Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices

62109

c 1904

Established 1884

Paid up Capital \$200,000

LIBRARY
RECEIVED

Department of Agriculture

Fancher
Creek
Nurseries
Incorporated

George C. Roeding
Pres. and Manager
Fresno, Cal., U.S.A.

The Emperor Grape.

Fancher Creek Nurseries

INCORPORATED

Paid up Capital \$200,000.00

Experimental and Ornamental Nursery, 640 acres, . . . 6 miles East of Fresno
Greenhouses and Propagating Grounds, 120 acres, . . . 2½ miles N-W. of Fresno
General Fruit Tree Nursery, 160 acres, . . . 18 miles East of Fresno
Citrus Nursery, 40 acres, Exeter, Tulare County, California

Copyrighted, 1904, by George C. Roeding.—All rights reserved.

DESCRIPTIVE CATALOGUE

**Fruit and Forest
Trees, Vines and
Shrubs, Palms
and Choice Roses**

Adapted to the soils of the Pacific
States, Old Mexico, Cuba, Porto Rico
South America, the Philippines, Aus-
tralia and the Islands of the Pacific

GEORGE C. ROEDING

PRESIDENT AND MANAGER

TELEGRAPH, TELEPHONE, POSTOFFICE AND EXPRESS ADDRESS:

FRESNO, FRESNO COUNTY, CALIFORNIA, U.S.A.

OUR EXPORTS IN NURSERY STOCK.

WITH the onward trend of California's horticultural development there has been growing a demand for our fruits and plants in many of the countries to the south of us, in Australia, the Philippines, Hawaii, and indeed from all sections of the world enjoying a climate, soil and productions similar to those prevailing with us. Indeed, so pronounced has become the reputation for the superiority of California fruits in all the markets of the world, that it is now regarded as synonymous with all that is best in fruit culture. As one great newspaper, viz., The New York World, has declared, California can no longer be considered the Golden State, but the Fruit State of the country. The exception is well taken. During the last season, the miners dug \$14,179,800 out of the hills, while the growers coaxed \$28,280,104 from tree and vine. "The Ex-Golden State", the same authority goes on to say, "stands first in the Union in peaches, prunes, plums, pears, apricots, grapes, oranges, lemons, grape fruit, olives, figs, nuts and second in cherries. Of some of these she produces more than all the rest of the United States combined; of others, she is practically the only producer. In some she supplies practically the American market, and has a surplus for export." Not only is this true of the commercial fruits of the world, but it applies with equal force to the growing of forest trees, medicinal and other economic plants, and to the whole range of vegetation known to the trade as the ornamentals. In view of these startling facts, is it any wonder that foreign countries and our own Island possessions are looking to this State for their supplies of fruit trees and general nursery stock?

AN ABRIDGED EDITION OF THIS CATALOGUE IN SPANISH.

■ Taking these facts into consideration, it is not at all surprising that the correspondence of the Fancher Creek Nurseries from the South American Countries, from our Island possessions, Australia and even from Europe should also be a growing factor. Indeed, so pronounced has been the demand for information concerning California horticultural practice, and so keen has been the interest in California trees and plants from abroad, that we have found it not only expedient but necessary to publish an abridged edition of our standard catalogue in the Spanish language. This has not been done hastily; but to meet a healthy demand for California grown trees and plants from abroad. Copies of this edition are to be had on application.

Long experience has enabled us to handle trees and plants along lines calculated to insure their arrival at points of destination in good condition. Single shipments from our establishment have at times been three months in transit and still arrived in good shape, growing well when properly handled and planted out. On the strength of this we cordially solicit orders from planters in the South American States, Old Mexico, Australia, the Philippines, Cuba, Porto Rica, the islands of the Pacific, and Europe.

TO INTENDING PURCHASERS

THING TO OBSERVE.

1. All orders should be legibly written on a separate piece of paper, and not mixed up with the body of the letter.

2. It is always advisable to send orders for nursery stock as early as possible, as those who come first are served first, and we make it a rule to fill orders in rotation as received.

3. In ordering, please state whether substitution will be permitted, as we feel at liberty when no instructions accompany the order to replace with other sorts as nearly similar as possible. Those not acquainted with the different varieties will do well to leave the selection to us, as we will send them only such varieties as we know are adapted to their locality.

4. Our packing and labeling is as perfect as possible, and we charge for the same only to cover the cost of material. All goods are delivered at the railway or express office free of charge.

5. State distinctly how you wish us to ship—by freight or express; also designate the route, otherwise we will use our own discretion in forwarding.

6. After delivering to the carriers we cannot hold ourselves responsible for any loss or injury to trees or plants after they have been carefully packed and shipped; but we will do everything in our power, if any loss should occur, for the protection and recovery of our customer's property.

7. Orders to be sent by express, C. O. D., will be filled, provided one-half of the amount is sent with the order.

8. If any mistakes are made in filling orders, we will cheerfully rectify the same, but must respectfully request our customers to notify us at once; or, at the most, within ten days after receipt of the goods.

9. Orders from unknown correspondents must be accompanied with a remittance or satisfactory reference.

PRICE LIST.

For the convenience of patrons we also publish annually a price list of all the Fruit and Forest Trees, Shrubs and Vines, Palms and Roses enumerated in this catalogue. When ordering, always consult this for prices.

ARTICLES BY MAIL.

For convenience of those who cannot be reached by railroad or express, packages of small articles not exceeding four pounds in weight, can be forwarded by mail, such articles to be charged at singles rates.

GUARANTEE OF GENUINENESS.

Our trees are all budded or grafted from bearing trees as far as possible, and every care and precaution is exercised to have them true to name; still with all our caution, mistakes are liable to be made, but we hold ourselves in readiness, on proper proof, to replace all trees, and other stock that may prove untrue to label, free of charge; or to refund the amount paid. It is mutually understood and agreed to between purchasers and ourselves, however, that our guarantee of genuineness shall, in no case, make us liable for any sum greater than that originally paid us for said trees, etc., that prove untrue.

A NOTE OF WARNING.

Those only who can show a certificate of recent date, with our signature attached, are authorized to solicit orders for us. We wish to call special attention to this notice, as we know it has heretofore been the practice of unprincipled persons, to procure the catalogues of prominent nurseries, and take orders in their names, which they fill with poor stock bought elsewhere. If our patrons will notify us of any person whom they have reason to believe is not a regularly appointed agent, we shall consider it a favor.

Please remember to write your name, postoffice, county and state as distinctly as possible; also give your nearest express office and railway station, or if on a stage route send us special directions, giving us the name of the transportation company delivering the goods. Orders for export to old Mexico, the Hawaiian Islands, Cuba and South American points, should give in addition to the above, the steamship routes by which their orders are to be shipped.

All remittances should be by postoffice money order, registered letter, express order or bank draft.

Address all correspondence,

Fancher Creek Nurseries (Inc.)

GEORGE C. ROEDING,

President and Manager,

FRESNO, CAL.

SOMEWHAT PERSONAL IN TONE.

So well was our catalogue of last year received that the large issue we presumed would carry us over until 1905, is at this writing (December) exhausted, and we find ourselves compelled to place another and larger edition, with more pages and illustrations,

In many respects, this tenth annual catalogue of The Fancher Creek Nurseries is an improvement over its predecessors. Not only is it larger, but its illustrations are better and its text more accurate. The design has been to serve all who contemplate planting and feel the need of securing only that

Main Office and Sales Yards in Fresno City.

on the presses. This is not only gratifying but clearly demonstrates that the intelligent fruit growers and plant lovers who constitute the rank and file of our patrons, are keenly alive to the importance of a catalogue dealing with an advanced horticultural practice along scientific and practical lines.

which is best and true-to-name in the way of trees and plants, by making the descriptive matter not only full, clear and accurate, but to supplement the same with cultural directions, and practical suggestions, calculated to be of service to growers and plant lovers everywhere. If our efforts

Load of Trees Packed for Shipment. A Daily Occurrence During the Season.

Indeed, we have had not a few letters from satisfied customers stating they find it handy for reference in the matter of correct nomenclature. This has afforded us a real pleasure, and encourages us to still further effort to please and merit the confidence and support of growers at home and abroad.

In this direction shall be as well received as our catalogue of last year was, we shall be amply rewarded.

In December, 1902, this establishment was incorporated under the laws of the State of California, with a paid-up capital of \$200,000, making it one of the largest

Sectional Views in our Green and Lath Houses.

and strongest nursery establishments west of the Missouri river. This step was found essential in order to place the business upon a broad foundation, affording it free scope for development and growth in every direction. As a result it has been materially strengthened, until it stands today with facilities and an assortment of nursery stock in all departments second to no similar establishment on the Pacific Coast. This growth and development is due to the fact that it aims to please patrons, and strives to deserve their support and esteem.

Special attention is here called to the fact that on the experimental grounds of this establishment is now situated the only full-bearing genuine Smyrna fig orchard in the United States, and that we are headquarters for trees of the true Smyrna fig of commerce, which constitutes at the present time our leading specialty.

EXPERIMENTAL AND ORNAMENTAL GROUNDS.

These are located on a section of land containing 640 acres, six miles east of Fresno, and are devoted to orchard, vineyard and experimental culture. These grounds have earned a world-wide reputation for the first successful production on the Western Hemisphere, of the genuine Smyrna fig. Experimental cultures enable us by actual observation to determine the varieties best suited to this and similar climate.

PROPAGATING ESTABLISHMENT

During the past year we have added to our 120 acres of propagating grounds, two miles northwest of Fresno, several large green-houses, and an extensive lath house, affording every facility for propagating all kinds of plants in large quantities. These additions and improvements cover a floor space of about 7000 square feet, and are on the whole among the most complete in the State. Here the accommodations are sufficiently ample to meet the ever-growing demands on this corporation for the next few years.

FRUIT TREE NURSERY.

To keep up with the demands of increasing business, as well as to maintain the high quality of our nursery stock, we have found it advisable to increase our planting ground, and have selected for our new deciduous fruit and forest tree nursery 160 acres of fine bottom lands, situated 18 miles east of Fresno. The soil is of a deep sandy loam, in character well adapted to the production of a superior quality of fruit tree. Here we are now growing the bulk of our deciduous stock, both economic and ornamental, besides a full line of roses and decorative shrubs. The situation is in every way admirable.

Greenhouses and Propagating Grounds, 120 acres, two and a half miles northwest of Fresno.

CITRUS TREE NURSERIES.

Happily located in the thermal belt of Tulare county, these nurseries are situated in an ideal location, for the growing of orange and lemon trees. The location being

exempt from biting frosts coupled with the fact that the soil is warm and deep, causes the fruit to ripen as early as November, and helps to the development of an unusually healthy and vigorous nursery tree. These citrus nurseries are an integral part of the Fancher Creek Nurseries, in which W. R. Wood is the active interested partner and manager.

The Fancher Creek Nurseries as at present constituted, possess the following striking features and advantages:

PACKING AND SHIPPING ESTABLISHMENT.

This comprises four acres of land in the city of Fresno, where our trees are heeled in during the winter months. Here our facilities for handling stock and executing orders promptly are unexcelled. Our improved method of baling with electric machinery enables us to pack large lots of trees with neatness and despatch. We extend to all patrons, who have no time to visit our nurseries, a cordial invitation to inspect our packing and shipping establishment.

MAIN OFFICE AND LOCAL SALES YARD.

This contains principally ornamental stock, palms, trees, shrubs and potted plants,

situated in the city of Fresno, on J street, between Fresno and Merced.

A WORD IN CONCLUSION.

Needless to add that in the filling of all orders our aim is to please customers and supply only such trees or plants as in our judgment will live and flourish and be prolific of results. Nevertheless, and in spite of the utmost care on our part, errors will sometimes occur. In such cases we ask a suspension of judgment on the part of patrons until we can be appraised of the error and afforded an opportunity to make it good. Remember, it is our aim to deserve our friends and patrons, and to do this we at all times stand ready to do that which will be fair alike to the seller as well as the purchaser.

Thanking our thousands of patrons, both at home and abroad for the liberal patronage bestowed, and hoping to deserve a continuance of their good will and future favors, we remain

Yours to please,

FANCHER CREEK NURSERIES. (Inc).

GEO. C. ROEDING,

President and Manager.

WHEN TO PLANT AND HOW.

With natural condition favorable to the exploitation of rural economies and agricultural and horticultural wealth, it is no wonder that within a score of years California has become recognized as the center of fruit production in the United States, and one of the leading horticultural sections of the world, whose development is after all, only in its infancy.

Radical differences in soils and climates are often to be met with in the same orchard, and one locality is often blessed with as great a diversity as may be found in a whole State east of the Rocky Mountains. Hence local horticultural conditions are of prime importance when planting for profit is the consideration. Indeed, it is our experience that it is the very keystone to the successful prosecution of fruit culture as applied to California and the Pacific Coast.

Taking it for granted that the intending planter is reasonably familiar with the local conditions prevailing in his locality and on his land, a few suggestions on methods of planting will be found timely. Obviously, it is of the utmost importance that the land be put in first-class condition ready to receive the trees. This is accomplished by thorough plowing and cross plowing, followed by subsoiling and cultivation, until the soil is as friable as an ash heap. Drainage should also be considered if the land

is low and the trees are liable to "wet feet" during the winter or rainy season. Be sure to have the future orchard symmetrical in order to economize the area planted. There are two methods or systems whereby this may be attained, viz: the square and equilateral triangle.

After the field has been thoroughly tilled, and the ground plotted off to either of the preceding systems, and the trees have been provided, the next thing is to dig the holes, which should be deep and of ample size—the better the soil is worked and the roots of the tree spread out the better the growth will be. In soils underlaid by a stratum of hard pan, it is essential to dig or blast through it. Trees cannot prosper in a soil so close and dense as to prevent root growth, which the breaking up of the layer of hard pan relieves.

Time to Plant.—Early planting is always advisable in this State with deciduous fruit and forest trees and plants. In the case of citrus trees and the evergreens, planting may be deferred into late spring and early summer. Preceding the descriptive paragraphs of the different fruits, the reader will find a few cultural directions as applied to particular sorts, to which attention is directed.

Selecting Trees.—This is not over difficult if the planter is reasonably familiar

with the character of the land which he is to devote to fruit culture, together with its climatic conditions. Where patrons are in doubt as to varieties, if they will write us of their local conditions, we shall be pleased

grown nursery tree. In taking up nursery stock we exercise every precaution to avoid exposure of the roots, so as to maintain the vigor of the tree.

Treatment of Trees on Arrival.—The

NUMBER OF TREES OR PLANTS ON AN ACRE.

DISTANCE APART.			Square Method	Equilateral Triangle Method
Distance,	1 foot apart each way,	No. plants	43,560	50,300
"	2 "	"	10,890	12,575
"	3 "	"	4,840	5,889
"	4 "	"	2,722	3,143
"	5 "	"	1,742	2,011
"	6 "	"	1,210	1,397
"	7 "	"	888	1,025
"	8 "	"	680	785
"	9 "	"	537	620
"	10 "	"	435	502
"	12 "	"	302	348
"	14 "	"	222	256
"	15 "	"	193	222
"	16 "	"	170	196
"	18 "	"	134	154
"	20 "	"	109	125
"	25 "	"	69	79
"	30 "	"	48	55
"	35 "	"	35	40
"	40 "	"	27	31

RULE SQUARE METHOD—Multiply the distance in feet between the rows by the distance the plants are apart in the rows, and the product will be the number of square feet for each plant or hill; which, divided into the number of feet in an acre (43,560) will give the number of plants or trees to an acre.

RULE EQUILATERAL TRIANGLE METHOD—Divide the number required to the acre "square method" by the decimal 866. The result will be the number of plants required to the acre by this method. See diagram below.

to make a selection, subject of course to their approval. We aim to supply trees of medium size, straight and healthy, with

trees when received at point of destination should immediately be unpacked and carefully "heeled in" on ground previously pre-

The Square and Equilateral Methods.

a strong vigorous root development, free from insect pests and disease, and invariably true to name. We do not grow "cheap" trees, because such are expensive to the planter if tendered to him as a gift, and are always a source of dissatisfaction and after recrimination between sellers and buyers. You cannot extract sunbeams from cucumbers, neither can you produce fine fruit from a stunted and badly

pared in order to avoid exposure of the roots; water freely. Should your stock be delayed in transit so as to become dry and suffering from exposure, bury it completely under ground, root and branches, and leave in this condition for a few days until it becomes normal, when it may with safety be planted out. Never soak the roots in water. The same remedy applies to stock frozen. Just immediately before planting

Object Lessons in California Methods of Pruning Nursery Trees at Time of Planting.
For explanations see next page.

be sure to examine the roots carefully, and cut away to a smooth surface all bruised, lacerated and broken roots and rootlets with a sharp knife. The tree can now be said to be ready for its permanent orchard home. In setting out one person should hold it in an upright position while another shovels or fills in the loose soil around it, first spreading out the roots and rootlets in as nearly a natural position as possible. The surface or finest and best soil should be put in first among the roots, care being taken to fill every interstice, thus bringing all the roots in direct contact with the soil. Firm the earth thoroughly about the roots by treading before finally closing up the hole, at the same time applying water freely before the remainder of the soil is finally filled in and the operation of planting is completed. Never tramp down the top soil, nor apply water to it, as it tends to bake the ground thus preventing its aeration and capillary attraction about the roots, which is essential to the vigorous aftergrowth of the tree. Guard against setting too deep but allow for the settling of your soil, so that when once established your tree will stand about as it did at the time of removal from the nursery rows. In the hot interior valleys of this State, the base of the trees should be mulched, it is also important to protect the trunks until they can supply their own shade.

