BARBATUS—(See Sweet William).

Datura, double.

Didiscus.

Echeveria.

Eschscholtzia, mandarin.

Eulalia, japonica.

Euphorbia.

DIANTHUS CARYOPHYLLUS—(See Carnation).**DIDISCUS.**

Delicate, sky-blue blossoms, produced in numerous umbels, or hemispherical heads. The flowers are singularly formed, and very striking. The seed can be sown in open ground in May, and will begin to flower in July and August; if started in hot-bed, will blossom in June. Set plants two feet apart. Hardy annual; two feet high. *Didiscus, cœruleus*, sky-blue.....10

DIGITALIS—(See Foxglove).**DOLICHOS**—(See Hyacinth Bean).**ECHVEERIA.**

Green-house, evergreen perennial, house leek, for sub-tropical or conservatory decoration, with large, massive succulent leaves, of purplish color, and scarlet and yellow flowers in racemes. A magnificent plant for flower and foliage. Seeds are very small and costly.

Echeveria, metallica glauca, large, orange-colored blossoms borne on spikes twelve to fifteen inches high, each spike bearing fifteen to twenty umbelliferous flowers.....50

" *secunda glauca*, small, compact-growing, glaucous variety, with free-flowering, scarlet and yellow racemes of bloom; very fine.....50

ELICHRYSUM—(See Helichrysum).**ERAGROSTIS**—(See Love Grass).**ERIANTHUS RAVENNAE.**

A very desirable ornamental grass, equal to Pampas Grass in appearance and habit of growth, and superior to it for general culture, as it is entirely hardy and blooms more abundantly. When plants are two or three years old, the flower stalks are often ten feet in height, surmounted by beautiful silvery plumes. Sow early in spring in green-house or hot-bed, and transplant when weather becomes warm.

Erianthus Ravennæ.....10

ERICA—Cape Heath.

A genus of shrubby plants of much interest and beauty. Most of the species are without odor, but this lack is compensated for by elegance, as well in their foliage as in their flowers. The flowers, in beauty of form, delicacy of aspect and variety of tint, can scarcely be surpassed. To succeed well, the seed should be sown in hot-bed, or better still, in green-house or conservatory. Half-hardy perennial.

Erica, capensis, mixed varieties.....25

ERYTHRINA—(Coral Tree).

Handsome, leguminous shrubs, popularly known as Coral Trees. They are cultivated for the sake of their beautiful, bright scarlet, pea shaped flowers, which are arranged in terminal spikes. Start in heat and transplant out of doors in warm situations, where the plants will grow freely. Half-hardy shrubs.

Erythrina, crista galli.....25

ESCHSCHOLTZIA.

Finely cut leaves of a glaucous color, and blossoms about two inches in diameter, of many brilliant and showy colors. A bed of *Eschscholtzia* in the sunshine makes a blaze of color. As the stalks and branches are delicate, they will do better if supported by small sticks. Sow where the plants are wanted to bloom, as they do not bear transplanting. Thin to six inches apart. Half-hardy perennial; one foot high.

Eschscholtzia, mandarin, a new and very beautiful variety, introduced by Messrs. Carter, of London. The outer side of the petals are *brilliant scarlet*, the inner side *rich orange*;

rare.....	20
" <i>Californica</i> , bright yellow.....	5
" <i>crocea alba</i> , creamy white.....	5
" " <i>striata</i> , beautifully striped.....	5
" " <i>rosea</i> , rose colored.....	5
" <i>aurantiaca</i> , distinct orange; a deep colored mark running up the center makes the flowers look like a maltese cross.....	5
" mixed.....	5

EULALIA JAPONICA.

A most magnificent ornamental grass from Japan, growing five to six feet high, and exceedingly graceful. A single plant often makes thirty to forty elegant, recurved flower spikes of light violet color, resembling ostrich plumes. Beautiful for vases in the winter. Transplant from hot-bed to ten feet apart.

Eulalia Japonica, light violet; beautiful.....20

EUPHORBIA.

A large family, widely differing in their habits, many varieties being unworthy of cultivation. We have selected the most useful and beautiful variety for border and pot culture.

Euphorbia, variegata, hardy annual; foliage beautifully veined and margined with white; very showy. Sometimes known as Mountain of Snow.....5

Eutoca.

Fenzlia.

Stipa, pennata.

EUTOCA.

Foliage dull green, covered with hairs; blossoms blue striped, three-quarters of an inch across, produced in terminal racemes. Excellent for cutting, because a branch placed in water will bloom many days, and the blue is intense in color. Succeeds best in warm, sandy soil, not over rich. Sow in open ground early in spring, and thin to one foot apart. Hardy annual; one foot high.

Eutoca, viscida, blue	5
" " alba striata, striped.....	5
" " mixed.....	5

FEATHER GRASS—(Stipa).

Hardy, biennial, ornamental grass of much beauty, used in the formation of winter bouquets. Seed should be started in hot-bed, as they germinate slowly.

Stipa, pennata (Feather Grass), delicate and pretty.	10
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FENZLIA—(Dianthoides).

Charming little hardy annual, with pink-like flowers; fine for border, or pots in conservatory, and well adapted for vases and rock work. Sow in open border in April. Fenzlia, dianthiflora, from California; purple and yellow flowers; three inches high.....20

FERNS.

Flowerless plants, too well known to need description. Many of the varieties are exquisitely beautiful. There

Athyrum Felix Femina.

are so many sorts, varying so widely in habit, that to give explicit directions for the culture of each, would require a volume of itself. As a general rule they should be kept in a warm, humid atmosphere, and watered abundantly. The soil best adapted to their growth is a turfy, fibrous peat, mixed with sand and leaf mold, and underlaid with pieces of broken crock. Many of the most beautiful sorts are propagated from seed only.

Aspidium Angulare

Their exceeding grace and beauty will well repay all care bestowed upon them.

Polypodium vulgare

Scolopendrium Undulatum.

Forget-Me-Not.

Ferns, fine mixed (Filices), an almost endless variety 25

" fifty finest species mixed, very beautiful. . . 25

Aspidium Spinulosum.

We do not offer the different varieties of ferns separate, but our packet of fifty species mixed will contain all the newest and most desirable kinds.

Polypodium Cambricum.

FEVERFEW—(See Pyrethrum).

FORGET-ME-NOT—(Myosotis).

The Forget-Me-Not is an old favorite plant, bearing clusters of star shaped, delicate blue flowers with white and yellow eyes. It flourishes best in a moist, situation, and it is in constant bloom nearly the season. If the seed be sown in autumn, it will su

Four O'clock.

Foxglove.

best, and flower early in spring. Hardy perennial; six inches high.

Myosotis, palustris, blue flowers, with white and yellow eyes. 10
 " *azurea grandiflora*, light azure blue; one-half foot high; fine. 10
 " *dissitiflora*, very deep blue; early blooming; a welcome addition to this class of spring bedding plants, so much in requisition. 15

FOUR O'CLOCK—(Marvel of Peru).

Old fashioned, but none the less beautiful on that account. The plants are large, and require four feet space; make a pretty hedge. Some of the varieties have beautifully variegated leaves. The flowers are funnel shaped, white, red and striped, very fragrant, and open about four o'clock in the afternoon, remain open all night, and generally perish before noon the next day. The French call it *Belle de Nuit*, "Beauty of Night." Will grow in any common garden soil, from seed sown in open ground. Hardy annual; two feet high.

Four O'clock, gold striped. 5
 " red. 5
 " scarlet. 5
 " silver striped. 5
 " white. 5
 " yellow. 5
 " variegated foliage. 5
 " sweet-scented. 5
 " mixed. 5

FOXGLOVE—(Digitalis).

Ornamental plants of much beauty, producing dense spikes of flowers on stems three to five feet high. The blossoms are thimble shaped, purple, white and spotted, and very striking. Seed can be sown in spring or autumn, and large roots can be divided. Blossom the second season. Hardy biennial; three feet.

Digitalis, Ivery's new spotted, great improvement on the old sort; an endless variety of colors; robust, strong and hardy. 10
 " splendid mixed. 5

FRAGARIA—(Chinese Strawberry).

Pretty, hardy, herbaceous creeper from India, with beautiful, yellow blossoms, and bright red fruit, like small strawberries. Elegant for rock work or hanging baskets. Propagated from seed and runners. Seed should be sown very early in the house, and plants transplanted. Perfectly hardy.

Fragaria, indica. 10

Fragaria.

Hedysarum.

Fuchsia.

FRENCH HONEYSUCKLE—(Hedysarum).

Very handsome, free flowering plants, producing racemes of beautiful, pea like flowers; particularly adapted for borders or rock work. Sow in open border in spring. Hardy perennial; four feet high.

Hedysarum, coronarium, brilliant scarlet. 5
 " fl. albo, true, white. 5

FUCHSIA.

Well known, half hardy, perennial, deciduous shrubs, worthy a place in every garden. The varieties are now numbered by hundreds, and some are exceedingly beautiful. They are as easily grown from seed as cuttings, and from seed many improved varieties are obtained. Sow in March, in shallow pots; prick out in crocks four inches in diameter, when of convenient size, where they can continue to grow till they bloom. As soon as they have flowered, select such as have good points, and change into larger pots. When frost appears, protect the plants.

Fuchsia, double, finest mixed, from the finest specimens. 25
 " double, white corollas, very beautiful. 25

GAILLARDIA.

Showy, and universally admired perennials, flowering the first year, and among the gayest ornaments of summer flowering beds.

Gaillardia, picta nana, one foot high; flowers creamy yellow. 5

Gaillardia, Richardsoni, grandiflora hybrida, the largest and most beautiful flowers of the species; blossoms orange colored 10

GERANIUM—(Pelargonium).

Probably the Geranium is better known and more

Gaillardia.

universally admired than any other plant grown. The constant succession and durability of bloom till frost comes, the brilliancy of the scarlet and other colors, and the exquisite markings of the leaves of some of the varieties, render them

very desirable for pot culture and bedding. No garden seems complete without a bed of them, and in every collection of conservatory or parlor plants we are sure to find the Geranium. *Propagation by seed is the only sure way to obtain superior varieties.* Sow in March, in gentle heat, in well drained pots. Water moderately, and as soon as the third leaf appears, pot singly in two-

Geranium, Zonale.

G. Golden and Bronze.

Gilia.

Gladiolus.

Gloxinia.

Globe Amaranth.

inch crocks, exchanging for larger ones as the plants require. As soon as the weather will permit, plunge the pots in open border, and on approach of frost, remove to cover. They will blossom the succeeding spring. The following are all very choice varieties, and seed sparingly.

Geranium (Pelargonium), diadematum, splendid new variety.....	50
" (Pelargonium), odier, five petals blotched.....	50
" " fancy, splendid mixed.....	25
" double, finest double varieties mixed.....	50
" Zonale, scarlet, Col. Helden, a new, profuse blooming variety of great merit. Large, globular trusses thrown well above the foliage. Color rich crimson, shaded with scarlet; very bright and distinct; comes true from seed.....	25
" Zonale scarlet, mixed sorts.....	25
" " white, all white-leaved varieties mixed.....	25
" " golden and bronze, Robt Downie, Laird and Lang's fine collection. Magnificent.....	50
" apple scented, very fragrant.....	25

GILIA.

Hardy annual, one to two feet high; grows in almost any situation, in beds or in rockery. Delicate and fine flower.

Gilia, capitata, dense globular heads of clustered blossoms of a celestial blue. Two feet high..	5
" tricolor, flowers blue, with yellow and purple center. Sow in masses. One foot high.....	5

GLADIOLUS.

Magnificent plants, with sword like leaves, and long spikes of flowers, of every conceivable color and shade. The varieties are now numbered almost by thousands, each year bringing forth new and choice selections which have been produced from seed, which is the only method of obtaining new varieties. The plant and flower are from a bulb, which requires two or three years to produce from seed of sufficient size to flower well. The bulbs should be taken up on approach of winter, and kept from freezing till warm weather in spring, and then planted out in groups and borders.

Gladiolus, finest mixed, from fifty choice named varieties.....	25
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For Bulbs, see Spring Bulbs, in this Catalogue.

GLOBE AMARANTH—(Gomphrena).

A desirable everlasting, valued for its handsome, globular heads of flowers, which, if cut when well matured, will retain their beauty for years. Seeds germinate slowly. Start in hot-bed, or soak in warm water to soften the woolly husk. Tender annual; two feet high.

Gomphrena, globosa, purple..... 5

" " white..... 5

" " flesh colored..... 5

" " orange..... 10

" " striped..... 5

" " mixed..... 5

GLOXINIA

Stove perennial bulbs, producing rich and beautifully colored flowers. They deserve extensive cultivation, and thrive best in an equal mixture of peat, loam and sand. Sow in March, on the surface, in a warm, moist atmosphere. When the second leaf appears, transplant into shallow pots to grow through summer. Allow them to rest through autumn, and keep in same pots through winter, giving little water. In spring repot and water freely; will blossom second season. The first three following varieties have peculiar leaves, being large, thick, light green, and recurved in such a manner as to entirely hide the pot. From the center of the plant are produced very large flowers of the most brilliant colors and finest form. Quite a new and distinct tribe of Gloxinias.

Gloxinia, hybrida crassifolia grandiflora erecta..... 25

" " " " horizontalis..... 25

" " " " pendula..... 25

" mixed, all choice sorts..... 25

GNAPHALIUM—(Everlasting).

An interesting class of immortelles, with rather homely

Gnaphalum.

foliage, but beautiful clusters of bright golden blossoms, which, if plucked when on the point of opening, and dried in the shade, will retain their beauty for years. Good for forming winter bouquets, in conjunction with other everlasting and grasses. Tender annual; one and a half feet high.

Gnaphalium, foetidum 10

GODETIA.

Beautiful garden plants, of easy cultivation in any good garden soil, and remarkable for the delicacy of their very fine, large blossoms. Hardy annuals; one to one and a half feet high.

Godetia.

Godetia, rubicunda splendens, a very showy, new variety. Rosy-lilac flowers, with purple stain in the center 5

" *rosea alba* (Tom Thumb), delicately blotched blossoms, white at the outer portion, and rose at the base of the petals 5

" *Whitneyi*, flowers largest of the species, measuring four inches across; color crimson-blush; fine for pot plant, garden or rockery.....10

GOURDS.

A tribe of climbers with curiously shaped fruit, in various colors. Being of rapid growth, they are fine to cover old fences, trellises, stumps &c. The foliage is quite ornamental, and the markings of some of the fruit

Pear shaped, ringed.

quite extraordinary. Do not plant the seed till all danger of frost is over, and select rich, mellow ground. Tender annual climbers; ten to twenty feet h.gh.

Corsican.

Gourd, orange, the well known Mock Orange..... 5

" egg shaped, white; fac-simile of an egg; elegant10

" apple shaped, yellow; beautifully striped.....10

" pear shaped, yellow and green, striped with cream color.....10

" pear shaped (*piriformis annulata*), exceedingly beautiful fruit, with rings running round it; green ends.....10

" bottle, handsome and useful.....10

" Corsican, elegant fruit and rapid climber.....10

" Siphon, or dipper, long, slim handles, useful for dippers.....10

" powder horn, in the form of a powder horn.....10

" Hercules' club, the longest of all the varieties.10

" mixed, ornamental.10

GRAMMANTHES.

A charming little succulent plant, producing an abundance of bright scarlet and orange-yellow blossoms in the shape of a star. It is especially adapted for rock work, hanging baskets, edgings, &c. The segments of the corolla have the appearance of the letter V on them. Give it a warm, sunny situation, and good rich soil. Tender annual; six inches high.

Grammanthes, gentianoides, rich, orange-scarlet.15

" *lutea*, yellow.....15

" fine mixed.....15

GUNNERA.

A curious, herbaceous perennial, growing best in rich mold kept moist. It is increased by seed and by division of roots. Has curious, cone shaped blossoms. Green-house plant.

Gunnera.

Gunnera, scabra, large, rhubarb like leaves, and purple blossoms. One and a half feet high; curious.....15

GYNERIUM—(See Pampas Grass).

Grammanthes.

Gypsophila.

Helichrysum.

GYP SOPHILA.

Delicate, free flowering little plants, covered with a profusion of little, star shaped, white blossoms. Well adapted for hanging baskets and edgings, and valuable for making bouquets. Blossom first season, and continue to blossom several years. Make handsome specimens dried.

Gypsophila, elegans, white and pink flowers; hardy perennial; one foot. 5
" muralis, pink flowers; hardy annual; six inches. 10

HEDYSARUM—(See French Honeysuckle).

HELIANTHUS—(See Sun Flower).

HELICHRYSUM.

Large, full, double flowers of various colors, from bright yellow to scarlet, shaded and tipped. Peculiarly desirable as dried specimens; and exceedingly handsome bouquets may be formed of them for winter, is blossoms be gathered when on the point of expanding. Sow early in spring, in any good garden soil, and thin the plants to one foot apart each way. Hardy annual; six inches to two feet high.

Helichrysum, bracteatum (Golden Eternal Flower), bright yellow. 5
" nanum atrosanguineum, deep crimson. 10
" compositum album, flowers white. 10
" monstrosum fl. pl., mixed, eight varieties of largest double flowers, mixed. 10
" nanum fl. pl., mixed, five dwarf-growing, double flowering varieties mixed. 10

Heliotrope.

Helipterum.

Hollyhock.

Helichrysum, minimum fl. pl., mixed four varieties of beautiful little miniature double flowers; fine. 10
" mixed. 5

HELIOTROPE.

Highly valued for the fragrance of their flowers, and duration of bloom, and are to be met with in most gardens. They succeed in any rich, light soil, and cuttings of the shrubby kinds, taken off while young, strike readily. Half-hardy perennial; one foot high.

Heliotropium, Anna Turcz., violet-blue. 10
" Roi des Noirs, black; splendid. 10
" Triomphe de Liege, deep blue; fine. 10
" dark varieties mixed, very choice. 10
 (See colored plate.)

HELIPTERUM—(Everlasting).

A very desirable and distinct dwarf everlasting, with small foliage, and large, globular clusters of bright golden, and pure white, star-like flowers. Is excellent for forming winter bouquets, for which purpose the flowers should be gathered when on the point of opening, and dried in the shade; they will open while drying, and will retain their brilliancy for years. Hardy annual; one foot high.

Helipterum, Sanfordii, golden. 15
" anthemoides, pure white. 15

HIBISCUS.

A branching plant of the easiest culture, with rather pretty foliage, and large, cream colored blossoms, pur-

Honesty.

Hordeum.

Humea

ple in the center. The flowers are exceedingly showy; not of very long duration, but continue to bloom from June till October. The seed should be planted early, and the plants thinned to one foot apart each way. Hardy annual; two feet high.

Hibiscus, Africanus..... 5

Hibiscus.

HOLLYHOCK.

The Hollyhock, in its present state of perfection, is very unlike its parent of olden time; it now ranks with the dahlia, aster, camellia, &c. For a back-ground to a flower garden, perhaps no plant is so useful. The flowers are as double as a rose, of many shades of color, from deep yellow, red, purple, to pure white. Plant the seed in June or July, in open ground, and in the autumn, when the plants have made five leaves, transplant to permanent position, three feet apart. The following summer they will bloom. Each plant should be supported by a stake. Hardy perennial; five feet high.

Hollyhock, mixed double.....10

" Chater's finest mixed, twelve double varieties of the greatest perfection mixed; from Mr. Chater's improved strain.....15
(See colored plate.)

HONESTY, or SATIN FLOWER— (Lunaria).

Early, free flowering plants, interesting for the silver like tissue of the seed pods in their matured state. The flower is purple, not very conspicuous. The seed pods are fine for skeletonizing and working in with other

everlasting flowers for winter bouquets. Blossoms the second year from seed, and then dies. Hardy biennial; two feet high.

Honesty (Lunaria, biennis)..... 5

HORDEUM—(Ornamental Grass).

A beautiful, ornamental grass for forming winter bouquets. It somewhat resembles our domestic barley, having heavy, bearded heads. It is very hardy, and will grow in any common soil.

Hordeum, jubatum, exceedingly ornamental; two feet high.....10

HUMEA.

A remarkable, handsome plant for decorative purposes. Leaves very fragrant when slightly rubbed. Succeeds best in light, rich soil. Half-hardy biennial; six feet high.

Humea, elegans, red; from New South Wales 10

HYACINTH BEAN—(Dolichos).

Splendid climber, with abundant clustered spikes of purple and white flowers, which are followed by exceedingly ornamental seed pods; of rapid growth, often running twenty feet in a season. Plant where they are to remain, after the weather has become warm, and cultivate like common beans, only give support for the vines to run upon. Tender annual; ten to twenty feet high.

Dolichos lablab, purpurea, purple.....10

" lablab, alba, white.....10

" mixed, the above mixed.....10

" giganteus, tall growing variety, with large, purple flowers; fourteen feet; very fine.....10

IBERIS—(See Candytuft).

ICE PLANT—(Mesembryanthemum).

Mesembryanthemum, crystallinum (Ice Plant), handsome and curious plant for hanging baskets, rock work, vases, and edgings. The leaves and stems are succulent and fleshy, and appear as though covered with ice crystals, and look like rock candy. The whole plant is peculiarly brilliant in the sunshine. The flower is white, and not conspicuous. Succeeds best in dry, sandy loam, and in a warm situation. Can be grown in pots or open border, the former having preference. Tender annual trailer; six inches high..... 5

" cardifolium variegatum, the leaves are blotched with light yellow and cream colored spots. Fine for hanging baskets or dwarf masses. Hardy annual; six inches high10

INDIAN SHOT—(See Canna Indida).

Hyacinth Bean

Ice Plant.

Variegated Ice Plant.

IPOMEA.

Beautiful climbers, and exceedingly attractive mixed with other climbers. The flowers are of a variety of shapes and sizes, and of an endless number of colors, many being wondrously brilliant, and of graceful form. They are alike good for green-house, for pots and baskets, and for trellis, stumps, arbors, &c. They require heat in starting, and some of the varieties will not succeed out of the green-house. Tender annuals; five to ten feet high.

- Ipomea, cocinea** (Star Ipomea), fine scarlet..... 5
 " **bona nox** (Good Night), pure white.....10
 " **limbata**, elegantly blotched and margined with white.....10
 " **limbata hybrida**, great variety of colors; fine.10
 " " **elegantissima**, large flowers, in form of a five pointed star, with intense purple center, and pure white margin.....10
 " **rubra cœrulea**, immense flowers of bright celestial blue; stove or green-house climber....10
 " **fine mixed**.....10

IPOMEA QUAMOCLIT—(See Cypress Vine).**IPOMOPSIS**—(See Tree Cypress).**JACOBÆA**—(Senecio).

Remarkably pretty, free growing, profuse flowering plants, almost unsurpassed for brilliancy and beauty. Grow freely from seed, and are easily propagated from cuttings, not one in fifty failing. *The double are the only ones worth cultivating.* Hardy annuals in open

border, biennial in green-house. Sow in loam mixed with leaf mold. One foot high.

- Jacobæa, double crimson**, extra fine.....10
 " **double white**, elegant.....10
 " **yellow**.....10
 " **new double dwarf blue**, carefully selected, constant in height, pure in color, and double to the center.....10
 " **mixed**, above varieties mixed.....10

JASMINE.

Hardy, deciduous, ornamental shrubs, growing three feet high, and producing beautiful yellow flowers, which are very fragrant, and much admired. The seeds require bottom heat to start.

- Jasminum, fruticans**, yellow; fragrant.....10

JOB'S TEARS—(Coix).

Curious, ornamental grass from East Indies, with broad, corn like leaves, and seeds of a light slate color, wonderfully lustrous. Valuable for the formation of winter bouquets, in connection with everlasting flowers, and strings of handsome beads are formed from the seeds. Plant in open ground, in hills three feet apart, four or five seeds in a hill, and cover half an inch deep. Hardy annual; three feet high.

- Coix, lachryma** (Job's Tears)..... 5

JOSEPH'S COAT—(See *Amaranthus Tricolor*).**KAULFUSSIA.**

Beautiful, free blooming little plants of dwarf and compact growth, somewhat resembling the single asters.

Job's Tears

Lantana.

Larkspur, single.

Flowers are light blue, pure white, and the most intense violet-purple of any annual in cultivation—the richest color imaginable. A good plant for mixed beds and borders. Hardy annual; six inches high.

- Kaulfussia, amelloides*, bright blue..... 5
 " *amelloides*, alba, new; pure white..... 5
 " " *atroviolacea*, the richest violet color of any annual in cultivation..... 5
 " fine mixed..... 5

LAGURUS—(Ornamental Grass).

Useful for forming bouquets for winter decoration. The heads bear a resemblance to a hare's tail, and it is sometimes called Hare's Tail Grass. It is a perfectly hardy annual, and will grow in any common soil.

Lagurus, ovatus, curious and ornamental; one foot 5

LANTANA.

These plants are rapid growers, forming small, hardy shrubs, and producing their pink, yellow, orange, white, constantly changing heads of flowers in great abundance, which have an agreeable, aromatic perfume. Any loamy soil suits them, and they are readily increased by cuttings, in sand, in heat.

Lantana, finest French hybrids mixed, all colors.....10

" *alba magna*, pure white; one foot.....15

" *Imperatrice Eugenie*, rosy lilac; two feet.....10

Larkspur, double.

LARKSPUR—(Delphinium).

The Larkspur is one of the handsomest and most useful of plants, and for large gardens is invaluable. The leaves are much divided, and the flowers in terminal spikes. The brilliant colors of the flowers are unsurpassed. Easily propagated by seed, or by dividing the roots; delights in a deep, rich soil, and should be sown in August or September.

Delphinium, ajacis (Double Dwarf Rocket Larkspur), hardy annual; ten inches; *twelve kinds mixed*..... 5

" *cardiopetalum*, deep blue; heart shaped. Hardy annual; from the Pyrenees; one and a half feet high..... 5

" *elatum*, (Bee Larkspur), has hairy petals in the center, and a fancied resemblance to a bee. Hardy perennial; five feet high..... 5

" *grandiflorum album*, large, double white flowers. Hardy perennial; four feet high.....10

" *formosum*, rich blue and white. Hardy perennial; three feet high..... 5

" *consolida candelabrum fl. pl.*, a new type of annual larkspur, growing in the form of a branched candlestick; flowers double, and of various colors. *very showy*.....10

" *Hendersoni*, remarkably fine, large, richly colored blossoms; hardy annual.....10

" *nudicaule*, a splendid novelty, eighteen inches high, with *scarlet* flowers; fine for rockeries, flower borders or pot culture; hardy biennial.....10

" *mathiolaeflorum nanum* (Dwarf Stock-flowered, *ten brightest colors mixed*). Long spikes of perfectly double blossoms in all colors. Hardy annual; one foot high..... 5

Leptosiphon.

Lily of the Valley

Limnanthes.

Linum.

Delphinium, mathirolaeorum (Tall Stock-flow-ered), *eight brightest and best colors mixed*. Spikes of double flowers eighteen inches long; *very beautiful*. Hardy annual; two feet high 5

" **Imperiale fl. pl.** (Double Emperor Larkspur), one and a half feet high, compact and profusely blooming, almost every plant having 100 close, erect spikes of perfectly double flowers, which, in a dried state, are fine for winter bouquets. Mixed colors. 10

LATHYRUS LATIFOLIUS—(See Peas).

LATHYRUS ODORATUS—(See Sweet Peas).

LEPTOSIPHON.

A charming little plant, with delicate foliage and cheerful, star shaped flowers; pure white, with yellow anthers. Make beautiful, low edgings for borders or walks. They do not bear our hot, scorching summers well, and the seed had better be sown late in the autumn or very early in spring, and, if possible, select a sheltered situation. Hardy annual; six inches high.

Leptosiphon, androsaceus, mixed colors; fine.... 5

" **aureus**, beautiful orange color; hardy annual; one-half foot 5

" **multiflorus albus**, white; compact growth; hardy annual; one-half foot. 5

" **multiflorus roseus**, *new variety*: rose colored blossoms; fine. Hardy annual; one-half foot. 10

" **French hybrids mixed**, comprising all colors; fine for pot or borders; hardy annual; one-half foot 10

LILY OF THE VALLEY—(Convellaria).

The Lily of the Valley is a sweet little plant, thriving in any common soil; it will do well in any shaded situation, where few other plants will thrive; can be multiplied by dividing the roots, or by seed. Hardy perennial.

Convellaria, majalis, white, sweet scented blossoms; one foot. 10

LIMNANTHES.

A native of California, quite hardy; of prostrate habit, and stems ten or twelve inches long, crowned with numerous fragrant flowers, each about an inch across. A large portion of the flower is yellow, the extremities of the petals only being white. Blooms from June to August. Sow the seed in spring, and give each plant two feet of room. Hardy annual; three inches high.

Limnanthes, Douglasii 5

LINUM.

A beautiful and effective genus of plants, of slender and delicate growth, and a profusion of bright flowers.

Linum, grandiflorum rubrum (Scarlet Flax), from Algiers. Hardy annual. 5

" **coccineum**, *deep crimson*; one of the handsomest annuals ever introduced; in brilliancy of color, surpassed by none 5

LOBELIA.

A most elegant and useful genus of plants, of easy culture, and well adapted for bedding, edging, pots or rockeries. They are employed as universally in general summer gardens as scarlet geraniums, to beds of which they form a neat and effective edging. Seeds should be covered lightly.

Crystal Palace

Lobelia, speciosa, Blue King, intense dark blue, with a white spot, dark colored foliage. Showy and valuable for bedding purposes. Half-hardy perennial. 10

Pumila grandiflora.

Lophospermum.

Nemophila,

Love-in-a-Mist.

Lobelia, speciosa, Queen of Whites, pure white flowers, not tinted with the slightest shade of any color. Blooms until destroyed by frost; tender perennial. 10

" **speciosa**, Crystal Palace variety, magnificent variety, with large blue and white flowers. 10

" **Queen Victoria**, scarlet, new, scarlet flowering variety, with the darkest leaves, and very constant. Hardy annual. 15

" **pumila grandiflora**, very compact growing, and admirably adapted for edging. The plants are full of intense, deep brilliant blue blossoms, opening till frost; hardy annual. . . 10

" **cardinalis** (Cardinal Flower), a magnificent native variety, with spikes of brilliant scarlet flowers. Will flourish in any common soil. Seeds need to be well started with heat. Hardy perennial; two feet. 10

" **gracilis**, very fine for baskets, vases, &c., trailing gracefully, and blooming profusely. Half-hardy annual 10

LOPHOSPERMUM.

Beautiful evergreen climbers, with purple and violet blossoms. Require green-house or cold frame in winter; will run up fences or verandas in summer. Propagated by preserving the fleshy roots in dry earth in winter.

Seed should be sown in hot-bed in March and April.
Lophospermum, scandens, flowers violet-purple; ten feet. 12

LOVE GRASS—(Eragrostis).

A very pretty species of ornamental grass, growing one foot high; splendid for winter bouquets; hardy annual.

Eragrostis, elegans, beautiful, dancing sparklets. . 5

LOVE GROVE—(Nemophila).

This popular plant is to be found in almost every garden, and has secured a place in the heart of every lover of flowers. Of dwarf, spreading habit, it is well adapted for border or pot culture. The flowers are exquisitely colored, blotched and spotted; they are quite apt to sport into an endless variety of shades, from black and blue to lighter colors. Sow in spring, and thin to one foot apart. Hardy annual; six inches high.

Nemophila, insignis, bright blue flowers, often marked with white. 5

" **atomaria**, flowers white, dotted with purple. . . 5

" **maculata**, white flowers with purple blotch on each petal. 5

" **insignis lilaciana**, flowers of beautiful, pale lilac color, presenting a handsome and unique appearance 5

" **insignis purpurea rubra**, the nearest approach yet obtained to the long desired **scarlet** color in nemophila 5

" **mixed**, above mixed. 5

LOVE-IN-A-MIST—(Nigella).

This singular plant is known as Lady-in-the-Green, and Devil-in-a-Bush, because the blossoms are partly

Lupinus.

Lychnis

Lythrum

Calendula, poncei fl. pl.

Tagetes, signata pumila.

Marigold, Orange Quilled

concealed by the abundance of finely cut foliage. The plant and flower are both handsome, require but little care, and are worthy a place in the flower garden. Sow the seed in spring, and thin to one foot apart. Hardy annual.

- Nigella, Damascena fl. pl.**, double blue blossoms; one and a half to two feet high 5
 " **Damascena nana fl. pl.**, double white and blue blossoms; one foot high 5

LUPIN—(Lupinus).

Very conspicuous plants, with spikes of pea shaped blossoms of various colors. The taller varieties look well as a back-ground to other low growing annuals, and the dwarf look best in masses. Sow the seed where the plants are required, early in spring, and thin to one and a half feet apart. Hardy annuals; one to three feet high.

- Lupinus, Hartwegii**, a beautiful species with delicate foliage, and blue blossoms 5
 " **Cruikshankii**, blossoms white, shaded with yellow, blue and purple 5

LYCHNIS.

A border perennial from Russia, and entitled to a place in every large flower garden, as there are few plants that produce such brilliant blossoms as the scarlet flowering varieties. The flowers are produced in clusters, and are constantly coming out all summer. Sow the seed in spring, in rich, loamy soil, and the following spring transplant to the border, one foot apart. Flowers the second season. Hardy perennials; one to three feet high.

- Lychnis, chalcidonica** (London Pride), bright scarlet; two feet 5

- " **Haageana** (Benary), elegant, large, scarlet blossoms with jagged petals. Perennial, but will blossom first year; one foot 10

- " **Sieboldii**, new variety, produces large, white flowers; two feet high 15

- " **Haageana grandiflora gigantea**, a very large flowering variety, about three feet high. The flowers are scarlet, much larger than any of the preceding; perennial, but will blossom first season 10

LYTHRUM.

A showy perennial plant of easy culture, growing in any good garden soil, and producing long, numerous spikes of bright rose flowers during the season. It is a wonderfully attractive plant, and well worthy of cultivation. If seed be planted in autumn, the plants will flower the following season. Hardy perennial; two feet.

- Lythrum, roseum superbum** 5

MARIGOLD.

The Marigold has been an inhabitant of the flower garden from time immemorial, and where a rich display of bloom is desired, is almost indispensable. The African varieties are tall, growing usually two feet or more, while the French are more dwarf, of most perfect form and gorgeous beauty; all are desirable. Half-hardy annuals, in bloom till frost comes.

Marigold, Meteor, a

Marigold, Meteor.

splendid new variety from Germany, with very large, beautifully imbricated, extremely double, striped blossoms; deep orange on almost white ground. The stripes are very regular, and the flower very striking. Covered with blossoms from May till autumn. Comes true from seed.....25

- " **African, orange quilled**, a very double variety, with quilled petals; very showy..... 5
 " **African, mixed**, selected from the finest double flowers; very beautiful..... 5
 " **French, Tagetes, signata pumila**, bright yellow flowers; elegant habit. Finest varieties mixed..... 5
 " **French, new gold striped**, magnificent stripes of brown on deep gold; very double..... 5
 " **Cape, Calendula, poncei fl. pl.**, double white; fine..... 5
 " **Cape, Calendula, pulchialis**, flowers single, white, brown underneath 5

MARVEL OF PERU—(Mirabilis)—(See Four O'clock).

MATFOLA—(See Stocks).

MARTYNIA.

Extremely handsome, large flowering, half-hardy annual, deserving of the most extensive cultivation. Should be started in green-house or conservatory, and transplanted singly into borders.

- Martynia, formosa** (fragrans), foliage thick, soft and velvety. Flowers delicate rosy-lilac, blotched and shaded with bright crimson. Needs plenty of room; very fragrant..... 5
 " **lutea**, yellow blossoms 5

Maurandia.

Mignonette, grandiflora.

M. Tall Pyramidal.

Martynia, proboscidea, a curious plant, on account of its singularly curious seed vessels, which are much esteemed when young, for pickles. Flowers blue..... 5

Martynia, proboscidea.

MAURANDIA.

Graceful climber for green-house, parlor, baskets, or out-door purposes. Set out in the border with a little frame to which to attach their tendrils, they will be loaded all the season with rich purple, white and rose, foxglove shaped blossoms. The seed should be started in hot-bed or green-house, as without artificial heat, they will scarcely flower the first season. They must be removed to a warm place on the approach of cold weather in autumn. Tender perennial climber; six feet high.

Maurandia, Barclayana, purple, rose, white and violet..... 10
" mixed, choicest kinds mixed. 10

MESEMBRYANTHEMUM—(See Ice Plant).

Dwarf Compact.

MIGNONETTE.

A well known, hardy annual, producing dense, semi-globular heads of exceedingly fragrant flowers, borne on spikes from three to six inches long. Is in bloom nearly the whole season, and the perfume is so fragrant that the

whole atmosphere around is perfumed. No garden should be without it. If sown at intervals during the spring and early summer, it will be in bloom till killed by the frost. Seeds sown in autumn, will bloom early in spring. Hardy annual; perennial if protected; one foot.

Mignonette (Reseda Odorata grandiflora), large flowered. (See colored plate) .. . 5

" **crimson flowered Giant**, of robust habit, with very large spikes of handsome, crimson flowers of exquisite fragrance; a free and perpetual bloomer..... 10

" **Parson's Tree**, of robust growth, and well adapted for green-house men and florists, as it affords long spikes of blossoms in great abundance..... 10

" **Parson's white flowering Giant**, flowers almost pure white, of great fragrance, borne on spikes six inches to a foot in length. May be grown as a tree or dwarf, and is especially valuable for the latter mode of culture .. . 10

" **Dwarf Compact**, a distinct and very desirable variety. It forms a dense, semi-globular bush about ten inches high and eighteen inches in diameter. The robust, vigorous branches are decorated with innumerable close spikes of reddish tinted flowers, which are said to be produced, without intermission, from spring till late in autumn, the blooming period of this being longer than in any other variety, owing to the successional branching growth. Highly recommended for pot culture, or for market purposes .. . 10

" **Tall Pyramidal**, this variety has woody stems and vigorous branches, which are clothed with dark green leaves and club like spikes of flowers ten inches long, of a fine red tinge. By good culture, it grows to a height of two and a half, and a breadth of one and a half feet. The fragrance is powerful, and in consequence of its ligenous habit, the more it is cut the more freely it flowers, continuing to bloom till quite late in autumn. 10

" **Pyramidal Bouquet**, this forms a dense, short pyramid of free growth, the numerous branches being terminated by large spikes of intense red flowers, as many as 300 of them being produced on one full grown specimen. This variety is recommended for pot culture, and for the open border..... 10

Mig. Miles' New Spiral.

Mimulus, punctatus.

Mim. inimitable double.

Mignonne, Miles' Hybrid Spiral, this new spiral mignonette is said to be superior to any in cultivation. It is of dwarf, branching habit, the flower spikes often attaining a length of eight to fourteen inches. By cutting the side shoots, the center spike will attain a length of eighteen to twenty inches. It is very hardy, well adapted for market purposes, and the fragrance very strong and pleasant. It has attracted much attention at the London Flower Shows, and the London agricultural papers notice it very favorably..... 15

MIMOSA—(See Sensitive Plant).

MIMULUS.

Strikingly handsome flowers of easiest cultivation. Perennials in the green-house, annuals in the open air.

Mimulus, moschatus (Musk Plant), cultivated on account of the musky odor of the plant. Needs rich soil and plenty of moisture. May be cultivated to an upright plant, though usually trailing..... 10

“ **punctatus** (Monkey Flower), large, beautifully spotted blossoms; blooms first year.... 10

“ **inimitable double**, a splendid variety, with beautiful, double tubed flowers; very interesting..... 25

MOLUCELLA.

MOLUCA BALM, or **SHELL FLOWER** is a very curious plant. Within the calyx a button shaped bud appears,

which unfolds into a shell shaped flower of a white and purple color. It is a strong annual, growing two or three feet in height with but few leaves, but such numerous branches that its width is often as great as its height. Sow in hot-bed in spring, and about the end of May transplant into dry, warm border, where it will flower freely.

Molucella, laevis..... 10

MOMORDICA.

A curious, annual climber, with yellow blossoms, and foliage similar to the Canary Bird Flower. The fruit is the chief curiosity, is egg shaped, and covered with warty excrescences, and when ripe, bursts suddenly open, scattering its seeds, and showing a brilliant carmine interior. Fine for trellises, fences, stumps, &c.

Momordica, balsamina (Balsam Apple)..... 5

MORNING GLORY—(Convolvulus Major).

Handsome, showy climber, of easy culture, and suitable for covering arbors, windows, trellises, old stumps, &c. It is so perfectly hardy as to grow in almost any soil. Without care, will soon cover any unsightly place if support be given for the vines. The flowers are most brilliant in the morning, and run through many shades, from white to dark blue, red and striped. Hardy annual; ten feet high.

Convolvulus Major, striped..... 5

“ “ **blue**..... 5

“ “ **crimson**..... 5

“ “ **white**..... 5

Momordica.

Morning Glory.

Mourning Bride.

Nasturtium, tall.

N. dwarf.

Nemesia.

Convolvulus Major, purple.....	5
" mixed	5
(See also Convolvulus.)	

MOURNING BRIDE—(Scabious).

Handsome flowers in hemispherical heads on long stems; of exceeding sweetness, and sometimes called Sweet Scabious. The colors are deep and light purple, scarlet, white, and dark mulberry red, some of the dark shades are tipped with white. With proper protection of the roots, they will bloom two or three years. Very useful for bouquets, as their long stems work easily, and their striking colors, as well as fragrance, are desirable. Plant in hot-bed, and transplant one and a half feet apart. Tender perennial, one to two feet high.

Scabiosa, atropurpurea, deep purple.....	5
" candidissima, pure white.....	10
" coccinea, scarlet	5
" mixed	5

MYOSOTIS—(See Forget-Me-Not).**NASTURTIUM, TALL—(Tropæolum Lobbianum).**

The Lobbianum differs materially from the common running Nasturtium, and is admirably adapted for greenhouse or conservatory decoration in winter. It is a very rapid grower, and strikes freely from cuttings, but seeds sparingly. The colors are very brilliant, and of many shades, from scarlet to black. Fine for covering arbors, trellis, and rustic work. Hardy annual; ten to twenty feet high.

Tropæolum Lobbianum, Couleur de Bismarck, brown.....	15
" Lobbianum, Geant des Batailles, carmine.....	15
" " Roi des Noirs, black	15
" " Von Moltke, bright, bluish-rose.....	15
" " mixed.....	10
" mixed tall, the common tall varieties	5

NASTURTIUM, DWARF—(Tropæolum Minor).

Very useful for bedding, massing, or ribboning. A bed of dwarf Nasturtiums in the yard is very brilliant and attractive, and they are in bloom all the season. The flowers are more brilliant if the soil be not over rich. Give each plant a foot of room. Hardy annual; one foot high.

Nasturtium, Dwarf, Crystal Palace Gem, sulphur, spotted maroon.....	10
" Dwarf, scarlet	10
" " King Theodore, very dark.....	10
" " Beauty, orange and vermilion.....	10

Nasturtium, Dwarf, yellow.....	5
" Dwarf, Pearl, white.....	10
" " rose	10
" " King of Tom Thumbs	10
" " Golden King of Tom Thumbs, new; brilliant gold color	10
" " Spotted King, introduced by Messrs. Carter, of London; new; yellow, spotted chocolate	10
" " mixed.....	5

NEMESIA.

A charming and useful, dwarf growing plant of compact habit, well adapted for beds, edgings, rock work or pot culture. The blossoms are curious and pretty, yellow and white, and so numerous as to almost hide the foliage. Sow in hot-bed or green-house, early in spring, and transplant in May six inches apart. Tender annual; nine inches high.

Nemesia, versicolor	10
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NEMOPHILA—(See Love Grove).**NIEREMBERGIA.**

Charming little plants, well adapted for edgings, baskets, &c. The seed should be sown in green-house, or in pans in the house, and set out in open ground, after danger of frost is over.

Nierembergia, gracilis, a fine bedding plant; white with purple eye; slender and graceful.....	10
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NIGELLA—(See Love-in-a-Mist).**NOLANA.**

Beautiful, trailing plants, with prostrate stems, much branched; almost equal to the portulaca for growing in masses, and unsurpassed for rock work, pots, baskets, or vases, as the branches hang pendulous over the edge of vase or basket. The blossoms are convolvulus shaped, brilliant, freely produced, of various colors. Sow in open ground, in light, sandy soil, early in spring; plenty of sun, and a dry situation are essential. Hardy trailing annual; six inches high.

Nolana, atriplicifolia, blue, white and yellow	5
" prostrata, blue, streaked with black.....	5
" mixed.....	5

NYCTERINIA.

Charming little plants, well adapted for rockeries and baskets. The flowers are borne on large heads, are of various colors, star shaped, and during the evening, are very fragrant. Produces richer, larger, and more blossoms in light soil. Start in hot-bed, and transplant six inches apart. They will blossom very early in spring,

Nierembergia.

Nolana.

Nycteria.

and remain in bloom the whole season. Tender perennial, six inches high.

Nycteria, capensis, white, yellow center.....	10
“ selaginoides, pink, yellow center.....	10
“ “ alba, pure white.....	10
“ mixed.....	10

NYPHÆA—(Water Lily).

Hardy, aquatic plants, bearing exceedingly beautiful, fragrant, white blossoms, which appear as if floating on the water. They are very much admired, and becoming more and more popular every day. Are increased by sowing the seed, or by dividing the roots or tubers. They grow readily in ponds or streams of shallow water having muddy bottoms, and can be grown in aquariums, tubs or tanks, in the house, if there be sufficient mud at the bottom, and the seeds or roots be kept continually covered with water.

CULTIVATION—In Tubs.—For a tub, take a strong barrel, free from tar, oil or salt, saw it in two, fill this one-third full with fine, black, garden soil, or meadow mud, if handy: plant the seed in this mixture, covering them one inch deep, add water gently so as not to disturb the seed, until the tub is full. This is all the care needed: always keep the tub full of water. Set this on a brick or board platform in any place you desire. The tubs, with their contents, should be placed in a cellar during the winter, kept from frost, and not allowed to entirely dry up.

For Aquariums.—Put in five inches of fine, black loam, cover the seed one inch deep in this, and sift on enough fine sand to entirely cover the loam.

Nymphæa, odorata, white: fragrant.....20

CENOTHERA—(See Primrose).

OLEANDER—(Nerium).

This well known shrub, originally a native of India, is of easy culture, and flowers freely the greater part of the year. In warm, moist climates, it requires no protection, and attains the proportions of a good sized tree. The flowers have a salver shaped corolla, with a crown of torn appendages in the center are of a beautiful shade of pinkish-red. They can be produced successfully in the house if the atmosphere is kept moist and warm. Sow seeds in gentle heat in February or March, in light, rich soil, which must be kept moist. When young plants are three or four inches high, repot in rich soil. The temperature in which plants are grown should not fall below 35°. The young shoots made one season should bloom the next.

Nerium, Oleander.....10

OXALIS.

Very pretty, herbaceous plants with rich, rose colored blossoms. They thrive well in a mixture of loam and sand; they should not be watered after they have done flowering until they begin to grow afresh. They are desirable for green-house decoration, rock work or baskets out of doors. The plants can be wintered successfully in cold frame if they are kept dry and the frost excluded. Sow seeds in gentle heat early in spring, and when well started, transplant where they are wished to flower. Half-hardy perennial.

Oxalis, rosea.....10

PALM—(Chamærops).

The Palm is perhaps one of the most ornamental plants in the green-house, and those varieties that are

Chamærops, Excelsa.

hardy enough to bear planting out in the lawn during warm weather, are sure to command attention. The seeds are imported, and must of course have the aid of green-house or conservatory to make them germinate. Seeds are frequently four months in germinating.

Chamærops, humilis (Dwarf Fan Palm), the most hardy sort, and in Scotland has stood out several winters with but slight protection. It is also the most dwarf of its species, seldom attaining over eight or ten feet in height.....15

“ **excelsa** (Hempen Palm of China), is a green-house variety in our climate. In our Southern States, would do well as a lawn plant, than which nothing could be more conspicuously attractive. A well grown specimen will attain the height of twenty-five or thirty feet...25

PAMPAS GRASS—(Gynerium).

Magnificent, ornamental grass, producing numerous flower stems, surmounted by plumes of silvery inflores-

COLLECTION N^o 3.

CONSISTING OF 9 BEST VARIETIES OF PANSIES.

EMPEROR WILLIAM.

PURE YELLOW.

LARGE STAINED.

ODIER.

KING OF THE BLACKS.

GOLD MARGINED.

COPPER COLORED.

PURE WHITE.

VARIEGATED or STRIPED.

PRICE 15 CENTS PER PACKET FOR EACH VARIETY.
\$ 1.00 FOR THE WHOLE SET OF 9 VARIETIES.

Nymphæa.

Oxalis.

Chamærops, Humilis.

cence. Half-hardy perennial, from South America; ten feet high. Start in heat.
Gynierum, argenteum to

PANSY.

These lovely flowers are favorites with all, not only for the brilliancy and variety of their colors, but for the durability of their bloom. Seed may be sown in open ground in spring or summer, or in hot-bed early in spring. Young plants produce the largest and best flowers. The plants should always occupy a cool, partially shaded situation, and the ground cannot be too rich; coolness and moisture are necessary. Transplant when an inch high. Seed sown in July will blossom late in autumn, if sown in October will bloom the following spring. Hardy biennial, four inches high.

The following varieties we have imported from the best English German and French florists, and can recommend them with confidence. They are saved from the choicest and finest flowers, and comprise all shades of color, from pure white to King of the Blacks

Pansy, Baron de Rothschild, very striking.....	15
" copper colored.....	15
" Emperor William, indigo, dark center.....	15
" King of the Blacks, coal black.....	15
" large stained, large, and extra fine.....	15
" Oser, each petal blotched.....	15
" pure yellow.....	15
" variegated and striped, fine.....	15
" white, pure.....	15

Pansy, bronze, auricula flowered.....	15
" purple, white edged.....	15
" sky blue.....	15
" fawn colored.....	15
" gold margined.....	15
" marbled.....	15
" mahogany colored.....	15
" Beauty of St. Osyth, very black.....	15
" violet, white edged.....	15
" purple and yellow.....	15
" Imperialis, the new, five blotched, prize pansy, of greatest perfection in size, form and variety of color.....	25
" Prince Bismarck, new, golden bronze, marbled; remarkably beautiful.....	50
" extra choice mixed, from choicest named flowers.....	15
" fine mixed, good quality.....	10

SIZE COLORED PLATE IN THIS CATALOGUE.

PASSION FLOWER.

A most interesting and well known order of climbers, bearing singularly beautiful flowers. They are the pride of South America and West Indies, where the woods are filled with the species, which climb about from tree to tree, bearing flowers of striking beauty. We have selected two varieties which seem best adapted to our climate, being more hardy than many other sorts.

Passiflora, cærulea, hardy, deciduous climber, with blue and white flowers of remarkable beauty. It is hardy enough to withstand our winters, if

Passion Flower

Pampas Grass.

Perennial Pea

Pentstemon.

Petunia, superbissima,

P. double.

the roots are protected with straw, leaves, or mulch.....10

Disemma coccinea, magnificent green-house climber, with brilliant scarlet blossoms in the form of a double coronet or crown. Is rather tender, but can be planted out after danger of frost is over; must be sheltered or protected from frost in autumn or winter.....20

PEAS—(Lathyrus).

A perennial climber, producing a long succession of white, rose and purple blossoms, in clusters of eight or ten each. Suitable for trellises, arbors, &c. Young plants flower the second year freely, but the third and fourth year, they produce an abundance of foliage and bloom. They die down every year, and start again in spring. Hardy perennial; ten feet high.

Lathyrus, latifolius, rose10
 " " **white**15
 " " **mixed perennial**.....15

" **Odoratus** (see Sweet Pea).

PENNISETUM—(Ornamental Grass).

A species of hardy grass, useful only for the formation of winter bouquets. The heads are barbed and feathery, and present a beautiful appearance when

Pennisetum.

mixed with Gomphrenas and other immortelles. Is perfectly hardy, and will grow in any common soil.

Pennisetum, longistylum, hardy, perennial, ornamental grass; two feet high 5

PENTSTEMON.

These handsome, herbaceous plants are deservedly growing in favor for bedding purposes. The flowers are

bell shaped, in racemes or spikes, and are constantly produced during the whole season. No one who has ever seen their beauty will willingly do without them. They are hardy perennials, and will live out of doors with a little protection. The seed should be sown in open border, covered very lightly, and the plants transplanted when four inches high.

Pentstemon, Hartwegi, one of the freest blooming kinds, and highly recommended; flowers brilliant scarlet, and very striking. Two feet high. 10

" **Murrayanus**, one of the best; a single spike has been known to produce upwards of fifty blossoms, each flower an inch and a half or more long; flowers rich, shining scarlet; three feet high.....10

" **choice named varieties**, seed saved from collection of newest varieties, and cannot fail to give great satisfaction.....10

PERILLA.

Ornamental foliage green-house evergreen shrubs, which are fine for bedding. Foliage metallic bronze; nothing else like it.

Perilla, atropurpurea laciniata, new; very beautiful foliage..... 5

PETUNIA.

Petunias are unsurpassed, if indeed equaled, for massing in beds. Their richness of color, duration of bloom, and easy culture, will always render them popular. They will do well sown in open border in spring, or earlier in cold-frame or hot-bed, and transplanted eighteen inches

Compacta elegantissima.

Petunia, single.

P. double fringed.

Phlox Drummondii.

apart. By the latter process, they will come into bloom much earlier, though they do perfectly well sown in open ground. Be careful not to cover the small seeds too deeply; they like a sandy loam. Tender perennial; one and a half feet high.

Petunia phoenicia, original type; deep purple.... 5

- “ **Countess of Elsmere**, deep rose, white throat..... 10
- “ **finest striped and blotched**, saved from magnificent collection of striped and blotched varieties..... 10
- “ **large flowered, spotted, very fine**..... 25
- “ **fine, green edged varieties, beautiful**..... 20
- “ **new fringed varieties, desirable novelty**..... 20
- “ **argentea, rosy-white**..... 5
- “ **atropurpurea, dark red**..... 5
- “ **nyctaginiflora, pure white**..... 5
- “ **violacea, violet-red**..... 5
- “ **hybrida grandiflora superbissima, novelty**; splendid, large throat..... 25
- “ **compacta elegantissima, new**; dwarf compact; free blooming..... 25
- “ **hybrida grandiflora, choicest mixed**; seed saved from show flowers..... 15

Perilla.

Hybrida robusta fl. pl.

- Petunia, large flowered mixed**, saved from largest flowers..... 10
- “ **hybrida, fine mixed**..... 5
- “ **double mixed**, finest varieties carefully fecundated with best double flowers. Sure to produce a good percentage of double flowering plants..... 20
- “ **hybrida robusta fl. pl.**, new, dwarf, of robust growth, forming a compact, upright, branched bush about ten inches in height and fourteen inches in width, with double, sometime even *double fringed* flowers in all shades of colors existing in petunias. An extremely handsome and valuable sort for market culture..... 25
- “ **extra double fringed**, many colors; beautifully fringed; a good percentage double; *new*..... 50

PHLOX DRUMMONDII.

Remarkable for the brilliancy and abundance of their large, terminal flowers, completely hiding the foliage. The blossoms are of many colors, from pure white to deepest purple, eyed and striped. For masses of separate colors and for cutting for bouquets, they are unsurpassed. The seed can be planted in open ground in autumn or spring or plants may be started in hot-bed and transplanted. Give good, rich ground, and set plants six inches apart each way. Hardy annual; one foot high.

Grandiflora splendens.

- Phlox Drummondii, alba, pure white**..... 10
- “ **Drummondii, scarlet, black center**..... 10
- “ “ **rosea, deep rose**..... 10
- “ “ **Black Warrior, fine**..... 10
- “ “ **Leopoldii, red, white eye**..... 10
- “ “ **Queen Victoria, violet, white eye**..... 10

Pink, double China.

P. double Diadem.

P. Heddewig's.

- Phlox Drummondii**, *marmorata alba rosea*, white, rose eyed and marbled..... 10
- " **Drummondii**, *Cardinal*, brilliant scarlet..... 10
- " " *General Grant*, rich purple... 10
- " " *Heinholdii* (*Benary*), *the true splendid scarlet phlox*..... 15
- " " *Heinholdii cardinalis*, an intense, fiery scarlet, and it may be considered a rival to the scarlet geraniums, verbenas, &c. Of compact, bushy habit, a constant and free bloomer 20
- " **Drummondii**, *grandiflora*, choice mixed, scarcely inferior in size and texture to the perennial sorts. One of the finest of recent introductions 10
- " **Drummondii**, *grandiflora splendens*, extra choice mixed, this very fine variety has proved itself to be the gem of the new, large flowering race of *P. Drummondii*. The flowers are large, handsomely rounded, and of great substance; the color vivid crimson, with a pure white disc: the habit of growth free and robust. As the color stands well in the open ground, it is a valuable bedding plant..... 10
- " **Drummondii**, fine mixed, many fine varieties..... 5

PHLOX PERENNIAL.

The varieties of Perennial Phlox are among the choicest of our flowers for bedding and border plants. They

Phlox Perennial.

are perfectly hardy, and need no protection; will flourish in any soil, succeeding better however, in deep, rich, rather moist ground.

Phlox Perennial, mixed, seeds saved from the newest, splendid sorts of Mr. Lieval..... 15

PINK—(*Dianthus*).

The family of *Dianthus* is by far the most useful of all the biennials and perennials, and for beauty and variety cannot be surpassed. The delicacy and richness of the tints, combined with the aromatic fragrance of many of the species, are valuable recommendations for the entire family.

- Dianthus**, *Chinensis fl. pl.* (*Double China Pink*), this species is a biennial of dwarf habit; flowers the first year, but the bloom is stronger the second. The colors are very rich, and in large beds, you can hardly find two alike. Seeds saved from double flowers will produce double ones. 5
- " **Plumarius** (*Pheasant Eyed Pink*), white or pink, with dark eye. The flowers deeply fringed or feathered; very fragrant. Hardy perennial..... 5
- " **Chinensis Heddewigii fl. pl.** (*Heddewig's Pink*), flowers very large and double, having a diameter of nearly three inches; of various shades of brilliant colors, almost unsurpassed. An elegant acquisition. Half hardy biennial. 10
- " **Chinensis laciniatus fl. pl.** (*Double Japan Pink*), to be properly appreciated, these should be seen, as it is impossible otherwise to convey any idea of their beauty. Rich in hue, very double, deeply fringed petals—only lacking fragrance to make them perfect. Half-hardy biennial. 10
- " **Heddewigii diadematus** (*Double Diadem Pink*), this is of denser growth than the *Heddewigii*, and of dwarfer habit. Very regular, densely double, and of all tints, from crimson-purple to deep black-purple. It has often a velvet-like, radiant fire, impossible to reproduce. 10
- " **Chinensis Imperialis fl. pl.** (*Double Imperial Pink*), a superb, double variety from China. 10

The two following varieties are introduced by Messrs. Carter, of London, and are new. They are selections from the finest formed varieties of *Dianthus Heddewigii*, and are said to be remarkably fine:

Pink, Eastern Queen.

Poppy, bracteatum.

P. carnation.

- Dianthus, Heddewigii, Eastern Queen**, beautifully marbled; the broad bands of rich mauve upon the paler surface of the petals are very striking and pretty 25
- " **Heddewigii, Crimson Belle**, rich, vivid, crimson like color; flowers of extraordinary size and substance, evenly and finely lacinated. Both the above varieties come perfectly true from seed. 25
- " **barbatus**, (see Sweet William).
- " **caryophyllus**, (see Carnation).

POPPY—(Papaver).

Old fashioned flowers, not much in demand; there are however a few species of great beauty, which are an ornament to any garden. The three following varieties will be found to be magnificent, worth more than all the rest. Hardy perennials, blooming first year from seed, if sown early; will not bear transplanting well.

- Papaver, bracteatum pulcherrimum**, superb, large, double, orange-crimson flowers 5
- " **Oriente**, large, gorgeous, orange-scarlet blossoms; bottom of petals black—beautiful. 5
- " **Carnation**, brilliant, large, showy, double flowers, of various colors; two feet 5
- ☞ The last variety, under the name of **Papaver, somniferum**, is the sort used extensively for the extraction of opium.

PORTULACA.

There is scarcely any flower in cultivation that makes

Portulaca, single.

such a dazzling display of beauty as a bed of many hued, brilliant colored Portulacas. They are in bloom from about the first of July till killed by frost in autumn. Plant in open ground after it has become warm, in a light, sandy soil, and in a dry situation. After the plants appear, withhold water, and if the be-

have a full exposure to the sun, the ground will be covered with the plants, and the effect will be beautiful. Tender annual—nine inches high.

- Portulaca, alba**, pure white. 5
- " **aurea**, deep golden 5
- " **striata**, striped yellow 5
- " **caryophylloides**, carnation striped. 5
- " **fine mixed**, many beautiful kinds. 5

Portulaca double.

DOUBLE VARIETIES.

The double varieties of this plant are most beautiful. The blossoms are about one and a half inches across, perfectly double, and of many colors. Not all the plants will be double, but the single ones can be pulled out. They will stand any amount of dry weather.

- Portulaca, double, white** 20
- " " **orange** 20
- " " **scarlet**. 20
- " " **rose striped**. 20
- " " **sulphur**. 20
- " " **mixed** 15

PRIMROSE, EVENING—(Euthera).

The Euthera, or Evening Primrose, is a general favorite. They all produce large, showy blossoms, which are fully expanded only towards and during evening. The blossoms are three to four inches across, usually yellow or white. And very freely and seasonably pro-

Primula plant.

P. flower.

P. double

Ænothera, acaulis alba.

duced. They all do better if seed be started in hot-bed, and the plants transplanted.

Ænothera, acaulis alba, of prostrate habit, the leaves lying on the ground; produces an abundance of large flowers about three inches across, of most wonderful beauty, being transparent, and of the color and lustre of mother of pearl. Hardy perennial; six inches high.....10

" **Lamarckiana**, superb spikes of large, bright yellow blossoms, about four inches across. As

Ænothera, Lamarckiana.

many as 400 buds and blossoms have been counted on a single spike, and they are constantly produced from early spring till late in autumn; Hardy perennial; four feet high.... 5

Ænothera, gigantea, the stem grows very tall, changing at about two-thirds its height into an immense flower spike of bright yellow. Notwithstanding its shrubby appearance, it is an annual, and may be grown as easily as the other kinds.....10

PRIMULA-SINENSIS—(Chinese Primrose)

These are perhaps the most desirable of all house-blooming plants, and will richly compensate for the little care they require. They are in almost constant bloom all winter, and if the plants be transferred to the border, they will bloom nearly all summer. Though perennial, new plants flower more freely, and seed should be sown every year. Give them a long time for growth before flowering, and do not force the young plants, but simply protect them from frost and damp, cutting winds. Sow the seed in shallow boxes, filled with good, rich soil, dusting a little fine earth over them; if covered too deeply, or if the seed be wet and allowed to dry again, they will not germinate. Transplant into pots, and they will be ready for winter blooming in the drawing room. Tender perennial; six to nine inches high.

Primula, sinensis fimbriata, new scarlet, distinct and striking.....25
 " **sinensis fimbriata**, rose, rose varieties mixed, 25
 " " **Village Maid**, pure white, 25
 " " **alba maxima**, flowers large, of great substance, finely fringed, pure white; *extra*; *novelty*.....50
 " **sinensis fimbriata**, James' Prize, dark carmine50
 " **sinensis fimbriata**, punctata elegantissima, the darkest primula known; flowers velvety-crimson, admirably fringed and regularly spotted on the edge with white50
 " **sinensis fimbriata**, choicest fern leaved, dark carmine and pure white.....25
 " **sinensis fimbriata**, choicest mixed, from Mr. James' choicest strain of best fringed varieties; confidently recommended to give the greatest satisfaction; all colors mixed.....25

DOUBLE VARIETIES.

The following four varieties can be relied upon to come true from seed. They are very choice, and highly recommended for florists:

Primula, fern leaved.

Primula. sinensis fimbriata, double	crimson....50
" " " " "	white.....50
" " " " "	red.....50
" " " " "	mixed.....50

P. Japonica.

Pyrethrum, double.

Pyrethrum, aureum (Golden Feather), beautiful, gold leaved bedding plant, retaining its ornamental character till late in autumn. One of the finest recent acquisitions for geometrical designs; flower white.... 20

QUAKING GRASS—(See Briza).

RHODANTHE—(Everlasting).

Of all the many varieties of everlastings, we think the Rhodanthe the finest and most beautiful. The flowers are of various colors, pure silvery white with yellow disc, rosy crimson and bright purple, rose suffused with white, &c. For winter bouquets, the blossoms should be gathered before they are fully expanded, and if dried in the shade, they will retain their brilliancy for years. The leaves are heart shaped and lustrous, and the calyx long, scaly and shining. The seeds should be started in hot-bed, and the plants transplanted to a warm situation, one foot apart. Tender annual; one foot high.

Rhodanthe, Manglesi, rich rose color, suffused with white.	20
" maculata, rosy-crimson, bright purple or white, with golden center, surrounded by a velvety band	10
" maculata alba, pure white, with yellow disc; elegant	10
" mixed	10

RICINUS—(See Castor Bean).

ROSE CAMPION—(See Agrostemma Coronaria).

ROSE of HEAVEN—(See Agrostemma Coeli-rosa)

Primula flower, double

PYRETHRUM—(Feverfew).

Very useful, and universally admired bedding plants, deserving a place in every garden. The single varieties are worthless, but the double flowering sorts are very beautiful. Half-hardy perennials, usually requiring the protection of a cold-frame or conservatory through the winter; any good garden soil suits them.

Pyrethrum, partenium (Double Feverfew), pure white, double flowers; very beautiful; desirable for bedding..... 10

Rhodanthe.

Salpiglossis.

Sanvitalia

Salvia, splendens compacta.

SALPIGLOSSIS.

Very showy bedding or border plants, with richly colored, erect, funnel shaped flowers. The colors are beautifully marbled and pencilled, purple, scarlet, crimson, yellow, buff, blue, and almost black. They are biennial in green-house but annual in open ground. Start seed in hot-bed, and transplant one foot apart into a mixture of loam and sand, with well rotted horse manure at the bottom. Bloom from August to October. Tender annual; one and a half to two feet high.

Salpiglossis, New Black, a new variety, recommended for its distinct character as a black blossom 15
 " fine mixed, colors beautifully marbled; purple, scarlet, crimson, yellow and blue.....10

SALVIA.

The Salvia, or Flowering Sage, is a very ornamental plant, flowering in spikes of fiery red, crimson and blue, and continues in blossom, in open ground, till frost, when the plants can be removed to the green-house, and will continue in bloom a long time. Start the plants in hot-bed, and transplant into light, rich soil, about one foot apart; tender annual; one to five feet high.

Salvia, splendens compacta, the finest salvia grown, being literally covered with blossoms; grows well from cuttings. 15
 " Roemeriana, deep crimson; beautiful; one foot. 10
 " patens, one of the brightest and purest of all blue flowered plants, and holds a pre-eminent position.....20

SANVITALIA.

Very pretty, dwarf, trailing plants, excellent for rock work, borders or edgings of beds. It is so completely covered with flowers as to nearly hide the foliage. The flowers are double and of a brilliant golden yellow, resembling a miniature double zinnia in form. Single varieties are not worth cultivating. Sow where required, in open ground in spring, and thin to six inches apart;

the plants will then cover the ground. Hardy annual; six inches high.

Sanvitalia, Procumbens fl. pl..... 10

SAPONARIA.

It is impossible to speak too highly of these charming little plants. They are the longest blooming of all dwarf annuals, and carpet the ground with their pretty, little, star shaped, pink, rose and white blossoms during the summer and autumn months. Unsurpassed for edgings and ribboning, and produces a fine effect in beds, by their combination of colors. Sow in spring, in open ground. Hardy annual; six inches high.

Saponaria.

Saponaria, calabrica, deep pink..... 5
 " " rosea, new..... 5
 " " alba, white..... 5
 " mixed..... 5

SCABIOUS—(See Mourning Bride).**SCARLET FLAX—(See Linum).****SEDUM.**

A species of low, succulent plants, some of which are remarkably pretty; grow readily upon stones, rocks, walls and roofs of houses; are admirably adapted for the center of hanging baskets.

Sedum, caeruleum, the common blue sedum, frequently known as Blue Stonecrop. Hardy annual; six inches high 10
 " Aizoon, bright yellow blossoms; of trailing habit, and thick, succulent, deep green leaves. Hardy perennial; one foot high..... 10
 " fabarium, thick masses of pure white flowers. Hardy biennial; one foot high.....25

SENSITIVE PLANT—(Mimosa).

An interesting and curious plant, with globular heads of pink flowers, well known for the extreme irritability of its leaves and foot stalks, which close and droop at the slightest touch, or in cloudy, damp weather, and during the night. The plant is most irritable in the greatest heat, and if the upper branches be touched and droop, touching the lower ones, the whole plant will appear as if wilted and dying. Start in hot-beds, in pots, and transplant into a warm situation, six inches apart. Tender annual; two feet high.

Mimosa, pudica..... 5

SMILAX.

No climbing plant in cultivation surpasses this for graceful beauty of its foliage. In cut flowers, and for wreaths, &c., it is indispensable for florists. Its hard texture enables it to be kept several days after being

Sedum, fabarum.

S. cæruleum.

Statice.

cut, without wilting. Nothing is finer for clothing statuettes, vases, &c. Soak the seed in warm water twelve hours, and plant in pots, in hot-bed or green-house, in February, and keep in warm, moist place. One plant in a two-inch pot is enough. After they have completed their growth and the foliage begins to turn yellow, turn the pots on their sides and withhold water till August, when the little bulb which has formed can be repotted in good, rich earth, and watered freely, and it will grow all winter. Tender perennial climber; ten feet high. *Boston Smilax*, *Myrsiphyllum asparagoides*15

SNAPDRAGON—(*Antirrhinum*).

The Snapdragon is an old favorite border plant, with dark and glossy leaves, and large, curiously shaped flowers with finely marked throats. They have been much improved by careful selection, and now are really magnificent flowers. They will blossom the first season from seed sown in spring, but the blossom will be much stronger the second season. Succeeds best in dry, loamy soil. Tender perennial; two feet high.

<i>Antirrhinum</i> , majus album, pure white.....	5
" majus, brilliant, crimson, white throat.....	5
" " caryophylloides, beautifully striped .	5
" " Delila, white throat.....	5
" fine mixed, all the best colors.....	5

SOLANUM.

A class of beautiful, ornamental, fruit bearing plants. They are useful for conservatory decoration, and present a beautiful appearance in the drawing room. Most of the varieties are half-hardy perennial shrubs, and can be planted out when danger of frost is over. The foliage is beautiful, but the fruit is the chief attraction, being very beautiful in appearance, but not edible.

Sensitive Plant.

Smilax

Snapdragon.

Solanum.

- Solanum*, pseudo capsicum, covered with a profusion of miniature, pepper shaped, scarlet fruit10
- " *Prince of Wales*, magnificent variety, covered with bright orange, pear shaped fruit20
- " *Weatherill's hybrids*, dark green foliage, and various colored fruit; very fine for pot culture in drawing room, or to decorate dinner tables. 20
- " *hybridum compactum*, large, orange-scarlet berries, produced abundantly. Elegant for house or green house decoration during winter.15

STATICE.

The species of Statice, or Sea Lavender, ought to be in every garden, on account of their lovely little flow-

Stock, double German Ten Week. S. Emperor, or Perpetual.

Sweet Sultan.

ers so freely produced. Sow in sand, loam or peat, in the house, and transplant into the garden when warm. Is perfectly hardy.

Statice, Tatarica, hardy, herbaceous perennial from Russia, producing an abundance of pink flowers. One and a half feet high.....25

STEVIA.

A genus of plants, producing white and purple flowers which are of great value, and largely used in bouquets. If transplanted in the spring, in open beds, they bloom in autumn, but are more valuable in green-house conservatory as winter flowering plants; they are indispensable to the florist. Sow seeds in spring, in sandy soil, and give protection in severe weather. Hardy perennial.

Stevia, serrata, white.....10
" *purpurea*, purple.....5

STIPA—(See Feather Grass).

STOCK.

The Stock has for many years been a general favorite, but of late years the Germans have grown them in such perfection that they are considered almost indispensable where a fine display is wanted. The seed is grown with such great care that a very large proportion of double flowers are produced from the seed, and of great fragrance and beauty. To have them in bloom early, start in hot-bed, and transplant when small into pots, and turn out in June to open border. They will blossom late in the season if planted in open ground. Hardy annual; one foot high.

Stock, double German Ten Week, fifteen separate colors mixed; fine.....10

" **Brompton**, blooms well in winter; flowers very fragrant. Half-hardy biennial; one and a half feet high. Six best colors mixed.....10

" **Emperor, or Perpetual**, this beautiful and splendid variety of stock will bloom several years if protected from the frost; and if planted in pots early in spring, in green-house, will bloom the first autumn. The pots should be kept in a dry, cool place during winter, after blooming. The magnificent spikes of bloom are very rich and attractive, and for individual specimens are unequalled. Tender perennial; one and a half feet high. Twelve most beautiful colors mixed.....15

" **night scented**, *Matthiola discolor*, very sweet scented, the perfume being observable at a great distance, and as agreeable as mignonette; purple flowers.....15

Stock, night scented, *matthiola tricuspidata*, valuable for edgings of beds; blossoms profusely till killed by frost. Mauve like, sweet scented flowers. This and the preceding are hardy annuals.....15

SUMMER CYPRESS—(See Belvidere).