Bringing an Orchard into Bearing.—Fruit growing is a business pure and simple, and in its successful operation is quite as apt to call forth the best energies of brain and brawn of those who "are in the business" as any other line of commercial activity. Just in the proportion that your orchard receives intensive and intelligent care, will it give you corresponding returns on your investment of capital, time and labor. For the first two or three years this consists chiefly in proper cultivation, irrigation (where the rainfall is insufficient to carry the trees through the long dry California summer) and pruning; later on when in bearing, fertilization must also be resorted to. Of these thorough cultivation is of prime importance, and should be religiously observed. Pruning is equally if not more necessary. We are aware that it is difficult to lay down specific rules on this point, but it is our experience not to spare the knife, but cut all deciduous trees back at time of planting to from 16 to 18 inches from the top to the surface of the ground. This is now the general practice among the most successful orchardists throughout California, and is the result of years of experience. Its advantages are: (1) it makes a low heading and a more stocky tree, affording an umbrageous head, and thus protecting it from the hot rays of the scorching summer suns; (2) it enhances the carrying capacity of the tree, thus avoiding artificial props when maturing a crop of fruit; (3) it expedites the harvesting of the crop, by rendering it more accessible to the pickers, thus economizing

time and expense; (4) it prolongs the life of the tree by reason of conserving its vital forces, and rendering it less liable to damage in the breaking of limbs and taxing its strength by carrying its fruits "close in."

The illustrations on accompanying pages clearly define the system of pruning nursery stock that generally prevails in California, and is that followed in the orchards of the Fancher Creek Nurseries.

Figs. A A show a one year old Smyrna fig tree, the taller illustrating its appearance just as it came from the nursery rows; that to the left is the same specimen cut back to 18 or 20 inches, with its roots properly pruned for planting. The one foot mark shows the depth of the original cutting and the point at which the new growth takes its inception; in planting be sure to set the tree a trifle deeper, so that this connection will be below the surface.

Figs. B B show an orange tree properly balled ready for shipment, the taller specimen is a fine example of a one-year-old bud as it appears when taken from the nursery row; the illustration to the left shows it properly pruned ready for planting. It is advisable to cut the rope around the ball, but the burlap or sacking can be allowed to remain; indeed, if the soil is of a rather light loamy character it is best not to remove it, as it soon decays.

Figs. C C show an olive tree under identical conditions, except the balling, and explain themselves. The same applies to Figs. D D of two peach trees.

Figs. E E. These show a pear tree two years in orchard form,—the view to the left indicating a season's growth, while that to the right shows the same tree properly pruned. Attention is called to the system of thinning out the interior and lateral branches, and also to the shortening-in of the leading limbs in order to produce a well developed vase-shaped tree.

Figs. F F. A one-year-old Calimyrna fig tree, showing a year's growth in orchard form, being about four feet from the ground. In pruning, the object is to strengthen the lateral branches and body, and to promote the new growth at a point close to the ends of the shortened-in lateral branches, to secure a well-opened vase form of tree. This method should be followed in a modified form for about three years, when it will only be necessary to thin out interfering branches.

Figs. G G represent a three-year-old olive tree. The upper view shows a year's growth, defining its general character, while the lower view illustrates the same tree properly pruned. The olive tree requires a thinning out and shortening-in of the lateral branches for at least four years after planting. This gives sturdiness and promotes a healthy uniform growth. This system produces a uniform bearing surface throughout the tree.

Object Lessons in California Methods of Pruning Young Orchard Trees.

For explanations see pages 11-13.

In figs. H. H. we have a peach tree showing two years' growth in orchard form, illustrating its peculiar development, while the smaller view just underneath shows the same specimen after pruning. Emphasis is placed on the importance of thinning out and shortening-in of the lateral branches. For best results peach trees must be severely cut back for at least three seasons after planting.

In no way can the average grower gain the rudiments of an enlightened horticultural practice more quickly than in the application of the principles laid down in reliable books, which in their contents give the best thought and experience of the most successful pomologists, horticulturists and growers generally now before the public. In compliance with a general demand we beg to suggest the following books and periodicals calculated to cover the subject of fruits and fruit culture, as applied to California condition:

Henderson, Peter. "Henderson's New Hand Book of Plants and General Horticulture." A dictionary of plants, flowering, ornamental, economic, etc., including vegetables and fruits; in fact, a complete work on cultivated plant life. Everything is arranged alphabetically, from Aaron's Beard to Zygothallum; very complete descriptions are given, with full cultural instructions for everything of importance. 526 pages, profusely illustrated. Price \$3.00.

Roeding, George C. "The Smyrna Fig at Home and Abroad." A treatise on practical fig culture, together with an account of the Wild or Capri Fig, and the establishment of the Fig Wasp, *Blattophaga grossorum*, in America. Contains some 87 pages, 6x10 inches, and is sumptuously illustrated with half-tone engravings made direct from original photographs, line cuts, and a beautiful frontispiece illustration, showing the Smyrna fig in natural colors. Price 50 cents the copy.

Table Showing the Number of Plants in Lengths from 1 to 100 feet Apart.

Used or Planting Hedges, Windbreaks, Shade Trees, Etc.

Distance Apart	No. per Mile	Distance Apart	No. per Mile	Distance Apart	No. per Mile
1 foot.....	5,280	15 feet.....	352	60 feet.....	88
2 feet.....	2,640	20 feet.....	264	65 feet.....	81
3 feet.....	1,760	25 feet.....	211	70 feet.....	75
4 feet.....	1,320	30 feet.....	173	75 feet.....	70
5 feet.....	1,056	35 feet.....	151	80 feet.....	66
6 feet.....	880	40 feet.....	132	85 feet.....	62
7 feet.....	754	45 feet.....	117	90 feet.....	58
8 feet.....	660	50 feet.....	105	95 feet.....	55
9 feet.....	586	55 feet.....	96	100 feet.....	52
10 feet.....	528				

Bailey, L. H. "The Horticulturist's Rule-Book." A compendium of useful information for fruit growers, truck gardeners, florists and others. A vast mass of information is presented in this handy little reference book, arranged so carefully and indexed so completely that instant reference may be made to any one of the two thousand entries. The things you want to know about horticultural work, the remedy for a plant disease, the way to conquer a troublesome insect enemy—all are concisely set forth. 312 pages. Price 75 cents.

Bailey, L. H. "The Cyclopedia of American Horticulture." Now complete in four volumes, with over 2,000 original engravings. A complete description of all species of fruits, vegetables, flowers and ornamental plants in America. Directions for the cultivation of all kinds of crops, observations on marketing, etc. Price \$20.00 for the set.

Hussman, George. "Grape Culture and Wine Making." \$1.50, post paid.

Wickson, Edward J. "The California Fruits and How to Grow Them." A manual of methods which have yielded greatest success; with lists of varieties best adapted to the different districts of the State. 575 pages, 6x9. Price, \$2.50, post paid.

Pacific Rural Press, The. A weekly horticultural and agricultural newspaper. Sixteen pages, three columns to the page. \$2.00 per year. Publication office 330 Market St., San Francisco.

California Cultivator, The. Published weekly at Los Angeles, California, at \$1.00 per year 24-32 pages, 4 columns to the page.

Fruit World, The. Devoted to fruit culture, packing and shipping. Twenty-four pages, four columns to the page. Subscriptions \$1 per year. Published at Los Angeles, Cal.

California Fruit Grower, The. Published at San Francisco, at \$2 per year. Devoted to fruit culture, and particularly to fruit shipping and marketing.

Remember, we supply any book or paper dealing with horticulture, post-paid in the U. S., on receipt of publisher's price.

Six Standard Varieties of Apples.

1. Lawver. 2. Missouri Pippin. 3. Rhode Island Greening. 4. Yellow Belledflower.
5. White Winter Pearmain. 6. Yellow Newton Pippin.

FRUIT DEPARTMENT.

THE APPLE.

As applied to Pacific Coast conditions, the apple enjoys a wide distribution, and in many localities yields a superior fruit in good quantities. Varieties are variable as to localities, and in the selection of sorts the intending planter should be governed largely by local conditions of soil and climate. Broadly speaking, the hot interior valleys are not suitable to commercial apple culture, owing principally to the long dry and hot summer. Hence in these sections farmers should limit planting to only a few trees and sorts for family or local use. The best soil for this fruit is a deep, rich loam which will allow the free extension of the roots and is exempt from stagnant moisture. An extremely light soil should be avoided. Apples do exceedingly well in all the coast counties, as well as in the upper foothills and mountains of the Sierra Nevada. In adjacent States and Territories to the North and East apple culture is more general, and may be safely followed whenever the soil and climate is favorable. The keeping qualities and the flavor of our mountain-grown apples at elevations of 5000 feet or more, are indeed hard to surpass.

It is the consensus of opinion among experienced apple growers that the commercial varieties should be planted from 25 to 35 feet apart in the orchard rows.

Trees should be headed from 14 to 16 inches from the ground except in the mountainous region where high heading is advisable to avoid the breaking of the lateral branches by the settling of the snow in the winter months. Not more than three to four branches should diverge from the body of the tree and these should be as evenly distributed as possible.

For the first three years thinning and a systematic shortening of the main and lateral branches should be followed with the view of securing a strong, well-balanced tree, capable of developing a good crop of fruit without breaking down.

In after years shorten in moderately and thin out the center growth.

NEW VARIETIES.

Bismarck. Introduced from New Zealand and said to be one of the most promising of recent introductions, a tremendous bearer and one of the very best apples for hot climates. Fruit is of a beautiful golden-yellow color of the largest size; very highly flavored and as a dessert apple, said to have no equal; also suitable for cooking purposes. Ripens early and is a good keeper.

Gano. Originated by N. G. Gano, of Parkville, Mo., no doubt identical with the Black Ben Davis, at least this fact is conceded by many authorities and our observations would lead us to the same conclusion. A true Ben Davis type, except the color, being deep dark red.

Glowing Coal. Of enormous size, and said to be very valuable on account of its striking beauty and superior quality. A vigorous grower; flesh fine grained with sub-acid flavor. A most promising sort.

Paragon. Originated in Tennessee. The original tree is now fifty years old and is still vigorous and in bearing; fruit large to very large, roundish, somewhat flattened; dark red, slightly streaked; flesh firm, yellow, sub-acid and juicy and of excellent quality; a fine keeper. Its size, splendid keeping and shipping qualities, render it one of the most valuable varieties of recent introduction.

SUMMER.

Duchess of Oldenburg. A beautiful Russian apple; large yellow, streaked with red; tree vigorous and very productive; juicy with rich sub-acid flavor; excellent in this valley on account of its dense foliage; August.

Early Harvest. Medium size; bright straw color; tender and fine; good for table and cooking; July.

Gravenstein. Large, beautifully dashed with deep red and orange; tender and crisp, with a highly aromatic flavor; tree very vigorous; August.

Keswick Codlin. Large, conical; greenish-yellow; flesh, yellowish-white; fine for cooking; August and September.

Maiden's Blush. Medium, well-shaped; yellow, with a very distinct red cheek on the sunny side; flesh white; pleasant sub-acid flavor. It has the beauty of color of the pretty little Lady apple; excellent for the table and for cooking; August.

Red Astrachan. Large, deep crimson, with sometimes a little greenish-yellow in the shade; flesh white, moderately juicy, with an agreeable rich acid flavor; very productive; July.

Red June. Medium, oblong, deep red; excellent for table; one of the best early apples; July.

White Astrachan. A Russian apple; medium, roundish; skin nearly white; tender; good for market; August.

AUTUMN.

Alexander. Large, conical; greenish-yellow, streaked with orange and brilliant bright red in the sun; flesh yellowish-white, of medium quality, very productive; September.

Fall Pippin. Very large, yellowish-green; tree vigorous and very productive; flesh white, tender and mellow; one of the best fall apples; September.

Fameuse. (Snow Apple)—Medium, roundish; greenish-yellow, with streaks of deep red on sunny side; flesh remarkably white, very juicy; October.

Golden Russet. Medium; skin rough, yellow covered with dull russet; flesh whitish-yellow, sprightly, sub-acid flavor; September and October. Thrives well in a warm climate.

Gloria Mundi. Very large, greenish-yellow, flesh coarse, tender, with pleasant sub-acid flavor; excellent for cooking and drying; October.

Hubbardston Nonsuch. Large, roundish oblong and splashed with stripes of bright red, nearly covering a yellowish ground; juicy and tender, with an agreeable acid flavor; very good to best; October. An excellent variety in the interior valleys of the State and in other localities having a dry warm climate.

Jonathan. Medium, conical; light yellow, covered with red stripes; tender and juicy with a sprightly vinous flavor; excellent for table or market; October and November.

King of Tompkins County. Very large, flesh yellowish, rather coarse, juicy, with a rich vinous flavor; October and November.

Mother. Large, red; flesh very tender, rich and aromatic. One of the best dessert apples.

Rambo. Medium, yellowish-white, streaked with pale yellow and red; tender, rich and sub-acid; very productive; October.

Red Bietigheimer. A valuable German variety, very large, roundish inclining to conical; skin pale, cream-colored ground; flesh firm white, with brisk sub-acid flavor. Tree a strong grower and heavy bearer. This fruit is very showy and is worthy of extensive cultivation.

Rhode Island Greening. Large, greenish-yellow; succeeds on a great variety of soils; flesh yellow, fine-grained, tender, crisp, juicy and aromatic; excellent for cooking and table; adapts itself to a variety of climates; October and November.

Roxbury Russet. Medium, dull-green, covered with brownish russet when ripe; flesh greenish-white, with a rich sub-acid flavor; good to very good; October.

Skinner's Pippin. (Skinner's Seedling)—Large; skin thin, pale yellow, with a blush on the sunny side; tender and juicy; September.

Twenty Ounce. Large and showy; a good sprightly fruit, though not very highly flavored; flesh coarse-grained, brisk sub-acid.

WINTER.

Arkansas Black. Medium to large, round or slightly conical; yellow where not covered with a beautiful dark maroon, approaching to black; flesh firm, fine-grained, juicy; a long keeper. Tree a vigorous grower and very productive. A valuable market apple.

Baldwin. Large, rounded; deep bright red; very productive. One of the best and most popular winter apples.

Ben Davis. Medium to large; yellowish, almost entirely overspread with two shades of red; flesh white, tender, moderately juicy, pleasant sub-acid; December to March.

English Russet. Medium; ovate or conical; greenish-yellow, with red cheek; crisp, sub-acid; strong grower and a regular bearer.

Esopus Spitzenberg. Large, oblong; yellowish ground, with broken stripes of bright red; flesh yellow, juicy, with a delicious sub-acid; rich flavor.

Grimes' Golden Pippin. Medium; rich golden yellow, sprinkled with small gray and light dots; flesh yellow, crisp, tender, spicy sub-acid, peculiar aroma; December to March.

Kentucky Redstreak. Medium, roundish, greenish-yellow shaded with dull purplish-red and sprinkled with large light dots having gray centers; flesh whitish, tender, juicy; December to February.

Lady Apple. A beautiful little dessert fruit; flat; lively lemon-yellow, with a brilliant deep red cheek; flesh crisp, juicy and pleasant. Highly esteemed at Christmas as a beautiful ornament to Christmas tree.

Lawver. Large roundish; bright red, covered with small dots; flesh white, firm, crisp, mild sub-acid; tree vigorous, thrives well in the interior valleys and in warm dry climates. A fine keeper and very showy; December to February.

Limber Twig. Medium; yellow, shaded with dull crimson; flesh whitish tender, juicy, with a brisk sub-acid flavor.

Mammoth Black Twig. Large, to very large, slightly conical; skin bright yellow shaded red in the sun; flesh pale yellow, tender, juicy, mild sub-acid, rich, very good. October to February.

Missouri Pippin. (Stone's Eureka)—Very extensively planted in the southern part of the state; large roundish, slightly conical; yellowish, striped and splashed with red; covered with a greyish bloom and sprinkled with large greyish dots; tender, juicy, compact; a good market sort; December.

Marshall's Red or Red Bellflower. Originated with J. L. Marshall, near Napa. Fruit very large, same shape as Yellow Bellflower, but of same color as Red June; quality very good; flesh firm, fine-grained, slightly more acid than the Yellow Bellflower; tree a very heavy bearer. A very popular variety.

Nickajack. Large, roundish, yellowish shaded and splashed with two shades of red; flesh yellowish, compact, tender and juicy. Tree a vigorous grower and very hardy. December to January.

Northern Spy. Large, roundish, greenish-yellow, covered with light and dark stripes of purplish-red; flesh white, juicy, brisk sub-acid; valuable for market and cooking. As a resistant to woolly aphis when grown on its own roots, it cannot be surpassed. November to January.

Red Pearmain. Medium, roundish, oblong, conical; maroon, thickly sprinkled with large grey dots; flesh juicy; mild sub-acid; very extensively grown in Santa Cruz county; a valuable shipping sort.

Shockley. Below medium, roundish, conical, pale-yellow overspread with red; crisp, juicy, slightly vinous flavor; good bearer and a good keeper. One of the best for this valley, and others with similar climates; December to January.

Smith's Cider. Medium; yellow, shaded with red; a standard commercial variety. November to February.

Sonoma Seedling. Above medium size; pale yellow, striped with red; rich, acid flavor; fine keeper. Popular in Sonoma and Napa counties.

Stark. Large, roundish, inclining to conical; greenish-yellow, shaded and splashed with dark red; thickly sprinkled with brown dots; flesh yellowish, juicy, mild, sub-acid. A long keeper and profitable market fruit.

Swaar. Large and regulary formed; pale lemon-yellow, dotted with brown specks; flesh yellowish, fine-grained, tender with rich aromatic flavor; an excellent apple in warm dry climates; a good market sort; December to January.

White Winter Pearmain. Medium, oblong; pale yellow, thickly sprinkled with minute brown dots; flesh yellowish, tender, crisp, juicy, very pleasant sub-acid flavor; succeeds well in all parts of the state; a standard market sort, widely distributed; November to January.

White Pippin. Large; greenish-white, pale yellow when ripe; flesh white, tender, with a rich sub-acid flavor; December to February.