SUNFLOWER—(Helianthus).

Adapted by its stately growth for a back-ground to a lawn, or a screen to hide unsightly places. It is also raised as an absorbent of miasma in damp or ill-drained situations, thus preventing fevers. The flowers are really quite attractive. Plant the seed in spring, where desired, and thin to four feet apart in rows. Hardy annual; five feet high.

Sunflower, double (*Helianthus Californicus* fl. pl.), very double.....5

" **Large Russian**, a very tall growing, single variety, often fifteen to twenty feet high; the stalks are sometimes used for fuel.....5

SWEET PEAS—(Lathyrus Odoratus).

Showy, free flowering climber, and deservedly one of the most popular annuals that enrich the flower garden. The flowers are very freely produced, white, red, crimson, purple, black and striped, and quite fragrant. Plant four inches deep, very early in spring—the earlier the better. Hoe the earth towards the vines without ridding, and give support to the vine to run upon. Hardy annual; six feet high.

Sweet Peas, purple.....5

" " **scarlet**.....5

" " **striped**.....5

" " **Painted Lady**.....5

" " **invincible scarlet**.....5

" " **black**.....5

" " **mixed**.....5

" **Violet Queen**, a new and very beautiful variety, introduced by Messrs. Carter, of London; of rather dwarf habit, the colors ranging from deep mauve to light violet.....10

SWEET SULTAN—(Centaurea).

Handsome border plant of easy culture, bearing very fragrant, double, deep purple blossoms, from July to October. They produce a striking effect in mixed borders, and are extremely useful for forming bouquets of cut flowers in connection with other colored flowers. Plant where required, in spring, and thin to six inches apart. Hardy annual; two feet high.

Centaurea, moschata atropurpurea, double purple 5

Sweet Pea.

Sweet William.

Tassel Flower.

SWEET WILLIAM—(Dianthus Barbatus).

A bed of the finer varieties sports into an endless variety of colors, and presents a beautiful sight. For display in the garden, the Sweet William is unsurpassed. The seed can be planted very early in spring, in open ground, and will blossom the following autumn; or it can be sown in August, and will make fine blooming plants for spring. The plants will bloom several years, but young plants bloom better, and seed should be sown every year. Hardy perennial; one and a half feet high.

<i>Dianthus barbatus marginatus</i> (Pfection),	
beautiful	10
<i>barbatus, ocellatus marginatus</i> , splendid	10
<i>Carter's Harlequin</i> , all colors and	
shades	10
<i>pure white, pure white flowers</i>	10
<i>black, reddish, velvety black</i>	10
<i>fine mixed</i>	5
<i>mixed, double, perfectly double,</i>	
and great variety of colors	10

SWAN RIVER DAISY—(See Brachycome).**TAGATES—(See Marigold).****TASSEL FLOWER—(Cacalia).**

A showy plant of easy culture, producing beautiful scarlet and golden yellow, tassel shaped blossoms, from July to October. It is sometimes known as Flora's Paint Brush. Looks best when grown in clusters. Suc-

ceeds best in a mixture of fresh loam and leaf mold. Sow early in spring, in open ground, in clusters. Hardy annual; one and a half feet high.

<i>Cacalia, coccinea</i> , scarlet	5
<i>aurea</i> , golden yellow	5
<i>mixed</i>	5

THUNBERGIA.

Ornamenta, climbers for green-house or parlor decoration, which if transplanted to a warm, sunny border, will grow and blossom all summer. The flowers are orange, buff and white, with variously colored throats. A support of string or lattice work should be supplied for the branches to cling to and run upon. Start the plants in pots in a hot-bed or cold-frame, and do not set out till weather is warm. A soil of peat and loam suits them best. Half-hardy annual climber; six feet high.

<i>Thunbergia alata</i> , buff, dark eye	10
<i>aurantiaca</i> , bright orange	10
<i>Bakeri</i> , pure white	10
<i>fine mixed</i>	10

TORENIA.

A very fine, new annual, with large, sky blue blossoms, with three large spots of dark indigo blue, and yellow stain in the center. Sown from February to April in pots, and kept under glass, it will flower from June to September. The prettiest annual for cultivation under glass, but will thrive well in open air dur-

Torenia.

Tritoma.

Thunbergia.

Tree Cypress.

Valerian.

Verbena Flower.

the warmer season of the year. In open air, the plants are dwarfer and more robust, flowering well till cold weather

Torenia Fournieri superbiens, the darkest spotted varieties. 25

TREE CYPRESS—(*Ipomopsis*).

A wonderfully handsome plant, with fine, feathery foliage, somewhat like that of the cypress vine, and long spikes of beautiful flowers dazzling scarlet spotted and marked with darker shades. It is equally desirable for out-door or conservatory cultivation. Sow the seed in August, in a dry situation; if the ground be at all wet, the plants will decay. Half-hardy biennial; three feet high.

Ipomopsis, elegans, scarlet 5

TRITOMA.

An interesting, half-hardy, summer and autumn blooming plant, producing magnificent spikes of rich orange-red flower tubes. Needs protection of dry litter if left in the ground during winter; may be taken up in the fall, potted and kept from frost. Seeds should be sown in hot-bed or green-house, early in spring; the bulb which will be produced should not be watered too freely, nor forced till the succeeding spring, when it should be transplanted into rich, loamy soil.

Tritoma, uvaria grandiflora 25

TROPÆOLUM LOBBIANUM (See *Nasturtium Tall*).

TROPÆOLUM MINOR—(See *Nasturtium, Dwarf*).

TROPÆOLUM FEREGRINUM—(See *Canary Bird Flower*).

VALERIAN—(*Polemonium*).

An old, standard border plant, often called Jacob's ladder, from its beautiful, pinnately cleft leaves. The flowers are lively blue, nodding at the ends of upright stalks. It blooms in June, is of easy cultivation, perfectly hardy, and may be increased by dividing the roots. Sow early in spring, in open border, and thin to one foot apart. Hardy perennial; one and a half to two feet high.

Valerian, Greek (Polemonium cœruleum) 5

VERBENA.

No plant is more generally cultivated, or more eagerly sought after than the Verbena, and no plant excels it

for masses in beds on the lawn. In the varieties may be found every color except yellow. The white is pure, the crimson and scarlet so vivid, and the purple so deep while the striped are so conspicuous, that they are very desirable. They flower perfectly well from seed sown in spring. If started in the house, in pots, in winter, they will be in bloom sooner, but if sown in open ground in May, they will bloom in August. Each plant will require a space of four feet. Tender perennial trailer, one foot high.

Verbena, Aubetia grandiflora, reddish-purple.... 5

" *Niveni*, white; sweet scented. 10

" *Venosa*, rich purple 5

" *scarlet*, scarlet blossoms. 15

" *Montana*, hardy; from Rocky Mountains; will stand our winters out of doors; rose, changing into lilac. 15

" *Defiance*, seed may be relied upon to produce the true deep scarlet color. 20

" *hybrida*, blue, all shades of blue. 20

" " *Italian striped*, beautiful. 20

" " *Auriculiflora*, various shades, all with distinct eye of white or rose. 20

" " *maxima perfecta alba*, pure white; desirable new variety; said to produce large, pure white flowers of standard perfection; fine for florists. 25

" *extra choice mixed* seed saved from all named flowers; very choice. 20

" *fine mixed*, embraces all colors. 10

VINCA.

A genus of ornamental, free flowering, green-house perennials, with glossy green foliage and beautiful circular flowers. If sown early, under glass, and transplanted in a warm situation, they will bloom in the summer and autumn, and may be potted for the house before frost. Two feet high.

Vinca, alba, white, with red eye. 10

" *pura*, pure white. 10

" *rosea* 10

VIOLA TRICOLOR—(See *Pansy*).

VIOLET—(*Viola Odorata*).

The Violet should not be wanting in any garden, on account of its fragrance and early appearance. A single flower will perfume a whole room. They are well adapted for border or rock work, and commence putting forth their beautiful double and single blossoms in April and continue through May. Succeeds best in a shady, sheltered place, and can be easily increased by dividing

Verbena plant.

Violet, double.

Wall Flower.

the roots. The violet is an emblem of faithfulness. Hardy perennial; four inches high.

- Violet, sweet scented English (*Viola Odorata*),**
 flowers double and single; white; fragrant....10
 " **white (*Viola cornuta alba*),** large, white blossoms.....10
 " **yellow (*Viola cornuta lutea grandiflora*)**....10
 " **Mauve Queen,** mauve colored.....10
 " **Purple Queen,** deep, fine purple.....10

VIRGINIA CREEPER *Hedera*—(*Ampelopsis Quinquefolia*).

The Virginia Creeper, or American Woodbine, is hardy, very ornamental, of rapid growth, and the foliage is luxuriant and beautiful. It is often made to cover the walls of houses forty or fifty feet high, clinging by its tendrils. The flower is reddish-green, not showy, but is succeeded by clusters of nearly black berries, at which time the tendrils and stalk turn to a rich crimson color. It is exceedingly ornamental and conspicuous in October, after the first frost. Is easily propagated from layers.

Virginia Creeper.....10

VIRGINIA STOCK—(*Malcomia*).

Hardy annuals, very useful for border or edging. A continual succession of blossoms may be kept up the whole season by sowing at intervals through the spring and summer. The flower and plant are quite as desirable as the candytuft; grows about nine inches high.

- Virginia Stock, red**.....5
 " " **white**.....5
 " " **New Pigmy,** a new, dwarf variety, a single tuft of which forms a close, erect mass of white flowers; about six inches high....10

WAITZIA.

A new class of everlastings, with clusters of most beautiful flowers. Very useful in the formation of winter bouquets, for which purpose they should be picked as soon as open, and dried in the shade. They are very tender annuals, and should be started under glass and transplanted as soon as danger of frost is over. They like a soil of sandy peat, or leaf mold. One foot high.

- Waitzia, aurea, yellow**.....20
 " **grandiflora, large, golden flowers**....20

WALL FLOWER—(*Chieranthus Cheiri*).

The large, massive spikes of the Wall Flower are very conspicuous in beds or borders, and are very useful in making bouquets. They are deliciously fragrant, perfectly double, and combine many shades of color, the orange, purple and chocolate predominating. Sow the

seed early, in hot-bed, and when the plants are small, prick them out into pots, and sink the pots in the earth. On approach of cold weather, remove the pots to the house, and they will bloom all winter. Tender perennial; one and a half feet high.

- Wall Flower, mixed double**.....10
 " **Early Brown,** brownish-red, fragrant flowers; large, thick spikes; early. Tender biennial....10
 " **Tom Thumb, New Golden,** a new variety, free flowering, dwarf and compact habit; highly recommended for spring bedding, for which it is invaluable.....15

WAHLENBERGIA.

A very interesting family of hardy, perennial plants, with campanula-like flowers of white and blue, which are exceedingly beautiful. Sow under glass, or in the house, early in April, and transplant to open ground in May. Four feet high.

- Wahlenbergia, grandiflora alba,** pure white.....15
 " **grandiflora cærulea plena,** deep blue.....15

WHITLAVIA.

A pretty plant, with delicate, handsome foliage, producing a constant succession of bright blue, and pure white, bell shaped flowers, in drooping clusters, half an inch in length. In heavy, wet soils it does not succeed well, but in light, sandy loam, few flowers give more satisfaction. Sow the seed in open border early in spring. Hardy annual; one foot high.

- Whitlavia, grandiflora**.....5

WIGANDIA.

Very ornamental plant with immense veined leaves, and stems covered with crimson hair. It grows rapidly, and should be formed into a bush. Its large leaves, and clusters of lilac flowers which continue to open in succession for a long time, lend the plant a tropical aspect, and make it one of the most valuable ornamental foliage plants for garden and lawn decoration. Seeds if sown early in spring, in hot-bed, will produce large plants by the middle of summer.

- Wigandia, caracasana**....25

WISTARIA.

One of the most beautiful and rapid growing of hardy climbers, growing, when well

Wistaria.

Waitzia.

Whitlavia.

Xeranthemum.

established, in good soil, from fifteen to twenty-five feet in a season. Frequently blooms both in spring and fall; the pale blue, pea shaped flowers are borne in long, drooping clusters similar in size and shape to a bunch of grapes. It thrives best in a light, rich soil, and should be trained against a south wall or veranda. Seeds should be sown in mellow loam early in the spring; if a greenhouse or hot-bed is available, start in winter, and when plants are a foot high, transplant into situations where they are to remain.

Wistaria, sinensis 20

XERANTHEMUM.

Of neat, compact habit, free flowering, and of the easiest cultivation. The leaves are covered with a silvery down, and the flowers are pure white, deep purple and yellow, single and double. If gathered before fully opened, and dried in the shade, they will retain their beauty for years. They make fine winter bouquets alone or mixed with grasses. Sow in spring, and to one foot apart. Hardy annual; one foot high.

Xeranthemum, atropurpureum, double flowers;
 deep purple 10
 " yellow, yellow flowers 10
 " white, new; double; fine 10
 " mixed 10

ZEAL MAIZE—(Striped Japanese Corn).

An ornamental foliage plant of much beauty. It is a species of corn, with large foliage, the leaves being beau-

tifully striped with white and green. Half-hardy annual, from Japan; six feet high.

Zea Japonica, fol. variegata, striped foliage 5

ZINNIA.

A very showy plant, with large, double flowers, which, when fully expanded, form hemispherical heads, become densely imbricated, and might easily be mistaken for dwarf dahlias. The colors run through all the shades of carmine, lilac, scarlet, purple, crimson, yellow, to pure white. If any single blossoms appear, they should be at once pulled up. Sow the seed early in spring, in open ground, and transplant to one and a half feet apart, in good, rich soil. Half-hardy annual; one and a half feet high.

By careful selection and several years cultivation, the European florists have obtained the following distinct varieties of this valuable plant. The seeds we offer can be entirely relied upon to reproduce the different colors, almost without sporting.

Zinnia, double, carmine 10
 " scarlet 10
 " " purple 10
 " " crimson 10
 " " orange 10
 " " lilac 10
 " " deep scarlet 10
 " " deep purple 10
 " " alba plenissima, pure white 10
 " " mixed, very fine 10

Zea Maize.

Zinnia, double.

Z. Darwini

COLLECTION N^o 4.

CONSISTING OF THE SEEDS OF 6 BEST PERENNIALS,
AND 6 CHOICEST TENDER PERENNIALS FOR HOUSE CULTURE IN POTS.

CARNATION.

Extra Choice Double Mixed. Price 25 Cts

SMILAX.

Price 15 Cts.

COLUMBINE.

Mixed Double. Price 10 Cts

FOXGLOVE.

Ivory's. Price 10 Cts

HOLLYHOCK.

Chater's. Price 15 Cts.

LILY OF THE VALLEY.

Price 10 Cts.

THE ABOVE 6 VARIETIES AMOUNTING TO 85 Cts. WILL BE SENT ON RECEIPT OF 60 Cts.

CYCLAMEN PERSICUM.

Choicest Mixed. Price 25 Cts.

HELIOTROPE.

Dark Mixed. Price 10 Cts.

PRIMULA SINENSIS.

Choicest Mixed Price 25 Cts.

VERBENA.

Extra Choice Mixed 20 Cts.

CALCEOLARIA.

Large Flowered Mixed Price 25 Cts

CINERARIA.

Choicest Mixed 25 Cts

THE ABOVE 6 CHOICE VARIETIES FOR GREEN-HOUSE OR POT CULTURE. AMOUNTING TO \$1.30 WILL BE SENT FOR \$1.00.

THE WHOLE 12 VARIETIES ON THIS PAGE. AMOUNTING TO \$2.15 SENT FOR \$1.50

Zinnia, elegans plenissima, Emperor Francis Joseph, a new, extra double variety of superior quality; deep purple upon orange ground; beautiful 10

Haageana fl. pl., a perfectly double variety, of deep orange color, finely margined with bright golden yellow, beautifully imbricated, representing a depressed globular cone. 10

Zinnia, Darwinii fl. pl., a distinct class of zinnias of most beautiful form and every conceivable shade of color. There are four classes, known as *nana compacta*, *major pyramidalis* and *vitata*, about twelve colors in each class. The seed we offer comprises a mixture of all the above classes 24

The following classification will be of convenience to our customers in making selections:

FLOWERS BLOOMING THE FIRST SEASON.

Abrobia	Canary Bird Flower	Forget-Me-Not.	Leptosiphon.	Pink.
Acroclinium	Candytuft	Four O'clock.	Linanthus.	Poppy.
Adonis.	Castor Bean.	Gaillardia.	Linum.	Portulaca.
Ageratum.	Catananche.	Gilia	Lobelia.	Primrose.
Agrostemma	Catchfly.	Globe Amaranth.	Love Grove.	Rhodanthe.
Alonsoa.	Celosia	Gnaphalium.	Love-in-a-Mist.	Salpiglossis.
Alyssum.	Centaurea.	Godetia.	Lupin.	Salvia.
Amaranthus	Chlora	Gourds.	Lychnis.	Sanvitalia.
Ammobium.	Chrysanthemum.	Grammanthes.	Lythrum.	Saponaria.
Anagallis	Clarkia.	Gypsophila	Marigold.	Sensitive Plant.
Argemone.	Clintonia.	Helichrysum.	Martynia.	Snaptadragon.
Asperula.	Cockscomb	Heliotrope.	Maurandia.	Stocks.
Aster.	Commelina.	Helipterum.	Mignonette.	Sunflower.
Bachelor's Button.	Convolvulus.	Hibiscus.	Mimulus.	Sweet Peas.
Balsam.	Convolvulus Minor.	Honesty.	Molucella.	Sweet Sultan.
Bartonia.	Crepis.	Humea	Momordica.	Tassel Flower.
Belvidere.	Cuphea.	Hyacinth Bean.	Morning Glory.	Thunbergia.
Brachycome.	Cypress Vine.	Ice Plant.	Mourning Bride.	Verbena.
Browallia.	Datura.	Indian Shot.	Nasturtium.	Virginia Stock.
Calcepelis.	Didiscus.	Ipomea.	Nemesia.	Waitzia.
Calandrinia.	Eschscholtzia.	Jacobaea.	Nolana.	Whitlavia.
Calliopsis.	Euphorbia	Job's Tears.	Nycterinal.	Xeranthemum.
Callihoa.	Eutoca.	Kaultussia.	Petunia.	Zinnia.
Campanula.	Fenzlia.	Larkspur.	Phlox Drummondii.	

FLOWERS BLOOMING THE SECOND SEASON.

Adlumia.	Clematis	Gladiolus.	Pampas Grass.	Statice.
Agrostemma.	Cobaea.	Hollyhock.	Pansy.	Stocks.
Alyssum.	Columbine.	Jasminum.	Peas.	Sweet William.
Anrucula.	Cyclamen.	Larkspur.	Pentstemon.	Tree Cypress.
Azalea.	Dahlia.	Lily of the Valley.	Phlox, Perennial	Valerian.
Bocconia.	Daisy.	Linum.	Primrose.	Violet.
Canterbury Bell.	Foxglove.	Lobelia.	Pyrethrum.	Wahlenbergia.
Carnation.	Fragaria.	Lychnis.	Salvia.	Wall Flower.
Chrysanthemum.	French Honeysuckle.	Oxalis.		

ORNAMENTAL FOLIAGE PLANTS AND GRASSES.

Agrostis.	Centaurea.	Feather Grass	Job's Tears.	Pennisetum.
Amaranthus.	Cineraria.	Ferns.	Lagurus.	Perilla.
Bocconia.	Coleus.	Hordeum.	Love Grass.	Sedum.
Briza.	Erianthus.	Humea.	Palm.	Wigandia.
Canna.	Euphorbia.	Ice Plant.	Pampas Grass.	Zea Maize.
Castor Bean.				

ORNAMENTAL CLIMBERS.

Aborea.	Cobaea.	Lophospermum.	Nasturtium, Tall.	Sweet Pea.
Adlumia.	Cypress Vine.	Maurandia.	Passion Flower.	Thunbergia.
Balloon Vine.	Gourd	Momordica.	Peas.	Virginia Creeper
Calcepelis.	Hyacinth Bean	Morning Glory.	Smilax.	Wistaria.
Canary Bird Flower.	Ipomea.			

EVERLASTING FLOWERS.

Acroclinium.	Gnaphalium	Helichrysum.	Honesty.	Waitzia.
Ammobium.	Globe Amaranth.	Helipterum.	Rhodanthe.	Xeranthemum.

SEEDS DESIGNED FOR GREEN-HOUSE.

Abutilon.	Chlora.	Ferns.	Maurandia.	Primula.
Alonsoa.	Chrysanthemum.	Fuchsia.	Mesembryanthemum.	Sedum.
Auricula.	Cineraria.	Geranium.	Mimulus.	Smilax.
Azalea.	Cianthus.	Gloxinia.	Nasturtium.	Solanum.
Balloon Vine.	Coleus.	Gunnera.	Nierembergia.	Stevia.
Begonia.	Convolvulus.	Humea.	Nymphaea.	Stocks.
Bocconia.	Cuphea.	Heliotrope.	Oleander.	Tritoma.
Calceolaria.	Cyclamen.	Ipomea.	Palm.	Torenia Fourniera.
Calla.	Daisy.	Jacobaea.	Pampas Grass.	Verbena.
Camellia.	Echeveria.	Lantana.	Pansy.	Vinca.
Carnation.	Erica.	Lobelia.	Passion Flower.	Violet.
Cassia.	Erythriaa.	Lophospermum.	Perilla.	Wall Flower
Centaurea.				

PLANTS FOR 1882.

It is with real satisfaction that we present our customers with a largely increased list of Plants from which to select, embracing nearly all of the valuable newer varieties that have been tested and found worthy a place in our catalogue. Rooted plants, such as we send out, seldom fail to give perfect satisfaction; not nearly the skill and patience are required with Plants that are necessary to produce bloom from the seed. The system of packing is now so perfect that plants can be sent about as safely in the coldest weather in winter, as in summer. It is now nine years since we added the plant feature to that of our seed business, and we are glad to say that the instances have been very rare when the plants we sent out have failed to give satisfaction.

The poor as well as the rich are fast learning that a few nice, healthy plants in their dwellings are a necessity as well as a luxury. They are regarded almost as members of the household, and many a delightful hour is spent in their companionship. How much real satisfaction is afforded in being able to offer your retiring guest in mid-winter a little bouquet of living flowers, grown in your own house, and perfected under your own supervision. Even the green leaves bring cheerfulness and sunshine. We cannot too strongly urge our friends to have some flowers and plants for winter blooming, at which season of the year even the most insignificant flower is more welcome than the most gorgeous display in summer, when all nature is blooming.

It is now well understood that we have unprecedented facilities for promptly and faithfully executing orders for plants, through our connection with one of the largest and most favorably known houses in central New York, with whom we have dealt for the past nine years, and who have gained an enviable reputation both for us and themselves, by growing and sending out only large, healthy, fine specimens of plants. Their system of packing and facilities for shipping are complete, and perfect satisfaction can be relied on. The order and money must be sent to us, but the plants will be sent to the party direct from the green-house in central New York.

PLANTS BY MAIL.—At the prices quoted, except where expressly stated otherwise, we send plants by MAIL, POSTAGE PREPAID BY US. The rate of postage on seeds, bulbs, and plants is *sixteen cents per pound*, so only small plants can be sent by mail. They will however be well rooted and healthy, and we will also wrap them carefully in oiled cloth, and use every other precaution to have them reach their destination safely and in good condition. In remote places, where the express charges would be exorbitant, we can *only* send plants by mail; and we cannot undertake to send to such remote places, under any circumstances, those plants, like Bouvardias and Camellias, which are offered to be sent only by express.

PLANTS BY EXPRESS.—In all cases where it is apparent that the express charges will not be exorbitant (from the long distance), it is much preferable to have your plants sent by express. The express charges will cost the purchaser a little more, but you will be sure of getting much larger, finer plants, and we shall add to all good sized orders *a few extras*, to compensate for the small difference in cost between mail and express. Parties living at a great distance, such as Texas, Louisiana or the Territories would not be justified in ordering by express, as the charges would be more than the plants would be worth when received. We shall use our judgment and experience in shipping for the benefit and protection of our customers. When plants are sent by express the purchaser is in every case to pay the transportation charges.

BOXES AND PACKING.—We make no charges for boxes and packing, and the plants will be in fine condition when they leave us, and properly and carefully packed, but we cannot undertake to *guarantee* their condition when received. Our responsibility ceases with the delivery, in good order, to the express company or post office.

TERMS OF PLANTS.—The terms are strictly CASH WITH THE ORDER. The best method is to send draft on New York or Chicago to our order, or purchase a post office order payable to us. When neither of these is convenient, send the currency in registered letter.

ORDERS FOR PLANTS MUST AMOUNT TO FIFTY CENTS.—We cannot afford to give our attention to orders for plants amounting to less than fifty cents, unless in addition to the amount for plant or plants wanted, ten cents is sent. The office work on a small order is the same as on a larger one, and it also requires nearly as much time to pack it, and takes almost as much postage, as an order double or triple the size. If your order for plants amounts to less than fifty cents, ten cents extra must be added.

COLLECTIONS OF PLANTS.

For the convenience of our customers, we have made the following selections of plants which we offer at reduced rates. We have bestowed great care on the selections, and none but good, healthy plants will be sent. The varieties sent will all be labeled, but *exclusively our choice*, though only good sorts, such as are described in our catalogue will be sent. We are only enabled to offer them at the following low prices by *retaining the privilege of selecting the varieties ourselves when we fill the order.*

In ordering, please be particular to give the correct letter of the collection.

Collection A—Free by mail for \$1.00.—1 Fuchsia, 1 Tea Rose, 2 Tuberoses, 1 Lemon Verbena, 1 Heliotrope, 1 Salvia, 1 Carnation, 2 Gladioli.

Collection B—Free by mail for \$1.00.—1 Rose Geranium, 1 Silver Leaf Geranium, 1 Tea Rose, 2 Carnations, 1 Heliotrope, 1 Begonia, 2 Tuberoses, 1 Gladiolus.

Collection C—Suitable for hanging baskets or window gardens, free by mail for \$1.25.—12 basket plants, our choice of sorts.

Collection D—Suitable for hanging baskets or window gardens, free by mail for \$1.25.—1 Geranium, 2 Begonias, 1 Coleus, 1 Achyranthus, 1 Cuphea, 6 assorted vines, our choice.

Collection E—Free by mail for \$2.00.—1 Fuchsia, 2 Tea Roses, 6 Verbenas, 2 Geraniums, 1 Cuphea, 1 Hydrangea, 2 Tuberoses, 2 Chrysanthemums, 2 Hybrid Perpetual Roses.

Collection F—Free by mail for \$2.00.—1 Fuchsia, 2 Heliotropes, 1 Dielytra, 3 Tea Roses, 3 Single Geraniums, 3 Double Geraniums, 3 Verbenas, 2 Tuberoses, 1 Gladiolus.

The following four collections can be sent only by express, the purchaser paying charges:

Collection G—By express only for \$3.00.—12 Verbenas, 6 Tuberoses, 6 Gladioli, 6 Geraniums, 1 Heliotrope, 2 Tea Roses, 2 Hybrid Perpetual Roses, 2 Fuchsias, 2 Begonias, 1 Violet, 3 Pansies, 2 Daisies.

Collection H—By express only for \$3.00.—6 Verbenas, 6 Tuberoses, 12 Gladioli, 3 Geraniums, 1 Heliotrope, 1 Veronica, 2 Tropæolums, 1 Passion Vine, 1 Lantana, 2 Dahlias, 1 Jasmine, 6 Coleus, 2 Ageratums, 1 Calla Lily, 1 Abutilon.

Collection I—By express only for \$5.00.—12 Coleus, 6 Achyranthus, 6 Verbenas, 2 Fuchsias, 3 Heliotropes, 1 Lemon Verbena, 6 Geraniums, 1 Feverfew, 1 Smilax, 3 Ferns, 1 Lantana, 1 Petunia, 6 Tuberoses, 6 Gladioli, 2 Honeysuckles, 3 Abutilons, 3 Chrysanthemums, 1 Hydrangea, 3 Tea Roses, 3 Hybrid Perpetual Roses.

Collection J—By express only for \$5.00.—2 Lobelias, 2 Ageratums, 6 Geraniums, 6 Tea Roses, 3 Dahlias, 2 Maderia Vines, 6 Pansies, 2 Dielytras, 2 Astilbe Japonica, 2 Geraniums (Ivy Leaf), 1 English Ivy, 1 Ampelopsis Quinquifolia, 2 Tuberoses, 2 Passion Flowers, 2 Salvias, 6 Verbenas, 3 Coleus, 3 Carnations, 3 Begonias, 2 Centaureas, 2 Calceolarias, 2 Heliotropes.

Abutilons, 20 cents each, except where noted.

Darwintii, flowers a deep orange scarlet, veined with pink.

Boule de Neige, the best white flowering abutilon that has yet been introduced.

Roseum, a free growing variety; flowers of a fine rose color.

S. gnor Rotuse, very free bloomer, of good habit; flowers orange and scarlet; very large.

Thompsonii, leaves spotted with bright golden yellow; one of the finest ornamental leaved plants.

Vexillarium var., climbing habit, veined and striped; scarlet and yellow.

Achania, *malvaviscus*, strong growing, ever blooming, green-house shrub, flowers intense scarlet. 25 cents.

Achyranthus, bright leaved plants, used largely in ribbon beds and masses. Will stand the hottest weather. 20 cents each.

Aureus reticulatus, leaves veined, stalks light carmine. *Emersonii*, an improvement on *A. Lindenii*, much lighter, a large portion of the foliage being a beautiful pink.

Hoveyii, large, crimped leaves, beautiful carmine, blotched with bronze.

Lindenii, deep blood red.

Agapanthus, *umbellatus var.* 50 cents to \$1.00.

Agave, *Americana var.*, the well known variegated Century Plant. Valuable as a pot plant or for decorating lawns. 50 cents to \$1.50.

Ageratum, 20 cents each.

Blanche, pure white; dwarf.

John Douglas, deep blue, compact habit, free bloomer. *Variegatum* variegated foliage.

Cannell's Dwarf, very bushy; deep blue.

Aloysia, *vitriodora*, (Lemon Verbena), of this well known shrub so indispensable for the delightful fragrance of its leaves, we offer fine plants. 20 cents.

Alyssum, *double white*, similar in every way to the common Sweet Alyssum, but with double flowers. It is valuable for cut flowers at all seasons. 15 cents.

Var., this is one of the most useful of variegated plants; good for bedding and cut flowers. 15 cents.

The Gem, new; an improved form of the variegated plants, with double white flowers. 25 cents.

Ampelopsis, *Veitchii*, a dwarf variety of the Virginia Creeper. The young growth during summer is a

Abutilon. Boule de Neige.

dark purple, changing in fall to the brightest tints of scarlet, crimson and orange. It clings to stone work or wood, and is a very rapid grower. 25 cents.

Quinquifolia, the well known Virginia Creeper, found in many parts of the country. It is a free grower, of strong habit, leaves splendidly variegated in the fall. 25 cents.

Aspidistra, *variegata*, a splendid striped and curious plant for Wardian Cases, and equally as good for Aquariums. 50 cents.

Lurida, plain green, equally as good for same purposes. 25 cents.

Astilbe japonica, (Spirea Japonica), about one foot high, perfectly hardy, bearing its flowers in branching, feather-like spikes of purest white, and in great abundance. Valuable for winter blooming, and is extensively used by bouquet makers for forcing. 25 to 50 cents.

Azalea, *Indica*, free flowering, green-house shrubs; flowers of all colors. 25 cents to \$2.00.

Begonia, *flowering varieties*, desirable plant, blooming more or less profusely from March to November; varying in color from white and rose, to bright scarlet, assimilating in character to the well known Begonia Rex, in their great diversity of picturesque markings: rich crimson tinted stems, and silvery leaf markings. 20 cents each, except where price is given.

Agrostima prita, spotted white. 25 cents.

Glaucophylla scandens, a creeping or drooping variety, peculiarly adapted for hanging baskets; large panicles of orange-salmon blossoms. One of the most beautiful plants in cultivation, when grown singly in hanging baskets. 30 cents.

Grandiflora rosea.

Hybrida grandiflora, rosy pink.

Hydrocotylon, 25 cents.

Manicata, 25 cents.

Palmata, a very ornamental variety, with peculiar palm shaped leaves. 30 cents.

Parva flora, clear white; compact and dwarf.

Rex, large leaf varieties. 50 cents.

Rubra, one of the most valuable acquisitions to winter flowering plants. Leaves dark green; flowers rosy-scarlet, glossy and wax-like. It is a model of perfection. Nice, large, healthy plants 25 to 30 cents.

Begonia.

Begonia Rex.

*Sanguinea.**Saundersonii*, scarlet-crimson.*Subpeltatum nigricans*, leaves are a rich shade of crimson; flowers bluish-white. 30 cents.*Welltoniensis*, beautiful pink; winter blooming.

Bouvardia, valuable as winter blooming plants, equally desirable for bedding. Beginning to bloom in August, they continue until frost. Bouvardias are sent by express only. 25 cents each, except where price is given.

Alfred Neuner, white double flowering. The growers describe it as follows: "This is a gem of the first water, equal, if not superior in profuse blooming quality and vigorous growth to the valuable single white variety, 'Davidsonii,' of which this double white one is a sport. The flowers are rather larger than those of the single flowering, and composed of three perfect rows of petals of the purest waxy white color, each floret resembling a minia-

Bouvardia, double white.

ture tuberos. The trusses are large and perfect, and are freely and without interruption produced, even on the small side shoots, which generally make no flowers on the single one, and according to our observation and experience for the last two years, it will bloom more freely and constantly than the single variety." 30 cents each.

Elegans, scarlet vermillion; trusses large and full.*Lientha*, dazzling scarlet; small and compact.*The Bride*, pink; soft and pretty shade.*Vreelandii*, pure white.

Cactus, best varieties 25 cents to \$2.00 each.

Calla, *Ethiopica*, very large, tube shaped, white flower. 25 to 50 cents each, \$2.50 per dozen.

Caladium, *esulentum*, one of the best plants for lawns or center of large flower beds. Plants are pro-

duced from bulbs, like the Calla. Bulbs 25 to 50 cents. *Fancy*, leaves spotted and striped in almost every color, 50 to 75 cents.

Camellia, *japonica*, one of the most popular green-house plants for winter bloom. Sent by express only. \$1.00 to \$5.00.

Caladium, fancy.

Campsidium.

Campsidium, *Filicifolium*, an elegant climber of rapid growth, for green-house culture, the leaves of which much resemble the fronds of a fern in miniature. May be grown as a pot plant, or trained to the rafters. 30 cents.

Canna, *Indica*, plants used largely in sub-tropical gardening, for the grand effect which their rich and varied colored leaves produce. 25 cents.

Carnations, *monthly*, indispensable either for decorating the flower garden in summer, or green-house or parlor in winter. The flowers are of nearly every shade and marking, and most of them delightfully fragrant. 20 cents each, except where price is given.

Carnt'on, Mrs. Henderson. Clematis, Jackmanii.

Chas. Sumner, new; deep rosy-pink; very double; free bloomer.

Hinsdale, white, flaked with pink; fringed; very free and early.

Snowdon, new; pure white, clove scented flowers; habit very dwarf and compact.

La Purite, carmine.*La Purite var.*, scarlet, striped.

Mrs. Henderson, a new scarlet carnation. We take pleasure in sending out this new carnation, as florists have long felt the need of a good scarlet carnation. In foliage, it is almost identical with Peter Henderson. The flowers are nearly if not quite as large, rich orange-scarlet, and hold well without

bursting. Mr. and Mrs. Henderson are without doubt the finest pair of carnations that have ever traveled over the country 50 cents.

Peter Henderson, double white perpetual. This is one of the very best sorts yet introduced. It will produce twice the number of flowers, and of twice the size of any other. It is *truly a perpetual bloomer*. Nearly 200 buds and blossoms are on a good sized plant at one time. 25 cents each; \$2.50 per dozen.

President DeGraw, white.

Centaurea, gymnocarpa.

Centaurea, gymnocarpa, drooping habit; silvery grey; valuable plant to contrast with *Coleus* and *Achyranthus*. 25 cents.

Chrysanthemum, this favorite autumn flower, since the addition of so many choice varieties, has become still more popular; they are particularly suited for pot culture, while in any place south of New York they are perfectly hardy. The following are the best, selected from over one hundred varieties. 20 cents each.

Amphilla, bright crimson; flowers medium in size.

Alphonso, maroon, tipped yellow, extra.

Countess of Derby, pearl lilac; globular flowers, large.

Cendrillon, violet-purple; small flowers.

Elaine, (Japan), pure white; petals long and narrow.

Fulgore, (Japan), tassellated; purple, crimson and white.

Gazelle, (Japan), crimson, gold and brown extra.

Geo. Peabody, (large flowering), white, back of petals lilac.

Grandiflorum, (large flowering), golden yellow.

Grand Turk, (Japan), purple, changing to pearl white.

Geo. Glenny, (large flowering), rich lemon yellow.

Guernsey Nugget, (large), pale yellow; extra.

Gloria Mundi, (Japan), yellow; extra large.

Gen. Canrobert, (Pompon), golden; early bloomer.

Jardin des Plantes, (Japan), rich golden yellow.

Mrs. G. Rundel, (large), pure white; incurved.

Lasciniatum, (Japan), tassellated white; extra.

Cineraria, maritima, white foliage plant, similar to *Centaurea*, with deeply cut leaves 20 cents.

Cissus, discolor, stove climber; foliage beautifully shaded silver, crimson and purple. 25 cents

Clematis, Virginiana, a very rapid growing, hardy plant; flowers white. 50 to 75 cents.

Jackmanii, the flowers, when fully expanded, are from four to six inches in diameter, of an intense violet-purple, and rich velvety appearance. It is perfectly hardy, and blooms continuously from July until cut down by the frost. 75 cents to \$1.50.

Cobæa, scandens, a most useful climber on account of its rapid growth, and large, bell shaped flowers. 25c.

Coleus, these beautiful foliage plants are almost indispensable in the formation of flower gardens. 15 cents each; \$1.50 per doz; \$10.00 per 100 by express.

Black Prince, deep shade of maroon.

Excelsior.

Fascination.

Picta.

Princeps.

Coleus.

Glory of Autumn.

Illumination.

Little Annie.

Mrs. Shuster.

The Shah, very striking, half the leaf assuming a golden yellow as soon as the plant is grown

Velvet Queen, a deep, rich shade of carmine.

Verschaffeldii, velvety crimson; finest bedding sort.

Convolvulus, mauritanicus, a favorite

drooping basket plant

with large, delicate

blue flowers. 20 cts.

Crotons, plants,

which for their beautiful

leaf markings, demand

a place in every

collection of hot-house

plants. Valuable also

for ferneries and Wardian

Cases. 25 cents to

\$2.00 each, according

to variety and size.

Cyclamen, persicum,

a fine, ornamental,

green-house plant; both

flowers and leaves are

valuable in floral work.

Small plants 25 cents; large 50 cts.

Cyperus, a grass like plant,

surrounded at the top

with a whorl of leaves.

Fine for aquariums, window

gardens, &c.

Alternifolius, bright green. 20 cents.

Alternifolius variegatus,

a beautiful form, striped

with white. 30 to 50 cents.

Daisies, double white and red. 10 cents each; \$1.00

per dozen; \$6.00 per 100

by express.

Dracæna, Australis,

(Dragon Tree), wide, green

foliage. 25 cents to \$1.00.

Congesta, narrow, green

leaves 75 cts to \$1.50.

Guilfoylei, variegated very

showy. \$1.50 to \$3.00.

Terminalis, rich crimson

foliage, marked pink

and white. 50 cts to

\$2.00.

Duranta, Baumgartii

fol. var., beautiful foliage

plant, of tall and branching

habit; leaves marked half

their depth with golden yellow. 30 cents.

Croton.

Dracæna.

Echeveria, a genus of succulent plants, both novel and interesting. Five varieties, 25 cents each.

Eucharis, *Amazonica*, a lovely green-house plant from the river Amazon. Flowers pure white, star shaped and very fragrant. It requires a warm atmosphere and plenty of moisture. 25 cents to \$1.00.

Euonymus, *japonicus aureus*, handsome, evergreen shrub, with bright yellow blotch in the center of the leaf. An excellent house plant for winter, growing well in the shade. 25 cents.

Japonica radicans variegata. 25 cents

Euphorbia, *splendens*, a continuous blooming variety, densely covered on the stems with spikes or thorns an inch in length, giving it a curious appearance. Bright scarlet flowers, with yellow center. 25 to 50 cents.

Jacquiniflora, a graceful house plant, blooming from January to March, covering the branches with orange-scarlet flowers. 25 to 50 cents.

Farfugium, *Grandes*, a very showy foliage plant, with large, dark green leaves spotted with yellow. 25 to 50 cents.

Ferns, too much cannot be said in favor of these graceful plants, and we are glad to see they are constantly growing in favor each year, till no collection of plants, however small, is now considered perfect without at least a few varieties of ferns. In places too shady for other plants to thrive, they grow in great beauty. Coming as they do from every clime, we find them a very interesting study. They are alike good for baskets, vases, rock work, for ornamental plants for parlor or conservatory, and the pressed leaves of some of the varieties are marvels of graceful beauty. We make a specialty of them, and we doubt if many so large collections as ours can be found in this country.

Adiantum, decorum. 25 to 50 cents.

" *denticulatum*. 50 cents.

" *gracillimum*. 25 to 50 cents.

" *excisus multifidum*. 50 cents.

" *Roenbeckii*. 50 cents to \$1.00.

" *farleyense*, a new variety, and the most beautiful of all. Very large, beautiful leaves, of drooping habit; a single plant is often two feet in diameter, and resembles a fountain. It would be difficult to conceive of anything more elegant than a single specimen. \$2.00 to \$5.00.

Alsophila, australis, (Tree Fern). 50 cents to \$5.00, by express only.

Asplenium, balengeri. 25 cents to \$3.00.

" *fabianum*. 25 to 50 cents.

Blechnum, occidentale. 25 cents to \$1.00.

Cheilantes, Hirta. 25 to 50 cents.

Davallia, dissecta. 25 to 50 cents.

" *Mooreana*. 25 cents to \$1.00.

Diplazium, decinatum. 25 to 50 cents.

Lomaria gibba. 25 cents to \$3.00.

Lygodium scandens, (Japanese Climbing Fern), a na-

tive of Japan; of graceful, twining habit, and in its native clime, will grow fifty feet. Of easy culture, treated as other ferns, and valuable as a climbing or drooping plant. 25 to 75 cents.

Nephrolepis, exaltatum. 25 cents.

" *scabra*. 25 to 50 cents.

" *picta*. 25 to 50 cents.

Onychium, japonicum. 25 to 50 cents.

Platycerium, alcorni, (Stag Horn Fern), 75 cts to \$3.00.

Platyloma, falcata. 25 cents to \$1.00.

Polypodium aureum. 25 cents.

" *kurrudrianum*. 25 to 50 cents.

Pteris, argyrea. 25 cents to \$1.00.

" *critica alba lineata*. 25 cents.

" *serrulata*. 25 cents.

" *cristata*. 50 cents.

" *tremula*. 25 cents to \$1.00.

Pella, hastata. 25 cents.

☞ We have also a great variety of other Ferns and Selagrenellas, too numerous to name.

Feverfew, *Pyrethrum*, double white; summer blooming: 20 cents.

Golden, much used for massing or bordering. Leaves finely cut, of a golden yellow color. The flower stems should be cut as soon as they appear. 10 cents each; \$1.00 per doz.; \$6.00 per 100, by express.

Ficus, *Elastica*, (India Rubber Tree), from East Indies; foliage large, dark green and shining; fine house plant. \$2.00 to \$5.00.

Pearcellii, a splendid decorative plant, with beautiful, variegated foliage. The leaves, which are of large size, thin texture and coarsely serrated on the margin, are of a bright green color, profusely but irregularly blotched with creamy white and dark green. \$1.00 to \$5.00.

Fittonia, low growing plants; leaves nicely veined with pink and white; good for ferneries 20 cents.

Fragaria, *Indica*, bright red strawberry; used for rock work or baskets. 20 cents.

Fuchsia, (Lady's Ear Drop), in shaded situations, with plenty of air and light, they make elegant summer blooming plants for grouping or massing in beds. We have a choice collection of both single and double, which have been carefully selected with a view to obtain the best varieties in habit, growth and distinct shade of color. 20 cents each, except where noted. Larger plants 25 to 50 cents.

Geranium, single.

G. Happy Thought

G. Distinction.

Black Prince, bell shaped; very fine.
Champion of the World, new; dwarf, very free blooming, double variety, with scarlet tube and sepals, violet corolla. Best fuchsia out. 30 cents.

Charming, new; sepals crimson, corolla violet.

Clipper, sepals carmine-scarlet, corolla deep purple.

Day Dream, double; corolla maroon, sepals crimson.

Earl of Beaconsfield, new; light rosy carmine, corolla deep carmine; free bloomer.

Emperor, double; crimson sepals, violet corolla.

Fulgens, a fine old sort, very heavy foliage.

Geo. Felton, one of the very best dwarf, double; sepals crimson, corolla violet.

Golden Fleece, foliage golden yellow; free, early bloomer.

Lustre, scarlet corolla, blush sepals.

Miss Lucy Finnis, new; double white; dwarf.

Mrs. Bruant, double white; vigorous, free bloomer.

Mrs. Marshall, corolla carmine, sepals white; winter bloomer.

Pearl of England, cherry-red corolla, rosy-white sepals.

Prince Imperial, dwarf; corolla purple, sepals recurved, crimson; one of the very best of the dwarf varieties.

Princess of Wales, double white; free bloomer.

Speciosa, corolla scarlet, sepals blush.

Sunray, beautiful, tricolored variety; great novelty. 30c.

Geranium, Zonale.

GERANIUM, ZONALE.

Scarcely rivaled as bedders of the surest growth on all soils, succeeding to perfection during the heat and drought of summer: of rich, massive, and often gay zoned foliage; compact growth, and profuse, constant, brilliant bloom in scarlet, crimson, salmon, and white; they are especially valuable and beautiful for winter blooming in the house. 20 cents each; \$2.00 per dozen; \$10.00 per 100, by express.

Bicolor, white, deep salmon eye.

Bridesmaid, rosy-salmon.

Col. Holden, extra large truss; crimson-scarlet.

Dazzler, intense scarlet, white eye.

Delight, rose.

Dr. Denny, rich purplish magenta; extra; new.
Duchess of Sutherland, scarlet, white eye.
Emily Vaucher, white.
General Grant, scarlet; very large truss.
Helen Dick, pink and white.
Jealousy, orange-scarlet, with a decided orange hue.
Kate Nicholson, rosy-pink.
L. F. Courier, clear vermilion; good.
Louis, crimson-purple; extra.
Mad. Muzzard, magenta.
Margaretta, white, pink eye and border.
Master Christine, rich pink.
New Life, by far the finest striped variety; color deep scarlet, striped with white.
Par Excellence, soft scarlet.
Queen of the West, rosy-scarlet.
White Clipper, pure white; dwarf.
Wood Nymph, new; clear pink.

GERANIUM, DOUBLE.

A beautiful selection of this well known plant, producing double flowers, and cultivated as easily as the single varieties. They are free blooming, and remain a long time in perfection, and are useful in a variety of ways, where the single ones are not. 20 cents each; \$2.00 per dozen; \$10.00 per 100, by express, except where noted.
Asa Gray, bright salmon, a soft and mellow tint.
Bataclan, deep violet-purple.
Candidissima plena, pure white.
Crimson King.
Conrad Kirchner, brilliant scarlet, white center.
Depute Lafuze, truss round, vermilion-purple.
Ernest Lauth, glowing crimson.
Guilten Manguilli, dazzling crimson-scarlet.
J. C. Rodbard, brilliant red.
Jewel, trusses of good size, deep scarlet in color.
J. G. Waggoner, rich crimson.
Le Pere Secchi, orange salmon.
Little Fred, light, with salmon center.
Maria Crouse, vermilion.
Meteor, light crimson.
Mme. Amelia Ballet, the best of all the double whites, flowers not changing as they grow old. 25 cents.
Mme. Boucharlatain, intense scarlet.
Mme. Thibaut, flowers very large, deep rose-pink, upper petals marked with white; habit dwarf and compact; splendid bedder. 25 cents.
Naomi, new; peculiar violet-pink; very fine.
Sylphide, rose.
Wonderful, semi-double; orange-scarlet.

GERANIUM, HYBRID IVY LEAF.

Bijou, scarlet.

GERANIUM VARIEGATED.

Bronze, gold and silver edge; most elegantly variegated in foliage; flowers pink, carmine and scarlet; as vigorous in growth as the plain leaved varieties; admirable for contrast with other colors; partially shaded, succeed as bedders. 20 cents each; \$2.00 per dozen.
Bronze King, bronze and yellow.
Cloth of Gold, yellow and green.
Crystal Palace Gem, golden and green.
Distinction, the leaves are encircled near the edge with a very narrow zone of deep black.
Golden Crown, light yellow.
Happy Thought, a large yellow blotch in the center of each leaf, with an outer band of green at the margin.
Italia Unita, carmine zone, white edge.
Lady Collum, style of Mrs. Pollock.
Marshal McMahon, ground color of the leaves golden yellow, marked with a deep chocolate ring.
Mountain of Snow, white margined, scarlet flowers.
Mrs. Pollock, best tri-colored variety.

GERANIUM, SCENTED.

20 cents each; \$2.00 per dozen.

Bridal Ring.

Lady Plymouth, rose scented; silver edged.

Mrs. Taylor, scarlet flowers.

Nutmeg. Pennyroyal.

Rose.

GERANIUM, IVY LEAF.

The value of this selection is greatly enhanced by the beauty and profusion of its flowers during the spring and summer months, varying from white to pink. They are well adapted for rock work or vases; for drooping over baskets or on trellises, they are unsurpassed; but few plants give more satisfaction for home culture. 20 cents each; \$2.00 per dozen, except where noted.

Diadem.

Duke of Edinburgh, leaves margined white.

King Albert, double; beautiful mauve color.

Lady Edith, flowers crimson and purple.

Lucy Lemoine, flowers very double; white, veined with purple. 25 cents.

L'Elegante var.

Gazania, *splendens*, a low growing plant, with large, showy, orange-yellow flowers. 20 cents.

Heliotrope, no plant succeeds better for summer flowering; is equally well adapted for green-house blooming in winter; it is a constant bloomer, and is a general favorite, on account of its delightful fragrance. 20 cents each; set of six \$1.00.

Heliotrope.

Glory de Masette, dark lavender.

Heloise Delesalle, lavender.

Homer, lilac.

Mad. Blerney, white.

Miss Nightengale, light lavender.

Star, the darkest of the heliotropes; white eye; dwarf habit.

Hibiscus, 25 cents each.

Double, rosy-crimson.

Cooperii, foliage variegated, white, green and pink.

Hydrangea japonica variegata, the leaves are deep green, marked with pure white. 50 cents.

Hortensis, the old, hardy variety of great merit; flowers pink, changing to bluish-white. 25 cents.

Otaksa, flowers similar to *H. Hortensis*, but larger; plant more dwarf, and blooms younger. 25 cents.

Paniculata grandiflora, perfectly hardy; flowers white. 25 to 50 cents.

Schizophragma hydrangeoides, new climbing hydrangea, said to cling to trees, and grow to the height of fifty feet; hardy. 25 to 50 cents.

Thos. Hogg, white; one of the best. 25 cents.

Hoya, carnosa, (Wax Plant), delicate, waxy, star shaped flowers. 25 to 50 cents.

Carnosa var. foliage variegated. 50 cents.

Ivies, plain and variegated. Best varieties, 20 to 50 cents.

Ivy, German rapid growing climber, for trellis or baskets. 20 cents.

Jessamine, grandiflora, flowers pure white and very fragrant. 25 cents.

Night blooming, the flowers are of a pale yellow color, and exceeding fragrant, its delicate perfume being perceptible only at night. 20 cents.

Lantana, valuable plants for bedding out; of the most delicate colors; white, rose, orange, lilac, and yellow. 20 cents each.

Alba perfecta, pure white; very fine.

Ball of Fire.

Delectatissima, deep lilac.

Mme. Hoste, rose and orange.

Laurastinus, dark foliage shrub; rich winter bloomer; flowers white. 25 cents to \$2.00.

Libonia, Perchiensis, flower, tube shaped, maroon orange, and yellow in color. In winter and spring it is one mass of bloom. Few plants are more attractive 20 cents each.

Linum, Florum, a plant of extremely neat habit, growing about one foot high, with flowers of pure yellow, nearly two inches in diameter, almost covering the plant when in full bloom. 20 cents.

Lily of the Valley, 25 cents.

Lobelia, speciosa, a valuable plant for ribbon lines and baskets. 15 cents.

Mahernia, 20 cents each.

Hector, flowers yellow, tipped with scarlet.

Odorata, a neat growing, green-house plant, blooming in the early spring. Flowers yellow, bell shaped, and of exquisite fragrance.

Maranta, beautiful, ornamental foliage. They require a good deal of heat. New sorts, 25 cents to \$2.00.

Mesembryanthemum, grandiflorum, very showy, pink and white. 20 cents each.

Mikania, violacea, a climbing or creeping plant, very striking; foliage of a purple-green; very showy for baskets or vases. 20 cents.

Jessamine

Myosotis, palustris, the well known Forget-Me-Not of the garden. 25 cents.

Myrtus, communis, (Myrtle), double; white flowering. 20 cents.

Myrtle, Pink Crape, hardy in the south, but should be kept from frost in the north. It is a shrub, and produces wondrously beautiful flowers. 25 cents.

Nerium, (Oleander), double rose. 25 to 50 cents.

Single white. 25 cents to \$1.00.

Othenna, crassifolia small, tassel like flower; fine for vases and baskets. 20 cents.

Oxalis, excellent for baskets, vases or window culture, flowering nearly the entire season.

Double, flowers of large size, very double; yellow. 250 *Golden yellow*, blossoms most of the time through winter. 20 cents.

Grandiflora, pink; flowers and foliage very large. 200

* We send dry bulbs of the above three varieties.

Floribunda alba, white 15 cents.

" *rosea*, rose colored. 15 cents.

Palms, for decorative purposes, the Palm stand unrivaled, imparting a rich, tropical appearance wherever used. They are growing so rapidly in popularity, that no entertainment of importance is now given without a tasteful array of Palms among the decorations

Chamarops, Excelsa. \$1.00 to \$3.00.

" *Fortunei*. \$1.00 to \$3.00.

" *Humilis* \$1.00 to \$3.00.

Curculigo Recurvolata. \$1.00 to \$5.00.

Latania Borbonica. \$1.00 to \$3.00.

Pandanus Lulie. 50 cents to \$3.00.

Seaforthia Elegans. \$3.00 to \$10.00.

Panicum, variegatum, a variegated grass of drooping habit; valuable for vases or baskets. 15 cents.

Pansy, (Heart's Ease), a charming class of plants for the spring garden, and extremely effective for edging beds; *splendid assortment*. 10 cents each; \$1.00 per dozen; \$6.00 per 100, by express.

Passiflora, coerulea, blue. 20 cents.

Pfordtii, very free, hardy climber; bluish-purple flowers. 25 cents.

Quadrangularis variegata, variegated foliage; bluish purple flowers. Scarce kind. 50 cents to \$1.00.

Peperomia, maculosa, bright green, veined with white. 20 cents.

Resedaflora, this plant bears tiny spikes of white flowers; very fine for button hole bouquets. 20 cents.

Petunia, double flowering varieties. 25 cents each *Blanche*, pure white.

Maranta

Myrtle, Crape.

Palm.

Phlox, Perennial.

Primula Plant.

Petunia, double.

Brilliant, crimson.

Cato, deep pink.

Colossus, very large; fringed; crimson and white.

Elegans, white, crimson center.

Imogene, purplish-crimson, fringed white.

Lambert, crimson and purple.

Louis, large; carmine.

Maculata, white, spotted rose.

Magnet, blotched.

Phlox Perennial, *hardy, herbaceous.*

C. De Tenrense, white, violet eye.

Czarine, snow white, profuse bloomer.

La Fousse, purple center, bordered white.

Lothair, beautiful rosy-salmon.

Madam Corbay, center carmine, border blush white.

Maria VanHoutte, purplish-violet, bright eye.

Mirranda, center delicate carmine, bordered pure white

Mons. Malet, lilac-purple.

Mutabilis, cherry pink.

Reve d'Or, dazzling carmine.

Surprise, purple, mottled white.

York and Lancaster, lilac, striped white.

Pilea, (Artillery Plant). 20 cents.

Pilogyne, *sanvis*, a beautiful, rapid growing climber; excellent for screens or verandas; fine for the house in winter. 20 cents.

Pink, white fringed; hardy. 25 to 50 cents.

Plumbago, *capensis*, very pretty plant, producing large heads of light blue flowers. 20 cents.

Larperntae, dwarf, hardy shrub, indigo blue; fine for edging; covered with bloom during summer and autumn. 25 cents.

Poinsettia, *pulcherrima*, a tropical plant of gorgeous beauty, the bracts of leaves that surround the flower being in well grown specimens, one foot in diameter, of the most dazzling scarlet.

Pulcherrima alba, white.

25 cents to \$1.00 each.

Pomegranate, *dwarf*, (Punica nana), this variety has the peculiarity of blooming when quite small. The flower is a rich shade of orange-scarlet; a rare color. 25 cents.

Primrose, *hardy*, double white. 25 cents.

Primula, *Chinensis*, best varieties. 25 cents.

" double white. 50 cents.

Richardia, *alba maculata*, a variety of calla; leaves spotted with white. 25 cents.

Poinsettia.

Primula, double.

Rivina, *humilis*, a plant of slender growth; branches covered with red berries. 20.

Rosmarinus, *officinalis*, (Rosemary). 20 cents.

Roses, our stock of Roses this season is very fine, both for mailing and sending by express. Those offered as large plants have been bedded out, or grown in pots the past season, and wintered in cold-frame; they can be planted out in the spring with little or no risk. The rose requires high culture; it should be planted in good, well drained soil; the ground can scarcely be made too rich. The pruning required will vary with the sorts planted, the rank growing requiring less pruning than the weak ones. The points particularly to be observed are to prune before the buds start in spring, to cut out all unripe or old and feeble shoots, and to cut back the last season's growth to from one-half to two-thirds its length, according to the vigor of the sorts. Winter protection of tender sorts is accomplished by covering after a few severe frosts, with leaves, straw, evergreen boughs, or earth, or by removing the plants to a cool cellar. With a little care of this kind, the choicest tender roses may be safely wintered, and as they are the only really perpetual roses, they are abundantly worth the extra care. The insects most commonly injurious to the rose—as the Aphis, which appear in great numbers upon the young, growing shoots, and the Thrips, which prey upon the under side of the leaf, giving it a sickly, yellowish look, may easily be destroyed by syringing or dipping the plants in tobacco water. Purchasers will do better by allowing us some latitude in making selections, not only getting better plants, but greater distinction of variety.

Roses, *hybrid perpetual*, *hardy*, these bloom two or three times during the season. Bedding plants 20 cents each; \$2.00 per dozen; \$10.00 per 100, by express. Large plants 35 to 50 cents each; \$20.00 per 100, by express. **Alexander Bachmettiff**, bright red, large and very fine.

Hybrid Perpetual, hardy.

Alfred Colomb, beautiful carmine-crimson.
Achille Gonod, dark carmine-red.
Augusta Mie, deep blush; extra.
Baron Maynard, pure white, edge of petals often tinged pink; fine.
Baron Prevost, pure rose color, free bloomer.
Baron de Rothschild, a light, lovely pink; beautiful.
Beauty of Waltham, rosy-crimson, changing to bright rosy-carmine.
Belle Normandy, silvery rose color: large and full; extra fine.
Cardinal Patrizzi, brilliant crimson, exquisite color.
Caroline de Jansal, flesh color; full; one of the best.
Charles Rouillard, beautiful pale rose; large.
Comtesse de Serenye, tender rose color, shaded with carmine.
Couquette des Blanches, white, flowering in clusters.
Duplessis Morny, purplish-crimson; a fine grower.
Eveque de Nismes, crimson-purple; large and full.
General Jacqueminot, brilliant crimson; magnificent bud.
General Washington, scarlet-crimson; very double.
Infant de Mount Carmel, deep crimson.
John Hopper, dark shade of pink; a showy sort.
Jules Margottin, bright carmine.
La France, silvery white and rose; fragrant.
La Reine, rosy-pink; full and fragrant.
Leopold Hansburg, large, bright rose.
Lord Macartney, dark velvety crimson; double.
Lord Raglan, brilliant crimson-scarlet; very double.
Louis de Argens, blush to white.
Louis Odier, rose color.
Louis Van Houtte, rich crimson-maroon. 30 cents.
Maria Bauman, bright carmine.
Marshal Forey, bright crimson; double; extra.
Maurice Bernardin, clear, bright red.
Mme. Richer, beautiful rose color.
Mme. Alf. de Rougemont, white, tinged with rose.
Mme. Victor Verdier, cherry red, changing to satin rose.
Mme. Theresa Coumer, bright rose.
Mme. Plantier, pure white; large and double.
Mrs. Elliott, bright rose.
Napoleon III, violet-crimson.
Paul Meron, dark crimson; a free bloomer.
Pierre Notting, dark red; very double.
Pierre Seletzky, purplish-red, shaded with violet.
President Lincoln, dark crimson, shaded red.
Prince Camille de Rohan, crimson-maroon.
Prof. Koch, cherry crimson.

Reine de Belges, carmine.

Reynolds Hole, dark crimson-maroon.

Senator Vaisse, bright red; large, bold flower.

Wm. Knox, pink; excellent.

Roses, *Hardy Moss*, bedding plants 30 cents each; \$2.50 per dozen; large plants 50 cents to \$1.00.

Countess Muranais, pure white.

Crested Moss, rose color.

Glory of Mosses, rosy-carmine; extra large and double.

Mrs. Wood, deep crimson.

Perpetual White, white.

Princess Adelaide, bright pink, densely covered with moss.

Salet, pale rose.

Roses, *Hardy Climbing*, bedding plants 20 cents each; \$2.00 per dozen.

Baltimore Belle, flowers white and blush, in clusters.

Gem of the Prairies, red, blotched with white.

Jules Margottin, bright carmine.

Queen of the Prairies, clear, bright pink, sometimes with white stripe.

Seven Sisters, pure white to deep crimson.

Triumph, white, shaded with rose.

Roses, *Tea, Bengal and Bourbon*, monthly, these are admirably adapted for bedding out or pot culture; can be wintered in cold-frames, or cool, dry cellars. No place should be without them. Bedding plants 20 cents each, except where noted; \$2.00 per dozen; \$10.00 per 100, by express; and large plants 35 to 50 cents each; \$20.00 per 100, by express.

Agripina, velvety crimson; fine in bud.

Alba Rosea, blush, rosy center.

Aline Sisley, a rare shade of violet-red.

Appoline, light pink; cupped; exceedingly sweet.

Arch Duke Charles, rosy crimson; a constant bloomer.

American Banner, (the new striped tea rose), possesses the fragrance of the Bon Silene. Small plants 50 cents each.

Aurora, silvery rose; very double and sweet.

Banksia, five colored, white, yellow, rose and striped.

Bella, white; an excellent sort.

Bon Silene, purplish-carmine; delightful fragrance.

Bougerv, rosy-bronze.

Cels Multiflora, blush white; a beautiful variety.

Clara Sylvana, pure white, cream center.

Clementis Nabormand, few; cream, shaded violet.

Tea Rose.

Cornelia Cook, pure white.

Devoniensis, magnolia rose, creamy white.

Douglas, rich crimson, entirely distinct in color.

Duchess of Edinburgh, large buds; deep crimson; tea scented. 30 cents.

Duchess de Brabant, light pink; very fragrant.
Gigantic, flesh color.
Hermosa, pink; very profuse bloomer.
Homer, rosy-salmon; tea-scented.
Isabella Sprunt, canary yellow; fine buds.
Jean Parnet, beautiful pale yellow.
Jas. Gordon, red.
Lady Warrendale, pure creamy white.
Lawrenciano, all; rosy pink.
Leveson Gordon, rosy-salmon.
Maria Gordon, pure white; very double.
Maria Gordon, white and rose.
Maria Gordon, light yellow, pink edge.
Maria Gordon, clear pink.
Mme. Rachel, lemon white; beautiful buds.
Mme. Bosanquet, flesh color; perfect form.
Mme. Bravery, creamy-white; excellent under glass.
Mme. Bureau, blush.
Mme. Caroline Kuster, orange-yellow; very sweet and desirable.
Mme. Lacharme, blush.
Mme. Ristori, blush.
Mme. Vetry, carmine-rose.
Niphetos, without doubt one of the best white roses grown; buds large and full, and a free bloomer.
Nina, creamy-white.
Pauline Labante, salmon-rose; rich tea scent.
Perle des Jardins, deep yellow; very double, and highly perfumed. 30 cents.
Pink Daily, pink.
Purple Crown, purplish-crimson.
Regulus, salmon, shaded with rose.
Roi de Cramoie, red; good in bud.
Safrano, buff.
Sanguinea, rich crimson; excellent for bedding.
Sir J. Paxton, vivid rose, shaded with crimson.
Sombrieul, white, blush; one of the finest.
Sou de Ami, salmon and rose shaded.
Souv. de la Malmaison, flesh color. 30 cents.
Stella, light yellow.
St. Joseph, light pink; delightfully tea-scented.
Triumph de Luxembourg, coppery-rose.
Viridiflora, green; a curiosity.
White Daily, white.
Yellow Tea, buds nicely shaped; a yellow tint; one of the best for summer planting. 30 cents.
 Roses, *Noisette*, or *Climbing, monthly*, these are tender, and should be protected in winter; they are mostly fragrant, and well adapted to verandas, &c. Bedding plants 20 cents each; \$2.00 per dozen.
Caroline Manois, blush white.

Climbing, monthly.

Glorie d'Dijon, salmon; deep cup shaped.
James Sprunt, bright salmon; valuable as a pillar rose.
La Marque, straw color.
Marshal Niel, yellow; fine form; very fragrant.
Setina, rose.
Solfatarre, saffron-yellow.
Washington, white; can be wintered out doors with but little protection; profuse bloomer.
Woodland Marguerette, white.
Salvia, 20 cents each; \$2.00 per dozen.
Splendens, flower spike of the most intense scarlet; ever blooming.
Rosea, pink flowers.
Marmorata nana, a neat, dwarf variety; flowers even-ly marbled, scarlet and white; very striking.
Saxifraga, sarmentosa, basket plant. 20 cents.
Sedum, 25 cents each.
Carnea var., white striped foliage.
Sieboldii var., leaves marginated with yellow.
Sempervirens, a succulent plant, allied to the Sedums; good for rock work. 20 cents.
Smilax, Myrsiphyllum asparagoides, there is no climbing plant in cultivation that surpasses this in the graceful beauty of its foliage. For a parlor or window plant, it is indispensable. 20 to 50 cents.
Solanum, 20 cents each.
Jasminoides variegated.
Fol. var., dwarf varieties.
Thyme, golden lemon, leaves marginated yellow. 15c.
Tradescanthia, 15 cents each.
Vulgaris, a drooping sort, with bright, glossy green leaves.

Smilax.

Violet, double.

Yucca.

Zebrina, leaves striped with silver white.

Rapens, leaves bright green, striped white.

Tropæolum, *double scarlet*, fine for baskets or vases. 20 cents.

Valloia, *purpurea*, a beautiful, scarlet, summer flowering bulb of the amaryllis class. 25 to 30 cents.

Verbena, for years the cultivation of the *Verbena* has been made a specialty by many leading florists. We offer thirty varieties this season. In making up this collection, we have kept two objects in view: good bedding qualities and finest flowers. It has been our aim to grow no other, and our customers may rest assured that this set comprises all the positive colors to be found in any collection of verbenas, together with the best striped and mottled ones grown. A collection of the finest sorts. 10 cents each; \$1.00 per dozen; \$6.00 per 100, by express.

Veronica, a beautiful class of plants, blooming during the fall months. Spikes of flowers from four to six inches long, produced in great abundance. 20c. each.

Imperialis, amaranth red, changing to carmine.

Triumph de Meaux, deep lilac.

Andersonii, variegated foliage, marked white.

Vinca, *elegantissima*, evergreen creeper, creamy-white marking. 25 cents.

Violet, hardy, double, sweet scented varieties. 25 cents each.

Double white.

Double Blue.

Maria Louise, double blue.

Yucca, or *Adam's Needle*, for a cemetery, we doubt if a more appropriate plant can be found than the *Yucca*. The immense clusters of pure white blossoms render it very attractive. The leaves are narrow and long, and from their edges depend long threads. The flower stalk arises from the center of the plant to a height of three or four feet, and the bell shaped, white blossoms are produced in abundance. The plant is perfectly hardy, and can be set out where required, either in autumn or spring, and it will require no further care.

Filamentosa. 25 cents to \$1.00.

FRUIT TREES, GRAPE VINES, SMALL FRUITS, &c.

BY MAIL.

We receive many letters from our customers who purchase their supply of seeds and plants from us, asking if we cannot also supply them with fruit trees, grape vines, small fruits, &c. In order to accommodate all our customers, we have completed an arrangement with one of the largest and most reliable nurseries, by which all orders for this class of goods can be sent directly to us, and they will be promptly and faithfully executed with the very best of stocks, and forwarded by mail, securely packed, and postage prepaid. This will be a very great convenience to those who live at considerable distances from us, and we hope to be favored with very large orders.

Order direct from us.—By so doing, you are sure of getting *just what you order*, every article *true to name*, and you also make a *great saving*, as no agent or dealer can afford to spend time and money traveling through the country, without adequate remuneration.

Terms.—Our terms are strictly *cash with the order*. Do not ask us to send *C. O. D.*, as the cost of collecting return charges is quite an unnecessary item of expense; and the prices being given, we can conceive of no necessity to warrant goods being so sent.

How to Send Money.—The money must always accompany the order, and we prefer a P. O. order, payable to our order. These cost ten cents on orders up to \$15, and 25 cents on \$50, and can be had at almost any post office. The next best thing is a draft on New York or Chicago, and where neither of the above is convenient, the money should be sent by registered letter, costing ten cents. Money can also be sent safely by express, but the charges must be prepaid by the sender. Do not send private checks on local banks, as it costs us too much to collect.

Orders must amount to One Dollar.—We cannot afford to give our attention to orders of less amount than one dollar, unless in addition to the amount wanted, ten cents is sent. The office work on a small order is the same as on a larger one, and it also requires nearly as much material and time to pack it, and takes almost as much postage as an order double or triple the size.

Packing and Packages Free.—At prices in this list, we make no charge for packing, or for material used in packing, such as baskets, boxes, &c.

Safe Arrival Guaranteed.—We prepay postage, and guarantee their safe arrival in good condition at any post office in the United States. If not received in good condition, notice should be immediately returned to us, naming the number and kinds dead, so that there may be no delay in our replacing them.

In Corresponding, always sign your name alike each time. Ladies frequently write in their husband's name, sending an order, and then again in their own name, perhaps making inquiry about it. This gives us a great deal of trouble in looking through our long files.

Lost Orders.—It is very important in writing us relating to lost orders, that you state the time the order was sent, the amount of the order, how the remittance was made, whether by post office order, draft on New York, or registered letter, duplicating your order in full, so that it may be filled immediately, and not be delayed until we correspond back and forth for the duplicate order.

Rare Evergreens, Grape Vines, &c.—Persons desiring to stock up in fruit trees, grape vines, small fruits, evergreens, &c., will find it far the cheapest to order direct of us; by doing so they can secure a full supply at half the cost that traveling dealers can afford to supply at.

The Best Time for Forwarding Plants is from the first of October to the first of June. They are less liable to suffer from frost than extreme heat. We have extensive cellars in which we store a full assortment for winter shipment.

Should our stock of any variety become exhausted before the close of the season, we shall substitute others equally as good.

Mailing Club Rates.—Postage prepaid by us:

Persons sending \$2.00 may select articles valued at \$2.20	
" " 4.00 " " " 4.50	
" " 6.00 " " " 7.00	
" " 8.00 " " " 9.50	

Persons sending \$10.00 may select articles valued at \$12.00	
" " 15.00 " " " 18.50	
" " 20.00 " " " 25.00	

And for all amounts remitted above \$20, twenty-five per cent. may be added to order, purchaser's choice from catalogue or dollar collections.

Express Clubbing Rates.—Transportation charges paid by the purchaser:

Persons sending \$2.00 may select articles valued at \$2.40	
" " 4.00 " " " 5.00	
" " 6.00 " " " 8.00	
" " 8.00 " " " 11.00	

Persons sending \$10.00 may select articles valued at \$14.00	
" " 15.00 " " " 22.00	
" " 20.00 " " " 30.00	

And for all amounts remitted above \$20.00, fifty per cent. may be added to order, purchaser's choice from catalogue or dollar collections.

Individual orders for any of the preceding amounts will be entitled to the same premium as club orders.