Wine Sap. Medium; yellow ground streaked with red; tree thrives well on sandy, light soil; flesh yellow, with rich, high flavor; excellent for table, and one of the very best cider fruits; November to February.

Yellow Bellflower. Large, oblong; yellow, sometimes a blush in the sun; flesh firm, crisp, juicy, sub-acid; one of the standard varieties in California and should be extensively planted; tree a good grower and very productive; succeeds well in the interior; October to January.

Yellow Newton Pippin. Large; skin smooth, golden-yellow; flesh firm, crisp, juicy; one of the standard varieties in California and probably more extensively planted than any other apple; January to March.

CRAB APPLES.

Hyslop. Large, dark crimson with bloom; very showy and popular on account of its size and hardness; November to January.

Red Siberian. Fruit an inch in diameter; very handsome tree, an erect, free grower.

Transcendent. Fruit very large; tree immensely productive; fruit juicy and crisp; skin yellow striped with red, the best of its class for cider; September.

Yellow Siberian. Large, fine golden-yellow color.

THE PEAR.

The pear is a fruit cultivated throughout California and the Pacific States generally, extending into Mexico. It does well in all soils, but succeeds best on a heavy loam. Of the whole range of commercial fruits it seems to thrive better in alkali soils than any other and is being largely planted in vineyards and orchards, where the vines and trees have been killed. The trees are usually planted 20 to 25 feet apart on the square. The practice of cultivation is much the same as with the stone fruits. Pruning is usually to the vase form of tree. The fruit should be thinned out on heavily loaded trees, or else it is liable to run to small and unmerchantable sizes. The fruit of the summer and autumn sorts should be gathered some ten days before ripening and placed in a dark cool place, where it will ripen, acquiring a delicious aroma, fine flavor, and a melting characteristic pleasing to the palate when eaten. The demand for this fruit both in the green and dried state is increasing yearly, making it a most profitable fruit

The Winter Bartlett Pear, a New and Popular variety, "in" California.

to plant. The Sacramento and San Joaquin valley soils and climates are especially favorable to pear culture; as well as the Coast counties and south of Tehachapi.

Its geographical distribution covers the entire Coast. Our selection of varieties has been limited to those having a high commercial value and in addition to this, having qualities which would be appreciated by any true lover of a highly flavored fruit.

NEW VARIETIES.

Winter Bartlett. This fine pear originated in Eugene, Oregon. The original tree stands in a door-yard of that city, and with possibly one or two exceptions, has born a good crop for over 20 years. Fruit large, closely resembling the famous Bartlett in shape and appearance, but ripening four months later; skin yellow, slight blush on side exposed to the sun; perfectly smooth, sprinkled with large russet brown dots; flesh not quite as fine-grained as the Bartlett, but tender, juicy and melting and with a flavor almost identical to the Bartlett. Trees in the nursery rows not growing as straight as the Bartlett, but fully as vigorous. This pear has been fruited for several years in this county, and is undoubtedly one of the few pears of recent introduction promising any real merit. Its close resemblance to the Bartlett, fine flavor, unexcelled keeping qualities, combined with its lateness, places it in the front rank, as one of the finest of winter pears, worthy of extensive cultivation. In every way a grand fruit.

SUMMER.

Bartlett. Large; skin very thin, clear lemon-yellow with soft blush on the sunny side; flesh white, buttery, very juicy and highly flavored; the best summer pear in existence; thrives in all parts of California. The most popular of pears and more highly esteemed for canning, shipping and drying than any other.

Beurre Giffard. Medium; tapering to the stem; greenish-yellow, shaded red on sunny side; melting and juicy; a fine early pear; July.

Bloodgood. Medium; yellow, sprinkled with dots; rich, sugary, highly aromatic flavor; August.

Clapp's Favorite. Large; pale lemon-yellow, mottled with crimson on sunny side and thickly sprinkled with brown dots; flesh finely-grained and melting; with a rich vinous flavor; July.

Doyenne d'Ete. Fruit small, roundish, slightly pyriform; skin smooth, fine yellow, often shaded with bright red and covered with russet dots. One of the earliest.

Lawson or Comet. Large; brilliant crimson color on yellow ground; flesh crisp, juicy, but of rather inferior flavor; a firm and good shipper; the most attractive of all pears for market, on account of its beautiful exterior. Ripens in June; its large size and earliness make it one of our most valuable shipping pears.

Le Conte. Large, bell-shaped; skin smooth and of a rich creamy-yellow color; a rapid grower, a prolific bearer, foliage is rich and luxuriant; it is valuable for its shipping qualities and is excellent for cooking; July.

Madeleine. Medium; pale yellow, dotted with brown dots; flesh melting and juicy; the first early pear; June and July.

Seckel. This small but most delicious pear originated on the farm of Mr. Seckel, near Philadelphia. Without question the richest and most highly flavored variety known. Its highly concentrated, spicy, honeyed flavor is not equalled by any other variety. Skin brownish-green with a lively russet-brown cheek; flesh whitish, buttery, juicy and melting.

AUTUMN.

Beurre Bosc. A large fine pear with long neck; cinnamon-russet, handsome; half melting, juicy, slightly perfumed and delicious; tree fine grower and productive; one of the most valuable of our autumn pears; September.

Beurre Clairgeau. Large; yellow, shaded with orange and crimson, covered with russet dots; flesh yellowish, buttery, juicy and granular; one of the best varieties for transportation; September.

Beurre d'Anjou. Large; russet-yellow pear, shaded with crimson; melting, juicy, rich and delicious; valuable for market and table; September.

Beurre Hardy. Large; greenish, covered with light russet and shaded with brownish-red; flesh buttery, with a rich vinous brisk flavor, good; September.

B. S. Fox. A seedling raised by the late B. S. Fox; large; somewhat the shape of Clairgeau; skin greenish-yellow, smooth, nearly covered with golden russet; flesh buttery, juicy, sub-acid flavor; a valuable addition to the list of our autumnal pears, and highly recommended on account of its excellent shipping qualities; September.

Dana's Hovey. Fruit medium, regular in form; skin greenish-yellow, netted and patched with russet, and sprinkled with many brown dots; flesh yellowish, juicy, melting, with a sugary, rich aromatic flavor. Tree vigorous and a regular and enormous bearer.

Doyenne du Comice. A French pear of recent introduction and of much promise: fruit large; skin greenish yellow, shaded with crimson in sun; flesh buttery, rich and slightly aromatic; October.

Duchess d'Angouleme. Very large; dull greenish-yellow, spotted with russet; flesh white buttery, with rich, excellent flavor; tree very productive; September.

Flemish Beauty. Large; pale yellow, marbled with light russet; flesh yellowish-white, not fine-grained but very juicy and melting; good bearer and very hardy; September and October.

Howell Large, waxen yellow, sprinkled with minute russet dots; flesh whitish, juicy, brisk, vinous; vigorous grower and a prolific bearer; September.

Kieffer's Hybrid. Large; skin rich golden-yellow, sprinkled thickly with small dots and often tinted with red on one side; flesh slightly coarse, juicy, with a pronounced quince flavor; tree very vigorous, an early bearer and very prolific and more widely distributed through the United States than any other pear.

Sheldon. Above medium; greenish-yellow, covered with thin light russet; flesh whitish, very juicy, melting, rich, aromatic. A fine pear.

Winter Seckel. Small, regularly formed; skin dull yellowish-brown, with a lively russet red cheek; flesh whitish, buttery, very juicy and melting, with a rich, spicy flavor and aroma; the most exquisitely flavored variety known; October.

WINTER.

Col. Wilder. Another of Fox's seedlings. Large, yellow, profusely dotted and marbled with russet; flesh melting, juicy sweet, with a peculiar flavor. Tree a vigorous grower.

Doyenne d'Alencon. Medium; skin rough yellow, shaded with dull crimson; flesh granular, juicy, sugary and highly perfumed; November.

Easter Beurre. Large, roundish, often sprinkled with many dots and patches; flesh white, fine-grained, juicy, sweet, rich flavor; a most desirable winter pear and an excellent shipper; tree a rapid grower and abundant bearer; October to January.

Forelle or Trout Pear. A beautiful German pear, deriving its name from its finely speckled appearance; fruit oblong, inclining to pyriform; lemon-yellow, washed with deep rich red on the sunny side, where it is marked with large crimson specks; flesh white, buttery, melting, slightly vinous; October and November.

Glou Morceau. Large; skin pale greenish-yellow, marked with small green dots; flesh fine-grained, buttery, very melting, with a sugary flavor; November.

P. Barry. A most valuable winter pear, originated by the late B. S. Fox, of San Jose; large to very large; ovate pyriform; skin yellow, nearly covered with russet dots and blotches; flesh juicy, fine-grained, flavor sprightly, rich, excellent. The tree is a vigorous grower and heavy bearer, and in habit is very much like the Winter Nelis; an excellent keeper, it is worthy of extensive cultivation; December to March.

Winter Nelis. Medium; skin yellowish-green, dotted with gray russet; flesh yellowish-white, fine-grained and abounding with juice of a rich, saccharine, aromatic flavor; thrives best in warm localities and is especially adapted to a warm dry climate; a regular bearer. An excellent shipper and good keeper; December.

DWARF.

The following varieties are worked on quince root as dwarfs and are to be recommended for gardens or where space is too limited to permit the growing of standard trees. Bartlett, Beurre Hardy, Duchesse d'Angouleme, Easter Beurre, Winter Bartlett.

THE CHERRY.

Throughout California the cherry is a fine, luxuriant tree, with smooth, light, colored bark. It thrives best in the Coast counties, but also does well in many sections of the interior valleys, in Oregon and Washington, and other districts of the Coast. It finds its greatest luxuriance in the counties aligning San Francisco Bay; does well on foothill soils at an elevation of 2000 feet. Though preferring a dry situation, it must nevertheless have available moisture, its requirements being more emphatic in this direction than with some other trees. Plant the trees 25 feet apart. The tree should be headed very low, to avoid sun-scald to its rather sensitive bark. Our trees are exceptionally well grown, and are calculated to meet the general requirements prevailing throughout this region.

THE BIGARREAUS.

Belle d'Orleans. Above medium size, roundish heart-shaped; whitish yellow, partly covered with pale red; sweet and excellent; May.

Bing. Originated by Seth Lewelling, from seed of Black Republican. Fruit large, dark brown or black, very fine, late: a good shipping variety.

Black Eagle. Large, heart-shaped; skin deep purple; flesh deep purple, tender and rich; moderate bearer; June.

Black Tartarian. Largest size, irregular and uneven on the surface; flesh purplish, half tender and juicy; the best black cherry; June.

California Advance. A seedling of Early Purple Guigne, ripening a week earlier. Said to be larger and a heavier bearer than its parent.

Centennial. A seedling of Napoleon Bigarreau; larger than its parent, and valuable on account of its shipping qualities; very sweet; June.

Chapman. A seedling of the Black Tartarian, but is larger, finer and earlier than its parent.

Early Purple Guigne. Medium; purple; tender, juicy, rich, one of the earliest, May to June.

Elton. Large, pointed, heart-shaped; pale yellow, delicately mottled with bright red; tender, with a rich luscious flavor; June.

Gov. Wood. Very large; light yellow, shaded with bright red; sweet and delicious; June.

Great Bigarreau. (Monstreuse de Mezel) Very large; dark red, almost black; firm and juicy; tree a strong grower, and very productive; late.

Knight's Early Black. Large; irregular; skin dark purple; flesh purple; rich and sweet; June.

Lambert. Fruit of largest size and of fine quality; color deep rich red; flesh firm and of fine flavor; a fine market variety. Ripens two weeks later than Napoleon Bigarreau.

Lewelling. (Black Republican) Seedling raised by Seth Lewelling of Oregon; large size, black, sweet, with purplish flesh; late and a good shipper.

Napoleon Bigarreau. (Royal Anne) A magnificent cherry of the largest size, pale yellow, becoming amber in the shade, richly dotted and spotted with deep red, and with a bright red cheek; flesh very firm, juicy and sweet; tree a rapid grower and immense bearer.

Rockport Bigarreau. Large; pale amber in the shade; light red in the sun; good bearer; highly esteemed for cooking and shipping.

Schmidt's Bigarreau. A black cherry of the largest size; an excellent market variety.

Windsor. Originated at Windsor, Canada, and introduced by Ellwanger & Barry. Fruit large, liver-colored, flesh firm, and of fine quality. Tree very hardy and prolific.

Yellow Spanish. Large; pale yellow; one of the best of light colored cherries; June.

DUKES AND MORELLOS.

Are a distinct class from the preceding and are distinguished, by the less vigorous growth of the trees, leaves thicker and of a deeper green color, and the marked acidity of the fruit.

Belle Magnifique. Large; bright red; flesh juicy, tender, acid, excellent for cooking.

Early Richmond. Medium; dark red; juicy, sprightly acid flavor; one of the best acid cherries, and unsurpassed for cooking purposes; very productive.

May Duke. Large; rich dark red; flesh tender, juicy and sub-acid; an excellent variety, and one of the earliest of its class.

Ostheimer Weichsel. Fruit of largest size; roundish oblate; skin very dark when mature; flesh liver color, tender, juicy, almost sweet sub-acid. Very fine.

Reine Hortense. Very large; beautiful, glossy red; a good bearer; excellent for canning, but too soft for shipment.

THE PLUM.

To give the different types of plums, even a brief classification, the following condensed statement is taken from the *Cyclopedia of American Horticulture* (Bailey): "Prunes, characterized by sweet firm flesh capable of making a commercial dried product; any color, though blue purple are best known." (See "Prunes" on following pages.)

The plum in its geographical distribution on this Coast, and particularly in California, covers a wide range of soils and climates, being thrifty along the Coast regions, in the Coast and interior valleys, and well up in the foothills. Indeed, so wide is its range that it is safe to say that every county in the State boasts of its plum orchards, excepting perhaps the city and county of San Francisco. This adaptability is undoubtedly due largely to the various stocks on which the different sorts are budded or grafted. Twenty to twenty-five feet apart is a standard distance to plant the trees. Being a sprawling grower, the tree should be pruned quite severely when young, the general vase form being much in favor. Like the cherry the tree is more or less subject to sun-scald, and hence should be headed low. Our trees have been budded and grafted on different roots, calculated to meet the varying conditions prevailing in different portions of the State and the Coast generally. This fruit has not in recent years been planted so extensively as it deserves, which is due

no doubt to some extent to the difficulty of marketing; but now with canneries established in every prominent fruit growing section in the State, and with the demand for shipment to eastern markets in the fresh and dried state, there is no reason why it should not be largely planted. "Black knot" and the insect "Curculio" combined have discouraged planting in the eastern states, and as a consequence our fruit finds a ready market there of late years. The Oriental varieties are coming more into favor. The trees grow rapidly, are heavy and regular bearers, and adapt themselves to a wide range of territory. The fruit is very showy and highly flavored and its shipping qualities are unexcelled.

NEW VARIETIES.

America. Originated by Luther Burbank. Fruit large to very large; skin glossy coral red; flesh yellow, moderately firm and delicious; said to be one of the most highly flavored plums.

Apple. Another of Burbank's novelties; named from its close resemblance, form, color and rare keeping qualities; flesh firm, pale red with marblings and streaks of pink. A valuable acquisition to the list of Japanese plums; ripens after Burbank.

Bartlett. One of the best of Burbank's recent introductions. Said to be wonderfully productive; a very ornamental tree with glossy green leaves, resembling very closely the famous Bartlett pear in habit of growth, flavor and fragrance. Fruit oval, yellow, turning to deep crimson when fully ripe; flesh light salmon colored, firm and juicy; ripens before Burbank.

Chalco. A cross between Simoni and Burbank, resembles the former variety very closely but said by the originator, Luther Burbank, to be by far superior to it. A tremendous grower and very prolific. A superior shipping plum, as it ripens and keeps well when picked green. Will eventually supplant the Simoni, thriving and bearing where that variety is a failure.

Climax. This is well named the "King of Plums," its extreme earliness, immense size, high color, delicious flavor and fragrance, places it in the lead among early shipping plums. Fruit heart-shaped; color deep, dark red; flesh yellow. Tree vigorous and remarkably productive.

Sultan. Said by the originator, Luther Burbank, to be one of the most attractive of plums; its huge size, deep purplish crimson color render it a valuable market variety. The flesh is very firm, fragrant, sweet, dark crimson, clouded and shaded with pink, salmon and light yellow. Tree is a very rapid grower with wood and leaves very much like a Royal Anne Cherry.

GENERAL COLLECTION.

Bavay's Green Gage. An excellent foreign variety; fruit large, greenish-yellow; flesh yellow, juicy, melting, rich; August.

Burbank. Introduced by Mr. Luther Burbank, of Santa Rosa, Cal., and considered to be the best of over forty Japan plums tested by him. Fruit is large, nearly globular; clear cherry-red, with lilac bloom; flesh deep yellow, very sweet, with a peculiar and most agreeable flavor; tree very vigorous, often commencing to bear when only two years old.

Bradshaw. Large; reddish-purple; juicy and pleasant; adheres partially to the stone; July.

Cherry Plum. Small; lively red, light bloom; flesh greenish, soft, with a pleasant sub-acid flavor; June.

Clymen. Originated in Napa Valley; mottled, reddish-purple, with beautiful blue bloom; free stone; flesh firm and sweet; two weeks earlier than the Peach Plum, which it very much resembles, only it is not quite as large. Very valuable for shipping. Tree very prolific and a strong grower; June.

Coe's Late Red. Medium, round; dark red; rich, vinous flavor; hangs on the tree a long time; October.

Coe's Golden Drop. Large; light yellow; flesh sweet and delicious; adheres partially to the stone; tree very vigorous; September.

Columbia. Largest size, nearly globular; brownish purple, dotted with fawn-colored specks; rich, sugary and excellent; separates freely from the stone; August.

Duane's Purple. Very large; reddish-purple; flesh yellow, sugary; separates from the stone; August.

Early Golden Drop. Small, bright yellow, sugary; June.

General Hand. Very large, oval; deep yellow, moderately juicy, sweet and good; parts freely from the stone; August.

Giant. Introduced by Luther Burbank; raised from the seed of the Petite d'Agen, pollinated with the Hungarian Prune. Tree is a handsome, strong, vigorous grower; leaves very large, so the fruit is well protected. Fruit large to very large; flesh yellow, flavor good; freestone.

Grand Duke. A valuable addition to late plums; skin dark, almost blackish-purple; flesh greenish-yellow, adhering closely to the stone; has a sweet and rich flavor when fully ripe; September.

Green Gage. Small; round, flesh pale green, melting and juicy, separates freely from the stone; one of the best flavored plums; July.

Ickworth Imperatrice. Above medium size, obovate; skin deep purple, traced and embroidered with streaks of golden-fawn color; flesh greenish-yellow, sweet, juicy, and rich; adheres slightly to the stone. A valuable late variety; its firmness and fine keeping qualities, render it worthy of more general cultivation.

Imperial Gage. Above medium size; oval, pale green, tinted with yellow; very juicy and rich; fine for canning; August.

Jefferson. Large; yellow, reddish cheek when exposed to the sun; one of the best for canning; one of the most desirable and beautiful of all dessert plums; parts freely from the stone; tree a slow grower, but very productive; August.

Kelsey Japan. Very large, heart-shaped; color green, changing to rich yellow, nearly overspread with bright red when fully ripe and covered with bloom; flesh yellow, very firm and adheres slightly to the stone which is very small; tree an immense bearer and very ornamental; July to October.

Peach. Very large, shaped like a peach; skin brownish-red, flesh pale yellow, slightly coarse grained, but juicy; separates freely from the stone; very valuable for shipping, always commanding a high price.

Red Egg. Large, oval; pale red, changing to deep red in the sun; flesh coarse, sub-acid flavor; July.

Satsuma. (Blood Plum.) Large, globular, color dark red bloom, skin of a lilac shade; flesh dark red, solid color from skin to pit, firm, rather juicy, good flavor; pit very small; July.

Shropshire Damson. Superior to the common Damson; tree better grower and bearer; dark purple; best for preserves; October.

Simon Plum. (*Prunus Simoni*, Apricot Plum.) Said to be a native of Northern China; tree resembles the peach, with the exception that the leaves are of a lighter shade; a very vigorous upright grower; fruit large, of a cinnabar color, flattened at both ends; flesh yellow, firm, rich, sweet with a marked pineapple and faint banana flavor; pit very small. One of the best of the foreign plums, its high color, delicious flavor and earliness combine to make it one of the best plums for eastern shipments; early July.

Victoria. Large, round; yellow, shaded red in sun; good flavor; very productive; one of the best plums in cultivation; August.

Washington. A fine, large plum; skin dull yellow, with a pale crimson blush; flesh yellow, firm, very sweet and luscious; separates freely from the stone; August.

Wickson. Originated with Mr. Luther Burbank, of Santa Rosa, Cal., and considered by him to be among the best of the Japan plums. The tree is a strong, vigorous upright grower, even more so than the Simon Plum, which it very much resembles in habit, except that the leaves are much broader. It is a cross with Satsuma on Kelsey bloom. Formed like the Kelsey, but more symmetrical; in ripening the color changes from a deep cherry red to a rich claret; flesh amber, very juicy; pit is small; the flavor is striking and agreeable; a valuable shipping plum.

Yellow Egg. Very large; skin of a deep golden color, covered with a white bloom; juicy, but rather acid; an excellent variety for cooking; very showy, and when fully ripe a most attractive dessert plum.

THE PRUNE.

Prunes, as all experienced horticulturists know, are the dried product of certain varieties or plums, though in the nursery trade the word has a significance of much wider application, meaning the commercial growing of these certain varieties as an independent fruit. The same general remarks as to soils and climates given under the heading of Plums, apply to prune culture. The production of this fruit is one of the chief industries of this state; our prunes are sweeter than the imported and are in every respect superior to them, and today the United States is exporting prunes, particularly the larger sizes, to Europe. The river bottom lands in the San Joaquin Valley are admirably adapted to their successful production.

NEW VARIETIES.

Sugar. This new creation of Burbank's has probably attracted more attention among horticulturists than any other prune of recent introduction. It possesses all the good qualities of the French, with its bad points entirely absent. The fruit runs very even in size, grows from three to four times as large. It ripens fully a month earlier than the French prune and this fact alone makes it a valuable acquisition. but add to this its high percentage of sugar in the fresh fruit, averaging 23-92 per cent. as compared with 18-53 per cent. in the French Prune, it combines qualities which will cause it to entirely supersede that variety. The tree is a vigorous, strong grower, and having unusually large foliage it ought to prove very valuable in the interior valleys. Skin very tender dark purple when mature, covered with a thick white bloom. Cures as easily as the French Prune; flesh is yellow, tender and rich.

Imperial Epineuse. (Imperial) The tree is a strong, thrifty, sturdy grower, and in habit very closely resembles the French Prune. The fruit is very large, and of uniform size on the tree, of a violet-purple color, with dark blue bloom; flesh greenish-yellow, and exceedingly sweet; pit small. It ripens earlier than the French Prune, and when dried is quite dark, and is in every respect fully equal if not superior to the French Prune in flavor and sweetness, and in size it is far ahead of it.

GENERAL COLLECTION.

Fellenberg. (Large German Prune, Swiss, Italian Prune.) Medium, oval, tapering at both ends; dark purple; flesh greenish-yellow; separates freely from the stone; August.

French Prune. (Petite Prune d'Agen) Medium sized, egg shaped; violet purple; sweet, rich and sugary; very productive. This is the standard variety for drying, and has been more extensively planted than any other; September.

German Prune. (Quetsche.) Long, oval; skin purple; covered with blue bloom; flesh green, sweet; separates from the stone; September.

Hungarian Prune. (Pond's Seedling, Grosse Prune d'Agen.) Large, ovate; skin thick, reddish-violet, with numerous brown dots; juicy and sweet, tree a strong grower and good bearer; its large size, showy appearance, render it a profitable variety for shipment for home and distant markets.

Robe de Sargent. Fruit medium size, oval; skin deep purple approaching to black and covered with a thick blue bloom; flesh greenish-yellow, sweet and well flavored, sugary, rich and delicious, adhering slightly to the stone. This variety makes a larger, darker colored dried prune than the Prune d'Agen and is valuable both for drying and preserving.

Silver Prune. Seedling of Coe's Golden Drop; it is claimed that the tree is more vigorous and productive, while the fruit is larger and superior to its parent; excellent for drying; September.

Tragedy. Originated in Sacramento county; medium; resembles Duane's Purple, but is more elongated; skin dark purple; flesh yellowish-green; very rich and sweet; parts readily from the pit; ripens in June. Tree a rapid grower and very productive. Valuable on account of its earliness and as a shipping fruit.

Our supply of genuine Smyrna fig trees is unusually fine in quality this year, and we feel that intending planters will only be consulting their own interests by writing us before placing their orders.

THE APRICOT.

A fruit intermediate between the peach and the plum, and particularly adapted to California conditions. As a commercial proposition, this State has practically a monopoly in apricot culture, as no other section of the Union produces it in commercial quantities at so small an expense and at so little risk of failure in crops. It finds its best development in Coast counties and in the interior valleys, though on low land it is at times apt to suffer severely from the cold. Owing to the success with which it can be budded to different stocks, it is afforded a wide range in the matter of soil, moisture and climate, and in the production of our trees, we have given particular attention to the different root stocks calculated to overcome any local drawbacks in this regard. Being a rampant grower, the pruning knife and saw must be constantly, and often severely applied. There are a number of systems employed by the best growers in different localities, each good in its own environment, the particulars of which are to be learned in Wickson's "California Fruits and How to Grow Them." It is indeed a delicious fruit; ships well and commands a good price in the eastern market. For drying and canning there is nothing superior to it.

NEW VARIETIES.

Smyrna. This new variety was introduced by our Mr. Geo. C. Roeding in 1901. It was found growing in the garden of Dr. Rufus W. Lane, American Consul in Smyrna. The fruit is large to very large, resembling in shape the Hemskirke; flesh is bright orange yellow, juicy and sweet, parts freely from the stone; the remarkable fact about it is, that the kernel is sweet, having all the properties of an almond, the Prussic acid taste being absent entirely. Very highly valued in Smyrna, and it will, no doubt, be a valuable addition to our list of apricots here, with everything in its favor to be successfully grown, due to the similarity of our climate to that of Smyrna.

Tilton. Originated by Mr. Tilton of Le-moore, Kings county, California. Said to be an abundant and prolific bearer; the original tree having never failed to bear heavily each season; in general appearance the fruit resembles the Routier's Peach, but it is somewhat smaller, more rounded and firmer than that variety; the flesh is of a light orange-yellow color, adheres slightly to the stone; flavor excellent and will no doubt be a good shipping sort; already much in demand by the canners.

GENERAL COLLECTION.

Black Apricot. Small, light purple color; flesh yellow, juicy and sweet.

Blenheim. (Shipley) An excellent variety and in great demand. The trees are early and regular bearers and have an abundance of foliage thoroughly protecting the fruit. Fruit above medium, oval; orange color, with deep yellow; juicy and rich flesh; June.

Hemskirke. Large, roundish; flesh bright orange, tender and juicy, with a rich plum like flavor; fruit not quite as large as the Moorpark, but ripening more evenly.

Large Early Montgamet. A large apricot of French origin; resembles the French apricot in shape and appearance. The tree is a striking grower and it is easily distinguished from all other varieties by its long slender branches which have a weeping tendency; the fruit is large, compressed, and of a deep golden yellow color.

Moorpark. Very large; yellowish-green, brownish-red on the sunny side, marked with numerous dark specks and dots; flesh bright orange, parts freely from the stone; fine for canning and drying. The most popular variety in the Northern Coast counties.

Newcastle Early. Originated by C. M. Silva & Son, of Newcastle, California. Medium, round, and two weeks earlier than Royal. A good shipper and very valuable on account of its earliness.

Pringle. Of California origin; small, cling-stone; worthy of cultivation only for its earliness; should not be extensively planted.

Royal. French origin; fruit medium, oval, slightly compressed; dull yellow, with red flush on side exposed to the sun; flesh pale orange, with rich, vinous flavor; very desirable in all parts of the State, and more extensively planted than any other variety; excellent for canning and drying; June.

Routier's Peach. (Peach, Bergetti's French) Fruit very large, rather flattened and compressed on its sides, with a well marked suture. Skin orange-yellow, flesh of a fine saffron yellow color, juicy, rich and highly flavored. This apricot is a valuable acquisition, and we take pleasure in recommending it, as one of the very best apricots in existence. When dried it is of a deep golden-yellow color. Its large size, fine color, render it very attractive in the dried state.

St. Ambrose. A large, early apricot, earlier than the Moorpark; deep yellow color; flesh sugary and juicy; good for drying or canning; July.

Spark's Mammoth. A new apricot originated in Ventura county, by W. W. Sparks. The fruit is of an extra large size, with the skin of a pale lemon-yellow color. Flesh clear yellow, very tender, juicy and sweet. Excellent for drying and canning and very popular in Ventura county.

THE PEACH.

The peach, like the prune and apricot is indeed a fruit of commercial importance to economic horticulture, and finds wide distribution not only in California, but throughout the length and breadth of the Pacific slope. For size, flavor, color and "standing" shipping qualities the peaches grown in this State have a national reputation. The tree prefers a light, deep, sandy loam, preferably inclined to be dry rather than too moist, but well drained. It should be not less than three or four feet deep, the more depth the better. Prior to planting the ground should be well broken and plowed deep. The trees are usually set 20 to 25 feet apart. The tree must be headed low and should be systematically pruned, thus forming a stocky growth of trunk and limb capable of sustaining a large crop. The fruit, as a general proposition, should be thinned out severely in order to conserve the vital forces of the tree, and enhance the quality of its product. This should be done when the fruit has set well and before the kernel has formed.

NEW VARIETIES.

Admiral Dewey. Ripens at the same time as the Triumph, but is said to be far superior to it. It is a perfect freestone, has better form and brighter color; flesh is yellow, of uniform color and texture to the pit. The tree is a strong symmetrical grower and fully as hardy and productive as the Triumph. Said to be the very best early yellow freestone in cultivation.

Crosby. (This is an Iron Clad Peach.) The tree is of low spreading habit, inclined to dwarf. The fruit is large, almost globular in form and deeply divided by a broad suture; bright orange-yellow, splashed with streaks of carmine on the sunny side. Pit small; a freestone; flesh juicy and sweet. Ripens between Early and Late Crawford. This variety has fruited with us; its firmness, fine appearance, globular form, will make it valuable for shipping as well as for drying. Worthy of trial.

Sneed. Said to be fully ten days earlier than Alexander. Large, creamy-white, with blush cheek; flesh tender, juicy, melting and delicious; clings slightly to the pit. A valuable early peach.

Triumph. Ripens with Alexander; blooms late and tree is a strong thrifty grower. The fruit is of large size, with very small pit; surface yellow, nearly covered with red, and dark crimson in the sun; flesh bright yellow, juicy, sweet and of excellent flavor.

GENERAL COLLECTION.

The time of ripening is given for the interior valleys; on the coast it is from ten days to two weeks later. All varieties which are not designated as clingstones are free.

Alexander. Large; greenish-white, with deep maroon shade; juicy and sweet; one of the standard sorts.

Australian Saucer. Medium flat, hollowed like a saucer on one side, hence the name. Skin white, shaded crimson in the sun; flesh white, sweet, delicious flavor; pit very small, almost round; an oddity for home consumption only; July.

Bilyeu's Late. Originated in Caroline county, Maryland. A very late peach, ripening in October. Large; color white, with a beautiful blush cheek; flesh white; coarse but sweet; an excellent shipper.

Blood Cling. Fruit medium; skin downey, clouded and streaked with purplish-red; esteemed for pickling and preserving; July.

Brigg's Red May. Originated with J. B. Briggs, of Marysville; fruit medium to large; skin greenish-white, with rich red cheek; flesh greenish-white, melting and juicy; a standard early variety, and the one most extensively planted in this state. Middle of June.

Early Imperial. Originated by W. W. Smith, Vacaville. Fruit medium, deep yellow, with dark red cheek; flesh rich, juicy and very firm. A very highly colored peach and remarkable for its firmness. Ripens with Hale's Early. Its rich color and earliness combined will make it one of the most profitable varieties for early shipment.

Early Crawford. Very large, oblong; skin yellow, with fine red cheek; flesh yellow, very sweet and excellent; middle of July.

Elberta. Introduced from Georgia. A cross between Crawford's Early and Chinese Cling; very large; bright yellow with a beautiful mottled red cheek; flesh yellow, juicy, sweet; tree a uniform and regular bearer and strong grower. Fruit very showy and a perfect freestone. One of the best market varieties, selling at double the quotations of other peaches. Ripens last of July.

Foster. Large; yellow, becoming very dark and earlier than the Early Crawford and superior in many points; flesh is firmer, without so much red at the stone, which is smaller; one of the very best for drying, market or canning.

George's Late Cling. Originated in Sacramento; large yellowish-white, splashed with red; flesh firm, juicy, white, colored around the pit; of rather inferior flavor; tree a tremendous bearer and strong grower. Fruit ships and keeps well, and on account of its beautiful appearance sells readily in the Eastern markets; middle of September.

Hale's Early. Medium to large; skin greenish, mostly mottled with red; flesh white, juicy, and sweet; good for shipping; early in July.

Heath Cling. A most delicious Cling. Very large; skin downy, creamy white, with faint blush of red; flesh white, slightly red at the pit; very tender, juicy and sweet; valuable for canning; season early September.

Late Crawford. Very large; roundish; yellow with dark red cheek; flesh deep yellow, juicy and melting; flavor rich and excellent; very popular, valuable for canning and drying. Worthy of extensive cultivation; ripens middle of August.

Levy's Late or Henrietta Cling. A magnificent cling of large size; skin a deep yellow, a shade of rich brownish-red in the sun, flesh deep yellow, firm, juicy, sweet, half melting, slightly vinous. Latest of all clings and highly esteemed for canning and market; middle of September.

Lovell. A California seedling; large, almost perfectly round; flesh yellow to the pit, firm, and of excellent quality; a superb canning and drying peach and more in demand by the canners in recent years, and commanding a much higher price than any other variety of freestone peach. Worthy of extensive cultivation; ripens a few days after Muir.

McDevitt's Cling. Originated with Neal McDevitt, of Placer county. Very large; rich, golden-yellow, becoming quite red when ripe; flesh yellow, firm and of superior flavor; excellent shipper; last of August.

McKevitt's Cling. A California seedling introduced by A. McKevitt, Vaca Valley; white; flesh firm, rich, sugary and highly flavored, white to the pit; excellent for shipping and canning. Tree a remarkably strong grower and not subject to curl; early in September.

Morris White. Fruit large; oval; skin greenish-white, with a creamy tinge when fully ripe; flesh white to the stone, firm, sweet and juicy; good for canning or drying; August.

Muir. Large to very large; perfect freestone; flesh clear yellow, very dense, rich and sweet; pit small; fruit a good shipper and canner and peculiarly adapted to drying because of its exceptional sweetness and density of flesh; ripens first week in August.

Persian Cling. Originated in Visalia, probably from the seed of the Heath Cling. Very large; clear, white skin; flesh white to the pit; very firm and sweet; a most delicious canning peach. Tree a strong grower and a heavy bearer. Much superior to the Heath Cling and worthy of extensive cultivation; ripens a few days later.

Phillips' Cling. Fine, large; yellow; flesh firm, clear yellow to the pit which is very small. Preferred by canners to any other variety of Cling; its firmness, fine texture of flesh and lateness, not ripening until September, when other Clings are practically harvested, makes a demand for this variety far beyond the supply.