DOLLAR COLLECTIONS

Of trees and plants of suitable size to be sent by mail, *postage paid by us*. Our selection of sorts, all labeled. Persons wishing their choice of sorts, will please order at the single rates which accompany the descriptions.

Set 41—8 Apple trees, 4 sorts, \$1.00.

" 42—3 Pear trees, 3 sorts, \$1.00.

" 43—3 Cherry trees, 3 sorts, \$1.00.

" 44—2 Pear, 2 sorts, 2 Quince, 2 sorts, \$1.00.

" 45—6 Peach trees, 3 sorts, \$1.00.

" 46—1 Pear, 2 Peach, 2 Apple, \$1.00.

" 47—1 Apple, 1 Pear, 1 Cherry, 1 Quince, \$1.00.

" 48—8 Grape vines; 2 each of Concord, Hartford, Ives and Rodgers' Hybrids, \$1.00.

" 49—10 Grape vines; 5 sorts, entirely our choice, \$1.00.

" 50—20 Raspberries; 4 each of Mammoth Cluster, Doolittle's Improved, Brandywine, Philadelphia and Turner, \$1.00.

" 51—25 Raspberries; 5 sorts, our choice exclusively, \$1.00.

" 52—8 Currants; 2 Cherry, 3 La Versailles and 3 White Grape, \$1.00.

We have frequent letters of inquiry, similar to the following: "In your set of 25 Raspberry plants for \$1.00, what varieties do you send?" In reply to all such inquiries, permit us to say, that we are only enabled to offer so large a number for a dollar by retaining the *privilege of selecting the varieties when we fill the order*, and this excludes the possibility of naming in advance of filling the orders, what varieties will be used. But all sets will be filled with good sorts, such as are described in our catalogues. In sets where the varieties are named, those of course will always be sent.

Set 53—50 Strawberry plants; 10 Monarch of the West, 10 Crescent Seedling, 20 Wilson's Albany and 10 Chas. Downing, \$1.00.

" 54—50 Strawberry plants; 20 Sharpless, 10 Col. Cheney, 10 Glendale, 10 President Wilder, \$1.00.

" 55—40 Sharpless Strawberry plants, fruit immensely large, \$1.00.

" 56—2 Grapes, 2 Currants, 4 Raspberries, 20 Strawberry plants, \$1.00.

" 57—5 Sweet Chestnut, 1 Spanish Chestnut, 1 Butternut, 1 Black Walnut, 1 Madeira Nut, \$1.00.

" 58—100 Catalpa Speciosa; perfectly hardy, rapid grower, very durable timber, \$1.00.

" 59—40 Sweet Chestnut trees, \$1.00.

" 60—5 Norway Spruce, 3 to 4 inches high, 1 American Arbor Vitæ, 1 Pyramidal Arbor Vitæ, 1 Juniper, 1 Scotch Pine, 1 Retinospora, \$1.00.

PRICE LIST

Of Articles that can be Sent to any part of the United States by Mail.

With the return of another year we have the pleasure of offering you many new and rare varieties of fruits, and although we cannot expect that every variety in the list will make a world-wide renown for itself, yet we have reason to hope that many of them will be so superior to the older sorts ripening at the same time, as to displace them from our catalogue. It is only through the introduction of new kinds that we can hope to arrive at perfection, which should be the aim of every cultivator of fruit. For want of space, we regret that we cannot give description of varieties in full.

APPLES—Standard.

Plant 30 feet apart each way; 48 trees to the acre. One year grafts finely rooted, cut back suitable for mailing. 15 cents each; 8 for \$1.00, purchaser's choice of the following:

SUMMER.

Benoni,	Keswick Codlin,
Early Harvest,	Red Astrachan,
Early Strawberry,	Sops of Wine,
Golden Sweet,	Sweet Bough,
Holland Pippin,	Western Beauty.

AUTUMN.

Autumn Swaar,	Fall Pippin,
Autumn Strawberry,	Gravenstein,
Buckingham,	Maiden's Blush,
Colvert,	Sherwood's Favorite,
Cayuga Red Streak,	St. Lawrence,
Fall Jenctting,	Trumbull Sweet.

WINTER.

Ben Davis,	Northern Spy,
Bailey's Sweet,	Peck's Pleasant
Belmont,	Paradise Sweet,
Baldwin,	Rome Beauty,
Bellflower Yellow,	Russet Roxbury,
Dominie,	R. I. Greening,
Dutch Mignonne,	Rawles' Janet,
Fallawater,	Rambo,
Fameuse,	Ribston Pippin,
Grimes' Golden,	Seek-no-Further
Golden Russet,	Stark,
H. Nonsuch,	Talman Sweet,
King (of Tomp. Co.),	Vandevere,
Limber Twig,	White Pippin,
Lady Apple,	Wagener.
Monmouth Pippin,	

APPLES—Russian and others of Special Merit.

One year grafts cut back for mailing. 25 cents each; 5 for \$1.00.

Alexander, Emperor Alexander, Russian Emperor, &c.—A large, beautiful, red apple. September.

Bottle Greening.—Fruit medium; greenish yellow, shaded with dull crimson; sub-acid, almost melting. January and February.

Duchesse of Oldenburg.—Large, striped yellow and red. Popular everywhere. September.

Dutch Butter.—A beautiful, even sized, sweet, red apple, admirably adapted for apple butter. December to March.

Haas.—Large size; splashed and mottled light red; juicy acid, rich, extremely hardy. November to March.

Lawer.—Large, dark bright red. Flesh white, crisp, slightly, aromatic, sub-acid. January to May.

McIntosh Red.—A new, hardy variety, of Canadian origin. Fruit medium, dark red; very handsome, fine grained, juicy, tender and mild. January.

Mann.—A good sized apple of the Greening type, keeping until June or July.

Pewaukee.—Medium size; bright yellow, splashed and striped dull red; sub-acid, with a rich, aromatic flavor; perfectly hardy. December to March.

Red Canada.—This is the old Richfield Nonsuch. A handsome, red, winter apple, but difficult to propagate. December to February.

Smith's Cider.—Very desirable; medium, striped, productive. November to March.

Seedless.—Medium sized; greenish yellow, with dark carmine cheek in sun. It is entirely seedless, and quite a novelty. November and December.

Shiawassee Beauty.—Fruit medium, white, marbled, splashed and striped with red. Flesh firm, very white, tender, juicy, brisk, refreshing, sub-acid. October to January.

Stump.—Medium, roundish, conical, smooth, white, shaded with bright red, splashed and striped with crimson. Flesh white, tender, juicy and pleasantly sub-acid. September and October.

Tetofsky.—An early Russian apple, ripening in July and August; bears extremely early. Fruit handsome, medium to large; yellow, striped with red; juicy, pleasant acid, aromatic.

Walbridge.—Medium size; handsome, striped red; one of the hardest. March to June.

Wealthy.—A native of Minnesota; perfectly hardy; fruit large, red, sub-acid. December to February.

HYDE'S KING OF THE WEST.—Large to very large; handsome, yellowish green; good quality, a remarkable keeper. Apples of crops of 1878 and 1879 were exhibited side by side at the winter meeting of the Ohio State Horticultural Society, held at Canton, in December of 1879, and attracted great attention. Time of keeping, all the year round. One year trees, suitable for mailing, 40 cents each; 3 for \$1.00.

APPLES—Crab.

One year grafts cut back for mailing. 25 cents each; 5 for \$1.00.

Aucubifolia,	Marengo,
Briar's Sweet,	Power's Large Red,
Chicago,	Transcendent,
Golden Beauty,	Van Wyck's Sweet,
Hyslop,	Whitney's No. 20,
Montreal Beauty,	Yellow Siberian,

PEARS—Standard.

Plant 20 feet apart each way, 108 trees to the acre. One year grafts cut back for mailing. 40 cents each; 3 for \$1.00.

Bartlett,	SUMMER.
Brandywine,	Madelaide,
Dearborn's Seedling,	Osband's Summer,
	Tyson & Clapp's Favorite.

Autumn.	
Buffam,	Howell,
Beurre d'Anjou,	Louise Bonne de Jersey
Beurre Clarigeau,	Seckel,
Belle Lucrative,	Swan's Orange,
Duchesse de Angouleme,	Sheldon,
Flemish Beauty,	Steven's Genesee.

Winter.	
Beurre Easter,	Mt. Vernon,
Columbia,	Vicar of Wakefield.
Lawrence,	

PEARS—New.

Price 50 cents each, except where noted.
Beurre de l'Assomption.—Fruit large and melting, ripening early in August.

Brockworth Park.—Large, pale yellow, flushed and streaked with red on the sunny side; flesh white, buttery, melting; very juicy, vinous and rich. September.

Duchesse de Bordeaux.—Medium to large; sweet and pleasant. December to February.

Frederick Clapp.—Above medium size; clear lemon yellow; fine grained, juicy, melting, sprightly, rich and aromatic; very good to best. October. 75 cents.

Souvenir du Congress.—A seedling of the Bartlett, ripening before it, and larger. The fruit is very fine, and of immense size, but unfortunately the tree blights badly.

Goodale.—Fruit large, light yellow, with a blush in the sun; juicy, melting, vinous. October.

Keiffer's Hybrid.—A cross between the Chinese Sand Pear and a choice variety supposed to be Bartlett, the tree partaking of the hardness of the Sand Pear, which is absolutely blight proof, and the fruit partaking of the characteristics of our choicest varieties. Mr. Meehan, editor of the *Gardener's Monthly*, says: "I have eaten fruit of Keiffer's Hybrid, that was equal in luscious richness to any pear I ever ate. I have never tasted a bad or indifferent pear of this kind, every one was delicious. I regard it the most wonderful production of the age." As yet no case of blight on Keiffer has been known; dwarf trees, \$1.50.

PEARS—Dwarf.

Plant one rod apart, 160 to the acre. Leading sorts, one year buds, cut back for mailing, 40 cents each; 3 for \$1.00, except Keiffer's Hybrid \$1.50; Frederick Clapp 75 cents, and others in list of new pears 50 cents each.

CHERRIES.

Plant Hearts and Bigarreus 20 feet apart each way; 108 trees to the acre.

Plant Dukes and Morellos 10 to 12 feet apart; 563 trees to the acre.

One year from bud, cut back for convenience in mailing to about one foot. 40 cents each; 3 for \$1.00.

LEADING SORTS.

Black Eagle,	Gov. Wood,
Black Tartarian,	May Duke,
Belle Magnifique,	Napoleon,
Carnation,	Ohio Beauty,
Early Purple Guigne,	Reine Hortense,
Early Richmond,	Rockport,
Elton,	Yellow Spanish.
English Morello,	

NEW CHERRIES.

Empress Eugenie.—A new variety from France of great excellence; a profuse bearer. 50 cents,

Montmorency Ordinaire.—A sort of quite recent introduction, of the Early Richmond class, but larger and later, and a prodigious bearer. A variety of great value. 50 cents each.

Luelling.—Very large, black; flesh firm. 50 cents.

Olivet.—Large, globular; a shiny, deep red sort: tender, rich and vinous; one of the largest of its class. 50 cents each.

Louis Philippe.—Large; dark red, almost black; tender, sprightly, mild acid; stone small; tree vigorous and very productive; ripens middle to last of July. 50 cents.

PLUMS.

Plant 16 by 18 feet apart. One year buds cut back for convenience in mailing. 50 cents each, except where noted.

LEADING SORTS.

Coe's Golden Drop,	Magnum Bonum Yellow
Dennison's Red,	Pond's Seedling,
German Prune,	Prince's Imperial Gage,
General Hand,	Reagle's Union Purple,
Imperial Gage,	Reine Claude,
Italian Prune,	Shropshire Damson,
Jefferson,	Smith's Orleans.
Lombard.	

Improved varieties of American plums on peach stocks.

Bassett.—A new American seedling, said to be almost curculio proof. 75 cents.

De Cardeuc.—Medium, round, slightly flattened; skin yellow, nearly covered with red; flesh melting, sweet and vinous. End of June and first of July.

De Soto.—A very hardy, native variety, originating in Wisconsin; very productive. 75 cents.

Newman.—Medium oblong; skin a beautiful glossy red, with delicate purple bloom; flesh somewhat coarse but juicy. August and September.

Wild Goose.—Well adapted to peach stocks; an improved variety of the Chickasaw; large, deep red, with purplish bloom; flesh melting and good.

Weaver.—Fruit large, purple, very prolific; regular bearer. This tree is very hardy, and will thrive in the very northern limits of the United States. Ripens August.

PEACHES.

Plant 15 to 18 feet apart. One year buds cut back for mailing. 20 cents each; 6 for \$1.00.

Amsden's June,	Mountain Rose,
Alexander Early,	Old Mixon Cling,
Bernard's Yellow Rareri-	Old Mixon Free,
pe, Old Mixon Free,	Red Cheek Melocoton,
Crawford's Early,	Richmond,
Crawford's Late,	Snow,
Coolidge Favorite,	Smock's Free,
Chinese Cling,	Smock's Cling,
Early Beatrice,	Steadley,
Early Louise,	Salway,
Early Rivers,	Scott's Nonpareil,
Foster,	Stump the World,
Geo. the 4th,	Sturtevant,
Hale's Early,	Susquehanna,
Hill's Chili,	Troth's Early,
Jacques' Rareri-	Ward's Late Free,
pe, Large Early York,	Yellow Rareri-
Lemon Cling,	pe.

NEW PEACHES.

Price, except where noted, 35 cents each; 3 for \$1.00.

Bowers' Early,	Marshall's Late,
Beer's Smock,	Mrs. Brett, 50 cents.
Bilyea's Late October,	Prince of Wales, 50 cts.
Boss Queen, 50 cents.	Saunders,
Conklin, 50 cents.	Waterloo, 50 cents.
Downing,	Wilder.
Honeywell,

Mulberry, Downing's Everbearing. Nectarines and Apricots.

A good assortment. Plant 15 to 18 feet apart. 50 cents each.

MULBERRIES.

White. 25 cents.

Downing's Everbearing. 75 cents.

New American. 75 cents.

Russian.—Fruit large, about the size of Kittatinny blackberries. Mostly jet black, about one tree in twenty producing flesh colored berries. Sub-acid to sweet, with a fine aromatic flavor. Immensely productive, perfectly hardy. The original trees were imported from western Russia, as far north as the 49th degree of latitude, assuring their success to the very northern limits of the United States. 50 cents.

QUINCES.

Angers, 30 cents.

Champion, \$1.00.

Orange, 30 cents.

Rea's Mammoth, 50 cts.

NUTS.

Trees suitable size for mailing.

American Sweet Chestnut, 10 cents each; 40 cents per 10; \$2.50 per 100.

Spanish Chestnut, 25 cents each.

Butternut, 20 cents each; 6 for \$1.00.

Black Walnut, 20 cents each; 6 for \$1.00.

English Walnut, 25 cents each.

Almonds, hard and soft shell, 50 cents each.

Pecans, 50 cents each.

Hickory Nuts, shell bark, 25 cents each.

Japan Chestnut.—A splendid addition to our nut-bearing trees. Nuts of the largest size, averaging nearly an ounce each; of delicious flavor. A beautiful tree, apparently more hardy than the American Sweet Chestnut. 50 cents.

GRAPES.

NEW VARIETIES.

Price \$1.00 each, except where noted.

Eldorado.—Clear, golden yellow; of the highest flavor, with a decided aroma resembling pineapples. One of the very handsomest grapes grown.

Early Dawn.—An extremely early, black grape of superior quality; berry medium round, black flesh, tender, juicy, sweet, slightly vinous; ripens a week before Hartford, and unlike that grape, is a good keeper.

Bacchus.—Bunch medium to large, shouldered, compact; berry below medium, black, with a blue bloom; half tender, sprightly, juicy; an excellent wine grape.

Grape, Prentiss.

Duchess.—Bunch medium to large, shouldered, compact; berries medium, pale greenish yellow, with a whitish bloom; flesh tender, juicy, sweet, spicy, rich, and of excellent quality, keeping a long time after being gathered. Ripens soon after Concord.

Highland.—Bunch large, long, compact; berry large, round, black; flesh soft, juicy, sweet, somewhat vinous. Ripens between Concord and Catawba.

Jefferson.—A pure native, a cross between Concord and Iona, resembling Concord in growth, vigor and hardiness, with fruit much like Iona in color, texture and quality. Ripening about with Concord.

Lady Washington.—A showy and beautiful white grape; bunch and berry large; flavor delicious.

Monroe.—Bunch medium to large; berry large, black; flesh juicy, sweet, vinous and sprightly. Ripens with Hartford.

Rochester.—Bunch large; berry medium to large, dark purple; flesh very sweet, vinous and aromatic. Ripens first of September.

Pocklington.—This is the largest white grape yet offered, with large, thick, tough leaves; vines perfectly hardy; bunch large, compact; berry large to very large, pale yellow, covered with a thin, light bloom; flesh juicy, sprightly, sweet, ripening with the Concord. \$1.50.

Prentiss.—Berry yellowish green, sometimes with a rosy tint; flesh tender, sweet, melting, juicy. \$1.50.

Vergennes.—A hardy, strong grower, very productive; bunches large; berries medium to large, holding firmly to the stems; color light amber; flavor rich, delicious; flesh meaty and tender. Ripens as early as Hartford Prolific, and is an excellent keeper in a proper temperature, drying down almost to a raisin.

GENERAL COLLECTION—BLACK.

Plant rows 8 feet apart, 6 to 10 feet in rows.

The following prices are for first class one year vines, two year vines being too heavy to forward by mail.

Price 25 cents each, except where noted.

Clinton.—Bunches small and compact; berry round, black, pulpy, juicy, of medium quality.

Champion.—Vine vigorous; bunch and berry medium in size, black, thin skin; pulp sweet and pleasant, soft and melting. Ripens earlier than Hartford.

Concord.—A large, purplish black grape, ripening about the middle of September; vine remarkably vigor-

ous and free from disease. It is now being planted over a greater extent of country than any other one variety. 15 cents.

Eumelan.—Medium size, deep purplish black, covered with a fine bloom; fine quality, hardy, productive and early. 30 cents.

Hartford Prolific.—Bunches large; berry large, round and dark, of medium quality. Ripens some three weeks earlier than the Isabella. Hardy and prolific. 15 cents.

Ives' Seedling.—Bunches medium to large, compact, often shouldered; berry medium, slightly oblong, of a dark purple color. 15 cents.

Isabella.—Bunches long, large and loose; berry large,

Grape, Moore's Early.

oval, dark purple or black; pulp tender, juicy, sweet and rich when fully ripe. Ripens first of October. 15 cts.

Merrimac, (Rogers' No. 19).—Black; bunch large, berry very large, round; one of the most reliable varieties, ripening from the 10th to 15th of September.

Moore's Early.—Bunch large, berry large, round; color black, with heavy blue bloom; vine exceedingly hardy, entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, and its hardiness particularly adapts it to Canada and the northern portions of the United States. 75 cents each.

Worden.—A splendid, large, black grape of the Concord type, but earlier; larger in bunch and berry, and of decidedly better quality; vine hardier than that old stand-by, the Concord, and every way as healthy. 50 cents each.

Wilder, (Rogers' No. 4).—Bunch and berry very large, black, round; flesh tolerably tender; flavor sprightly, sweet and agreeable. One of the best of Mr. Rogers' hybrids, ripening quite early.

RED or AMBER.

Agawam, (Rogers' No. 15).—A dark red grape of the Hamburg cross; bunch large, compact, frequently shouldered; berry very large with a thick skin; pulp soft, sweet, sprightly; vine very vigorous. Ripens early.

Grape, Brighton.

Brighton.—An excellent new grape. Bunch large, well formed; berry above medium to large, round, Catawba color; excellent flavor and quality; one of the best. One of the earliest in ripening. 50 cents.

Catawba.—Bunch of good size, rather loose; berry large, round; when fully ripe, of a dark copper color, with a sweet, rich, musky flavor. Requires a long season to arrive at full maturity. Excellent both for the table and wine. 15 cents.

Delaware.—This is undoubtedly the best table grape,

ranking pre-eminently above all others in its pure, rich, sugary, wine like juice. Bunch small, compact, shouldered; berry medium size, fine wine color, translucent; vines hardy, moderately vigorous and very productive. Ripens 15th September.

Gæthe, (Rogers' No. 1).—A strong, healthy vine, producing large crops of beautiful bunches; berry very large, yellowish green; flesh tender and melting. Ripens late; very valuable at the south.

Lindley, (Rogers' No. 9).—Vine vigorous; berry medium to large, reddish in color; flesh tender, sweet and aromatic. Ripens early.

Massasoit, (Rogers' No. 3).—A vigorous vine; berry medium in size, brownish red; flesh tender and sweet. Ripens early.

Salem, (Rogers' No. 53).—A strong, vigorous vine; a hybrid between the native and Black Hamburg; berry large, Catawba color, thin skin, free from hard pulp, very sweet and sprightly. Ripens as early as Hartford.

Walter.—Bunch and berry medium, resembling the Delaware in color, but larger in size; flesh tender, rich and sweet, ripening very early; vine fair grower, with dark brown, short jointed wood. 75 cents.

WHITE.

Croton.—Vine moderately strong; berry medium size, yellowish green; flesh melting and sweet. Ripens early. 50 cents.

Lady.—A new white grape; a seedling of the Concord, possessing all the vigor of the parent vine; berry large, light greenish yellow, skin thin, pulp tender; sweet and rich. Ripens earlier than Hartford; worthy of trial in all sections. 50 cents.

Martha.—A light colored grape. Bunch compact; berry large, round; vine a strong grower; said to be a seedling of the Concord, but ripening earlier, and sweeter.

Rebecca.—Bunch rather large; berry above medium size; color light green, rich amber in the sun; flesh rich and sweet; vines moderately vigorous, rather tender when young. Ripens ten days before Isabella. 50 cts.

STRAWBERRIES.

For field culture, plant one by four feet apart, 10,000 to the acre. For garden culture, plant one by two feet apart. Any rich soil that will produce good corn or potatoes is suitable for the Strawberry. Early in the winter cover the entire surface with litter of some kind to keep the plants from being injured by freezing. There is no danger of putting on too much between the rows, but the plants themselves must not be covered too deep; from two to three inches of coarse straw is probably the best covering. When growth commences, remove the covering from directly over the plants, and leave it between them for a mulch. The blossoms of those marked with a letter (p) are destitute of stamens, and are termed pistillate, and unless a row of a perfect flowered variety is planted at intervals not exceeding about a rod, they will produce imperfect fruit and but little of it. But as a rule, when properly fertilized, they are more prolific than those with perfect flowers.

NEW STRAWBERRIES.

Price 10 cents each; \$1.00 per dozen.

Bidwell.—Bright, glossy crimson, averaging as large as the Sharpless, and more productive than the Wilson or Crescents. Very firm and meaty in texture, and delicious in flavor.

Crystal City.—The earliest variety in cultivation. Fruit of medium size, conical; color deep red; flesh moderately firm; good quality; very desirable for early home use.

Cetawayo (p).—Berries large, irregular in shape, and said to be wonderfully productive.

Mt. Vernon.—A large, late, very productive variety; a strong, healthy grower, with strong fruit stalks; fruit conical, bright red, uniformly large and of excellent quality.

Golden Defiance.—Large; beautiful, bright scarlet; of good quality; very productive; late to very late.

Huddleston's Favorite.—Large size; beautiful shape; bright, glossy crimson; firm, with a rich, spicy flavor. An excellent shipping berry.

Hervey Davis.—Fruit very large, holding its size well to the last. Deep, glossy red, ripening perfectly, and of the highest flavor.

Sucker State.—Fruit medium to large, regular shape, conical, but not pointed; color somewhat like Cumberland Triumph, but darker.

Springdale.—Very large; dark crimson; of excellent quality, exceedingly productive and vigorous.

GENERAL COLLECTION.

Price 10 cents each; 30 cents per 10; \$2.00 per 100.

Cumberland Triumph.—A magnificent variety; berries immense, fine, perfect form, and of fine flavor; plant very vigorous and productive.

Crescent Seedling.—Large, conical, quite uniform in size and shape; bright scarlet, moderately firm, a remarkable grower, and considered the most productive variety grown, one grower having picked 346 bushels to the acre; will bear more neglect than any other, taking entire possession of the ground to the exclusion of weeds. It appears at home alike in all soils.

Chas. Downing.—Fruit medium to large, conical; deep scarlet, fine flavor, productive.

Glendale.—So far, the best late market berry that has been tested; plant very thrifty, with tall, rank foliage, and very productive; succeeds well on both light and heavy soils; fruit of large size, regular, uniform, conical, bright scarlet color; fair quality; very firm, being fully equal to Wilson in shipping and keeping qualities.

Iowa Prolific.—A new variety from Iowa, large and prolific, and of good quality.

Jucunda.—A strawberry of the largest size, high color, holding its fruit well up on the vines; bringing the highest price in market.

Kentucky.—A strong, vigorous, productive variety, bearing its berries well up from the ground; fruit large, bright scarlet; firm, juicy, rich and sweet.

Monarch of the West.

Monarch of the West.—This is a well tested and truly worthy variety; will grow on most any good soil; stands drought and wet; berry very large, firm and of most delicious quality.

Seneca Chief.—Very large, conical, dark crimson; firm, very good, late; productive and vigorous.

Sharpless.—With the exception of President Lincoln, the largest berry of the entire collection, and has maintained its high reputation for vigor of plant size of berry, flavor and productiveness; flesh firm, sweet, with

Sharpless.

a delicate aroma; of first quality; color clear, light red, with a smooth, shining surface.

Wilson's Seedling.—One of the most productive and profitable varieties for market culture.

ADDITIONAL LIST.

Price 10 cents each; 40 cents per 10; \$3.00 per 100.

Black Defiance.—A splendid sort, one of the best; very large, fine, perfect form, and fine flavor; a luxuriant grower, and productive.

Capt. Jack.—A most vigorous grower, healthy and productive; berries large, handsome and solid.

Col. Cheeney (p).—Large, roundish ovate; bright scarlet; flesh rather firm; fine quality.

Cinderella.—Large, conical, regularly formed, bright glossy scarlet, mild, rich, aromatic, vigorous and productive; very fine for home use.

Forest Rose.—An excellent variety; large and handsome, of the Jucunda type.

Great America.—Very large, if given the highest cultivation, but not profitable on poor soil. Ripens late.

Longfellow.—A variety from Kentucky; large, late, firm berries.

Michigan Seedling.—A good sized berry, ripening a week or ten days later than Wilson's.

Marvin.—A cross of Jucunda with Wilson, resembling to a certain extent both, although distinct from either, a berry of extraordinary promise, being one of the very latest in ripening.

Pioneer.—Very early, of large size, bright red; flesh firm, and of excellent quality.

President Wilder.—Plant a vigorous, healthy grower very productive; fruit large, roundish, quite regular, bright crimson scarlet, firm, juicy, sweet and rich.

President Lincoln.—One of the largest berries in cultivation, rich dark color and fine quality. The size is really immense, irregular in form. The originator claims to have measured berries 10 to 11 inches in circumference. It requires rich soil and high culture.

Seth Boyden.—A very general favorite; medium early, large size, bright crimson, firm, juicy, rich, and immensely productive.

Triumph de Gand.—An old, well established favorite; large, firm, sweet, rich; continues a long time in bearing, almost covering the strawberry season.

Warren.—Plant vigorous, moderately productive; fruit of large size, fine form and color, and delicious flavor.

Windsor Chief (p).—A vigorous grower with healthy foliage, and immensely productive; fruit of large size to the end of the season.

GOOSEBERRIES.

Downing.—Very large, handsome, pale green, and of splendid quality for both cooking and table use; bush a vigorous grower, very productive, and usually free from mildew. 25 cts.

Houghton Seedling.—Small to medium, roundish oval; pale red, sweet, tender, very good; plants spreading shoot slender, enormously productive. 15 cents.

Mountain Seedling.—Large, roundish oval; pale red; skin thick; medium quality; plant a free grower, and very productive. 25 cents.

Smith's Improved.—Large, pale greenish yellow; skin thin; of very excellent quality, being unsurpassed by any other variety for table use or cooking; bush moderately vigorous, and excessively productive. 25c.

ENGLISH VARIETIES.

Strong, two year plants.	40 cents each.
Crown Bob,	Sulphur,
Golden Lion,	Warrenton,
Hedge Hog,	White Smith.
Montrose,	

RASPBERRIES.

The Raspberry should be planted in good, rich soil, in rows about five feet apart, and three feet apart in the row, with three or five canes to the hill. As soon as they have done bearing, cut out the old wood to give more vigor to the young canes. Price, unless noted, 10 cents each; 50 cents per 10; \$3.50 per 100.

Amazon.—A very large and fine flavored berry, and one of the most vigorous of growers.

Antwerp Red.—An old variety, originally from Antwerp; fruit large, conical, dull red; flavor rich and sweet; leaves large and plaited.

Antwerp Yellow.—Large, pale yellow, of excellent quality.

Brandywine.—A large, bright red berry, of very beautiful appearance, which makes it a favorite market variety, although not of the highest quality. It does well on nearly all soils, and endures the drought and heat of the south better than most varieties.

Catawissa.—Dark crimson, covered with a thick bloom; flavor sprightly; canes vigorous and productive.

Clarke.—Large, conical, bright crimson, juicy, sweet, and excellent, but rather soft for long shipment.

Cuthbert, or Queen of the Market.—A remarkably strong, hardy variety, said to stand the northern winters and southern summers better than any other variety; berries very large, measuring three inches around; conical; rich crimson, very handsome, and so firm they can be shipped hundreds of miles by rail in good condition; flavor is sweet, rich and luscious. 15 cents each; 15 for \$1.00.

Delaware.—Medium size, bright red; originated in New Jersey, where it is spoken of as one of the most delicious of berries.

Davidson's Thornless.—One of the earliest and best of the Black Caps, and nearly exempt from spines.

Doolittle's Improved Black Cap.—Although one of the first introduced, it still holds its place as one of the most valuable.

Gregg.—This is decidedly the largest and most prolific Black Cap that we have ever seen, far surpassing in size the famous Mammoth Cluster; averaging, when grown side by side, with the same treatment, from one-third to one-half larger. 15 cents each; 15 for \$1.00.

Great Western.—A Black Cap from Pennsylvania, resembling the Gregg very closely; thought by some to be identical. 15 cents each; 15 for \$1.00.

Herstine.—Very large, bright crimson; fine flavored; a strong grower and abundant bearer; one of the very best berries for home use.

Highland Hardy.—An early, strong growing and very productive variety, thriving in almost any soil; berry medium, bright red; its earliness, great productiveness, and bright, handsome appearance, make it a favorite market variety.

Kirtland.—An excellent red variety; perfectly hardy.

Lum's Everbearing.—Raised by H. B. Lum, of Sandusky, Ohio. It is similar to the Ohio Everbearing, but of larger size and more productive. 15 cents each.

Mammoth Cluster.—One of the largest, latest and best of the Black Caps; juicy and sweet.

Miami.—Large, juicy, sweet; very productive.

Philadelphia.—Dark red, good size, flesh moderately firm; plants hardy and enormously productive; valuable for market.

Reliance.—A new red raspberry of superlative excellence; firm, beautiful fruit; hardy, and an immense bearer. 15 cents each; 15 for \$1.00.

Seneca Black Cap.—Larger than Doolittle, a week later in ripening; firm, sweet, rich, hardy and very productive.

Thwack.—This new variety appears to be gaining in favor. The canes are short (3½ to 4 feet), are as hardy as the hardest, producing large crops of beauti-

Cuthbert.

Smith's improved.

Gregg.

ful fruit; very firm, rendering it one of the best for shipping. 15c; 15 for \$1.00.

Turner.—A beautiful, red berry of fine size and excellent quality; said to be the hardiest and most productive throughout the entire west.

CURRENTS.

The Currant has not hitherto received the attention its merit demands. It presents us its annual offering of grateful, refreshing fruit, just at the time it is most needed. 15 cents each, unless noted; the set of 11 sorts for \$1.75.

Black Naples.—Very large; fine for wine or jellies.

Cherry.—The largest of all the red currants.

La Versaille.—Very large, long bunches, deep red, productive.

Lee's Prolific (black).—Larger than Black Naples in berry and bunch; better in quality, and vastly more productive. 30 cents.

Red Dutch.—An old, well known, thrifty, upright sort; very productive.

Victoria.—Large, bright red, with very long bunches; late; a good bearer.

White Grape.—An early and immense bearer; very valuable.

White Goindoin.—A large, light colored sort; sweet, vigorous and productive.

White Dutch.—Milder flavor than the common red, and preferable for dessert.

Utah Black.—This is a distinct species, with large, blue-black fruit; quite sweet, a strong grower, and proof against the currant worm. 30 cents.

Utah White.—Similar to the preceding in size and quality, with color of a palish green. Both are desirable novelties. 30 cents.

BLACKBERRIES.

Plant 3 by 8 feet apart.

Lawton, Kittatinny, Snyder and Early Wilson. 10 cents each; 3 sorts for 25 cents.

Hoosac Thornless and Missouri Mammoth. 15 cents each.

Wachusett Thornless.—Medium size, oblong oval, sweet and good. A good keeper, rendering it valuable for market; succeeds well on both light and heavy soils, bearing large crops; a hardy variety, free from thorns. 20c

EVERGREENS.

In the following list we quote only such sizes of Evergreens as can be sent by MAIL.

Norway Spruce.—When planted alone on the lawn, makes a majestic pyramid of living green from base to summit; perfectly hardy to withstand the severest cold of our northern winters, or the greatest heat of summer. Unrivalled as a screen or wind-break. No evergreen excels it in safety of transplanting, in close, compact habit of growth, and in endurance of close pruning from year to year without injury. 2 years, 3 to 4 inches, 10 cents each; 25 cents per 10; \$1.25 per 100. 4 years, 6 to 8 inches, 10 cents each; 50 cents per 10; \$3.00 per 100.

American Arbor Vitæ.—A hardy, pyramidal tree; when grown singly and properly sheared, a handsome object; planted closely, it makes a compact and beautiful hedge of light green. 4 to 6 inches, 10 cents each; 50 cents per 10; \$4.00 per 100.

Arbor Vitæ (Golden).—A beautiful variety of the Chinese, compact and globular in form; color a lively, yellowish green; not quite hardy at the north; should be planted in a shaded situation. 4 to 6 inches, \$1.00.

Arbor Vitæ (Pumila).—A little dwarf; very fine both in color and form. 5 to 6 inches, 25 cents each.

Arbor Vitæ (Pyramidalis).—An exceedingly beautiful, bright variety, resembling the Irish Juniper in form; foliage deep green; color well retained in winter; perfectly hardy. Should have a place in every collection. 6 to 8 inches, 35 cents each.

Arbor Vitæ (Siberian).—A small, conical shaped tree; foliage dense, dark green; perfectly hardy and excellent for a single specimen or for hedges. 4 to 5 inches, 25 cents each.

Arbor Vitæ (Tom Thumb).—A very small, compact, little evergreen; very fine foliage; makes a beautiful ornament for a small yard or cemetery lot; fine for low hedges. 4 to 6 inches, 25 cents each.

Arbor Vitæ (Hovey).—A small tree, globular in form; foliage light green and very compact; hardy. 4 to 5 inches, 25 cents each.

Arbor Vitæ (Victoria).—A moderately free growing variety; foliage lively green, tipped with creamy white; very desirable. 6 to 8 inches, 75 cents.

Arbor Vitæ (Compacta), "Parson's."—A very compact variety; hardy and desirable. 5 to 6 inches, 25 cents.

Cypressus Nutkænsis.—A very fine evergreen from Nootka Sound. One of the best; foliage dark green; perfectly hardy. 6 to 8 inches, 30 cents.

Lawson Cypress.—A most desirable tree from California, with elegant, drooping branches, and feathery foliage, of a dark, glossy green hue. 6 to 8 inches, 35 cents.

Lawson Cypress (Erecta Viridis).—An erect variety of the elegant Lawson Cypress. 6 to 8 inches, 30 cents.

Irish Juniper.—Erect and formal in habit; foliage deep green and very compact, making a splendid column, sometimes 15 or 20 feet high. Much used in cemeteries. 6 to 8 inches, 25 cents.

Swedish Juniper.—Not quite as erect in growth as the Irish; foliage light yellowish green. It attains a height of 10 or 15 feet. Perfectly hardy. 4 to 5 inches, 25 cents.

Juniperus Suecica Nana.—A dwarf variety, compact habit of growth; foliage light, not changing in winter; perfectly hardy. 4 to 5 inches, 25 cents.

Pine (Austrian).—A strong, hardy grower, fine for wind-breaks; grows rapidly on light, sandy soils; hardy. 4 to 6 inches, 15 cents.

Pine (Scotch).—Like the preceding, its quick, strong growth makes it valuable for protective screens; very hardy. 4 to 6 inches, 15 cents.

Podocarpus Nubigen.—A rare evergreen from Japan; erect like the Irish Yew, with heavier and denser foliage. 4 to 5 inches, 40 cents.