Picquet's Late. Large and handsome; skin yellow, with red cheek; flesh yellow, melting, sweet and of the highest flavor, a very valuable peach; early in September.

Ringold Mammoth Cling. (Wilkins' Cling.) Very large; skin lemon-yellow; flesh clear white to pit; sugary, rich and delicious; tree very rapid grower and productive; the finest flavored of all clings when preserved; middle of September.

Runyon's Orange Cling. Originated with Mr. Sol. Runyon, on the Sacramento river. Fruit very large, yellow, with a dark crimson cheek; flesh golden-yellow, rich and sugary, with a vinous flavor; tree an immense bearer, and is not subject to mildew like the common sort; a splendid fruit for shipping, canning or drying; early August.

Salway. A large peach of English origin; creamy-yellow with a brownish red cheek; flesh deep yellow, red at the pit, rich and sweet; a standard late peach, growing more and more in favor with the orchardist; middle of September.

Sellers' Orange Cling. Very large; rich golden color; one of the very best Clings; ripens with Late Crawford; following a few days after Runyon's.

Strawberry. Medium size; white, marbled with dark red; flesh white, red near the pit; juicy, with a rich, delicious flavor; July.

Susquehanna. Large, nearly globular; skin rich yellow, nearly covered with red; flesh yellow, sweet, juicy, with rich, vinous flavor; tree a strong grower; branches very tenacious, requiring a heavy crop of fruit without breaking. Very valuable for this valley and even superior to the Late Crawford; ripening a few days later.

Tuscan Cling. (Tuskena, Yellow Tuscan.) A very large yellow cling; the earliest fine cling; flesh juicy and of fine flavor. A good shipping and canning peach and very desirable on account of its earliness, ripening with the Early Crawford.

Van Buren Dwarf. Tree very dwarf and ornamental, and on this account valuable for very small gardens; fruits medium size; skin yellow, shaded red; flesh yellow and of fine quality; ripens middle of August.

Ward's Late Free. Large, roundish; skin white, with beautiful crimson cheek; flesh white, juicy, rich; September.

Wheatland. Very large, round; yellow shaded red; flesh yellow, firm, melting, juicy, rich, sweet; tree a rapid grower and heavy bearer; fruit ripens between the Early and Late Crawford; one of the largest and finest flavored free-stones and superior to either of these varieties; excellent for shipping, canning or drying.

Wonderful. Large, almost globular; slightly pointed apex; uniform size and shape; rich golden-yellow, overspread with carmine; flesh firm, yellow, delicious and highly flavored; a good keeper; one of the best for shipping; September.

Yellow St. John. A favorite southern sort. Large, orange-yellow, with red cheek; juicy, sweet and highly flavored; ripens early in July.

THE NECTARINE.

As it is becoming better known, this delicious fruit is being extensively planted every year. As a dried fruit it is far superior to the peach and as a preserve it has few equals. Some varieties stand shipment well and being a novelty in the eastern markets, command good prices. It should be handled in the same manner as the peach.

Advance. Large, round; skin green, blotched with red and brown on sunny side; flesh greenish-white and sugary. Its earliness, large size and productiveness makes this variety a valuable acquisition.

Boston. Large, oval; bright yellow, with deep red cheek; flesh yellow, with a pleasant sub-acid flavor; tree a shy bearer; July.

Humboldt. Very large; skin bright orange-yellow, streaked and mottled with dark crimson in the sun; flesh orange, very tender and juicy. The only yellow nectarine outside of the Boston; by far a superior variety.

New White. Large; skin greenish-white; flesh white, tender, juicy; stone small and free; one of the best varieties for drying; July.

Stanwick. Very large, often as large as a peach; skin pale, greenish-white, shaded into deep rich violet in the sun; flesh white, tender, juicy, rich, sugary and delicious. For drying and shipping not excelled by any other variety; August.

The Smyrna Quince. Reduced one-third natural size.

THE QUINCE.

A standard fruit which has held its own without material modification for upwards of a hundred years. It likes a deep and loamy, moist soil. Its distribution is quite general, doing well along the Coast and in the interior, where there is sufficient moisture or irrigation is practicable. Though not of equal importance with the peach and apple, nevertheless a few trees should find a place in every family orchard. To cut the new growth back about one-half is deemed good practice, and certainly has a tendency to develop strong umbrageous trees.

NEW VARIETIES.

Pineapple. Originated by Luther Burbank. The name comes from the flavor, which is suggestive of the pineapple. The fruit

in form and size resembles the Orange quince, but is smoother and more globular. Makes a superior jelly; can be eaten raw and is said to cook as tender in five minutes as the best cooking apple, possessing a most exquisite and delicious flavor not equalled by any other quince.

Smyrna. This remarkably fine quince was introduced by us from the Aidin District, near Smyrna, in 1887. The tree is a rapid, strong grower, and immensely prolific, and is especially adapted to the interior valleys, on account of its heavy foliage. The fruit is very large, and of a lively yellow-lemon color, presenting a fine appearance. The flesh when cooked is very tender, having a delicious flavor, and most pronounced quince taste and odor. It ripens about the same time as the Orange Quince, and as a keeper it cannot be surpassed. Preferred by us to all other varieties, and worthy of extensive cultivation.

GENERAL COLLECTION.

Apple or Orange. Large; fine golden color; valuable for preserves or flavoring; very productive, the most popular variety; September.

Champion. Large to very large; skin strongly russeted around the stem; below a lively yellow; flesh cooks very tender, flavor is most delicious. More productive than the Orange, ripening two weeks later.

Chinese. A most extraordinary fruit; oblong, of immense size, often weighing from two to two and a half pounds; a very distinct grower.

Rea's Mammoth. Of recent introduction, a strong grower, and very productive.

West's Mammoth. A very fine quince, large and without hard spots or cores; originated in Stockton by W. B. West.

NUT FRUITS.

THE ALMOND.

Trees and shrubs bearing edible nut fruits have long been cultivated for the value of their product as a food for man, as well as for their oils used chiefly for culinary purposes. The list is quite extensive, and has proven a valuable adjunct to the horticultural wealth of the State. The assortment of varieties propagated on the grounds of the Fancher Creek Nurseries, embraces those sorts which have been tested under California conditions and not found wanting.

Chief among these and first in alphabetical order must be mentioned the Almond, thought to be native of the Mediterranean regions. Budding and blooming early it is quite apt to be nipped by early spring frosts when subjected to the low lands or colder regions of the state. It requires a light, warm, well drained situation, because keenly sensitive to "wet feet." In the San Joaquin valley it does well, yielding good crops where the situation meets its requirements, and hence should be more extensively planted. In training the tree it should be headed low, particularly during its early stages of growth up to, say the third year, when it will require less attention from the pruning knife and saw. Most of the European varieties tried have proved a failure in all localities, and we therefore recommend the planting of California sorts, which bear much more regularly.

NEW VARIETY.

The Jordan. This new sort is the famous Spanish variety so long sought after by nut growers. First introduced by John Rock, of Niles, and later by the United States Department of Agriculture. The name is a corruption of the French word "jardin," meaning simply "garden" almond. The nuts are long and are hardshells; the kernels are single, narrow, long and plump; the kernel is always removed from the nut proper, when exported. In this form they bring from eight to ten cents more per pound than any other variety. The tree is a strong thrifty grower and heavy bearer and will probably do much to give almond growing in California a strong impetus.

GENERAL COLLECTION.

Drake's Seedling. Originated with Mr. Drake, of Suisun, California; of the Languedoc class; bears abundantly and regularly where the Languedoc is a total failure.

Harriott's Seedling or Commercial. One of the largest of all almonds; originated in Visalia, California, where the original tree bears regularly and abundantly; shell softer than the Languedoc; nut long, quite large, kernel sweet; this tree is one of the finest ornamental trees, having a fine dense head; makes a very handsome avenue tree.

I. X. L. Tree a sturdy, upright grower, with large leaves; nuts large; shells easily, no machine being needed, nor is any bleaching necessary; shell soft but perfect. It bears heavily and regularly. Highly recommended by all orchardists who have tried it.

Languedoc. The best of the foreign varieties yet tried in California; nut large; kernel sweet.

La Prima. The latest of Mr. Hatch's introductions. Tree a very uniform and symmetrical grower; nut resembles Ne Plus Ultra, but averages somewhat larger in size, not borne in clusters, but evenly distributed throughout the tree.

Lewelling's Prolific. Originated with the late John Lewelling; tree a great bearer; of drooping habit; nut large and good; soft shell; hull free.

Ne Plus Ultra. Introduced by Mr. A. T. Hatch. Tree a rapid grower; leaves rather large; a heavy and regular bearer; nuts large and very long in shape; soft shell; hulls free.

Nonpareil. First called Extra. Of a weeping style of growth, smaller foliage than the I. X. L., but still forms a beautiful tree; an extraordinarily heavy and regular bearer, with very thin shell, of the Paper Shell type. One of the best.

Paper Shell Pecan. Single nut to the left natural size.

THE BUTTERNUT.

The *Juglans cinerea* of the botanists. A native of the Eastern states, of vigorous growth, spreading head; grayish colored bark, and foliage resembling that of the *Ailanthus*. Produces a large, longish nut, prized for its sweet, oily, nutritious kernel.

Grapes are a specialty with us, and just at present we are paying particular attention to the resisters of the phylloxera.

THE CHESTNUT.

Experience shows that a large area of California will successfully grow chestnut trees, particularly if the soil be of a heavy, clayey texture. If headed low to the ground, will produce large crops of fruit regularly; all failures to successfully grow them can be traced to the sunburn of the exposed stem. Beyond its economic value for its fruits, the tree possesses advantages for wayside plantings.

American Sweet. Nuts superior and sweeter than any of the large European nuts, but only one-third the size; very fine as a shade tree.

Italian or Spanish. Introduced from Europe strong grower and very productive, and valuable both for ornament and fruit. Nut much larger than the American Sweet.

Japan Mammoth. Immense size, and of fine flavor; the burrs contain at times as many as five large nuts; the tree is similar in habit and growth to the Italian Chestnut; it yields fruit in two years after planting; seedlings vary in size and shape as well as habit of growth and productiveness, and are not so reliable as grafted trees.

Marron Combale. A large nut, sweet and highly flavored; trees stand the sun well. The wood is of a yellowish brown color the leaves narrow and very glossy.

Marron de Lyon. The largest of Marrons; fruit roundish; sweet; of Freuch origin.

Numbo. Originated with Mahlon Moon, Morrisville, Pennsylvania, from seed of an imported tree. Tree a good grower; close, compact head; nuts large handsome and as fine flavored as any large chestnut.

Paragon. Originated in Germantown, Philadelphia, Penn. Tree hardy, spreading, vigorous, very productive; burr very large; nut large; three to five in a burr; kernel fine-grained, sweet and of good quality. Said to be the most widely planted and the most uniformly successful variety in the United States.

THE FILBERTS OR HAZELNUTS.

In habit shrub-like trees, of which there are numerous varieties in cultivation in Europe for their edible nuts. Also valuable for shrubberies; thrive in most any soils. Said to do better when given northern exposure along the Coast Range. Our collection comprises many of the best European and American sorts.

THE HICKORY.

Shell Bark or Shag Bark Hickory. The tree is of a sturdy, upright, lofty growth, and the wood, due to its great strength and elasticity, is in great demand for making agricultural implements. The nuts have a peculiar, rich, nutty flavor, equaled by no other variety.

No nursery establishment in the West offers a better or a more varied stock of olive, fig, citrus, and other fruit trees than we do.

THE PECAN.

A rapid growing tree, attaining a height of 170 feet in its natural habitat. In form and contour conspicuous and attractive, producing valuable timber, and a great abundance of smooth, oblong nuts, with sweet and delicious kernels.

Papershell Pecan. Originated in Texas. The finest of all pecans and in every way far superior to the ordinary Pecan. Nuts are larger, shell thin, easily crushed by taking two in the hand; very full of meat, which is rich and sweet and easily removed from the shell.

THE PISTACHIO.

The culture of this nut in California gives promise of developing into quite an industry. The U. S. Department of Agriculture is taking an active interest in introducing some of the best sorts from southern Europe.

Pistacia vera. The Pistachio nut of commerce, used largely in confectionery and for flavoring. A dwarf tree, producing a nut similar to the almond, but green in color and very delicious to the taste.

THE WALNUT.

Among the edible nuts grown in California, none equal in commercial importance the walnut (*Juglans regia*.) Under favorable conditions of soil and climate the tree attains an immense size, specimens some sixty feet high, with a spread of fully one hundred feet, being often conspicuous features of the landscape. It prefers a rather loamy, deep, rich soil, finding its greatest luxuriance in the bottom lands in the coastwise regions of this State. No nut yields larger and more profitable returns than the walnut, the tree is practically free from insect pests, and when once established it requires little care as far as pruning is concerned. Good and thorough cultivation is necessary for activity in the growth of the tree, causing it to respond with bountiful crops. Its geographical distribution is indeed wide, embracing the colder regions, the sub-tropical and even parts of the tropical belt in the mountainous regions.

Many varieties are grown from seed and in most instances, where the seeds are carefully selected, reproduce nuts, fully equal in quality and in thinness of the shell

to the parent. It is a well known fact, however, that there is always more or less variation in seedling trees, and we are, therefore, devoting considerable time and care to the working of the standard varieties of the commercial walnuts on the California Black Walnut. (*Juglans nigra*) root. This tree is

The Placentia Walnut. Reduced one-third.

a stronger, more vigorous grower, and adapts itself to a wide range of locations. It is said to have a decided influence on the soft-shell walnuts, causing them to grow more vigorously, bloom later, thus escaping the late frosts in the spring. In addition to this, grafted or budded trees will be found to be true to the parent tree. Indifferent success has been met with in grafting and budding the walnut thus far, so that the demand has always far exceeded the supply. Years of careful manipulation in this class of special work places us in a position to supply all varieties on demand.

Much of the difficulty in getting walnuts to bear can be attributed to the male blossoms maturing either before or after the female flowers are in the receptive stage. The walnut, pecan, and in fact, all the nut trees, outside of the almond, are monoecious or bisexual; that is, the flowers of both sexes although produced on the same tree, do not occur in the same flower. To overcome this trouble, when planting an orchard, not more than two or three rows of a variety should be planted together, or the rows can even be alternated, and by following out this plan, it is almost a certainty that this barrenness can be overcome.

Many of the French sorts being late bloomers, find congenial situations in many sections in the northern counties of the State. Experienced growers have learned

that the best results are obtained when walnuts are planted not closer than 40 feet apart, and on exceptionally rich soil 50 feet is preferable, for as the tree matures it makes a wide spreading top, so that it is no uncommon sight to see branches even at the latter distance interlacing.

NEW VARIETY.

Placentia Perfection. Originated by J. B. Neff, of Anaheim, California, being a chance seedling from the Santa Barbara Soft Shell. He describes it as follows: "The tree is a very vigorous grower, in fact, so much so is this the case that it is sometimes difficult to train in symmetrical form. The fifth year from planting it commences to produce nuts in abundance, and it then assumes a good habit of growth. It is a remarkably upright grower and when properly trained can be headed as low as 3½ feet from the ground. Blooms from six to ten days later than other varieties, and the staminate and pistillate blossoms appear at the same time, thus insuring fertility. The nuts are elongated, smooth and very white, being almost as white as the best bleached nuts; shell of medium thickness; meat white, plump and sweet; husks part from the nut readily, leaving it perfectly clean. We consider this nut a valuable acquisition and believe it will be found to be far more profitable than the Santa Barbara Soft Shell."

GENERAL COLLECTION.

A Bijou. (Large Fruited.) Nuts enormous the largest of all walnuts; thin shell, kernel very sweet; worthy of extensive cultivation.

Chaberte. A French variety; bears very fine regular-shaped nuts of excellent flavor. Tree very productive; blooms late.

Cut Leaved. A distinct variety, with large, deeply-cut foliage; nuts of medium size, round, with very smooth shell and sweet kernel.

Ford's Improved Softshell. Grown from seed of the Santa Barbara Softshell, from selections made in 1880 by George W. Ford of Santa Ana, California. The trees are abundant croppers, the nuts are more uniform in size and form; brighter and smoother than the parent, and much superior, in thinness of shell and quality of kernel. The nuts sell for several cents a pound more in the market than the Santa Barbara.

Franquette. Nut very large and long and commended for its size and quality; blooms late.

Mayette. Large; full fleshed and sweet nut; one of the best for dessert. Very late in budding out in the spring; suitable for frosty places.

Parisienne. A beautiful nut with full fleshed kernel. Blooms very late. Originated in the southeast of France, and named "Parisienne" in honor of the capital of France, on account of its beauty.

Praeparturiens. Fruits when very young, very productive, producing large crops regularly; flowers late and is therefore not affected by frosts.

Santa Barbara Soft Shell. Originated by Joseph Sexton of Santa Barbara, Cal. The nut is large, shell thin, so that it is readily broken by the hand. The kernel is white, full and sweet. The favorite variety in the southern part of the State.

Weeping Walnut. Droops like a willow, hence the name; highly ornamental; good bearer and good nut.

NATIVE VARIETIES.

American Black. (Eastern Black.) Usually designated by the latter name in this State to distinguish it from the California Black. Attains great size and is of majestic habit; valuable for its wood as well as its nuts, and deserving of extensive cultivation; bark very dark and deeply furrowed; foliage beautiful; nut round.

California Black. A native of this State; a rapid growing tree, bearing a nut with a very hard shell.

JAPANESE VARIETIES.

Cordiformis. The tree is a rapid grower and bears at four years from the seed, and is said to attain a great age. As a dessert nut it has few superiors; the kernels are of a peculiar heart-shape which can be readily extracted whole by boiling the nuts for about five minutes and cracking them while still hot. The meat is very sweet and is used very extensively in the form of candied nuts.