Retinospora Plumosa.—An exceedingly handsome, small evergreen from Japan, with feathery, light green foliage. 4 to 5 inches, 25 cents.

Retinospora Plumosa Aurea.—Like the preceding, a plant of great beauty; soft, plume like foliage, of a golden color; close and compact habit; should be in every amateur collection. 4 to 5 inches, 35 cents.

Retinospora Squarrosa.—A small sized tree, with graceful, drooping branches, and glaucous green foliage 4 to 5 inches, 35 cents.

Yew (Elegantissima).—An erect little tree with variegated leaves; valuable at the south. 4 to 5 inches, 30 cents.

Yew (Irish).—Upright in growth, with dense foliage, of a dark, sombre hue; not quite hardy here; valuable at the south for cemeteries or small yards. 3 to 4 inches, 35 cents.

Box Tree.—A fine, small evergreen, with pale green leaves; can be trained in any desirable form by shearing. 3 to 4 inches, 20 cents; 4 to 6 inches, 25 cents.

Box Tree (Elegantissima variegata).—A variety of

the Tree Box, with variegated leaves. 6 inches, 35 cents.

English Holly.—A small evergreen tree or shrub, with deep green, glossy, shining foliage, and bright red berries through winter; largely used in Christmas decorations; requires winter protection in the north. 4 to 6 inches, 35 cents.

DECIDUOUS TREES.

Catalpa Speciosa (Hardy or Western Catalpa).—This early blooming, upright growing variety appears to be much harder than the common *syringifolia*, having proved itself capable of enduring the severe winters of Wisconsin and Iowa, making, when planted in groves, straight, symmetrical trees, suitable for posts or railway ties, for which purposes, it is one of the most durable timbers known, lasting in many well authenticated instances, nearly or quite a century. Mr. W. H. Hubbard, of Fairview, Dakota, writes under date of October 26th, 1881: "The Catalpa Speciosa that I bought of you two years ago (nearly) are doing finely." 8 to 12 inches, 10 cents each; 30 cents per 10; \$1.00 per 100.

Ash Leaved Maple.—A distinct variety, making a handsome lawn tree. 4 to 6 inches, 20 cents.

Norway Maple.—A native of Europe; a large, handsome tree, with broad, deep green, shining foliage. Very desirable for street, park or lawn. 10 to 12 inches, 25 cents.

Sycamore Maple.—A handsome tree from Europe, of rapid, upright growth, and large foliage. 10 to 12 inches, 25 cents.

American Linden, or Basswood.—A rapid growing, beautiful tree, with very large leaves and fragrant flowers. 10 to 12 inches, 20 cents.

European Linden.—A very fine, pyramidal tree, with large leaves and fragrant flowers. 10 to 12 inches, 25 cents.

Mountain Ash (European).—A fine, hardy tree, with the head dense and regular, covered from July till winter with great clusters of bright red berries. 8 to 12 inches, 25 cents.

Magnolia (*Acuminata* Cucumber).—A beautiful, pyramidal tree, attaining from 50 to 80 feet in height; bluish green leaves 6 to 9 inches long. 10 to 12 inches, 25 cents.

Red Flowering Horse Chestnut.—This is a beautiful tree, with splendid rosy red flowers, forming a fine contrast with the white flowering sort. 2 years, stocky, 1 foot in height, 50 cents.

White Flowering Horse Chestnut.—This makes an admirable tree for all ornamental planting. 2 years, stocky, 1 foot in height, 35 cents.

Hardy Ornamental Shrubs.

ALTHEA FRUTEX—(Rose of Sharon).

There are many varieties of this beautiful shrub, differing in color and shape of the flower. A hardy shrub, easy of cultivation, and especially desirable on account of its blooming during the autumn months, when there are few other flowers. The following varieties are hardy here:

Double Rose.—25 cents.

Double Variegated.—Pink and white. 25 cents.

Folia Variegata.—Leaves conspicuously margined creamy white; flowers double purple. 35 cents.

AZALEA PONTICUM.

A fine, hardy shrub, producing an abundance of bright yellow flowers in early spring. 50 cents.

CALYCANTHUS.

Sweet Scented Shrub.—Flowers purple, very double, and deliciously fragrant; remains in bloom for a long time; a very desirable shrub. 25 cents.

Deutzia, fl. pl.

DEUTZIA.

Gracilis (Slender Branched).—A very desirable, dwarf growing variety. Flowers pure white. A valuable plant for winter blooming. 25 cents.

Crenate Leaved, (Crenata).—Strong grower; profuse bloomer. 25 cents.

Crenata (fl. pl).—Flowers double white, tinged with pink. 25 cents.

Crenata (fl. alba pleno).—A very valuable variety, of strong growth, producing its pure white, double flowers in abundance. 25 cents.

DAPHNE CNEORUM.

A beautiful, low growing, evergreen shrub, flowering very freely in early spring, and at intervals through the summer; flowers bright pink, very fragrant. 50 cents.

FORSYTHIA.

Viridissima.—Produces beautiful yellow flowers early in spring; leaves deep green. 25 cents.

HYDRANGEA Paniculata Grandiflora.

6 to 10 inches, 25 cents; 15 to 18 inches, 40 cents.

LILAC.

White and Purple.—35 cents each.

PYRUS JAPONICA.

Blooms early in spring; flowers bright scarlet; very hardy. 25 cents.

PURPLE FRINGE.

A beautiful, distinct, large shrub, much admired for its long, feathery flower stalks, which give the tree the appearance of being covered with a cloud of smoke. 25c.

PHILADELPHUS, or MOCK ORANGE.

Grandiflora.—A large growing shrub; flowers snow white, in great profusion. June to July. 25 cents.

SNOW BALL.

A well known shrub, attaining the height of eight or ten feet; produces its showy white flowers in large balls or masses, in June. 25 cents.

SPIREA.

Beautiful shrubs of the easiest culture; very desirable for shrubberies or the flower garden.

Ellardii.—Rose colored flowers in spikes. 25 cents.

Callosa Alba.—A white flowering variety, of dwarf habit; very fine. 25 cents.

Chamædrifolia.—One of the most desirable of the spiræas, with small, wiry branches covered in June with clusters of white flowers. 25 cents.

Eximia.—Spikes of bright rose colored flowers; very free blooming. 25 cents.

Grandiflora.—A very desirable variety, having large rose colored flowers. 25 cents.

Profuse Flowering.—Flowers white; a great bloomer. 25 cents.

Prunifolia.—A beautiful spirea; its flowers are like double, small, white daisies; blooms early. 25 cents.

Reevesii fl. pl.—Double white flowers in clusters; very fine. 25 cents.

Thunbergia.—A pretty, white flowering variety, with narrow, linear leaves; valuable for forcing. 25 cts.

Van Houtte.—A strong grower; flowers pure white, in clusters; fine. 25 cents.

RHODODENDRON, or ROSE BAY.

The most magnificent hardy, evergreen shrub that grows, with broad, thick, evergreen foliage of glossy richness, which is almost hidden in May and June by a splendid array of beautiful flowers in clusters, each cluster large enough for a lady's bouquet.

Catawbiense (Hybrid Seedlings).—9 to 10 inches \$1.00.

Choice named sorts.—9 to 10 inches, \$2.00.

WIEGELIA.

Rosea.—A beautiful shrub, with rose colored flowers, in May and June. 25 cents.

Rosea (Nana Variegata).—One of the most conspicuous shrubs that we cultivate; leaves beautifully margined creamy white; flowers pink. It is a dwarf grower, and admirably adapted to small lawns or gardens. 35 cents.

Amabilis.—Of robust habit, large foliage and flowers, deep rose color. 25 cents.

Verschafeltii.—A strong, upright grower; foliage and flowers very much resembling roses. 25 cents.

☞ We will send six shrubs, each labeled, our selection of varieties, for \$1.00.

Hardy Ornamental Climbing Vines.

AMPELOPSIS.

Quinquefolia (American Ivy).—A perfectly hardy climber, of rapid growth; fine for covering walls or unsightly objects. 25 cents.

Tricolor.—A variety with leaves beautifully mottled with creamy white. 25 cents.

Veitchii.—A hardy, climbing plant from Japan; it is a splendid plant for covering unsightly objects, as it clings to stone work, &c., with the greatest tenacity. The foliage is a bright, glossy green, shaded with purple, changing in fall to the brightest tints of scarlet, crimson and orange. 35 cents.

AKEBIA QUINATA.

A very beautiful, perfectly hardy, fast growing, Japan vine, with magnificent foliage, producing flowers in large clusters, of chocolate purple color, possessing a most delicious perfume; unsurpassed for covering trellises and verandas, the foliage never being attacked by insects. 25 cents.

ARISTOLOCHIA SIPHO.

Dutchman's Pipe.—A magnificent, hardy vine of rapid growth, with very large, heart shaped leaves, and brownish flowers resembling in shape a miniature pipe; splendid for archways or verandas. Strong plants, \$1.00.

BIGNONIA.

Radicans (Trumpet Flower).—A rapid growing plant, with large, scarlet, trumpet shaped flowers. 25 cents.

HONEYSUCKLE.

Monthly, fragrant.—A fine, rapid growing variety; flowers large and very fragrant; color red and yellow; a constant bloomer. 25 cents.

Chinese Twining.—Blooms at intervals through the summer, and retains its foliage late in winter; flowers nearly white; quite distinct. 20 cents.

Scarlet Trumpet.—A strong, rapid grower; blooms very freely the entire season; bright red, trumpet shaped flowers. 20 cents.

Bignonia.

Wistaria.

Aurea Reticulata.—A variety with beautifully variegated foliage; the leaves are netted and veined with clear yellow; flowers yellow and fragrant; fine for small yards. 25 cents.

Halliana.—Color white, changing to yellow; very fragrant; blooms from June to November. 20 cents.

Magnevillea.—Flowers yellowish white; fragrant; evergreen in winter. 20 cents.

WISTARIA, or GLYCINE.

This is one of the most popular of our hardy vines, growing very rapidly, climbing to a height of fifty feet or more, and when in bloom, is truly magnificent. It flowers in early spring, in long, drooping racemes, resembling in size and shape, a bunch of grapes.

Brachybotria Rubra.—Flowers reddish purple. 35c.

Magnifica.—Flowers in dense, drooping racemes of pale lilac; of the same size as the Chinese; vigorous, and perfectly hardy. 35 cents.

Chinese (Sinensis).—Flowers in clusters; pale blue; sometimes gives a second crop of flowers in the fall. 35 cents.

☞ We will send six climbing vines, each labeled, our selection of varieties, for \$1.00.

PAMPAS GRASS—(Tender).

The spikes of this really ornamental grass resemble plumes of white feathers, which are borne on stems above the foliage. It requires protection, or removing to the cold pit or cellar during the winter. 35 cents.

"SUCCESS WITH SMALL FRUITS."

By Rev. E. P. Roe.

We desire to call especial attention of our friends to this, the most comprehensive and trustworthy work on the subject yet published. It is beautifully illustrated, printed on the finest paper, and handsomely bound. Prof W. J. Beal, of the Michigan Agricultural College, says of it: "It must do a good deal towards accomplishing the desire of the author, *i. e.* to make the growing of small fruits more general and more attractive. Mr Roe speaks from a wide and successful experience. The facts are attractively presented, and a full index will enable the very busy man to find any topic he may desire at any time. In all that pertains to berries, we have nothing to compare with it, in our country, or any other." Sent, prepaid, on receipt of price, \$3.50.

BULBS FOR SUMMER AND AUTUMN BLOOMING.

The following Bulbs will be sent by mail or express, charges prepaid, when ordered at single or dozen rates; at the 100 or 1,000 rate they will be sent by express or freight, the purchaser paying the charges. No less than 6 will be sent at the dozen rate, no less than 50 at the 100 rate, and no less than 500 at the 1,000 rate. Orders with money should be forwarded as early as possible, and they will be filled in rotation. The tender Bulbs, that are injured by frost, will not be sent until such danger is over in the spring.

DAHLIA.

Dahlia.

The Dahlia has always been a favorite for autumn flowering. The flowers are so symmetrical and perfect, and the range of brilliant colors so large and varied, that they will always be popular where display is wanted. The roots are tender, and easily injured by frost. They should be set out three feet apart, after all

danger of frost is over, and placed in a cool cellar, and not be allowed to freeze during winter. The plants should be supported by tying to stakes. Ready for shipment about April 1st.

	EACH.	DOZ.
Extra choice mixed.....	25	2 50
Fine mixed.....	20	2 00
Extra choice mixed,.....	per 100.	15 00
Fine mixed,.....	"	8 00

Dielytra.

DIELYTRA—(Bleeding Heart).

Tuberous rooted plants, blooming in the spring, favorably known almost everywhere. They require only the ordinary culture of border plants. Roots planted in autumn will flower freely. The roots should be divided every third year. The flowers are a delicate pink color, very graceful, produced continuously from May till July. Ready for shipment about April 1st.

	EACH.	DOZ.
Dielytra, <i>Spectabilis</i> ,.....	25	2 50

GLADIOLUS.

The Gladiolus may, perhaps, be placed at the head of summer flowering bulbs. The improvements in this flower have been marked and rapid, and the varieties now embrace nearly all shades of color, and some of them are marvels of beauty.

To persons who are not familiar with the named varieties, the following collections will be valuable. They are put up in neat boxes and sent by mail, post paid. Each bulb is named, and a corresponding name is on the package:

Gladiolus, Bulb, Flower and Plant.

COLLECTIONS IN BOXES.

PR BOX.

A—12 good named varieties	1 00
B—12 extra choice named varieties.....	1 50
C—12 new and rare named varieties.....	2 00
D—12 choice unnamed varieties.....	80

MIXED GLADIOLUS.

This mixture must not be compared or confounded with the common mixed sorts, often the refuse of cheap, unsaleable kinds. It is composed only of named varieties of the best sorts, and represents over 150 kinds, among which is a good proportion of white, yellow, striped and blotched varieties. We feel certain that no one will be disappointed in purchasing this stock, and we recommend it with the greatest confidence:

	PER 1000.	PER 100.	PER DOZ.
Choice mixed.....	40 00	5 00	75

NAMED GLADIOLUS.

The following named varieties are selected with special reference to beauty of flower, range of color, and habit of plant. There is not one in the list that is not desirable, and every bulb has flowered the past season, and is known to be true to color and description. Ready for shipment about April 1st.

	EACH.	DOZ.
<i>Adonis</i> , light cherry, lower petals yellow, with carmine blotch.....	10	1 00
<i>Angele</i> , white, slightly flesh, light carmine blotches.....	20	2 00
<i>Antonius</i> , fine spike of large flowers, cherry colored, tinged with orange, and blazed with carmine red, pure white stains.....	10	1 00
<i>Aristote</i> , flesh color, spotted red, lower petals striped.....	10	1 00
<i>Arsinoe</i> , satin rose, flamed bright carmine, large, perfect flowers.....	20	2 00

	EACH.	DOZ.
<i>Bernard de Jussieu</i> , violet, shaded cherry, purple blotch.....	15	1 50
<i>Calypso</i> , flesh color, streaked rose, and blotched carmine.....	15	1 50
<i>Ceres</i> , pure white, flamed lilac, desirable.....	15	1 50
<i>Daphne</i> , cherry, striped with carmine.....	10	1 00
<i>Don Juan</i> , orange red, lower petals spotted yellow.....	10	1 00
<i>Edith</i> , flesh color, with darker stripes.....	10	1 00
<i>Emilie</i> , white, suffused with rose, brown blotch.....	15	1 50
<i>Etandard</i> , white, slightly suffused with carmine.....	15	1 50
<i>Eugene Scribe</i> , tender rose, blazed with carminate red, very beautiful.....	15	1 50
<i>Felicien David</i> , cherry, light carmine feathered, white blotch.....	15	1 50
<i>Flavia</i> , deep red, fine.....	15	1 50
<i>Fulton</i> , velvety vermilion, light purple blotch.....	15	1 50
<i>Galathea</i> , bluish white, carmine blotch.....	15	1 50
<i>Grenze</i> , intense cherry, flamed lake.....	15	1 50
<i>Isaac Buchanan</i> , new seedling, the best yellow variety yet introduced.....	25	2 50
<i>James Watt</i> , light vermilion, pure white blotch, feathered delicate rose.....	30	3 00
<i>La Candeur</i> , white, lightly striped with carmine violet, perfection.....	20	2 00
<i>Laura</i> , orange red, flamed carmine, pure white blotch.....	15	1 50
<i>Le Poussin</i> , light red, white blotch, handsome.....	15	1 50
<i>Lord Byron</i> , brilliant scarlet, flaked pure white, very showy.....	15	1 50
<i>Madame de Vetry</i> , French white, purple carmine blotch.....	10	1 00
<i>Madame Domage</i> , rose, spotted with amaranth, striped with white, excellent.....	15	1 50
<i>Mme. LeSeble</i> , pure white, purplish rose blotch, beautiful.....	20	2 00
<i>Madame Monneret</i> , rose, white stripe, and carmine blotch.....	15	1 50
<i>Maria Dumortier</i> , light flesh color, purplish blotch.....	10	1 00
<i>Mathilde de Landevoisin</i> , white, slightly tinted with flesh colored rose, streaked with carmine.....	25	2 50
<i>Meteor</i> , brilliant dark red, large, pure white blotch.....	15	1 50
<i>Meyerbeer</i> , brilliant scarlet, blazed with vermilion, very fine spike.....	20	2 00
<i>Napoleon III</i> , bright scarlet, the center of the petals white striped, extra fine.....	15	1 50

	EACH.	DOZ.
<i>Ophir</i> , dark yellow, purple blotch.....	20	2 00
<i>Othello</i> , bright orange red, dwarf habit.....	10	1 00
<i>Penelope</i> , bluish white, lower petals tinted yellow, streaked carmine.....	15	1 50
<i>Proserpine</i> , rosy white, very strongly marked with deep rose and crimson violet, extra fine.....	20	2 00
<i>Reine Victoria</i> , pure white ground, with rosy violet stain, fine.....	20	2 00
<i>Romulus</i> , brilliant dark red, large, pure white blotch.....	10	1 00
<i>Robert Fortune</i> , orange lake, shading to purple crimson, veined white, perfection.....	15	1 50
<i>Shakespeare</i> , white or bluish white, blazed with rosy carmine, large, rose colored stain, admirable.....	40	4 00
<i>Stella</i> , white, slightly tinted yellow, flamed carmine.....	15	1 50
<i>Sulphureus</i> , sulphur colored.....	20	2 00
<i>Thalia</i> , white, flamed and streaked with carmine.....	20	2 00
<i>Thunberg</i> , cherry orange, pure white blotch.....	20	2 00
<i>Van Dyck</i> , crimson amaranth, striped with white, very fine.....	25	2 50
<i>Vesta</i> , white, with purplish blotch on yellow ground.....	25	2 50
<i>Zenobia</i> , rose, tinged with violet and flamed with dark carmine, large blotch, feathered with crimson.....	20	2 00

LILIUM.

The Lily has been, with eminent propriety, styled the "Queen of Flowers," and truly no flower conveys so adequate an idea of queenly beauty, majestic grandeur, and faultless purity, as the Lily. Their culture is simple, and with a little care, failure is impossible. Select a deep, rich soil, enrich it well with thoroughly decomposed manure, and set the bulbs from three to six inches deep, according to size. In the autumn the bed should be protected by a liberal covering of leaves or litter, and care should be taken that the bulbs have proper drainage, no water being allowed to stand around the roots. The bulbs can be transplanted either in spring or autumn, but should be kept out of the ground the shortest possible time. Once firmly established, they should not be disturbed oftener than once in five years. Many of the varieties force well in green-house, but are more suitable for parlor culture.

Auratum, new, golden Japan lily, extra large bulbs..... 50 5 00

Lilium, Auratum.

L. Candidum.

L. Tigrinum, double.

Lilium, Chalcedonicum.

L. Longiflorum.

L. Lanciflorum.

	EACH.	DOZ.
<i>Brownii</i> , magnificent.	75	17 50
<i>Lanciflorum</i> , album, white Japan lily.	40	4 00
" <i>roseum</i> , rose spotted Japan lily.	25	2 50
" <i>rubrum</i> , white and red spotted.	25	2 50
<i>Candidum</i> , white, single.	25	2 50
" spotted.	40	4 00
" variegated foliage.	50	5 00
<i>Chalcedonicum</i> , brilliant scarlet, recurved blossoms.	75	7 50
<i>Longiflorum</i> , pure white, very fragrant.	15	1 50
<i>Tigrinum</i> , (Tiger Lily), orange, spotted black.	15	1 50
" <i>flore pleno</i> , (Double Tiger Lily), extra large bulbs, giving from 20 to 30 flowers.	40	4 00
<i>Jacobean</i> , (Amaryllis Formosissima), deep scarlet.	40	4 00
<i>Fortunei</i> , deep scarlet, spotted with black.	40	4 00

MADEIRA VINE.

Tuberous rooted climber, with glossy green leaves, and delightfully fragrant, white blossoms. Sometimes called "Mignonette Vine." It is of rapid growth, and from a few tubers, vines will be produced sufficient to cover one side of a cottage. The tubers are tender, and must be protected from frost during winter.

	EACH.	DOZ.
Madeira Vine Tubers.	10	75

TRITOMA.

Sometimes called "Red Hot Poker." It is really a fine plant, quite hardy, though requiring some protection

through winter. The flowers are produced in large spikes of rich, orange red tinted flower tubes. Plant two feet apart, and in November, cut the plants back near the ground, and cover the bulb with dry litter, which remove in the spring.

	EACH.	DOZ.
<i>Tritoma uvaria</i>	25	2 50

TUBEROSE.

Of all the summer flowering, bulbous plants, we think the Tuberose the most desirable. The flowers are waxy white, double, and so fragrant as to perfume the whole atmosphere for some distance around. They are useful for forming button hole bouquets, in large bouquets, or as single specimens. Each bulb flowers but once, but the smaller bulbs can be set out for future flowering, when their growth is completed. A good way to grow Tuberoses is to fill five inch pots half full of cow manure, and the remainder with good, rich earth, mixed with sand. Plant the bulbs in this in April, water moderately, and hasten growth by putting in a warm, light place. When weather has become warm, plunge the pots in the earth, out of doors. They will usually flower before cold weather in autumn; if they do not, the pots can be brought in, and they will bloom in the house. The bulbs cannot be safely sent by mail before April 1.

ALL FLOWERING BULBS.

	EACH.	DOZ.	100.	1,000.
<i>Double white</i> , tall.	10	75	4 00	35 00
<i>Pearl</i> , double dwarf white.	10	1 00	5 00	40 00

Madeira Vine.

Tritoma.

Tuberose, Tall.

T. Pearl.

SEED DRILLS.

Planet Jr. Garden Drills, Wheel Hoes, Wheel Cultivators, Horse Hoes and Firefly Plows.

These are the best known and latest improved implements for the garden and farm. Thoroughly made and finely finished; no similar tools that we have ever sold have been so popular. Most people imagine they are only play-things for the rich, and farmers and gardeners have been humbugged so much they will not believe the truth, but the truth is that every one of these implements is a practical, all day tool, made expressly to save the time, labor and money of the hard worked tillers of the soil.

Planet Jr. No. 2 Drill.

though holding less seed. It sows all garden seed accurately, opening, marking the next row, covering, and rolling down at one operation. By removing one bolt, it can be quickly made into an admirable Garden Cultivator, Wheel Hoe, Wheel Cultivator, or Wheel Plow. As a plow alone, it will put the garden in admirable order, and keep it so, the work equalling in quality that of a horse cultivator, besides opening furrows, covering, hilling, &c. As a hoe, it works safely and closely, both sides of the row at once, at the critical time when plants are very small, and weeds abundant. The hoes are exchangeable from side to side. It has also three cultivator teeth, making it a most efficient tool in all garden crops; all the blades are tempered and polished steel. Price, boxed and delivered at express office or depot, \$14.00.

Planet Jr. No. 2 Drill (no hoeing attachments).—Sows with ease and accuracy at any exact depth or thickness, all garden, field and nursery seeds possible to be sown with a drill, and quickly repays its cost in saving of seed, time, labor, and better crops to all who grow vegetables for home or market. The hopper revolves with the carrying wheels, thus avoiding complicated stirring devices, while preventing clogging and insuring regular dropping. Regularity of depth and evenness of covering are insured by the arrangement of the plow. A good marker, a self clearing plow, and the absence of all gearing and agitators make these drills remarkable for durability, simplicity and ease of management. Price, boxed and delivered at Express Office or Depot, \$12.

Planet Jr. Combined Drill, Wheel Hoe, Wheel Cultivator and Wheel Plow.—Every reader of our catalogue having a vegetable garden, large or small, should own this delightful labor-saving tool. As a Seed Drill, it is exactly similar to No. 2.

Planet Jr. Combined Drill and Wheel Hoe.

The same as a Wheel Plow.

Planet Jr. Double Wheel Hoe, Wheel Cultivator and Double Plow.—Will do the work of five to ten men with hand hoes, among market garden and root crops, small nursery stock, &c., and is especially adapted to onion culture. With this hoe the operator tends very readily both sides of a row at once, much more easily and closely than he can tend one side of each of two rows. This is an invaluable feature, especially in crops sowed on ridges. The wheels can be set four, seven or ten inches apart. It has a pair of hoes, a pair of plows, and two pairs of cultivator teeth, making it capable of every variety of work. It cuts from six to sixteen inches wide, throwing to or from the row as desired. Price, boxed and delivered at express office or depot, \$10.00.

Planet Jr. Double Wheel Hoe.

ground in the spring. They open furrows for beans, peas, corn and potatoes, and neatly cover them. Later cultivation of these and all other garden crops can be rapidly, thoroughly and beautifully done, and nothing can compare with the quality of work of this little tool, which can be quickly adjusted to work shallow for hoeing, deep and narrow for cultivating, and deep and wide for plowing. Price, packed and delivered at express office or depot, \$4.00.

Firefly Garden Hoe and Plow.—Makes the care of a vegetable garden a pleasure. They are made with polished and tempered steel moldboards with eyes for attaching a rope in breaking up the

Firefly Garden Hoe and Plow.

Planet Jr. Horse Hoe and Cultivator.

Planet Jr. Horse Hoe and Cultivator.—This is the most recent and valuable improvement in horse hoes. A wrought iron frame with tempered and polished steel blades make it light, strong, easily managed, and very durable. Particularly useful in tending corn, potatoes, cotton, broom corn, tobacco, rice and roots, in all stages of their growth. The side hoes are reversible, throwing from or to the row as desired, leaving the ground ridged much or little. Every machine is supplied with two extra teeth, to convert it into an ordinary cultivator. Price, packed and delivered at express office or depot, \$12.00.

Matthews' Garden Seed Drill.—This drill is designed to be used in field or garden. When in operation, it opens the furrows, drops the seed accurately at the desired depth, covers it and lightly rolls it, and at the same time marks the next row, all of which is done, with mechanical precision, by simply propelling the drill forward. In this way it sows with an evenness and rapidity impossible for the most skillful hand to do, all the different varieties of Beet, Carrot, Onion, Turnip, Parsnip, Sage, Spinage, Sorghum, Peas, Beans, Broom Corn, Fodder Corn, &c.

The agitator stirs the seed in the hopper thoroughly by a positive motion, which insures continuous and uniform delivery, and the bottom of the hopper is made sufficiently dishing to sow the smallest quantity of seed. When desired, the movement of the agitator can be checked, and the drill may then be propelled forward or backward without dropping seed. A simple contrivance accurately gauges the uniform deposit of the seed to any required depth, thus avoiding the risk of planting at irregular depths, or so deep in places as to destroy the seed. The markers are made adjustable for the purpose of marking the rows at any desired distance apart, and they mark them distinctly whether the ground is even or uneven. Another great advantage which it possesses over any other machine is that it is the only drill which has an INDICATOR with the names of different seeds thereon. This indicator is devised to simplify the adjustment for sowing different varieties of seeds. It is securely attached to the side of the hopper, in plain sight, and is made use of for changing from sowing one kind of seed to another by simply turning it until the name of the seed to be planted comes up to the indicator pin, which revolves the dial attached to the bottom of the hopper, until the right sized hole in it for planting that seed comes directly into place. This ingenious invention is a great improvement over any other method in use, and is wonderfully convenient, besides being entirely reliable. Price, boxed and delivered at depot or express office, \$13.00.

Matthews' Garden Seed Drill.

Matthews' Hand Cultivator.

Matthews' Hand Cultivator.—Is one of the best implements in use for weeding between row crops, and for flat cultivation generally, and is an indispensable companion implement to the seed drill. It is thoroughly constructed throughout, very durable, and easy to operate. A boy can do as much with it as six men with hoes. It spreads from 6 to 14 inches, and will cut all the ground covered, even when spread to its greatest extent. Its teeth are of a new and improved pattern, and thoroughly pulverize and mellow the soil. The depth of cultivating may be accurately gauged by raising or lowering the wheel, which is quickly done. It was formerly made with two wheels, afterwards some were made with two wheels and some with one wheel; but, as the latter was, for various reasons, found to be generally preferred, it is now made with one wheel, as shown in above cut, and this latest pattern cannot fail of being appreciated wherever used. Price, boxed and delivered at depot or express office, \$6.50.

Matthews' Drill and Cultivator Combined.

Ruhlmann's Hand Cultivator.

Matthews' Drill and Cultivator Combined.—Those who prefer a drill and cultivator combined, something which is inexpensive and reliable, suitable for limited use, chiefly in the cultivation of a small garden patch, will find the Matthews' Combined Drill and Cultivator exactly what they want. It has received the highest testimonials, is extensively used, and is universally admitted to be *the most complete and perfect implement of the kind ever produced*. It is thorough and simple in construction, sure in operation, and is capable of sowing nearly all the varieties of seeds sown by larger drills. The depth of planting can also be accurately gauged.

The above cut shows this drill with the cultivator attachment removed. When the cultivator attachment is affixed and the cover and roller are removed, it gives a hand cultivator which resembles the one shown in the previous cut, and has all its advantages. The change to either drill or cultivator is easily and quickly effected. Price, boxed and delivered at depot or express office, \$15.00.

Ruhlmann's Hand Cultivator.—One of the best, simplest and most durable machines we have ever seen for working among onions, carrots, beets, beans, peas, &c. It is strong, easily adjusted, having but two bolts, can be adjusted to work from seven to sixteen inches, can be regulated to any height, and will do the work of eight men with hoes. Knives of best cast steel. Weight, boxed, 35 lbs. Price, boxed and delivered at depot or express office, \$5.50.

Holbrook's Hand Cultivator.—This hand cultivator has proved a great labor saving implement, and given general satisfaction for garden and field use. The teeth are of cast steel, and cut from three to fifteen inches wide between rows, or both sides of the row at once, if preferred. The rear teeth have side guards, to allow them to work within half an inch of plants, and save nearly all the hand weeding. It is light, durable, simple, easy to operate, and thoroughly pulverizes and mellows the soil. It does the work of six to ten men with hoes. Price, packed and delivered at express office or depot, \$5.00.

Holbrook's Hand Cultivator.

WATER'S IMPROVED TREE PRUNER.

This Pruner is unsurpassed by any made. It has many points of superiority, a few only of which we will enumerate:—lightness, simplicity, durability, interchangeable parts, and cheapness. It is constructed of the very best steel; the blade is connected with the lever at the lower end in such a manner as to give great power. It cuts the smallest twig perfectly and a larger limb than any other pruner, always making a very smooth cut.

A good pruner is an indispensable article to everyone who cultivates a single fruit tree, and the Water's pruner is the best one yet offered. It is without a competitor for public favor.

These pruners can only be sent by express, purchaser paying charges. Prices, delivered free at express office here, as follows:

Length of pole	4 feet	weight, 2 1/4 lbs.	\$2.00
"	6 "	" 2 3/4 "	2.25
"	8 "	" 3 1/2 "	2.50
"	10 "	" 4 1/4 "	2.75
Extra Knives, postpaid.			each, 35

"PERFECTION"

Revolving Lawn and Garden

SPRINKLER AND FOUNTAIN

(PRICE, \$1.25.)

DIRECTIONS.—Screw on to hose so that the Sprinkler will stand upright when the pin is placed in the sod. Turn on the water according to the circle desired to be watered.

Guaranteed to do as much as any Sprinkler made.

The "Perfection" is warranted by the inventors to accomplish as much as any sprinkler in the market at the same pressure, and its superiority is shown by its simplicity, ease with which it can be cleared of any obstructions, effectiveness while working in a strong wind; also the circle watered can be reduced to any desired size, by turning the supply partly off.

By its simple construction, it can be used on hill-side or terrace.

In connection with a force pump, it can be used with good effect in green-houses, hot-beds, &c.

The bearings and working parts are made of brass, and it is complete in itself; has only to be screwed to the hose, and the pin stuck in the ground, to be used.

Sent, postage paid, on receipt of the price, \$1.25.

EXCELSIOR WEEDING HOOK.

For weeding flower beds or vegetable gardens, it cannot be excelled. It will work well among rows or seedlings, among ornamental plants, or in any place where freedom from weeds is desired. It removes the weeds with far greater rapidity than in the usual manner, without injury to the plants, and will pay for itself in one day's use. Price, 25 cents each; 30 cents by mail, prepaid.

GUY'S GERMAN PLANT FOOD.

For flowers, foliage plants, palms, ferns, bulbs, &c. Composed of nitro-gen, ammonia, and other chemicals essential to the growth of plants, producing a luxuriant growth and generous blooming. Plants fed with it are not often troubled with insects. Put up in wooden boxes, with full directions for use.

Price, small size box, for testing, 10 cents; by mail, prepaid, 15c.
" larger " containing five times the quantity, 25 cents; by mail, prepaid, 40c.

Weeding Hook.

A VALUABLE INVENTION.

Improved Adjustable Compound Microscope.

Patented December 25, 1877.

Cut No. 1—Represents the microscope one-half size, open, the dotted lines showing the lateral position of focus. Cut No. 2—Represents the microscope closed ready for placing in the pocket or for shipping.

The best thing for its various purposes ever presented to the American public. The Compound microscope has no rival in the world. Its focus is adjustable, power reliable, price low, quality first class, form compact, action simple, utility unquestioned, use practical, design unique, construction admirable.

Everybody engaged in banking, engraving, cloth, silk, linen or cotton purchasing, botanical study, machine making, manufacturing, the examining of insects, flowers, leaf formations, minerals, the ova of fishes, birds, fowls,

No. 1.

No 2.

and hundreds of other professional, industrial and scientific occupations, may find a ready daily or hourly use for this wonderful little instrument. Price, nickel embossed, \$2.00, by mail, prepaid.

MULLER'S VINE-FASTENER.

An end to Trouble—A Relief to the Sorely "Tacks-ed."—This little invention invariably finds favor in the eyes of every gardener, male or female, amateur or professional, who has ever spent time in tying or tacking up vines of any kind. It can be driven in wood or between bricks or stone, and securely fastens the plant, while yielding to its growth. Permits vines to be put up or taken down *instantly*. The materials—tinned wire and cork—defy the action of the elements. Infinitely *neater* as well as *better* than the old way. Price, by mail, postage paid, 10 cts per doz.

The Improved Double-Action Hydronette Pump.

The improved Hydronette is an invaluable implement for sprinkling flowers, watering lawns, washing windows, carriages, &c., and for extinguishing fires. It is made in a very durable manner, handsomely nickel plated, and cannot easily get out of order. The pump has a sprinkler and rubber hose attached. It will sprinkle your flowers, wash your windows, destroy worms on grape vines, tobacco plants and potato vines, and commends itself to every gardener, farmer, and householder. Price of pump, complete, \$8.50, delivered free at express office here. On receipt of \$9.25, we will deliver it free anywhere in the United States.

LAKE SUPERIOR MOSS, OR GROUND PINE.

Used very extensively in decorating churches, public buildings and private residences for the holidays. It is worked into innumerable designs. Keeps green for weeks and even months.

Per pound, post paid.....	25	Per 500 lbs., by express or freight, not prepaid....	42 50
100 lbs., by express or freight, not prepaid.....	9 00	1000 "	75 00

LADIES' FLORAL TOOLS.

These Floral Sets are now so universally known that they need no description here. They have steadily increased in public favor ever since their introduction eight years since, and have received the unqualified approval of all, we believe, of the leading florists of the country, and will be appreciated by every lady in the land, who cultivates flowers.

Put up in sets of four pieces, handsomely boxed. Price, per set, three-quarters polished, \$1.25, postpaid.

BRASS GREEN-HOUSE AND GARDEN SYRINGES.

adapted for cleansing plants and flowers from those destructive insects which are so injurious to them, by means of whale oil soap liquid, tobacco juice, &c. They are very strongly made from the best quality of brass, finely polished, elegant in appearance, not liable to dent or become injured. Strong in all their parts, and if properly cared for, will last a life time. Sent only by express, at expense of purchaser.