Sieboldi. Tree is very vigorous and of handsome form, with immense leaves, having a charming shade of green; the nuts are produced in clusters, shell smooth and much thinner than the native American Walnut; the kernel is sweet, has the flavor of the butternut, but is less oily.

Palms and Roses are specialties with us; our assortment is consequently full and complete. For verification of this statement see the division of palms and roses appearing elsewhere in this catalogue.

SMYRNA FIG OF COMMERCE

No one thing of recent years is fraught with so much that is full of promise and future greatness to California horticultural wealth as the successful introduction of the genuine Smyrna Fig of commerce, together with the Fig Wasp (*Blastophaga grossorum*) by this establishment. The introduction of the Washington Navel orange was certainly an event of prime importance, which has added millions to the wealth of the State, but it is hardly to be compared to the exploitation, after years of persistent effort and the expenditure of no little money on our part, of the genuine Smyrna Fig of commerce. The culture of the orange is, after all, more or less confined to the thermal regions of the State, where biting frosts are unknown, and the thermometer never goes below 22 degrees, and that only for brief periods, for a prolonged cold spell at even 26 degrees is quite apt to cause serious damage to the crop. With the fig, however, the area adapted to its culture is much wider. It can withstand 18 degrees and not suffer. Hence, its geographical distribution is much wider, and as applied to the Pacific Coast, embraces nearly all portions of this State, the sheltered sections of Arizona and

New Mexico, Southwestern Texas, the extreme Southern States, Old Mexico, the Hawaiian Islands, the Philippines and Australia. As it influences local horticultural development, the Smyrna Fig industry is an epoch-making event, destined to add millions to our rural wealth, and afford a livelihood and employment in all of its ramifications to a large portion of our population, while its introduction into other localities beyond our borders will be quite as pronounced. The reasons for the faith that is here expressed are obvious. The introduction of the Capri Fig, which serves as the home of the Fig Wasp (*Blastophaga grossorum*), which fructifies the Smyrna Fig, renders commercial fig culture feasible; the tree has a wide range of soils and climates in which it will flourish; it is of easy culture and exceptionally free from injurious insects and diseases; requires but little pruning; is a regular bearer of annual crops which are practically exempt from injury by frost, because the fruit does not set until early summer; the expense of harvesting a crop is purely nominal, as the fruit drops when ripe, thus only gathering is necessary; drying is simplicity itself, requiring

Two Striking Views in our Calimyrna (Smyrna) Fig Orchard, showing habit of Tree.

The Little Fig Wasp,—*Blastophaga grossorum*.

a, adult female with wings extended, seen from above; *b*, female, not entirely issued from pupal skin and still contained in gall; *c*, antenna of female; *d*, head of female from below; *e*, adult male; *f*, the same—all greatly enlarged.

less labor than peaches or apricots; in its dried state the fruit is not perishable, like green fruit, hence, can be held at the convenience of the grower; and, finally, the demand is much in excess of the domestic supply, thus insuring a market for years to come for home-grown Smyrna Figs at profitable prices. In this connection it is a source of gratification to this establishment to have been the cause of the successful acquisition of Smyrna Fig culture to America, and at the same time we desire to impress intending planters that ours is the only establishment in this country having a large stock of these trees now on hand ready for immediate delivery. Grown under our own personal supervision, we can guarantee genuineness in our stock as well as quality.

Caprification. According to Dr. C. V. Riley it is a botanica-entomological operation, consisting in the transfer of certain minute insects called *Blastophaga grossorum*, which develop in the seeds of the Capri Fig, to the edible fig proper, in order to secure through these insects the fertilization of the female flowers and fruit. This operation is an essential factor in connection with the growing of Smyrna Figs, for without the intervention of this little insect the Smyrna Fig never matures, but drops from the trees when quite small.

It must be borne in mind, in order to arrive at a little understanding of this subject, that the Capri Fig trees and the Smyrna trees are entirely distinct and separate, the former serving as a home for the insect while the latter produces the delicious fig so universally esteemed.

Each of these figs contain thousands of flowers, confined in a closed receptacle known as an inflorescence. Other varieties of fruit trees invariably produce flowers in which the male and female organs are exposed and which can be fertilized by the wind or through the agency of any insect which flies.

This is not the case with the Smyrna class of figs, or any of the other varieties of edible figs, for that matter, so the fertilization of the flowers can only be brought about by the intervention of this little insect (*Blastophaga grossorum*), which in its determination to enter the fig deliberately breaks off its wings in its efforts to force its way in. It has been generally admitted that the Adriatic type of figs, which mature fruits without the agency of the wasp, have what are known as mal-formed female flowers, which could not be pollinated. Experiments made in recent years have proven that this is not the case; that there are a limited number of female flowers in this family of figs, which can be fertilized, although no material change is made in the flavor or character of the fruit. The only difference being that a few fertile seeds are found in the Adriatic type.

The Calimyrna (Genuine Smyrna) Fig, natural size.

Caprification then is brought about by the *Blastophaga* carrying on its body and wings the pollen from the Profichi crop of Capri figs to the Smyrna figs in the month of June.

Capri figs have a succession of crops in the season, but there is only one, the Profichi or June crop which develops male or staminate organs.

The suspending of these figs in the Smyrna Fig trees is the only additional expense in connection with the growing of the Smyrna figs and as this, at the very outside, even in an orchard 12 to 14 years, is not over \$1.00 per acre, this item is only a nominal expense.

THE SMYRNAS.

Calimyrna. The genuine Smyrna fig packed under the name of "Erbeyli" (signifying fine fig) in Asia Minor, and known in Turkish as "Lop," and in Greek as "Lopia." Large to very large; turbinate, pyriform; very short, stalk short; ribs distinct, orifice large, of pale ochre color and widely open when the fig is mature and before shriveling; skin lemon-yellow; pulp reddish-amber, sometimes pale amber, turning to dark amber just before falling; seeds large, yellow, fertile, overspread with a clear, white syrup, giving the fruit a richness and meatiness surpassed by no other fig. Tree of spreading habit, leaves medium to large and five lobed. The dried figs contain 63-92 per cent. sugar, which is $1\frac{1}{2}$ per cent. more sugar than found in the imported Smyrna Fig. Dries readily and with less trouble and expense than any other fig, dropping to the ground of its own accord, being practically dry when it falls, requiring when placed on trays, only from two to three days exposure to the sun.

This is the world-famous fig of commerce.

See back cover page for illustration.

Bardajic. Derives its name from its close resemblance to the form of a water jug used by the people of Smyrna. Very large, obovate, acute pyriform; neck long; stalk long; skin very thin, greyish-green, ribs distinct, light grey, sprinkled with small dots of the same color; orifice deep red; pulp rich, deep crimson, seeds fertile and numerous. Tree a compact grower and of very spreading habit; leaves large and usually five lobed. A magnificent table fig and the largest of the Smyrna class.

Balachick. Maple Leaved. Medium, turbinate, rounded at apex; stem short; slight neck; no ribs; orifice widely opened, dark straw-colored; skin pale, yellowish-green; seed fertile, small. Tree of spreading habit, branches short jointed; leaves large, deeply lobed and heavily serrated; drying qualities not tested.

Black or Purple Smyrna. Small, globular, stems short; no neck; skin very thin, purplish, with prominent light greyish ribs, sprinkled with round brownish dots; pulp dark amber; a most delicious fig to be eaten out of the hand. Dries well, but too small for commercial purposes. Tree a dense compact grower, giving a shade as dense as the Texas Umbrella; leaves small, five lobed, slightly serrated.

Black or Purple Bulletin Smyrna. Fruit large to very large, obtuse pyriform, neck short, stalk long; skin light purple, streaked and ribbed with grey and sprinkled with small brown dots; pulp reddish-pink, very rich and luscious; seeds large and as usual fertile; orifice open when mature and very small. A superb fruit, both in the fresh and dried state.

Cheker Injir. Signifying "Sugar fig," and grown in the Island Scios. Tree a very strong grower, branches heavy and closely jointed; of upright growth; leaves very large, deeply lobed and slightly serrated; fruit roundish, oblate, short neck; pulp reddish-pink, seeds small, fertile; skin greenish-yellow, very thin, ribs distinct; light green; not tested for drying.

Kassaba. Medium to large, almost globular, somewhat flattened at apex; short neck and stalk; orifice decidedly large and open; skin pale green, pulp reddish pink; seeds fertile, small. A magnificent fig in the fresh state, the sugar contents being higher than in any other variety. Dries well, but the fruit ripens late. Tree a beautiful upright grower, without question the handsomest of the Smyrna varieties.

NOTE.—Purchasers of trees in the Smyrna class should bear in mind that we supply colonies of the little fig wasp (*Blastophaga grossorum*) free of cost when the trees come into commercial bearing—usually about four years from the time of planting. Obviously we use every precaution to preserve the names and addresses of patrons with the sole object in view of forwarding them colonies. If for any reason customers fail to secure the little fig wasp when wanted, will they kindly notify us of the fact and it will be our pleasure to forward them at once.

THE WILD OR CAPRIS.

Are readily distinguished from the foregoing by their slender branches and radically different habits of growth. This is a very extensive group, covering a wide range of territory and embracing a great many species and varieties. Our present collection comprises three varieties which are designated by numbers, the correct names not being known. Must be grown in connection with every Smyrna fig orchard; the ratio being about two Capri fig trees to each acre of Smyrnas.

Types of Smyrna Figs, showing variations in fruit and foliage. Very much reduced.

1. Bardajic.

2. Kassaba.

Black or Purple Smyrna.

Capri No. 1. A very rapid, vigorous grower of spreading habit and with very large leaves. Produces an abundance of all crops; Profichi, Mammoni and Mamme, and also matures the first profichi. Particularly valuable on account of its producing all the crops necessary for successfully carrying through all the generations of the Blastophaga.

Capri No. 2. A very upright grower branches very slender; leaves small. Produces an abundance of the Profichi crop, maturing somewhat later than the foregoing, in which its value principally lies, as it lengthens the season of caprification of the Smyrna Figs.

Capri No. 3. A decidedly distinct variety, branches much heavier and more closely jointed, than Nos. 1 and 2; leaves small and serrated. Figs of the Profichi crop very large, heavily ribbed and developing a larger number of galls with insects than either of the other two varieties. A rather uncertain bearer of the other crops.

THE ADRIATICS.

Agen. Fruit medium; roundish; skin green with brownish tinge; flesh dark blood red color; delicious.

Angelique. Medium; pyriform; skin whitish-yellow, pulp red; of good quality when mature.

Bellona. A fine French fig, fruit large, pyriform; dark purple; flesh red; leaves dark green, very glossy; fine flavor when dried.

Bourjassote Panache. The most ornamental of all fig trees; upright grower; branches beautifully marked with green and yellow stripes; fruit medium, pyriform, exquisitely marked with green and yellow stripes; pulp sweet.

Brown Ischia. A small, brown fig, pyriform; when fully ripe of a deep brownish-red color; tree especially valuable as a shade tree, its crown forming a fine umbrella, with densest shade; as a fruit and shade tree the Brown Ischia is valuable; as a fruit tree alone it has many superiors.

Brown Turkey. This is a very large fig; color violet-brown; the earliest large fig in the San Francisco market.

Cargigna. Fruit medium; light yellow; flesh amber; a most delicious table fig; June and August.

Cernica. Fruit medium, ovate; skin deep purple, dotted with white specks; flesh deep carnation-red; tree of drooping habit and rapid grower; ripens fruit from August to November.

Grise. Fruit medium, oblong; no neck; skin light blue, very thin; pulp of a rose color; sweet, rich and delicious; an excellent fig for the table; tree a strong grower with leaves resembling very much the White Adriatic.

Mission. (California Black.) The large black fig most common in California. It is a good grower and bearer, but not a fine fig in other respects; we believe this fig to be identical with the Bordeaux fig of the French.

Moissonne. A medium-sized fig, turbinate, stem long; dark purple, covered with blue bloom; pulp coarse, but sweet; August.

Rose Blanche. Fruit medium; oblate; skin exceedingly thin, deep purple; pulp deep red; valuable for the table or drying.

San Pedro White. (Fico de San Pietro, Apple Fig.) The largest and handsomest early fig in existence, with excellent flavor and sweetness; skin golden-yellow, shaded green; very palatable; ripens in June.

San Pedro Black. Very large, elongated, ovate, no stalk; skin smooth, violet black with green neck; pulp red, coppery tinted violet. One of the largest of figs; excellent for table use.

Verdal Longue. (Sultana, Verdal Honde.) Fruit large, turbinate; skin green when ripe; pulp of a carnation-red color; very rich, sweet and aromatic; tree a peculiar grower, branches all drooping downward, and almost touching the ground. A most delicious, and highly flavored fig; October.

White Adriatic. Introduced from Sicily and has been more extensively planted than any other variety for drying purposes. Fruit large, skin greenish-yellow color; pulp carnation-red; ripens from August to October. Will undoubtedly be displaced by the Smyrna class of figs on account of its very inferior flavor and inclination to sour on the tree wherever planted.

White Celeste. A very small fig of amber color, fine for preserves and crystallizing.

White Endich. A medium sized white fig; skin thin, golden-yellow when fully ripe; pulp white, slightly tinged with rose towards the center. Tree a rapid grower and an enormous bearer. Successive crops from August to November; valuable for drying, canning and pickling.

Zimitzia. Fruit large, pyriform; skin very thin; greenish-yellow; pulp amber, sweet and delicious; tree a very rapid, spreading grower; leaves deeply lobed; July.

A VALUABLE PUBLICATION.

[From The Leader, Melbourne, Australia.]

We have now to acknowledge a copy of "The Smyrna Fig at Home and Abroad," by George C. Roeding, and in doing so must emphatically state it is the most interesting horticultural publication that has ever reached this office. The paper cover, with its decorative fig leaf design; the colored frontispiece, showing the yellow and apparently luscious Calimyrna fig; the numerous illustrations, descriptive of pruning, grafting, planting, harvesting, drying, marketing, etc., all tend to render the publication attractive to the eye, a pleasing detail, especially when in combination with letter press of an instructive and readable character. * * The subject, in a word, is treated exhaustively.

Roeding's Capri Figs Nos. 1, 2 and 3.

THE SMYRNA FIG AT HOME AND ABROAD.

BY GEORGE C. ROEDING.

[From The Live Stock Tribune.]

No book that has appeared of late is destined to wield so wide an influence, nor be more highly appreciated by practical horticulturists than Mr. Roeding's superb monograph on the Smyrna fig. We say this advisedly, for no one man in the State is better qualified by reason of study, observation and practical experience, not only from a local point of view, but also from investigations made abroad in the natural home of the fig in Asia Minor, to treat the subject more intelligently. In some respects this experience is remarkable, at once individualizing his efforts and authenticating all he has to say on the subject. In this connection it is pertinent to state that Mr. Roeding was the first one to caprify the Smyrna fig artificially; he was the first to successfully introduce and establish, with the assistance of the Department of Agriculture, the fig wasp (*Blastophaga grossorum*) in this country; and in his orchards at Fresno were produced the first Smyrna figs in America along commercial lines. These facts of themselves do much to establish his name as an authority in Smyrna fig culture the world over.

No better index can be given of the wide scope and character of the book than to give the chapter headings, which are as follows:

- I Outward Bound
- II In the Land of the Smyrna Fig
- III Smyrna Fig Culture in Asia Minor
- IV The Trip to Smyrna by Land
- V Harvesting and Drying the Smyrna Fig Abroad
- VI Early History of the Fig in California
- VII An Historical View of Our Orchard
- VIII Introducing the Insect
- IX Areas, Soils and Climates
- X Practical Smyrna Fig Culture
- XI The Figs of Orchards and Gardens
- XII Grafting the Calimyrna (Smyrna) Fig
- XIII Insect Pests and Diseases
- XIV Harvesting and Drying
- XV Caprifying the Calimyrna (Smyrna) Fig
- XVI A Scientific View of the Fig Wasp
- XVII Production and Marketing
- XVIII A Calimyrna Fig Orchard
- XIX Economic and Ornamental values

The forepart of the book deals with the Smyrna fig historically, defining its nativity and dissemination throughout Southern Europe. Then follows an account of Mr. Roeding's investigations abroad, which comprise part one of the book, giving a clear and lucid exposition of Smyrna fig culture in Asia Minor from the propagation of the trees, to the final packing and exporting of the fruit to the European and American markets.

The man of affairs who either already has his capital invested in a fig orchard, or who may be contemplating such a venture, will turn instinctively to part two of Mr. Roeding's book, because he will find information well calculated to clear up doubtful points and at the same time clearly defining every essential step to be observed in the growing and handling of the crop on an economic and paying basis. Passing over the chapter dealing with the history of the fig in California, and also the retrospective glance in which is given the author's experience in the cultivation of a fig orchard for nearly twenty years with no visible returns but a beautiful expense account, we turn to a more refreshing chapter, giving an account of the introduction of the insect, showing the strenuous efforts that were necessary to the successful exploitation of our subject, and which was brought to fruition largely through Mr. Roeding's unshaken faith and individuality of purpose. To beginners in fig culture, the chapter on "Areas, Soils and Climates" will give encouragement along conservative as well as intelligent lines, while the following chapter on "Practical Smyrna Fig Culture" supplies just the information that intending planters will appreciate, dealing as it does with planting, pruning, cultivation and harvesting. Then follow a few timely pages on varieties, though primarily the fig of commerce is limited to a sort Mr. Roeding has appropriately named the "Calimyrna," (the Lop In-jir of Asia Minor, signifying "Sweet fig.") The wild or *Capris* are also described. These are the natural home of the fig wasp. People having fig orchards of the Adriatic type will be pleased to learn that their trees can be readily "worked over" to the Smyrnas in what our authority has to say on Grafting, which is easily accomplished and the trees brought to a bearing stage in a comparatively short time. Following this is a strong and practical chapter on "Harvesting and Drying," based on actual experience, which is immediately followed by one on "Caprification," dealing with the subject from a practical point of view, and also from a technical and scientific one. The book closes with a chapter on "Fig Orchards a Profitable Investment" and the "Economic and Ornamental Values" of both fruit and tree.