No. AA, parlor syringe, very small, with one fine spray rose.....	1	50
No. A, one stream and one spray rose.....	2	50
No. B, " " ".....	3	00
No. C, " " ".....	4	00

No. D, one stream and one spray rose.....	5 00
No. O, one spray rose, holes of large size.....	2 75
No. oo, " " " "	3 50
No. I, one spray rose and one stream rose....	3 50

THE LANGUAGE OF FLOWERS.

A neat little work of 120 pages, printed in fine style, on beautifully tinted paper, and contains several fine engravings. It not only gives the language, but the poetry of flowers, and clear and practical suggestions in reference to floral decorations and floral conversation. It is so arranged that the botanical name of the flower may be referred to. This work should be in the possession of every lover of flowers. Price, by mail, postpaid, bound in paper, 25 cents; bound in cloth, 50 cents.

INSECTS ON FLOWERS AND HOUSE PLANTS, AND HOW TO DESTROY THEM.

This is a valuable little book of directions to window gardeners and lovers of flowers how to overcome and destroy *Insects on their Plants*, both out-doors and in-doors. It tells how to fertilize and stimulate plants, the experiences of cultivators in keeping their plants healthy. Among the topics are these: *Red Spider, Aphis, Green Fly, Worms in Pots, Rose Slugs, Rose Bugs, Snails, Caterpillars, How to Destroy Insects on Garden Fruit Trees and Vegetables*, etc. It is exceedingly valuable also to housekeepers, as it tells all about *Ants* and all *House Bugs*. Price, 30 cents, by mail, postpaid.

CAREY'S HOUSE PLANT PASTILLES.

CAREY'S MOUNTED PASTILLES

Patented April 19, 1881.

Try them Once!

And be satisfied.

This article is, without any doubt, the best of all the many preparations which have been produced to supply the universal need of all engaged in the cultivation of plants, either largely or in a small way, for pleasure or for profit. So many of these having proved either ineffectual, impracticable, or offensive, these Pastilles, against which none of these objections can be urged, will be welcomed with delight. It will be seen by reference to the accompanying cut which is three-quarters of the actual size, that they are far superior in point of convenience, to any other fumigator. They are also clean and inoffensive and are in all respects the best article made for the purpose. The Holder, which is used in connection, is made of metal, handsomely bronzed, and will last a lifetime. While the Pastilles *can* be used without it, they will work, uniformly, better with it.

DIRECTIONS FOR USING.

Scratch the match end; then hold it so that the blaze will strike against the end of the Pastille. If from any cause the Pastille fails to light, it can be lighted with a common match. As soon as the Pastille is lighted, place the lower end of the match in the holder (or in the earth in the flower pot); have a paper bag ready to draw on over the plant and the pot, tie the open end of the bag around the pot to prevent the escape of the smoke. Allow the bag to remain from one to two hours, which will *effectually* destroy all the insects on the plant. A covered barrel, tub, or box will answer as well.

The Pastilles are put up in boxes containing 1 doz. each

Pastilles, per box, postpaid	.25
" " doz. boxes, postpaid	\$2.50

<p> Holdings, postpaid15 </p>	<p> 15 </p>
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FOR SALE BY

D. M. FERRY & CO.,

AND SENT FREE, ON RECEIPT OF PRICE.

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MISCELLANEOUS.

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MICHIGAN CARBON WORKS, DETROIT, MICH.

MANUFACTURERS OF

**HOMESTEAD SUPERPHOSPHATE,
HOMESTEAD COTTON, CORN, AND WHEAT GROWER,
HOMESTEAD TOBACCO GROWER,
Made from pure acid Blood Meat, Bone Black, and Potash.
HOMESTEAD RAW BONE MEAL.**

Our works are among the most complete and extensive in the country, and have every appliance to enable us to furnish Standard Fertilizers at the lowest price. Our machinery is of modern and improved construction, and our goods are made under the guidance of an able chemist, who inspects every lot before being placed on the market.

As manufacturers of animal charcoal, we have at our hands the most valuable material used in making fertilizers—viz: Bone Black Dust. This fertilizing substance contains eighty per cent. of phosphate of lime, against fifty-five per cent. contained in raw bones; and its well known value commands so high a price in the European markets that but very few manufacturers of fertilizers in this country use it. Although the Homestead fertilizer costs us more to manufacture than if prepared of the materials generally used, we shall continue its present high standard, and place on the market a genuine pure Bone Black Phosphate.

REDFORD, MICH., June 13th. 1880

MICHIGAN CARBON WORKS, DETROIT, MICH.:

Gentlemen—The enclosed is a photograph of Wheat which was grown on my farm. Each was cut from a space of ground five feet square, and put it with a nine-hoe fertilizer drill, and seven inches apart. This is showing a less difference than the field will average. This was the third crop of wheat grown on the same ground, the soil being sand and clay loam. Each had the same chance, with one exception—the best had at the rate of two hundred pounds to the acre of Homestead Superphosphate.

This wheat was cut the 11th day of June, 1880, and weighed at the time of cutting, 6½ pounds and 3 pounds respectively.

I hereby certify that the above statement is correct, according to the best of my knowledge and belief.

HUGH HOUK.

Sworn to and subscribed before me, this 13th day of August, 1880.

ANSEL B. PIERCE,
Notary Public, Wayne Co., Mich.

This wheat was examined, cut and weighed by us, on the 11th day of June, 1880.

JAMES APPLING,
ALFRED HARRIS,
ANSEL B. PIERCE.

MICHIGAN CARBON WORKS

MEDINA, ORLEANS CO., N. Y., August 7th, 1879.

Gentlemen—Enclosed please find a photograph of some barley. This barley was grown on A. H. Poler's farm, four miles south of Medina, Orleans Co., New York.

I made a frame four feet square and set it in the standing grain on the day of its being cut. I then cut and gathered all that stood within the frame of each, where there was phosphate and where there was no phosphate. I let it lay in the sun one day to cure, then weighed each bundle as you see it on the photograph.

The phosphate was put down with the seed with a fertilizing drill, the teeth being six inches apart. These bundles were cut side by side, only six inches apart. The one on the left of the photograph had no phosphate, and weighed twelve ounces; the one on the right had one hundred and forty pounds of the Homestead Superphosphate to the acre, and weighed two pounds and fourteen ounces to the four feet square. This is correct.

A. H. Poler also experimented on corn, potatoes and winter wheat, with as good results on each as on his barley. Of course he has not harvested his corn; but it stands sixteen inches higher than the rest of the corn, and earing one-half better.

Yours, respectfully,

GEO. W. POLER.

ACTUAL RESULT AT OUR SEED FARM ON LETTUCE SEED.

Homestead produced.....	583 lbs. per acre.	116 lbs. of Lettuce Seed, at \$1.25.....	\$145 00
Where none was used.....	407 " " "	560 lbs. of Homestead, at \$40 per ton.....	11 20
Difference in favor of Homestead	116 " " "	Actual profit per acre.....	\$133 80

D. M. FERRY & CO.

*Send for Circulars, giving full reports of results, and all particulars in regard to use.

In places where we have no authorized agents we will send sample barrels of 200 lbs. Homestead Superphosphate on receipt of \$4.00; Cotton, Corn and Wheat Grower, \$5.00; Homestead Tobacco Grower, \$6.00.

ODORLESS FLORALIS.

Prepared Expressly for Lawns, Flower Gardens, Pot and House Plants.

DIRECTIONS.—Use three tablespoonfuls of the manure to a gallon of water. Steep twelve hours before using, and keep well stirred while being applied. Do not apply oftener than once in two weeks.

PRICES, {	Box containing 10 lbs.....	\$1 00
"	" 25 lbs.....	2 00
"	" 50 lbs.....	4 00

Sent anywhere in the United States or Canada, by express or freight, on receipt of cash orders.

Good Agents Wanted in Every Town.

RETAIL PRICE LIST.

☞ All varieties in heavy face type are of superior quality.

		Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
ARTICHOKE —See page 17.						
Large Globe.....		10	35	60	1 00	3 50
Jerusalem, <i>tubers</i>					crop failed.	
ASPARAGUS —See page 17.		Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Giant.....		5	10	15	25	60
Conover's Colossal.....		5	10	15	25	75
Roots, one year old, by mail, prepaid.....					per 100,	1 50
" two.....					"	2 50
" " by express, not prepaid.....					"	1 50
BEANS, Dwarf —See pages 17-21.		Pkt.	½ Pt.	Pt.	Qt.	4 Qt.
D. M. Ferry & Co's New Golden Wax.....		10	15	25	40	1 50
Crystal White Wax.....		10	20	35	60	2 00
Ivory Pod Wax.....		10	20	35	60	2 00
Early China Red Eye.....		10	15	20	30	1 00
Early Mohawk.....		10	15	20	30	1 00
Early Red Valentine.....		10	15	20	30	1 00
White Seeded Valentine.....		10	15	20	30	1 00
Early Newington Wonder.....		10	15	20	30	1 00
German Wax, black seeded.....		10	15	25	40	1 50
German Wax, white seeded.....		10	15	25	40	1 50
Early Round Yellow, Six Weeks.....		10	15	20	30	1 00
Early Yellow Kidney Six Weeks.....		10	15	20	30	1 00
Early Rachel.....		10	15	20	30	1 00
Refugee, or Thousand to One.....		10	15	20	30	1 00
Large White Marrow or Mountain.....		10	15	20	30	1 00
White Corn Hill.....		10	15	20	30	1 00
Royal Dwarf Kidney.....		10	15	20	30	1 00
Red French Kidney.....		10	15	20	30	1 00
BEANS, Pole, or Running —See page 21.						
Dutch Case Knife.....		10	15	25	40	1 50
London Horticultural.....		10	15	25	40	1 50
Small White Lima, Carolina, or Sieva.....		10	20	35	60	2 00
Large White Lima.....		10	20	35	60	2 00
Dreer's Improved Lima.....		10	20	35	60	2 00
Indian Chief, or Tall Wax.....		10	20	35	60	2 00
Giant Wax, red.....		10	20	35	60	2 00
Southern Prolific.....		10	20	30	50	1 75
Scarlet Runner.....		10	20	30	50	1 75
Carter's Champion Runner.....		10	25	40	75	...
White Runner.....		10	20	30	50	1 75
BEET —See pages 21-25.		Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Extra Early Egyptian Blood Turnip, <i>true</i>		5	15	25	40	1 50
Bastian's Extra Early Blood Turnip.....		5	10	15	25	1 00
Extra Early Turnip Bassano, <i>true</i>		5	10	15	25	75
Early Blood Turnip.....		5	10	15	25	75
Early Blood Turnip, <i>improved</i>		5	10	15	25	80
Dewing's Early Blood Turnip.....		5	10	15	25	75
Henderson's Pine Apple.....		10	15	25	40	1 50
Half Long, Dark Blood, Rough Skinned.....		10	15	25	40	1 25
Long Dark Blood.....		5	10	15	25	75
Long Dark Blood, <i>improved</i>		5	10	15	25	80
French Yellow Sugar.....		5	10	15	25	60
French White Sugar.....		5	10	15	25	60
Lane's Improved Imperial Sugar.....		5	10	15	25	75
Vilmorin's Improved Imperial Sugar.....		5	10	15	25	1 00
Long Red Mangel Wurzel.....		5	10	15	25	60
D. M. Ferry & Co's Improved Mammoth Long Red Mangel Wurzel.....		5	10	15	25	75
Norbitan Giant Long Red Mangel Wurzel.....		5	10	15	25	75
Yellow Globe Mangel Wurzel.....		5	10	15	25	60
Carter's Warden Prize Yellow Globe Mangel Wurzel.....		5	10	15	25	75
Red Globe Mangel Wurzel.....		5	10	15	25	60
Swiss Chard, or Sea Kale Beet.....		5	10	15	25	75
BROCOLI —See page 25.						
Early Purple Cape.....		5	50	85	1 50	5 00
Carter's Summer.....		10	60	1 00	1 75	...
Leamington.....		10	60	1 00	1 75	...
BRUSSELS SPROUTS —See page 25.						
Best Imported.....		5	15	25	40	1 50

Add 30 Cents per Quart for postage.

CABBAGE—See pages 25-29.

FIRST EARLY SORTS.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Early Sugar Loaf.....	5	20	35	60	1 75
D. M. Ferry & Co's Extra Early York.....	5	25	40	75	2 25
Early York.....	5	15	25	40	1 50
Early Large York.....	5	15	25	40	1 50
Early Jersey Wakefield, <i>true, best American</i>	5	60	1 00	1 75	6 00
Henderson's Early Summer, <i>true</i>	5	60	1 00	1 75	6 00

SECOND EARLY, OR SUMMER SORTS.

Newark Early Flat Dutch.....	5	60	1 00	1 75	6 00
Early Dwarf Flat Dutch, <i>American</i>	5	50	85	1 50	5 00
Little Pixie.....	5	25	40	75	2 25
Imperial French Ox Heart.....	5	20	35	60	1 75
Early Winnigstadt, <i>true</i>	5	40	75	1 25	4 00
German Filderkraut.....	5	40	75	1 25	4 00
Early Drumhead, <i>imported</i>	5	30	55	1 00	3 00
Early Market.....	5	40	75	1 25	4 00
Early Bleichfield Giant.....	10	40	75	1 25	4 00
Fottler's Early Drumhead or Brunswick Short Stem, <i>true American</i>	5	50	85	1 50	5 00
Fottler's Early Drumhead, or Brunswick Short Stem, <i>imported</i>	5	35	60	1 00	3 50
Early Large Schweinfurt.....	10	40	75	1 25	4 00

LATE, OR AUTUMN AND WINTER SORTS.

Red Dutch, for pickling.....	5	20	35	60	2 00
Fine Blood Red.....	5	30	55	1 00	3 00
Stone Mason Marblehead.....	5	40	75	1 25	4 00
Late Flat Dutch, <i>Imported</i>	5	15	25	40	1 50
Late Flat Dutch, <i>American</i>	5	45	75	1 25	4 50
D. M. Ferry & Co's Premium Flat Dutch.....	5	50	85	1 50	5 00
Large Drumhead, <i>Imported</i>	5	15	25	40	1 50
Large Drumhead, <i>American</i>	5	45	75	1 25	4 50
D. M. Ferry & Co's Premium Drumhead.....	5	50	85	1 50	5 00
Marblehead Mammoth Drumhead, <i>true American</i>	5	60	1 00	1 75	6 00
Marblehead Mammoth Drumhead, <i>imported</i>	5	30	55	1 00	3 00
Quintal Drumhead, <i>true French</i>	5	35	60	1 00	3 50
Saint Denis Drumhead.....	5	20	35	60	2 00
Green Glazed.....	5	50	85	1 50	5 00
Savoy, Dwarf Ulm.....	10	25	40	75	2 50
Savoy, Green Globe.....	5	20	35	60	2 00
Savoy, Improved American.....	5	40	75	1 25	4 00
Savoy, Drumhead.....	5	20	35	60	2 00

CARROT—See pages 29-30.

Earliest Short Horn, <i>for forcing</i>	10	15	25	40	1 50
Early Scarlet Horn.....	5	15	25	40	1 25
Danvers, <i>new</i>	10	15	25	40	1 50
Early Half Long Scarlet, Stump Rooted.....	5	15	25	40	1 50
Half Long Scarlet Nantes, Stump Rooted.....	5	15	25	40	1 50
New Intermediate.....	5	15	25	40	1 25
Long Orange.....	5	10	15	25	1 00
Long Orange, <i>improved</i>	5	15	25	40	1 25
Large White Belgian.....	5	10	15	25	75

CAULIFLOWER—See pages 30-31.

Extra Early Dwarf Erfurt... Per pkt. 50c, ¼ oz. \$3.00, per 1 oz. \$10.00.....					
Early Snowball..... 25c, " \$2.50, " \$8.00.....					
Early Roman, <i>violet color</i>	5	75	1 25	2 00	...
Early London.....	5	75	1 25	2 00	...
Extra Early Paris.....	5	1 25	2 25	4 00	...
Early Erfurt.....	5	1 25	2 25	4 00	...
Early Walcheren.....	5	75	1 25	2 00	...
Early Paris.....	5	1 00	1 75	3 00	...
LeNormand's Short Stem.....	10	1 00	1 75	3 00	...
Nonpareil.....	5	1 00	1 75	3 00	...
Late London.....	5	75	1 25	2 00	...
Veitch's Autumn Giant.....	10	1 00	1 75	3 00	...
Thorburn's Wonderful.....	10	1 00	1 75	3 00	...

CELERY—See pages 31-33.

New Golden Heart.....	10	80	1 50	2 50	8 00
Crawford's Half Dwarf.....	5	75	1 25	2 00	7 50
Dwarf White Solid, <i>self-blanching</i>	5	20	35	60	2 00
Sandringham Dwarf White.....	5	30	55	1 00	3 00
Boston Market.....	5	70	1 25	2 00	7 00
Seymour's White Solid.....	5	20	30	50	1 75
Incomparable Dwarf Crimson.....	5	30	55	1 00	3 00

CELERY, Continued—		Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Seymour's Red Solid.....	5	20	30	50	1 75	
Celeriac, or Turnip Rooted.....	5	20	30	50	1 75	
Celery Seed, for flavoring.....	10	15	25	60		
CHICORY—See page 33.						
Large Rooted, or Coffee.....	5	10	15	25	1 00	
COLLARDS—See page 33.						
True Resette	5	25	40	75	2 50	
Georgia, or Creole	5	20	35	60	2 00	
CHUFA, or Earth Almond—See page 33.					crop failed.	
CORN—See pages 33-35.		Pkt.	½ Pt.	Pt.	Qt.	4 Qt.
SWEET OR SUGAR VARIETIES.						
Early Boynton, earliest sweet.....	10	15	20	25	75	5 00
Early Marblehead	10	15	20	25	75	5 00
Early Minnesota very early	10	15	20	25	75	4 50
Amber Cream	10	15	25	40	1 50	8 00
Excelsior	10	15	20	25	75	4 50
Black Mexican	10	15	20	25	75	5 00
New Triumph	10	15	20	25	75	4 50
Early Red Naragansett	10	15	20	25	75	4 50
Crosby's Extra Early	10	15	20	25	75	4 00
Russell's Early Prolific.....	10	15	20	25	75	4 00
Early Sweet, or Sugar	10	15	20	25	75	4 00
Moore's Early Concord	10	15	20	25	75	4 00
Egyptian	10	15	20	25	75	5 00
Mammoth	10	15	20	25	75	4 50
Stowell's Evergreen	10	15	20	25	75	4 00
FIELD VARIETIES.						
Early Adams	10	15	20	25	75	4 00
Blunt's Prolific	10	15	20	25	75	3 50
Chester County Mammoth.....	10	15	20	25	75	3 50
Compton's Early	10	15	20	25	75	3 00
Lackawaxen	10	15	20	25	75	3 00
Improved King Philip	10	15	20	25	75	2 50
Tuscarora	10	15	20	25	75	3 50
Early Canada	10	15	20	25	75	2 50
Early White Flint	10	15	20	25	75	2 50
Early Dent	10	15	20	25	75	2 50
Large Yellow, Eight Rowed	10	15	20	25	75	2 50
Large Red Blazed, Eight Rowed	10	15	20	25	75	2 50
Rice, for parching (bushel lots in ears).....	10	15	25	40	1 50	
Boston White, for parching (bushel lots in ears).....	10	15	25	40	1 50	
CORN, BROOM—See page 35.						
Dwarf Evergreen.....	60					6 00
Improved Evergreen.....	50					5 00
CORN SALAD, or Fetticus large seeded, large leaved—See pages 35-36		Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Curled	5	10	15	25	1 00	
True Water	10	50	85	1 50	5 00	
CUCUMBER—See pages 36-37.						
Early Russian	5	15	25	40	1 25	
Early White Spine	5	10	15	25	1 00	
Early Frame	5	10	15	25	1 00	
Early Short Green	5	10	15	25	1 00	
Early Cluster	5	10	15	25	1 00	
Bismark, long, light green, our own.....	5	15	25	40	1 50	
Improved Long Green	5	15	25	40	1 25	
London Long Green	5	15	25	40	1 25	
Long Green	5	10	15	25	1 00	
Boston Pickling	10	15	25	40	1 25	
D. M. F. & Co's Perfection Pickling, best pickling	10	30	55	1 00	3 00	
Small Gherkin, for pickles.....	10	25	40	75	2 50	
EGG PLANT—See pages 37-38.						
Early Long Purple	5	30	55	1 00	3 00	
Black Pekin, extra early, and very large.....	10	75	1 25	2 00	7 50	
Large New York Purple	5	60	1 00	1 75	6 00	
D. M. F. & Co's Improved Purple, extra large.....	5	75	1 25	2 00	7 50	
ENDIVE—See page 38.						
Green Curled	5	20	35	60	2 00	
Broad Leaved Batavian.....	10	20	35	60	2 00	
GARLIC, Bulbs—See page 38.						
				20	50	

Add 30 Cents per Quart for Postage.

	Pkt.	Oz.	2 Oz.	½ Lb.	Lb.
GOURD —See page 38.					
Sugar Trough.....	10	40	75	1 25	4 00
Other varieties, see Flower Seeds.					
HORSE RADISH, Small Roots —By mail, prepaid, each 10c; per doz, 50c. . .					
By ft. or exp. not prepaid, per 100, \$1 00 . .					
KALE, or Borecole —See pages 38-39.					
Tall Green Curled Scotch.....	5	15	25	40	1 25
German Dwarf Green.....	5	15	25	40	1 25
German Dwarf Purple.....	10	20	35	60	2 00
Sea (Chou Marin).....	10	25	40	75	2 50
KOHL RABI —See page 39.					
Early White Vienna.....	10	25	40	75	2 50
Large Green.....	5	20	35	60	1 75
Large Purple.....	5	25	40	75	2 50
LEEK —See page 39.					
London Flag.....	5	15	25	40	1 50
LETTUCE —See pages 39-40.					
Early Tennis Ball, true black seeded, for forcing.....	10	25	40	75	2 50
Green Fringed.....	10	50	85	1 50	5 00
Simpson's Early Curled.....	5	20	35	60	2 00
Boston Market.....	5	25	40	75	2 50
Early Boston Curled.....	5	25	40	75	2 50
Philadelphia Butter.....	5	20	35	60	2 00
Ferry's Early Prize Head.....	5	25	40	75	2 50
Large India Head.....	5	25	40	75	2 50
Hanson.....	5	20	35	60	2 00
Early White Head, good for forcing.....	5	20	35	60	1 75
Early Curled Silesia.....	5	20	35	60	1 75
Frankfort Head.....	5	20	35	60	1 75
Large Drumhead.....	5	20	35	60	1 75
Victoria Cabbage.....	5	20	35	60	2 00
Brown Dutch.....	5	20	35	60	2 00
White Paris Cos.....	10	25	40	75	2 50
MARTYNIA —See page 41.					
Pickling.....	5	30	55	1 00	3 00
MELON, MUSK —See pages 41-42.					
Surprise, new.....	10	15	25	40	1 50
Bay View.....	10	25	40	75	2 50
White Japan.....	5	15	25	40	1 25
Early Yellow Canteloupe.....	5	10	15	25	1 00
Early Yellow Canteloupe, improved.....	5	15	25	40	1 25
Jenny Lind.....	5	15	25	40	1 25
Skillman's Fine Netted.....	5	10	15	25	1 00
Skillman's Fine Netted, selected.....	5	15	25	40	1 25
Green Nutmeg.....	5	10	15	25	1 00
Improved Canteloupe, green fleshed.....	5	15	25	40	1 25
Improved Large Green Nutmeg.....	5	15	25	40	1 25
Pine Apple.....	5	10	15	25	1 00
Allen's Superb.....	5	15	25	40	1 25
Casaba, extra fine.....	5	15	25	40	1 25
Green Persian.....	5	15	25	40	1 25
Long Yellow.....	5	10	15	25	1 00
MELON, WATER —See pages 41-42.					
Cuban Queen.....	15	60	1 00	1 75	6 00
Early Jersey.....	5	15	25	40	1 50
Phinney's Early.....	10	15	25	40	1 25
Chinese Sculptured Seeded.....	10	15	25	40	1 50
Black Spanish.....	5	10	15	25	1 00
Long Island.....	5	10	15	25	80
Mountain Sweet.....	5	10	15	25	80
Mountain Sprout.....	5	10	15	25	1 00
Orange, the flesh separates easily from the rind.....	5	15	25	40	1 00
Ice Cream, true white seeded.....	5	15	25	40	1 25
D. M. Ferry & Co's Peerless, the best.....	5	15	25	40	1 50
Gypsy, the largest.....	5	10	15	25	1 00
Citron, for preserving.....	5	15	25	40	1 25
MUSHROOM SPAWN —See pages 42-43.					
English, by mail, prepaid.....					30
French, by mail, prepaid, 3-lb. boxes, \$2.00.					
MUSTARD —See page 43.					
White English.....	5	10	15	20	50
Brown Italian.....	5	10	15	20	50
Southern Broad Leaved.....	5	15	25	40	1 50

NASTURTIUM—See page 43.

	Pkt.	Oz.	2 Oz.	½ Lb.	Lb.
Tall Mixed.....	5	15	25	40	1 50

OKRA—See page 43.

Tall White.....	5	10	15	25	75
Dwarf White.....	5	10	15	25	75

ONION—See page 43-46. All prime new stock, and mostly our own growth, on our own Seed Farms. Beware of cheap Onion Seed, much of which is old and worthless. See page 44 for directions for growing Onions.

Extra Early Red.....	10	70	1 25	2 00	7 00
Early Red Globe.....	10	70	1 25	2 00	7 00
Large Red Globe.....	10	60	1 00	1 75	6 00
Large Red Wethersfield.....	5	50	85	1 50	4 75
Large Red Wethersfield, extra, our own growth, heavy seed.....	5	50	85	1 50	5 00
Large Yellow or Yellow Dutch.....	5	50	85	1 50	4 75
Yellow Danvers.....	5	50	85	1 50	4 75
Yellow Globe Danvers, extra, our own growth, heavy seed.....	5	50	85	1 50	5 00
White Portugal.....	5	70	1 25	2 00	7 00
White Globe.....	10	70	1 25	2 00	7 00
El Paso, or Large Mexican.....	10	60	1 00	1 75	6 00

IMPORTED VARIETIES.

White Silver-kin, for pickling.....	5	30	55	1 00	3 00
New Giant Rocca, of Naples.....	10	40	75	1 25	4 00
Early Neapolitan Marzajola.....	10	40	75	1 25	4 00
Giant White Italian Tripoli.....	10	40	75	1 25	4 00
New Queen, true best keeper.....	10	60	1 00	1 75	6 00

BULES

English Multipliers.....	35	about	10 00		
Top Onions.....	35	"	10 00		
Yellow Bottom Sets.....	35	"	10 00		
Red " ".....	35	"	10 00		
White " ".....	40	"	11 00		

Add 25c. per
qt. for post. &c.

Above are approximate prices per bushel, subject to variations of the market, and our ability to procure stock. The price per quart will hold good through the season, or as long as our stock lasts.

PARSNIP—See page 47.

	Pkt.	Oz.	2 Oz.	½ Lb.	Lb.
Long Dutch Sugar.....	5	10	15	25	75
Hollow Crown.....	5	10	15	25	75

PARSLEY—See page 47.

Carter's Fern Leaved.....	10	15	25	40	1 50
Fine Triple Curled.....	5	10	15	25	1 00
Myatt's Garnishing.....	5	10	15	25	1 00

PEAS—See pages 47-50.

EXTRA EARLY SORTS.

	Pkt.	½ Pt.	Pt.	Qt.	4 Qt.	Bu.
Ferry's First and Best.....	10	20	30	50	1 75	9 00
Bliss' American Wonder, true.....	10	40	60	1 00	3 50	..
D. M. F. & Co's Ex.....	10	20	30	50	1 75	8 50
Improved Early D.....	10	15	25	40	1 50	8 00
Extra Early Philade.....	10	15	25	40	1 50	8 00
Laxton's Alpha.....	10	20	30	50	1 75	9 00
Kentish Invicta.....	10	20	30	50	1 75	9 00
Ferry's Extra Early Tom Thumb.....	10	15	25	40	1 40	8 00
Carter's First Crop.....	10	15	25	40	1 50	8 00
Blue Peter, or Blue Tom Thumb.....	10	20	30	50	1 75	9 00
McLean's Little Gem.....	10	20	30	50	1 75	9 00
Premium Gem.....	10	20	30	50	1 75	9 00
Caractacus.....	10	15	25	40	1 50	8 00

EARLY SORTS.

Carter's Little Wonder.....	10	30	50	75	..	..
Extra Early Kent, true.....	10	15	25	35	1 25	6 50
Early Kent, common.....	10	15	25	30	1 00	6 00
Early Daniel O'Rourke, common.....	10	15	20	30	1 00	6 00
Bishop's Early Dwarf.....	10	15	25	35	1 25	7 00
Bishop's Long Pod Dwarf.....	10	15	25	35	1 25	7 00
Dwarf Champion.....	10	20	30	50	1 75	9 00
McLean's Advancer.....	10	20	30	50	1 75	9 00

LATE SORTS.

Yorkshire Hero.....	10	20	30	50	1 75	9 00
Eugene.....	10	20	30	50	1 75	9 00
Champion of England.....	10	15	25	35	1 25	6 50
Champion of England, choice.....	10	15	25	35	1 25	7 00
Blue Imperial.....	10	15	20	30	1 00	6 00
Large Blue Imperial, choice.....	10	15	25	35	1 25	6 50
Dwarf White Marrowfat.....	10	15	20	25	75	4 00

Add 30c. per Qt. for Postage, for all varieties of Peas.

PEAS, Continued—

	Pkt.	½ Pt.	Pt.	Qt.	4 Qt.	Bu.
Large White Marrowfat.....	10	15	20	25	75	3 50
Large White Marrowfat, <i>second quality</i>						3 00
Large Black Eye Marrowfat	10	15	20	25	75	3 50
Large Black Eye Marrowfat, <i>second quality</i>						3 00
Dwarf Sugar, Edible Pods, <i>grey seed</i>	10	30	50	70	2 50	14 00
Tall Sugar, Edible Pods, <i>grey seed</i>	10	30	50	70	2 50	14 00

FIELD SORTS.

Common White Field.....	<i>about</i>	10	15	20	40	1 50
Common Blue Field.....	"	10	15	25	50	2 00
Golden Vine, White Field.....	"	10	15	25	50	2 00
Creepers, White Field.....	"	10	15	25	50	2 00
Early Crown, White Field.....	"	10	15	25	50	2 00
Blue Prussian, Field.....	"	10	15	25	60	3 00

PEPPER—See page 50.

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Chili.....	5	40	75	1 25	4 00
Long Red Cayenne.....	5	35	60	1 00	3 50
Large Squash.....	5	35	60	1 00	3 50
Large Bell, or Bull Nose.....	5	35	60	1 00	3 50
Sweet Mountain.....	5	40	75	1 25	4 00
Monstrous, or Grossum.....	5	40	75	1 25	4 00

POTATOES—See pages 50-52. Please notice that our barrel quotations contemplate 3 bushels of potatoes not 2½ bushels, as is usually the case where no quantity is specified.

	1 Lb.	2 Lb.	3 Lb.	¼ Bu.	½ Bu.	Bu.	Bbl. 3 bu
White Star, <i>combines more good qualities than any other</i>	1 00	1 50	2 00	2 25	3 50	6 00	16 00
Mammoth Pearl, <i>very heavy yielder</i>	75	1 25	1 50	1 50	2 00	3 50	9 50
Magnum Bonum, <i>true American</i>	75	1 25	1 50	1 50	2 00	3 25	9 00
Andrus' White Rose, <i>very fine</i>	75	1 25	1 50	1 50	2 00	3 25	9 00
Clark's Seedling No. 1, <i>very early</i>	75	1 25	1 50	1 50	2 00	3 25	9 00
Triumph.....	75	1 25	1 50	1 50	2 00	3 25	9 00
Early Ohio.....	60	1 00	1 25	1 25	1 75	3 00	8 00
Trophy.....	60	1 00	1 25	1 25	1 75	3 00	8 00
Early Beauty of Hebron.....	50	75	1 00	1 00	1 50	2 75	7 50
Early Snowflake.....	50	75	1 00	1 00	1 50	2 75	7 50
Improved Peachblow.....	50	75	1 00	1 00	1 50	2 75	7 50
Pride of America.....	50	75	1 00	1 00	1 50	2 75	7 50
St. Patrick.....	50	75	1 00	1 00	1 50	2 75	7 50
Burbank's Seedling.....	50	75	1 00	1 00	1 50	2 75	7 00
Extra Early Vermont.....	50	75	1 00	1 00	1 50	2 50	7 00
Early Rose, <i>true</i>	50	75	1 00	1 00	1 50	2 50	7 00

Prices quoted are subject to fluctuations of the market and our ability to obtain stock. We send by express or mail, *prepaid*, at lb quotations. Quarter bushels and upwards sent by express or freight, the purchaser paying charges. We cannot become responsible for changes in weather, by which they may become injured en route. All orders for Potatoes must be accompanied with the money. They will be registered and filled in rotation, as soon as weather will permit in spring. Orders from the south will, however, be executed early enough for early spring planting.

PUMPKIN—See page 52.

	Pk	2 Oz.	¼ Lb.	Lb.
Large Yellow.....	(per bu. \$4.00) 5	15	20	40
Cushaw.....	5	20	15	25

RADISH—See pages 53-54.

Early Long Scarlet, Short Top.....	5	10	15	25	75
Early Long Scarlet Short Top, <i>improved, French seed</i>	5	10	15	25	1 00
Early Long Scarlet.....	5	10	15	25	75
Wood's Early Frame.....	5	10	15	25	1 00
Early Round Deep Scarlet.....	5	15	25	40	1 25
Early Scarlet, Turnip Rooted, <i>English seed</i>	5	10	15	25	75
Early Scarlet, Turnip Rooted, <i>French seed</i>	5	10	15	25	1 00
Early Scarlet Turnip, White Tipped, <i>new</i>	5	15	25	40	1 25
Early White, Turnip Rooted, <i>English seed</i>	5	10	15	25	75
Early White, Turnip Rooted, <i>French seed</i>	5	10	15	25	1 00
Golden Globe.....	5	15	25	40	1 25
Early Yellow Summer, Turnip Rooted.....	5	10	15	25	1 00
Grey Summer, Turnip Rooted.....	5	10	15	25	1 00
Early Rose, Olive Shaped <i>English seed</i>	5	10	15	25	1 00
Early Rose Olive Shaped, <i>French seed</i>	5	15	25	40	1 25
New French Breakfast, <i>English seed</i>	5	10	15	25	1 00
New French Breakfast, <i>French seed</i>	5	15	25	40	1 25
D. M. F. & Co's Perpetual Market.....	10	20	35	60	2 00
Long White Naples.....	5	10	15	25	1 00

WINTER VARIETIES.

Scarlet China, <i>English seed</i>	5	15	25	40	1 25
Scarlet China <i>French seed</i>	5	15	25	40	1 50
White China.....	10	15	25	40	1 25

		Pkt	Oz.	2 Oz.	½ Lb.	1 lb.
RADISH, Continued—						
Long Black Spanish		5	10	15	25	75
Long White Spanish		10	15	25	40	1 25
California Mammoth White China		10	15	25	40	1 50
RAPÉ—See page 54.						
German Summer	per bu.	\$6 00			15	40
Dwarf Essex					15	40
RHUBARB, or Pie Plant—See pages 54-55.						
Victoria		5	20	35	60	1 75
Giant		5	20	35	60	1 75
Linnaeus		5	20	35	60	1 75
Rhubarb Roots	25 cents each.	\$2 00 per doz				
"	by mail, prepaid, 4 cen each	4 00				
SALSIFY, or Vegetable Oyster—See page 55.		5	30	55	1 00	1 00
SPINAGE—See page 55.						
Round Summer		5	10	15	25	50
Improved Thick Leaved		5	10	15	25	60
Savoy Leaved		5	10	15	25	60
Prickly Winter		5	10	15	20	50
SQUASH—Summer—See pages 55-56.						
Perfect Gem		15	50	85	1 50	3 00
Early Yellow Bush Scallop		5	10	15	25	1 00
Early White Bush Scallop		5	10	15	25	1 00
Summer Crookneck		5	10	15	25	1 00
AUTUMN, OR WINTER SORTS.						
Improved American Turban		5	15	25	40	1 25
Essex Hybrid, <i>new</i>		10	20	35	60	1 75
Marblehead, <i>true</i>		5	15	25	40	1 25
Butman		5	15	25	40	1 25
Boston Marrow		5	15	25	40	1 25
Winter Crookneck		5	10	15	25	1 00
Hubbard, <i>true</i>		5	15	25	40	1 25
SUGAR CANE—See page 56.						
Early Amber	\$5 00 per bu.				15	40
SUNFLOWER—See page 57.						
Large Russian	\$6 00 per bu.				15	40
TOBACCO—See page 57.						
Connecticut Seed Leaf		5	30	55	1 00	3 00
White Burley		10	50	85	1 50	5 00
Virginia		10	40	75	1 25	4 00
Maryland Broad Leaf		10	40	75	1 25	4 00
Havana		10	50	85	1 50	5 00
Yellow Oronoco		10	40	75	1 25	4 00
Silky Pryor		10	40	75	1 25	4 00
TOMATO—See pages 57-58.						
Livingston's Perfection		10	60	1 00	1 75	6 00
Alpha		10	50	85	1 50	5 00
Little Gem		10	30	55	1 00	3 00
Essex Early Hybrid, <i>extra selected stock</i>		10	50	85	1 50	5 00
Hundred Day		10	30	55	1 00	3 00
Hubbard's Early Curled Leaf		5	25	40	75	2 50
Ferry's Improved Early Large Smooth Red		5	30	55	1 00	3 00
Early Conqueror		5	25	40	75	2 50
Canada Victor		5	25	40	75	2 50
Paragon		5	40	75	1 25	4 00
Acme		5	40	75	1 25	4 00
Hathaway's Excelsior		5	25	40	75	2 50
Trophy, <i>true</i>		5	40	75	1 25	4 00
General Grant, <i>excellent for canning</i>		5	25	40	75	2 50
Large Red		5	25	40	75	2 50
Large Red Fegee		5	30	55	1 00	3 00
Golden Trophy		5	30	55	1 00	3 00
Large Yellow		5	25	40	75	2 50
Green Gage		5	30	55	1 00	3 00
Red Cherry		5	30	55	1 00	3 00
Red Pear Shaped		5	30	55	1 00	3 00
Turk's Turban		15	75	1 25	2 00	
TURNIP—See pages 58-61.						
WHITE FLESHED SORTS.						
White Egg		5	10	15	25	1 00
Early White Stone		5	10	15	25	60
Jersey Navet		5	10	15	25	1 00

TURNIP, Continued—

	Pkt.	Oz.	2 Oz.	¼ Lb.	Lb.
Early White Flat Dutch	5	10	15	25	60
Early White Flat Dutch, Strap Leaved	5	10	15	25	75
Early Purple Top, Strap Leaved	5	10	15	25	60
Early Purple Top, Strap Leaved, improved	5	10	15	25	75
Cow Horn, or Long White	5	10	15	25	75
Improved Purple Top Mammoth	5	10	15	25	75
Large White Flat Norfolk	5	10	15	25	60
Large Red Top Flat Norfolk	5	10	15	25	60
Pomeranian White Globe	5	10	15	25	60
Pomeranian White Globe, Strap Leaved	5	10	15	25	75
Purple Top White Globe	5	10	15	25	1 00
Sweet German	5	10	15	25	75
Seven Top	5	10	15	25	60

YELLOW FLESHED SORTS.

Early Yellow Finland	5	15	25	40	1 50
Early Yellow Malta	5	10	15	25	1 00
Orange Jelly, or Robertson's Golden Ball	5	10	15	25	75
Purple Top Yellow Aberdeen	5	10	15	25	60
Large Amber Globe	5	10	15	25	75

RUTA BAGAS, OR SWEDES.

Yellow Swede, or Ruta Baga	5	10	15	25	60
Carter's Imperial Purple Top Ruta Baga	5	10	15	25	60
D. M. Ferry & Co's Improved Purple Top Yellow Ruta Baga	5	10	15	25	75
New Large Ovoid Purple Top Yellow Ruta Baga	5	10	15	25	75
Bangholm Swede	5	10	15	25	75
Sweet Russian, or White Ruta Baga	5	10	15	25	75

SWEET HERBS—See pages 61-63.

Anise	5	10	15	25	1 00
Balm	5	50	85	1 50	5 00
Basil, Sweet	5	25	40	75	2 50
Bene	5	20	35	60	2 00
Borage	5	15	35	40	1 50
Caraway, for sowing	5	10	15	25	75
Caraway for flavoring	5	..	..	..	50
Catnip	5	50	85	1 50	5 00
Chamomile	5	50	1 50	2 50	8 00
Coriander, for sowing	5	10	15	25	75
Coriander, for flavoring	5	..	..	..	50
Dandelion	5	30	55	1 00	3 00
Dill	5	10	15	25	1 00
Fennel, Sweet	5	10	15	25	1 00
Horehound	5	40	75	1 25	4 00
Hyssop	5	25	40	75	2 50
Lavender	5	20	35	60	2 00
Marjoram, Sweet	5	25	40	75	2 50
Pennyroyal	5	1 25	2 25	3 50	..
Rosemary	5	40	75	1 25	4 00
Rue	5	15	25	40	1 50
Saffron	5	15	25	40	1 50
Sage, English Broad Leaf	5	25	40	75	2 50
Savory, Summer	5	20	30	50	1 75
Tansy	5	40	75	1 25	4 00
Thyme, English	5	50	85	1 50	5 00
Wormwood	5	30	55	1 00	3 00

FRUIT SEEDS—See pages 63-64.

	Oz.	¼ Lb.	Lb.	Bu.
Apple Seeds	..	..	60	8 00
Cherry Stones, mahaleb	10	25	75	..
Cherry Stones, mazzard	..	..	50	..
Peach Stones, Natural Virginia	..	..	30	2 00
Pear Seed	30	1 00	3 00	..
Plum Stones	..	..	50	..
Quince Seed	25	75	2 50	..

FOREST TREE AND HEDGE SEEDS—See pages 64-65.

	Oz.	2 Oz.	¼ Lb.	Lb.
Honey Locust, (<i>Gleditsia tricanthos</i>)	10	15	25	60
Yellow Locust, (<i>Robinia pseudo-acacia</i>)	10	15	25	60
Box Elder, (<i>Acer negundo</i>)	10	15	25	1 00
Hardy Catalpa, (<i>Catalpa speciosa</i>)	30	55	1 00	3 00
Soft Maple, (<i>Acer rubrum</i>)	35	60	1 00	3 50
Scotch Pine, (<i>Pinus sylvestris</i>)	20	35	60	2 00
Norway Spruce, (<i>Abies excelsa</i>)	15	25	40	1 50
Australian Blue Gum, or Fever Tree, (<i>Eucalyptus globulus</i>)	1 00	1 75	3 00	10 00
Osage Orange, (<i>Maclura aurantiaca</i>) per bushel of 33 lbs. not prepaid, \$10.00	10	15	25	75

TESTED VARIETIES of SPECIAL MERIT.

The following varieties are either of recent introduction or have been tested and found worthy of special commendation. We can, with confidence, recommend our stocks of them to the most critical market gardener.

BEANS, Crystal White Wax.—A distinct, new bush bean with waxy, transparent pods of very rich flavor. The pods are stringless, succulent, crisp and tender, and though quick to mature, they are slow to harden, so snap beans of this variety can be had of delicious tenderness and sweetness for a long time. As the pods are very fleshy and the seeds small, this sort is not surpassed for pickling purposes.

Per packet 10 cents; $\frac{1}{2}$ pint 20 cents; pint 35 cents; quart 60 cents, 4 quarts \$2.00; bushel \$12.00. If by mail or express, prepaid, 15 cents per pint, 30 cents per quart must be added for charges.

Ivory Pod Wax.

BEANS, Ivory Pod Wax.—This magnificent variety, of very recent introduction, cannot be too highly praised as a sort for the home or market garden. It is fully a week earlier than the German Wax, and the pods are of a beautiful ivory white, even before fully grown. When they attain their full size they are large, long, brittle, stringless, and of a pure, transparent, waxy white color. The beans are medium size, oval, white and smooth, and very easily threshed when ripe. As a snap bean, it excels almost every other variety in tenderness and creamy flavor, and, like our well known Golden Wax, is especially valuable also as a shell bean for winter use; without doubt it is the most productive wax bean now grown, the vines, which are strong, compact growers, being a mat of pods the entire season.

Per packet 10 cents $\frac{1}{2}$ pint 20 cents; pint 35 cents; quart 60c. 4 quarts \$2.00; bushel \$12.00. If by mail or express, prepaid, 15 cents per pint, 30 cents per quart must be added for charges.

BEET, Bastian's Extra Early Blood Turnip.—Another year's trial with this variety convinces us that there is no better or more profitable beet to raise for market now in cultivation. It is as early as the Bassano, of a darker, better color, and always grows perfect in shape, even where the seed is thickly sown. It is very tender and sugary when cooked, and only needs to be more widely known to become a general favorite. Market gardeners will find this variety very satisfactory.

Per pkt 5c. oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; lb. \$1.00.

CABBAGE, Early Jersey Wakefield, true, best American.—This well known cabbage is deservedly

popular with market gardeners in the vicinity of our large cities. It is, without doubt, the most profitable early variety, as the heads are of fine quality, compact, solid, endure shipping to considerable distance, and are produced at just the right season to command a good price. Our stock of this variety is grown with special care, and can be depended upon as one of the very best strains in cultivation. (See cut on page 26.)

Per packet 5 cents; oz. 60 cents; 2 oz. \$1.00; $\frac{1}{4}$ lb. \$1.75; lb. \$6.00.

Early Market.

CABBAGE, Early Market.—This is an exceedingly fine second early variety, resembling very much Early Jersey Wakefield. It attains, under good cultivation, which it requires, great size, and is distinguished for tenderness, fine grain, and excellent flavor.

Per packet 5 cents; oz. 40 cents; 2 oz. 75 cents; $\frac{1}{4}$ lb. \$1.25; lb. \$4.00.

CABBAGE, Fottler's Early Drumhead, or Brunswick Short Stem.—This has proved to be a most excellent second early variety. It is low on the stump, heads solid and compact, weighing ten or fifteen pounds each. From seed sown in March, good sized heads can be marketed in June. We can recommend it highly for planting in the south, as it withstands the heat, and forms uniformly large, solid heads (See cut on page 27.)

Per packet 5 cents; oz. 50 cents; 2 oz. 85 cents; $\frac{1}{4}$ lb. \$1.50; lb. \$5.00.

D. M. Ferry & Co's Premium Flat Dutch.

CABBAGE, D. M. Ferry & Co's Premium Flat Dutch.—As a variety for winter market, we consider this sort superior to any other late cabbage, and as it is one of the best keepers, it is the kind most extensively cultivated for fall and winter use. It is a sure header, and with good cultivation, on moist, rich ground, ninety-five in a hundred will head up hard and fine. Our stock of this variety is *extra selected, of our own raising*, and is at least equal to any other strain of this standard variety.

Per packet 5 cents; oz. 50 cents; 2 oz. 85 cents; ¼ lb. \$1.50; lb. \$5.00.

Danvers.

Dwarf Erfurt.

—(Extra selected.) An extra early variety, and the sort so much prized in Germany for early market use. Scarcely a plant fails to

produce a good head. If planted first of March, heads nine inches to one foot in diameter will be produced early in June, in which month the whole crop can be marketed. It is of dwarf habit, compact growth, short outside leaves, and can be planted 20 inches apart each way. Highly recommended for early market and family use, and we think can be entirely relied upon, as the seed is selected with extra care, by one of the most careful growers in Germany.

Per packet 50 cents; ¼ oz. \$3.00; oz. \$10.00.

CELERY, New Golden Heart.—A new and entirely distinct variety, of sturdy, dwarf habit. It is entirely solid, an excellent keeper, and of fine, nutty flavor. When blanched, the heart which is large and full, is of a pure golden yellow, making this an exceedingly showy and desirable variety for both market and private use.

Per packet 10 cents; oz. 30 cents; 2 oz. \$1.50 ¼ lb. \$2.50; lb. \$8.00.

CORN, Amber Cream.—A recently introduced variety of great merit. A strong, hardy grower, producing large ears. Very tender and sweet. The color after maturity is a beautiful amber. One of the most productive varieties grown.

Per packet 10 cents; ½ pint 15 cents; pint 25 cents; quart 40 cents; 4 quarts \$1.50; bushel \$8.00.

CORN, Early Boynton Sweet, or Sugar.—We introduced this variety five years ago, and after repeated trials and tests with other early varieties, we firmly

believe this is the earliest variety of sweet corn in existence. The ears are small, rather pointed, and when mature, the kernels are much shriveled. It is of course intended only for first early, and as a week's time makes a great difference in the profits of a market gardener, this variety will be found valuable.

Per packet 10 cents; ½ pint 15 cents; pint 20 cents; quart 25 cents; 4 quarts 75 cents; bushel \$5.00.

CORN, Black Mexican

Sweet.—Unlike any other variety of sweet corn, the kernels of this sort are a bluish black when fully ripe, but scarcely noticeable when green. It is early, and produces good sized ears with well filed kernels, which are sweet, tender and delicious. For table use and the home garden, we consider this variety particularly desirable on account of its delicious quality.

Per packet 10 cents; ½ pint 15 cents; pint 20 cents; quart 25 cents; 4 quarts 75 cents; bushel \$5.00.

CORN, Marblehead Early

Sweet.—A very early variety, second only to our Early Boynton. Bl'k Mexican Sweet. The shape and size of the cob are almost identical with the Early Red Naragansett. Will be found a very satisfactory variety, and will be highly esteemed for its many good qualities.

Per packet 10 cents; ½ pint 15 cents; pint 20 cents; quart 25 cents; 4 quarts 75 cents; bushel \$5.00.

CORN, Chester County Mammoth.—When genuine seed of the variety is planted on good soil, the yield, under good cultivation, is from 100 to 125 bushels of shelled corn per acre. Ears are large and well formed, each having from fourteen to twenty-four rows of long kernels of a deep, bright yellow color. It is not a hard flint corn, but very sweet and nutritious, yielding a large amount of excellent fodder. It is a sure cropper, and hardy, but should not be grown in the extreme north where the season is not long enough to mature it. It is undoubtedly one of the best yellow field corns, and we think one trial will convince any farmer of its merits.

Per packet 10 cents; ½ pint 15 cents; pint 20 cents; quart 25 cents; 4 quarts 75 cents; bushel \$5.00.

CORN, Blunt's Prolific.—This is a twelve rowed, white flint variety, with short, well shaped ears, and small cobs. The stalks average eight to ten feet high, and bear from three to eight ears each. The originator, by scientific selection and careful cultivation, has so improved the variety, by increasing the number of ears to each stalk, that it is now one of the most prolific sorts. It makes a superior quality of pure white meal, and though it cannot be grown successfully in the extreme north, in every other locality it will be found a valuable acquisition.

Per packet 10 cents; ½ pint 15 cents; pint 20 cents; quart 25 cents; 4 quarts 75 cents; bushel \$5.00.

CORN, Lackawaxen.—A new variety of field corn. It completes its growth in ninety-five days, and has yielded one hundred and forty-seven bushels

shelled corn per acre. The following is from the *Historical Register* of the Paris Exposition, 1878: "The new field corn named *Lackawaxen*, was awarded a special prize gold medal for being the largest variety both in length of ear and size of grain, of any variety exhibited by any nation."

Per packet 10 cents; pint 15 cents; quart 20 cents; 4 quarts 60 cents; bushel \$3.00.

CORN, Compton's Early.—Stalks about ten feet high; ears bright yellow, ten to twelve inches long, often two on a stalk. It has matured in seventy-six days from planting, and yielded *one hundred and eighty-one bushels shelled corn per acre.* A case of ears was placed on exhibition at the Centennial, and a field was entered for the premiums offered by Mr. Conrad Wilson, of New York, and two prizes awarded it.

Per packet 10 cents; pint 15 cents; quart 20 cents; 4 quarts 60 cents. bushel \$3.00.

On all corn, 15 cents per pint, 30 cents per quart must be added to prepay postage or express charges.

LETTUCE, Green Fringed.—An exceedingly ornamental variety for table use, the edges being beautifully fringed and crimped. The inside of the leaves are white, the edges a delicate shade of green. The leaves are not quite so tender as those of some varieties, but they are fit for use nearly the entire season, and their ornamental appearance makes this sort especially desirable for table decoration.

Per packet 10 cents; oz. 50 cents; 2 oz. 85 cts; ¼ lb. \$1.50; lb. \$5.00.

Green Fringed.

LETTUCE, Ferry's Early Prize Head.—*The best lettuce ever introduced.* It forms a mammoth head slightly tinged with brown, and remains tender and crisp throughout the season; is prompt to head, but slow to run up to seed; of delicious flavor, and very hardy. (See cut on page 40.)

Per packet 5 cents; oz. 25 cents; 2 oz. 40 cents; ¼ lb. 75 cents; lb. \$2.50

MELON, MUSK, Bay View.—*The largest, most prolific, best flavored and finest musk melon in cultivation.* In quality and flavor, the Bay View excels all other varieties of canteloupes. The flesh is very deep, of a rich green color, granular, juicy, and peculiarly luscious and sweet. With ordinary cultivation it will grow from 10 to 15 pounds in weight, with a length of from 16 to 18 inches.

Bay View.

As a market melon, wherever introduced it sells at extra prices, on account of its beauty, large size and fine quality. It can be picked quite green, will ripen up finely, and carry safely for a long distance.

Per packet 10 cents; oz. 25 cents; 2 oz. 40 cents; ¼ lb. 75 cents; lb. \$2.50.

MELON, MUSK, Surprise.—This new melon has a thin, cream colored skin which is thickly netted. The flesh is of a deep salmon color, very thick, and of delicious quality. The melon is round and about the same size as the Nutmeg, quite as prolific, and somewhat earlier. The exquisite flavor of this melon has made it a favorite wherever introduced, and on our trial grounds the past season it ranked among the very choicest kinds. Our stock is saved from selected melons, and can be relied upon.

Surprise.

Per packet 10 cents; oz. 15 cents; 2 oz. 25 cents; ¼ lb. 40 cents; lb. \$1.50.

MELON, WATER, Cuban Queen.—A very handsome appearing melon, growing to enormous size. The flesh is bright red, very sweet, solid and luscious. In size, they are without rivals, some attaining the ex-

Cuban Queen.

traordinary weight of from 75 to 80 pounds. The rind is extremely thin, being not over half an inch thick; nevertheless they are so solid and keep so well that they are one of the best melons to ship. In productiveness, they are unequalled. Excelling in so many points, they are a most profitable melon to raise.

Per pkt. 15c; oz. 60c; 2 oz \$1.00; ¼ lb. \$1.75; lb. \$6.00.

D. M. Ferry & Co's Peerless.

MELON, WATER, D. M. Ferry & Co's Peerless.—This melon, originated and introduced by ourselves several years ago, has steadily increased in public favor till now it is well and favorably known in all parts of the country. It is unquestionably the best water melon in cultivation. Of medium size, light mottled green; flesh bright scarlet, solid to the center, crisp, melting, and sweet as honey.

Per packet 5 cents; oz. 15 cents; 2 oz. 25 cents; ¼ lb. 40 cents; lb. \$1.50.

PEAS, Bliss' American Wonder.—A highly im-

proved variety, recently introduced; one of the finest peas yet produced; very prolific; excellent flavor; one of the earliest varieties to mature. In all respects unexcelled, even if equaled. We cannot too highly recommend this variety. Anticipating a large demand for it, we have taken particular pains in raising our stock, and know that it is unsurpassed by any.

Per packet 10 cents; ½ pint 40 cents; pint 60 cents; quart \$1.00; 4 quarts \$3.50.

PEAS, Carter's Little Wonder.—A new variety, from England, well entitled to its name, Little Wonder

It is a sweet, wrinkled pea, very early and of delicious flavor. Cannot fail to become a favorite when introduced. Height 20 to 24 inches.

Per packet 10 cents; ½ pint 30 cents; pint 50 cents; quart 75 cents.

Ferry's First and Best.

PEAS, Ferry's First and Best.—In this variety we think we have what will suit the most critical market gardener. We have been experimenting for years, with a view of obtaining the earliest variety, and one that would ripen all its pods within a very few days, so that the gardener could clear off the ground and plant another crop after having had the full advantage of the high price for the first peas coming into market. This is the selection of the earliest ripening for a series of years, and is recommended with the greatest confidence as being unsurpassed for earliness and evenness of ripening, desirable qualities for a market variety. About forty-five days from planting is the average time for ripening the whole crop.

Per packet 10 cents; ½ pint 20 cents; pint 30 cents; quart 50 cents; 4 quarts \$1.75; bushel \$9.00.

PEAS, Premium Gem.—A new and valuable variety, growing about fifteen inches high, and as it is ready for use in forty-five days from sowing, is probably the earliest of the dwarf, green, wrinkled varieties. The pods are very long, of a dark, glossy green color; vines more robust than Little Gem; peas of very fine quality. The most remarkable characteristic is its wonderful prolificness, as many as twelve pods often appearing on a single stem.

Per packet 10 cents; ½ pint 20 cents; pint 30 cents; quart 50 cents; 4 quarts \$1.75; bushel \$9.00.

15 cents per pint 30 cents per quart must be added to all peas, to prepay postage or express charges

RADISH, Early Round Deep Scarlet.—A valuable improvement on the ordinary Scarlet Turnip Radish, and will be found to be very useful for market garden purposes. The color of the skin is very dark red so much deeper than the common scarlet as to attract attention. The flesh is white, crispy, and it has a very small top. Last season, in New York market, it brought

a third more than the Scarlet Turnip. It is equally well adapted for growing in frames, green-house or open ground.

Per packet 5 cents; oz. 15 cents; 2 oz. 25 cents; ¼ lb. 40 cents; lb. \$1.25.

RADISH, Early Scarlet Turnip, White Tipped.—A beautiful variety of the same size and shape as the Scarlet Turnip, but of a deeper scarlet color with white tip. It is early, of excellent flavor, and as it is so desirable for table use, from its ornamental appearance, it has already become very popular as a market variety.

Per packet 5 cents; oz. 15 cents; 2 oz. 25 cents; ¼ lb. 40 cents; lb. \$1.25.

SQUASH, Essex Hybrid.—A new and excellent variety, a cross between the Hubbard and American Turban, having the color and shape of the Turban with dryness and hard shell of the Hubbard. It is one of the richest flavored, finest grained and sweetest of the squash family, as well as one of the best keepers. The flesh is very thick, rich colored and solid, with only a small cavity for seeds. It is very productive, and as it is the earliest of the winter varieties, can be planted later in the season than other winter sorts.

Per packet 10 cents; oz. 20 cents; 2 oz. 35 cents; ¼ lb. 60 cents; lb. \$1.75.

Livingston's Perfection

TOMATO, Hundred Day.—As an early market variety, this certainly excels. It is of medium size, rather flat, and of a distinct, bright scarlet color. From its size, shape and color, we think it would be selected on the market in preference to larger and smoother sorts. We were particularly pleased with it last season on our own grounds.

Per packet 10 cents; oz. 30 cents; 2 oz. 55 cents; ¼ lb. \$1.00; lb. \$3.00.

TOMATO, Livingston's Perfection—A perfected variety of great value. In color it is a blood red,

in shape nearly round; it is smooth, solid, and of good size. Very prolific, maturing early, and continuing to bear fruit very late in the season. Ripens evenly, and is a most excellent variety for shipping long distances.

Per packet 10 cents; oz. 60 cents; 2 oz. \$1.00; ¼ lb. \$1.75; lb. \$6.00.

RUTA BAGA, D. M. Ferry & Co's Improved Purple Top Yellow.—The best variety of Swedish turnip in cultivation. Hardy and productive; flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong, terminating abruptly with no side or bottom roots; color deep purple above, and bright yellow under the ground; leaves small, light green, with little or no neck; the most perfect in form, the richest flavor, and the best in every respect.

Per packet 5 cents; oz. 10 cents; 2 oz. 15 cents; ¼ lb. 25 cents; lb. 75 cents.

For continuation of Tested Varieties, see Third Page of Cover.

Perfect Gem.

SQUASH, Perfect Gem.—An entirely new variety, combining the qualities of the best summer and winter squashes. Remarkably vigorous grower, sending out its vines very thickly for many feet, and covered with a luxuriance of fruit. These squashes are about five inches in diameter, are noted for fineness of grain, flavor and sweetness, and possess excellent keeping qualities. A most desirable variety for every garden.

Per packet 15 cents; oz. 50 cents; 2 oz. 85 cents; ¼ lb. \$1.50; lb. \$5.00.

TOMATO, Essex Early Hybrid.—This new Tomato is early, solid, large, rich flavored, and grows perfectly smooth. It is of a bright pink color, and the most desirable shape. It ripens very evenly, and as the flesh is very hard and solid, it makes one of the very best kinds for marketing and shipping. It is wonderfully productive and a vigorous grower, producing more fruit fit for market than almost any other sort.

Per packet 10 cents; oz. 50 cents; 2 oz. 85 cents; ¼ lb. \$1.50; lb. \$5.00.

TESTIMONIALS.

WM. YOUNGBLOOD, Newton, Newton Co., Texas, says: These oats are well adapted to our Southern climate. I sowed 1 pound, which produced 5 bushels. They are absolutely free from rust, perfectly hardy, and are certainly the best oats in the world.

EZRA RASSLEY, Mt. Bethel, Northampton Co., Pa., writes as follows: From the 3 pounds of seed I planted I harvested over 122 pounds. I find they yield three times as many as the common oats. They are very hardy, entirely free from rust, and produce sixty to eighty bushels per acre.

H. C. SCHMIDT, JR., Brazoria, Brazoria Co., Texas, writes: They are the best oats ever offered to the public. At first I had some doubt as to their prolificness, but since I have tried them am convinced that the *Russian White Oats* cannot be too highly recommended. The kernels are well filled, heads 16 to 27 inches. They are very hardy, not troubled with rust, and grow to a height of from 3½ to 5½ feet.

S. R. PEERY, Hadley's Mills, Chatham Co., N. C., writes: I sowed only 8 ounces, from which I harvested 200 ounces. They are the best oats I ever saw, and will take pleasure in recommending them to all.

W. PALMER, Marshfield, Coos County, Oregon, sowed 1 pound which produced 90 pounds. He says: "I have traveled the world over and have never seen oats that have so many good qualities."

H. M. SMITH, Monson, Hampden Co., Mass., writes: The *Russian White Oats* are without doubt the best oats in cultivation; they are very hardy, perfectly free from rust, and under ordinary cultivation will yield 75 bushels per acre.

J. N. ESTRIDGE, Gum, Lancaster Co., S. C., writes as follows: I was well pleased with the *Russian White Oats*. Their great prolificness is a wonder to all. They will yield 150 bushels per acre. They stand the drought well and through our severe dry season have grown and headed well, while other varieties were an entire failure.

GEORGE BURWAGER, Stonersville, Carroll Co., Md., writes: These oats are superior to all others. I planted them on poorer ground than I did the common sorts and their yield was three times as great. They averaged from 10 to 40 heads to each kernel, when thinly planted, and weigh 45 lbs. to the measured bushel.

L. G. DAVIS, Lander, Sweetwater Co., Wyo., sowed 6 lbs. and harvested 480 lbs. They are not troubled with rust, are perfectly hardy, and yields three or four times as much as ordinary varieties.

L. A. ANDERFUHREN, Fannery, Carroll Co., Md., says: One peck produced 7½ bushels. They were absolutely rust proof. They are the heaviest and largest oats I ever saw, and I would recommend them to all, especially farmers.

T. SOULSBY, Soulbysville, Tuolumne Co., Cal., writes: The *Russian White Oats* are superior to any variety yet introduced; are very hardy, free from rust, and with the same cultivation will pay the farmer twice as much as any other variety.

AARON H. MASON, Kezar Falls, York Co., Me., writes: Five bushels were produced from the 8 lbs. sown. The oats I had of you I put on rather ordinary ground to test them. They outdone my very highest expectations. The stalks are thicker and larger than those of other varieties, the heads 18 inches long, and all well filled. In my estimation they are "the oats" for the farmers to grow.

R. SHIELDS, Holly, Oakland Co., Mich., sowed 3 lbs. and harvested 2 bushels and 24 lbs. The stalks are 5 inches higher than common oats and very much thicker. They are wonderfully prolific, 2 grains having produced 12 stalks or 1075 grains.

RUSSIAN WHITE OATS.

Each kernel planted will produce twenty-five to forty heads from sixteen to twenty-two inches in length; the straw is large and strong enough to support the enormous heads of this variety. The grain is heavy and the chaff light, so that a measured bushel weighs considerably more than a bushel of ordinary oats. We have frequently had *Russian White Oats* that would weigh forty pounds and over to the measured bushel. They are peculiarly adapted for feeding purposes, as the berry is so plump and heavy and contains so much meal, that stock can get more nourishment from two bushels of *Russian White Oats* than from three bushels of the ordinary varieties. This fact alone should recommend them to the careful consideration of every farmer in our land. We would call your attention to the test months which we herewith present, which are only samples of the thousands we have received. We also call your attention to the tabulated statement which we herewith present.

DAVID NORELL, of Evergreen, Jefferson Co., Col., says: In reference to the *Russian White Oats*, they are 75 per cent. ahead of other varieties of oats. They are I think the best variety for this country. They yield well, ripen early, and the stalks are so strong and thick that they resist the effects of the strong winds so prevalent here.

R. SHIELDS, Holly, Oakland Co., Mich., sowed 8 lbs. and harvested 2 bushels and 24 lbs. The stalks are 5 inches higher than common oats and very much thicker. They are wonderfully prolific, 2 grains having produced 12 stalks or 1075 grains.

Positively no goods sent O. O. D. Address D. M. FERRY & CO., Detroit, Mich.

K. S. SKAGGS, Salema, Taylor Co., Ky., writes: I sowed 1 lb. and threshed out over 80 lbs. The
are not troubled with rust, are very hardy, yield four times as much as any other oats, and I take
pleasure in recommending them to all.

TESTIMONIALS.

HENRY W. KUHN, Mt. Storm, Grant Co., W. Va., writes: The *Russian White Oats* are far better any other kind in this part of the country. My oats weighed 41 lbs. to the measured bu. I am very pleased with them, and shall sow all I have next spring.

S. KISSLING, Lower Heidelberg, Burks Co., Pa., writes: I bought one pound of *Russian White* from you this spring, and that pound produced 1 bu., and I know that if we had more favorable weather they would have produced 3 bu. They grew to a height of over 5 ft., had heads 15 to 20 in. and some of these heads contained 200 kernels.

J. N. MERRITT, Pactola, Pennington Co., Ark., writes: I sowed 3 lbs. and threshed out 200 lbs. are not troubled with rust, and are very hardy. They are very prolific, one head having yielded 100 grains.

W. BURKE, Booneville, Logan Co., Ark., writes: I ordered 3 lbs. of your *Russian White Oats*, when the package arrived, it had been broken and there was only about one gill left; I planted however, and was surprised to find that this small quantity had yielded me over $\frac{1}{2}$ bushel. These are very strong and hardy, and are perfectly free from rust. In my estimation, they are very desirable for our southern climate.

Mr. N. H. DAWSON, of Consville, Henry Co., Mo., thinks that the *Russian White Oats* come up to what is claimed for them; he further says: My oats were sown the 5th of May, and ripened sooner than common white oats sown 30 days before. They are very hardy, entirely free from rust, and very prolific; I planted only 3 pounds and harvested over 6 bushels.

R. PERRY, Hadley's Mills, Chatham Co., Pa., writes as follows: I sowed 8 ounces and realized 200 ounces; I did not sow them until the 20th of March, and if they had not had such a dry season, I certainly have yielded five times as much as they did.

OSIAH BOWEN, of Dighton, Bristol Co., Mass., sowed one pound of *Russian White Oats*, and threshed over 200 pounds; he says that under ordinary cultivation they will yield over 100 bushels to the acre.

E. EWING, Lake View, Norhoo Co., Nev., writes: There is nothing in the oat line that will in any way compare with the *Russian White*. This variety is very prolific, hardy, and rust proof, three of these that are absolutely essential to good oats; as a proof of their prolificness, I wish to say that 3 pounds of seed sown, I realized over 116 pounds.

TABULATED STATEMENT.

We sent every customer, who, during the past season was a purchaser of the *Russian White Oats*, a circular asking the following questions, and we are pleased to state that 99 per cent. of those returns are answered about as follows:

quantity did you sow ?	}	The answers to these questions showed from 50 to 300 fold increase.
quantity did they produce ?		
were they troubled with rust ?	}	"No," invariably.
do you consider them hardy ?	}	"Yes," invariably.
under ordinary cultivation, how many bushels did you say they would produce to the acre ?	}	The answers to this question was from 50 to 200 bushels, according to locality.
did they yield as compared with other varieties of oats ?		
how were you pleased with them generally ?	}	The replies to this were from 50 to 100 per cent. better.
	}	"Well pleased," invariably.

DIRECTIONS.

The *Russian White Oats* should be sown the same as ordinary oats, about $2\frac{1}{2}$ bu. to the acre. They should be sown very early in the spring.

B.—While we only recommend them for early spring sowing, some of our customers in the North inform us that they have sown them in the fall with very good success.

PRICE LIST.

sent by mail, prepaid	\$ 50
" " " " " " " " " " " "	1.00
bushel (16 lbs.) by freight or express, not prepaid	1.25
" (32 lbs.) " " " " " "	2.00
" or over " " " " " "	\$1.75 per bu.
" " " " " " " " " " " "	1.65 per bu.

Charges to ship in 25c. each extra. All orders for $\frac{1}{2}$ bushel and upwards require a bag. In filling orders we can put $2\frac{1}{2}$ to 3 bushels in a bag. When ordering please state explicitly how you determine shipped, whether by freight or express; when the order does not so state, we will use our own judgment. As the railroad companies do not bill goods at less than 100 lbs., three bushels by freight no less cheaply as one bushel. You can remit money by New York or Chicago Draft, P. O. Money order, or by registered letter.

Do not receive any goods sent C. O. D.

Address D. M. FERRY & CO., Detroit, Mich.

D. M. Ferry & Co's Improved Purple Top
Yellow Ruta Baga.

RUTA BAGA, New Large Ovoid Purple Top Swede.—This variety is the result of a long selection of roots to obtain the highest perfection of weight, quality, purity and permanence of type. In size, it is mammoth, and is a very heavy cropper. It resembles closely D. M. Ferry & Co's celebrated Improved Purple Top Yellow Ruta Baga, except in shape and size, this variety being longer and more oblong. When a large Swede of superior quality is desired, we recommend this variety.

Per packet 5 cents; oz. 10 cents; 2 oz. 15 cents; ¼ lb. 25 cents; lb. 75 cents.

New Large Ovoid Purple Top Yellow
Ruta Baga.

PANSY.—Extra Choice Mixed.

The seed of this popular flower which we offer as *extra choice mixed* is, this season, of our own saving from the very choicest named varieties. Our strain will prove in range of color, size and beauty of flower unsurpassed by any hitherto offered. Seeds may be sown in open ground in spring or summer, or in hot-bed early in spring. The plants should always occupy a cool, partially shaded situation, and the ground cannot be too rich; coolness and moisture are necessary. Transplant when an inch high. Seeds sown in July will blossom late in autumn; if sown in October, will bloom the following spring.

Per packet 15 cents.

PYRETHRUM ROSEUM—Insect Powder Plant.

Practical entomologists have long been looking for some effective, safe and cheap insecticide, and now tell us they have found it in the *Persian Insect Powder*. This is the dried and powdered flowers of the *Pyrethrum Roseum*, and is certain death to Plant Lice, Flies, Cabbage Worms, and nearly every form of insect life. It is harmless to man, but when diluted with ten times its bulk of flour, kills every cabbage worm or other insect it touches. Hitherto the high cost of the powder and the difficulty of securing a pure and fresh article has prevented its coming into general use, but experiments made last season by Prof. Riley, of the United States Entomological Commission and others, showed that it can be grown successfully in all of the southern and many of the northern States.

CULTURE.—Sow in boxes of prepared soil, as early as the season will permit, and transplant to sixteen inches apart whenever the plants are large enough. The young seedlings are small and of slow growth, but the older plants hardy and vigorous. The largest crop of flowers is produced the second season. They should be gathered when in full bloom, dried carefully, and stored in paper bags. Before using, the flowers should be powdered as fine as possible.

Per packet 10 cents; oz. \$1.00.

VERBENA.—Extra Choice Mixed.

For some years we have made a specialty of growing *extra choice* verberna seed and this year we offer seed of our own growth from named flowers which is the result of careful selection of varieties possessing robust habit of growth combined with greatest beauty of flower. This seed will be satisfactory to the most discriminating lovers of flowers. Verbenas flower perfectly well from seeds sown in spring. If started in the house, in pots, in winter, they will be in bloom sooner, but if sown in open ground, in May, they will bloom in August.

Per packet 20 cents.

**D. M. Ferry & Co's Celebrated
RUSSIAN WHITE OATS.**

D. M. FERRY & CO.

DETROIT, MICH.