The above book contains some 87 pages, 6¾x10 inches, and is sumptuously illustrated with half-tone engravings made direct from original photographs, line cuts and a beautiful frontispiece illustration showing the Smyrna fig in natural colors. Price, 50 cents the copy. Sent to any address prepaid by the author.

GEORGE C. ROEDING,
Fresno, California

Three Grand Olives. Reduced one-third natural size.

1. Manzanillo. 2. Obliza. 3. Sevillano or Queen.

THE OLIVE.

The Olive has long been a recognized fruit in countries where the Latin races predominate, an especially is this true of the South American Republics, Old Mexico, and it will no doubt find conditions favorable to its culture in Australia. Its requirements of soil and climate are such as to commend it for planting on the higher plateaus and foothills and in the mountain valleys of nearly all tropical countries, and particularly those aligning the Pacific Coast to the south, where there is a great similarity of climate and soils to those prevailing in California and the Mediterranean region, the recognized home of this fruit, and where it has attained its widest economic importance. In California the Olive has long since passed the experimental stage, and is now produced in quantities, both for its oil, as well as for pickling. That it is destined to occupy a position of equal importance in the horticultural development of Latin America has long been admitted by students. It is necessary to have a mean average of 57 degrees Fahrenheit and at no time must the temperature go below 16 degrees above zero to carry on the culture of the Olive with any degree of success.

It should never be planted on cold or wet soils, nor in sections where biting frosts are apt to occur during the blooming period, which precludes the possibility of its bearing crops. "The Olive grows to perfection," says the *Cyclopedia of American Horticulture*, "in good soils throughout the length and breadth of the San Joaquin and Sacramento valleys; in many of the smaller Coast Range valleys, and up to an elevation of 1000 feet or more in this range, and in the warm belt of the foothills of the Sierra Nevada Mountains." It is also a pronounced feature of the landscape in all the Southern counties of the State, and in the Salt River Valley of Arizona. In pruning the tree, the vase shape is quite generally observed. In localities where there is not sufficient moisture by rainfall, irrigation is essential to profitable production. Nearly all the varieties enumerated by us have borne fruit, and our remarks in reference to them are borne out in many instances by actual tests made by us, or by the Department of Agriculture at the State University, to whose reports as well as to the reports of the State Board of Horticulture, we beg to refer our customers.

Ascolano. "White Olive of Ascoli," (Italian.) Fruit large, comes into bearing early. Among the best of the Italian varieties for pickling.

Atroviolacea (French.) Olives of medium size, and when fully ripe of a deep jet black color. A good oil variety, rather small for pickling. Said to be an excellent olive dried; October.

Correggiolo (Italian.) Makes a very high grade of oil and highly esteemed by Mr. E. E. Goodrich of the El Quito Olive Farm, Santa Clara.

Cucco (Italian.) A large olive, valuable for pickling.

Gordal (French.) A large olive highly esteemed for pickles; yields also a good quality of oil. Ripens early; is quite resistant to the cold. One of the most widely known varieties in Spain.

Lucques (French.) Tree a strong, upright grower, fruit varying from medium to large and of a veeular crescent shape, the pit being similarly formed. When fully ripe, the fruit is of a shining bluish color.

Manzanillo (Spanish.) Introduced by Prof. Pohndorf from Spain, of whom we obtained the first truncheons. Among the olives of Southern Spain, especially around Seville, the Manzanillo is highly prized both for pickling and oil; the fruit is very large, of a deep black color dotted with white specks when fully ripe; the tree is a straggling weeping grower. One of the best olives for this valley, very hardy and a prolific and regular bearer. Makes a fine pickle and produces oil of a very high grade; October.

Manzanillo No. 2 (Spanish.) This is an entirely distinct variety from the above; was received at the same time. Tree is a rapid grower, branches shooting upright and forming a very dense compact head. Fruit quite large, oval in form, with a very distinct tit at the end. Very rich in oil; late.

Mission (Spanish.) This old standard sort, introduced by the Spanish padres, is probably more extensively cultivated than any other variety. Fruit medium to large, and makes an excellent pickle, either green or ripe, as well as a superior oil. The tree is a handsome, upright grower, and although rated as a shy bearer, it has not been so in the San Joaquin Valley.

Nevadillo Blanco. This is the olive generally grown in the south of Spain, producing the finest oil of commerce. Fruit medium, deep black; tree a rapid grower and an immense bearer; branches weeping; grows well on the coast and interior; yields an abundant supply of oil of the very best grade, and makes a finely flavored pickle.

The Washington Navel Orange.

Obliza (Dalmatian.) This is an exceedingly large olive; oval, but broad and rounded at both ends; borne in clusters on the stems. The tree is a good grower; the branches are somewhat inclined to droop; the foliage is large, thick, and of a deep dark green color; very hardy and productive, and worthy of extensive cultivation. Excellent for pickles, and will find a ready sale in this shape, the fruit presenting a very fine appearance; November.

Pendulina (French.) The tree is a strong, upright symmetrical grower; the fruit grows in clusters and produces a good grade of oil.

Picholin de "St. Chamas" (French.) The trees of this variety require good soil, and amply reward with heavy crops all extra care. The fruit is oblong and reddish-black when ripe. Pickled green, they are a leading article of commerce in the neighborhood of St. Chamas, France. Possesses a very delicate flavor and said to be one of the best.

Razzo (Italian.) An olive from the Lucca district; oval, medium size or below; it yields in its native country the finest grade of oil.

Rubra (French.) The tree is a very vigorous, upright grower, succeeds in dry, hilly soils, almost unfit for the growth of any tree. The fruit is best suited for oil, but is also used for pickling; gives an oil of the very highest grade. Fruit medium size, bears heavy and regular crops; November.

San Agostino (Italian.) A very large olive; when ripe bluish black, with white specks. One of the standard varieties for pickling.

Sevillano (Spanish.) The tree is a strong grower, leaves green, greenish-white on the under side. The largest of olives, and the variety exported from Spain under the name of "Queen Olive." When ripe of a bluish-black color; flesh adheres to the pit. A regular bearer. A great olive for pickling; ripens early; its large size, fine flavor, and the fact that it pickles easily, is sure to cause it to be in demand.

Santa Caterina (Italian.) Shaped like Columella, but much larger. A fine pickling variety.

Uvaria (French.) A valuable olive for oil. Grows on rich and poor soil, and its production is good on either. The fruit is of medium size, borne in clusters resembling grapes; when fully ripe it is of a dark blue color.

CITRUS FRUITS.

THE ORANGE.

Though taking its inception in the warm belt of the Southern counties of the State, citrus culture has gradually found its way farther north year by year, until at the present writing, oranges and lemons are successfully grown within the very shadow of Mount Shasta; in Arizona—notably the Salt River Valley—and in many portions of Old Mexico. The sheltered nooks and interior valleys of the Sierras, the thermal belts in Placer, Kern and Tulare counties, the regions free from biting frosts in the great valleys of the San Joaquin and Sacramento, all furnish conditions of soils and climates in which the orange and the lemon luxuriate.

For many years we have realized that citrus culture, already one of the great and thriving industries of California, must in the natural course of events, find a field for successful prosecution not only in many of the recent acquisitions and dependencies of the United States, but also in many other countries with tropical and semi-tropical climates.

With these conditions before us, we have found it necessary to increase our plantings of this class of stock in the foothills, near Exeter, Tulare county, located about fifty miles southeast of Fresno, to keep pace with the demand. This spot was selected to carry on this branch of our business, first, on account of the admirable situation and its exceedingly rich soil, permitting us to grow the tenderest varieties of citrus trees, and secondary, for the exceptional railroad facilities, allowing us to make prompt shipments.

The remarkable success which has crowned our efforts since we undertook the growing of citrus trees on a large scale over six years ago, has been the cause of our making citrus culture one of the specialties of our business.

It will be our aim to grow nothing but standard varieties of established commercial value and our patrons can rest assured that we will only recommend such sorts as have been thoroughly tested.

With our many years experience in packing trees and plants, for long distance shipments, nothing has been more gratifying to us than the success we have made in our shipments of citrus trees to Aus-

Marsh's Seedless Pomelo. See page 49.

ustralia, New Zealand and the Philippine Islands. In many instances the trees were three months on the road, under rather unfavorable conditions, still they arrived in such fine condition that we received very flattering letters from our highly pleased customers.

Planting can be done from February to August, but preferably during the early Spring months. Distances apart is some-

what governed by varieties. The dwarfs can be planted as close as 10 feet, the budded varieties 24 feet, and the seedlings 25 to 30 feet. Thorough cultivation and judicious irrigation are essential to best results. Trees should be trained to form a symmetrical head, hence pruning is somewhat limited to cutting out the dead wood, interfering limbs and suckers. The Lemon requires more severe treatment, owing to

its scraggly growth; the treatment given the average deciduous tree, possibly not quite so severe, will be found about correct. The varieties of the citrus family which are here enumerated have all proven successful under proper environment and intelligent care.

NEW VARIETIES.

Golden Nugget Navel. Originated by R. M. Teague of San Dimas, California. Tree is a vigorous grower of good habit, thornless; foliage dark green, abundant lateral or fruiting branches, and very symmetrical, easily distinguished in a grove of other varieties. The tree presents a rather umbrageous appearance due to the slender willowy growth of the younger branches. The fruit is of a deep golden color, very smooth, solid and thin skinned, the exterior being strongly suggestive of kid gloves to the touch, so smooth and even is the surface; shape rather oblong, good size; pulp is deliciously sweet, free from rag and is seedless; bears two years from planting; is a good shipper and keeper; packs 90 per cent., fancy fruit and as it ripens very early it is a very desirable variety for holiday trade.

Navelencia. This new sort is commanding some attention from growers. Said to be a cross between the Thomson's Improved Navel and the Valencia Late. It possesses all the good qualities of its parents, and ripens fully 60 days later than the Washington Navel, thus extending the season for marketing Navels until the early summer months. In character of growth and in the fine texture of the fruit it is said to resemble other navels; it is seedless. Worthy of trial.

GENERAL COLLECTION.

Joppa. Fruit large and of red orange color, nearly seedless; thin rind; pulp very fine, sweet and juicy; tree thornless, upright grower. Its remarkable characteristic is that it can be left on the tree as late as July and still retain all the features of a first-class shipper.

Kumquat. A small species much cultivated in China and Japan. The fruit is of about the size of a large gooseberry; rind sweet, juice acid; very delicious and refreshing. Preserved in sugar by the Chinese and largely used as a sweet meat. Tree of dwarf habit and very desirable for pot culture.

Mediterranean Sweet. Fruit medium to large; pulp solid and few seeds; ripens late. Tree is thornless and very productive; very widely distributed and popular.

Ruby Blood. Fruit below medium, nearly round; skin very thin and smooth; pulp ruby-red. Considered by many to be a superior orange to the Maltese Blood. Tree a strong, vigorous grower and thornless.

Satsuma. (Unshiu, Oonshiu.) Introduced from Japan. Tree very hardy and of dwarfish, slow growth; fruit medium, irregular, flattened; skin deep orange color, easily detached from the pulp; fine-grained, very sweet and delicious.

Seedling. Very hardy; best bearer and most rapid grower. Preferred by many to the budded varieties.

St. Michael. Small, round, firm, thin skin; pulp juicy and very sweet; tree dwarfish habit; a good bearer; very desirable variety.

Tangerine. (Dancy's.) Fruit of medium size, of the Mandarin type. The pulp is very sweet; rind thin and separating readily.

Thomson's Improved Navel. Originated by A. C. Thomson, of Duarte. Fruit of medium size, rind very smooth and thin; pulp juicy, sweet and of firm texture. Its earliness combined with the smoothness and thin-skinned rind have given this variety in some localities a precedence over the Washington Navel.

Valencia Late. Fruit oblong, large, resembles Paper-rind St. Michael in color and firmness; ripens very late, reaching the market when all other varieties are gone. A valuable variety and only second to the Washington Navel in the extent of its dissemination. In localities not affected by late frosts it should be extensively planted. Will hold its fruit in good condition as late as September.

Washington Navel. Of all foreign varieties introduced none have given California the prominence and prestige as a great citrus section that this remarkable variety has. Here it has reached the highest stage of perfection, and it stands pre-eminently in the lead of all other varieties for its large size, lusciousness and sweetness of pulp, so that it well deserves the title of "King of Oranges." Tree is a rapid grower and an early and prolific cropper. Fruit juicy, melting, seedless.

THE LEMON.

It is well understood that the lemon will not stand as low a temperature as the orange, and the planting of this fruit for commercial purposes is therefore restricted to favored spots, where the tree will produce a succession of crops all the year around.

A few trees are always a desirable addition to the wants of every home, and by taking the precaution to plant them in a protected spot, a good supply of fruit is always available. The tree is a very prolific bearer and by following out a systematic plan of pruning each season a good crop is almost assured. The tree adapts itself best to a deep sandy loam, but will thrive on a heavy red soil providing the drainage is good.

The evolution in Persimmons from the small Italian to the great Japanese varieties.

1. The Italian. 2. The Yemon. 3. The Tane-Nashi. See page 51

Eureka. A California seedling; fruit of medium size; sweet rind; a good keeper.

Lisbon. Medium size; sweet rind and very strong acid; very few seeds; fruit very uniform; tree a rapid grower and very productive; said to be the lemon of commerce.

Villa Franca. Fruit oblong; rind thin, with out any trace of bitterness; pulp acid, juicy, nearly seedless; tree thornless, spreading habit; will stand a lower temperature than any other variety.

THE POMELO.

Known as Grape Fruit owing to its habit of growth, much resembling in appearance a bunch of grapes. Fruit much sought after for its medicinal qualities, particularly by people suffering with dyspepsia and other stomach troubles. Fruit round, somewhat larger than a Washington Navel, of a pure lemon color, with white flesh, of a delightful aromatic-acid flavor. In the better varieties the pulp is almost wholly free from seeds and "rag." The Pomelo commands a good price in the Eastern markets, the supply being for the present insufficient to meet the demand. Tree hardy as the orange, and a thrifty grower. The fashionable breakfast or luncheon fruit, usually eaten before the more substantial viands are partaken of.

Marsh's Seedless. This pomelo is deserving of more attention than it has been receiving. It has so many points in its favor over other varieties, that it stands in the same relation to the ordinary Pomeles, that the Washington Navel orange does to the general run of oranges. Size medium, skin very smooth, glossy lemon yellow color, pulp very juicy with very little rag. With the absence of seeds or nearly so, one of the principal objections to serving Pomeles is removed. The fruit will hang on the trees until late in September retaining all of its juices and piquant, aromatic flavor, without any sign of deterioration. This is largely due to its having no seeds which would germinate if kept until late in the season. Of all the citrus family, no tree is so showy as the Pomelo with its immense clusters of yellow globes set off with a background of deep dark green foliage. Can be eaten out of the hand with relish without the addition of sugar when fully mature. We regard it as the best Pomelo grown.

Triumph. Medium size; peel smooth, clear, thin and fine-grained; less "rag" than in most Pomeles and fewer seeds; very heavy, juicy and well flavored. No bitter in the juice, flesh or membranes surrounding the cells and dividing the segments, and very little in the white inner lining of the peel. Tree bears young; one of the best of the imported varieties.

THE CITRON.

The culture of this fruit is still in its infancy. The experimental work thus far has been so highly satisfactory to the growers that large plantations will no doubt be established soon.

The tree is even more tender than the lemon, and should therefore be planted where there is very little danger from damage by frost.

The fruit is prepared for use by immersing in a brine for several months and after washing it is placed in a hot syrup, remaining for three weeks. Later it is cooked with crystalized sugar dissolved in water, being cooked and cooled alternately until it has taken in sufficient sugar, when it is ready for market.

Citron of Commerce. Fruit large, weighing from three to five pounds; shaped like a lemon; skin bright yellow, smooth and very glossy. The tree is of a dwarf habit, with large glossy leaves and very ornamental.

THE LIME.

More of a bush than a tree, and frequently grown in the hedge form. Being subject to injury from frost, it should only be planted in localities where injury from frost is a remote possibility. The trees are tremendous bearers, producing heavily the third year.

Bearss. Fruit large, with few or no seeds; very juicy with pronounced acidity. Quite hardy, very productive, fruits mature all the year around. Pronounced by experts to be one of the best limes in cultivation.

Mexican. Very largely grown in California and equal to the imported Mexican. Is much used for hedges, for which purpose it is well adapted.

Tahiti. A strong grower; fruit much larger than the former, but coarse and of inferior quality.

THE PERSIMMON.

In this country there are but two varieties in cultivation, viz., the American and Japanese, of which the latter is deserving of wide consideration.

The fruits are yellow, pink and purple in color and somewhat variable in size, and about the size of an ordinary apple. Those familiar with the better varieties pronounce it one of our best fruit importations from Japan. The trees are quite hardy and fruit freely in all sections of the Coast and in the Southern States as far north as Washing-

The Wonderful Pomegranate.

ton. Ripening late in the fall months, the fruit is particularly desirable for winter use. The varieties enumerated below have all been tested and found meritorious both as to yield and quality of fruit. Persimmons can be planted where the thermometer does not go below one degree below zero.

American. Fruit medium to small, cannot be eaten except when frosted, well known in the southern and eastern states.

Dai-Dai-Maru. Fruit very large, round, oblate, somewhat flattened, color light yellow, deepened slightly at the apex; flesh delicious, firm, juicy, very good; seeds generally absent.

Hachiya. Fruit very large, oblong conical pointed toward the apex; skin dark, brightened with occasional dark spots or blotches, near the apex; flesh yellow, soft and jelly-like when ripe, very few seeds, a valuable variety, considered to be one of the best. Dried quite extensively in its native home Japan.

Hyakume. The name means "Hundred Momme" a weight equal to four-fifths of a pound and referring to its size; fruit very large, slightly oblate; skin orange yellow; flesh rusty brown, with many purple or dark spots, and but few seeds; ripens early, juicy and not astringent even when hard.

Italian. Fine tree of medium growth; small but very delicious fruit.

Tane-Nashi. Exceedingly large, broadly oblong, pointed; skin light yellow, changing to bright red at full maturity; flesh yellow, seedless; quality very fine; must be fully ripened before eating; tree a vigorous grower and prolific bearer. A valuable market variety.

Tsuro-no-ko. Fruit medium, oblong, slender, pointed; skin bright orange red; flesh orange yellow, rusty, thickly spotted with purplish-black dots; seeds long and pointed; ripens very early and like all the rusty flesh persimmons is much sweeter and juicier than the seedless yellow fleshed varieties.

Yemon. Fruit is large, oblate, tomato shaped, more or less square in outline, folded at apex; skin light yellow, changing to dull red; flesh deep yellow, seedless or nearly so; quality firm, one of the best; ripens in October, but it improves by keeping until very soft; when fully ripened, one of the most delicious persimmons extant.

THE POMEGRANATE.

Well known and highly appreciated for its showy habit, rich-colored red flowers, peculiar fruit and medicinal astringency. According to Muspratt, the bark contains 32 per cent. tannin, and is used for dyeing Morocco leather yellow. On this Coast it has not commanded the attention from planters that its beauty of bloom and foliage and its edible and peculiarly formed fruits entitle it to. This, however, is in measure due to the fact that the varieties which have been somewhat extensively propagated hereabouts are of little value, and not to be compared with the tested sorts that are here offered. The tree needs an abundance of water and does best on a rich, moist soil; it thrives well on lands strongly impregnated with alkali. It should be grown as a bush rather than as a tree, and bears indifferently if pruned heavily. The fruit of young plants is apt to be inferior, but size, shape and quality are improved as the plant becomes mature and in full-bearing. There is a limited, but growing demand for choice pomegranates in the leading eastern markets, where it usually commands fancy prices. We are now offering trees of the following tested varieties, which have fruited satisfactorily in California:

Papershell. This is a new variety of very fine quality with a thin skin, hence the name; the skin separating the pulp is also very thin, like tissue paper. For home consumption this variety will be highly valuable; tree a good bearer, but more dwarf than the following.

Spanish Ruby. Fruit very large, as large as the largest apple; eye very small; skin thick, pale yellow with crimson cheek; meat of the most magnificent crimson color, highly aromatic and very sweet. This pomegranate is simply magnificent and people who have never before liked the pomegranate have praised this fruit as unequaled. The Spanish Ruby is a fine grower, good bearer and ships well.

Sweet Fruited. Fruit large, with sweet juicy pulp; ripens in September.

Wonderful. (New.) Fruit is very large and highly colored, making it very attractive; the pulp is of a rich garnet color, while the juice is as dark as port wine, and of exquisite flavor. Ripens early, does not burst, and is very valuable for shipment to the Eastern market.

As we have one of the best equipped sales depots in the West, patrons of the Fancher Creek Nurseries can depend on receiving their plants and trees promptly.

Always write us for special quotations when in the market for large quantities.

MISCELLANEOUS FRUITS.

BANANA.

Musa Cavendishii or *Sinensis*. The Chinese or Dwarf Banana; one of the best, producing fruit equal to any and easily protected.

CAROB.

Ceretonia Siliqua, "Carob Tree," St. John's Bread Tree. Native of the Mediterranean regions. The saccharine seed pods are of value as food for horses, cattle and hogs, containing, as they do, about 66 per cent of sugar. The meat of sheep and hogs is much improved in flavor by this food, while its fattening properties are twice those of oil-cake. The fruit also yields a medicinal syrup. A fine tree for dry situations, and does exceptionally well in the interior valleys of this State.

ELAEAGNUS.

Elaeagnus Longipes. A beautiful new shrub from Japan. The bright yellow flowers appear in the early summer succeeded in July with an abundance of oval-shaped fruits, about half an inch long, of deep orange-red color, very showy and attractive; the flavor is pungent and agreeable, makes an excellent sauce. Worthy of extensive cultivation not only for the fruit, but also for ornamental purposes.

GUAVAS.

Psidium Guava, "Pear Guava." Grows to be quite a large shrub; fruit pear-shaped; very tender and can only be grown in the most favorable locations.

Psidium Cattleianum. The "Strawberry Guava." Of bushy growth. The bushes are heavy bearers, producing fruit larger than any English Walnut. When fully ripe, good to eat out of hand. Fruit especially fine for preserves; flavor of the strawberry.

JUJUBE.

Zizyphus jujube. A tree attaining a height of twenty-five feet with bright glossy green locust like leaves; fruit produced in great profusion the fourth year after planting, about the size of a large olive and edible either in the fresh or dried state. This is the fruit from which the delicate paste of the confectioner is made.

THE LOQUAT.

The "*Photinia eribotrya*" of the botanists. A beautiful evergreen shrub or tree, bearing beautifully pear-shaped fruits of a pleasing acidulous flavor and deep orange in color. Blossoms in early winter, and matures its fruit in early spring, and grows well in most any soil. It is said that the Japanese—the Loquat is indigenous to that country—cultivated it for the pit, which may account for its large size. Since its introduction into California it has ever been the aim of growers to increase the quantity of pulp and decrease the quantity of pit. In this endeavor some progress has been made, notably by Mr. C. P. Taft, of Tustin, in this State, who has evolved a loquat, the fruit of which is fully $2\frac{1}{2}$ inches long, by fully $1\frac{1}{2}$ inches in diameter, of fine texture, good color, melting flesh, with a fine aroma and a delicious and refreshing sub-acid flavor. Tree a strong grower, of good habit, and of easy culture.

Advance. (New.) Fruit very large, from two to three inches in length, and one and a half inches in diameter. The fruit is pear-shaped, borne in large clusters, turning to a bright orange yellow when fully ripe; flavor very distinct and exceedingly sweet when fully matured.

Premier. (New.) Fruit salmon-colored, oval, large, but not as large as the Advance; sweet with a rather peculiar but attractive flavor.

Victor. (New.) The largest of Mr. C. P. Taft's introductions, color pink to red; probably the best for canning and jellies.

MEDLAR.

Mespilus Germanica. Fruit of medium size which cannot be eaten until it begins to decay, when it acquires a very agreeable flavor.

JAPAN FRUITS.

Hovenia Dulcis. Resembles the wild pear in habit; small, whitish flowers appear in July; the fruit is sweet and very aromatic.

Lychee. This is the fine fruit so common among the Chinese; similar in shape to a chestnut, but the meat is very sweet.

Figs, grapes and olives are specialties with us, and hence we feel sure that we can please you both as to quality and price. Correspondence invited.

THE GRAPE.

The geographical distribution of the grape is indeed a wide one, and includes most all countries coming within the tropical and temperate zones. It finds, however, its most vigorous development in the warmer sections of the temperate areas, enjoying its greatest luxuriance at a point where the two zones meet, if such an expression be allowable. Hence we find grape culture the leading horticultural pursuit in the warmer regions of France, Germany, Italy and the Mediterranean regions, in the foothill lands of Australia, on the higher plateaus of the Philippines, along the base of the mountains of the South American States, particularly in the foothill sections of the mountain valleys. In California, and especially in the San Joaquin Valley, it finds ideal conditions, and in Fresno County, the raisin and the wine sorts constitute our leading industry, easily leading all others in money value and commercial importance. Owing to these facts, the Fancher Creek Nurseries have long made grape-growing a special study as well as a leading division of its large propagating business. This experience not only covers a wide range, but embraces years of experimental culture, which has given us a basis for the selection of varieties calculated to meet every condition of soil and at the same time prove profitable to the growers. At present our stock both in the growing stage and ready for marketing, comprises all the best sorts in raisin, wine and table varieties, embracing all told upwards of a million plants or rootings. Observations made in Europe, and a close study of conditions prevailing in the South American States have given us an insight into requirements which gives assurance that what we have to offer will prove desirable. Our vines are free from disease and insect pests, and are strong in constitutional qualities, hence vigorous growers.

Touching conditions, the extent of grape growing is almost universal, the locality being merely a matter of selecting the proper varieties. Any soil, however, not too shallow nor too heavily impregnated with alkali, is adapted to the vine. In a general way it can be stated 8x8 and 8x10 are popular distances to plant; with a tendency to plant robust growers in table and raisin grapes either 10x10 or 10x12 feet.

Treatment of Vines.

The first step to be taken before planting is to shorten in all roots, starting from the base of the cutting to about three inches, and to cut off all roots above this point. The top of the vine should be pruned to one spur with two or three buds.

A Pruned and Unpruned Grape Vine.

Figure to the left shows our system.

In planting dig a hole large enough to receive the roots readily, so that the vine when planted and the soil settles will stand about as it did in the nursery row.

Whether for high or low training, vines must be staked in order to form a head at least a foot above the ground. This is essential in order to facilitate pruning, keeping the fruit off of the ground, and economizing in the harvesting of the crop.

1. Golden Queen Grape.

2. Thompson's Seedless.

The two individual berries show natural size.

Resistant Vines.

The ravages of the Phylloxera in the grape regions of France and the practical extermination of the French vineyards through this dreaded pest, are too well known to require repetition here. Today France is producing more wine than she did in her palmiest days, prior to the time this pest was introduced. This wonderful change has been brought about by the planting of resistant vines, and grafting the table, raisin and wine varieties on this stock. The resistant grapes were originally wild American grapes, natives of the Mississippi Valley, where the Phylloxera originated. These have been taken in hand by the French viticulturists, improved by hybridization and selection until to-day a large number of variety of soils, locations and climatic conditions, all of which resist the attacks of the Phylloxera in a greater or less degree. The destruction of vines is due to the roots rotting whenever the insect makes a puncture, causing the vine to perish in time. The roots of the resistants although subject to these attacks, the punctures do not extend deeper than the bark of the rootlets, and as this is sloughed off each year, the roots are left as healthy as before. The grapes of the resistants are worthless, the vine simply serves as a stock for the more valuable foreign varieties of wine, table and raisin grapes, all of which succumb to the attacks of the Phylloxera on their own roots.

This terrible pest is now to be found in the vineyard regions over the entire world, and has already commenced to destroy the vineyards in certain sections of California. Realizing that in time our vineyards too would perish, we have taken steps to introduce the leading sorts of resistant grapevines from France, and already have hundreds of thousands growing in nursery form.

It is our purpose to make the growing of grafted resistant vines one of the special features of our nursery business, for we fully realize that the vineyard industry of California and other countries also, can only expand and maintain its prestige by extending the acreage in the future, using resistant vines to give it permanency. We are making practical experiments in our own vineyards, with a number of varieties of resistant vines, so we feel that we will be in a position to give advice to our customers on this subject, based on practical experience.

FOR TABLE, RAISINS AND SHIPPING.

Alicante. Bunches medium, shouldered, closely set; berries ovate, large; skin black, with thick, blue bloom; flesh very tender, delicious and very sweet.

Almeria. A strong grower; bunches large, loose shouldered; berry large, oval, yellowish-green. This is the grape which is so largely shipped from Spain, packed in cork dust, selling readily at very remunerative prices.

Amber Queen. Berries large, oval; skin greenish-white, turning to amber when fully ripe; flesh tender, with a rich and delicious flavor.

Black Ferrera. Bunches large shouldered, loosely set; berries large, oval, skin thin; black with violet bloom; flesh sweet, crackles; a most delicious table grape and valuable for shipping.

Black Hamburg. Bunches very large; berries large, round; skin thick, coal black when fully ripe; flesh sweet and juicy; one of the best table grapes.

Black Morocco. Bunches medium to large, closely set; berries very large, oval, skin thick, dark red, becoming black when fully ripe; flesh firm, juicy, sweet and crackling; ripens late, keeps well, an excellent grape for shipment.

Black Portugal. Bunches large; berries black, oval, dotted with brown specks; flesh firm and crackling.

Black Prince. Bunches very long, tapering; berries medium, ovate with thick bloom; juicy and sweet.

Blue Spanish. Bunches long and very compact; berries large, oblong, deep black with blue bloom; skin thin; flesh tender, juicy and sweet.

Chasselas Ciotat. Bunches small, compact; berries clear, greenish-white, small; flesh juicy and pleasant; leaves very much lacinated, hence the name, 'Parsley-leaved Grape;' very early, ripening first week in August; should be in every collection.

Chasselas Croquant. (Diamant Traube.) Bunches short and compact; berries very large, greenish-white, skin thin; flesh very sweet and delicious; a very handsome grape.

Chasselas Golden. Bunches medium, compact; berries of an amber color, sweet and watery; ripens latter part of July.

Chasselas de Fontainbleau. (White Sweet-water.) Bunches large and compact; berries medium size, round; skin thin, transparent, greenish-yellow; pulp tender, juicy, sweet, and highly flavored; one of the best early grapes.

Chasselas Rose. Bunches long, cylindrical; berries small, round, clear, rosy red; flesh firm, juicy, sweet and pleasant; a very pretty grape; ripens very early.

Chasselas Victoria. Bunches large and compact; fruit medium, round; skin thin and slightly tinged with violet when exposed to the sun; a fine early table grape with pronounced Chasselas flavor; juicy, vinous and refreshing.

Cornichon, Black. Bunches long and loose; berries oval, tapering at both ends; skin thick and dark, covered with bloom; flesh firm, with pleasant flavor; a desirable variety for shipping and marketing; ripens late.

Gros Colman Grape. Single berry natural size.

Cornichon, White. Resembles the above, only the skin is white and not so thick.

Deacon's Superb. Bunches large, long and very compact; berries oval, yellowish-green; skin thin; flesh juicy, melting, rich and sweet; vine a rapid grower and very productive. This is a magnificent table grape, and is worthy of extensive cultivation.

Early Madeleine. Bunches large, compact; berries greenish-white; firm, above medium, oval; one of the very best early table grapes.

Emperor. Vine a strong grower and heavy bearer; bunches very large, long and loose-shouldered; berry large, oblong, deep rose colored, covered with light bloom; firm, skin thick. One of the most profitable late varieties to plant for market; its firmness, good keeping qualities and rich color cause it to be in great demand in the eastern markets every year. Withstands rain better than any other variety; October.

See front cover page for illustration.

Flame Tokay. Bunches very large and moderately compact; berries large; skin thick, pale red, covered with bloom; flesh firm, sweet; an old standard variety, always commands a good price in the eastern markets, and as a table grape more extensively planted than any other variety.

Golden Hamburg. Bunches large, loose, broadly shouldered; berry large, oval, somewhat flat at the end; skin greenish-yellow; flesh soft, melting, watery; September.

Golden Queen. Fruit greenish-yellow, becoming golden when fully ripened; large, long-ovate; flesh juicy, with faint trace of Muscat. A magnificent table grape.

Gros Colman. Bunches large, cylindrical, loose; berries as large as Damson plums, spherical, slightly flattened; skin thin, very dark, covered with bloom; flesh firm, with a pleasant vinous flavor; ripens in October. Without doubt a valuable shipping grape; its large size, good keeping qualities and delicious flavor all combine to bring it into prominence as a desirable market and table variety.

Gros Maroc. Fruit nearly jet black, with a fine bloom, large, ovoid in shape; flesh firm, juicy; with a bluish; rich flavor.

Jura Muscat. Bunches medium and very compact; berries dark, coppery red; flesh sweet, with pronounced Muscat flavor; a very showy and desirable table grape.

Lady Finger. Bunches very large and long; berries long, shaped like a lady's small finger; a grape famous in Asia Minor; rare, highly esteemed for table use.

Malaga. Vine a strong grower, and immensely productive, thriving in almost any soil; bunches very large, often weighing ten pounds; compact, shouldered; berry very large, oval, yellowish-green; skin thick, fleshy. One of the best shipping grapes, commanding a good price in the eastern markets every season; makes a second quality raisin.

Millhill Hamburg. Bunches medium, broadly shouldered; fruit reddish-black, very large; flesh melting, juicy, sweet and rich.

Mrs. Pince. Bunches large and compact; fruit large, ovate, purplish-black; flesh exceedingly firm, rich and sweet, with decided Muscat flavor.

Muscat of Alexandria (Gordo Blanco.) Bunches long and loose shouldered; berry oval, sometimes round; yellowish-green; skin thick; flesh with a decided Muscat flavor. This is the variety so extensively planted for raisins. The distinctive feature between the Alexandria and Gordo Blanco is supposed to be in the shape of the berries, the former being oblong and the latter round. In this locality the two varieties have been found to be so nearly identical, round and oblong berries being found on the same vine, that they are classed as Muscats and no distinction is made by even the most experienced raisin vineyardists.

Muscat Befere. Bunches medium and loose; fruit medium, round; skin thin, greenish-white; pulp very sweet, with decided Muscat flavor.

Muscat Hamburg. Bunches large; fruit large, purplish-black, long ovate; flesh firm, rich, juicy, with decided Muscat flavor.

Muscat Rose. Bunches small and compact; fruit round, inclined to be oblong, of a violet rose color; flesh sweet, delicious. with Muscat flavor; a very handsome table grape.

Musque Chasselas. Vine strong grower, and immense bearer; bunches large and very compact; berries large and round; skin thin, greenish-white; flesh juicy. with slight Muscat flavor.

Purple Damascus. Bunches large, loose; fruit very large, oval; deep purple when fully ripe; skin thick; flesh meaty and juicy; a splendid grape for the interior valleys; a good shipper.

Rose d'Italie. Vine a strong grower; bunches large, loose; berry large, oval, coppery-red, blue bloom; a very showy grape of rather inferior flavor.

Rose of Peru. Vine a strong grower; bunches very large, shouldered, loose; fruit round, large with firm and crackling flesh; a very handsome grape of fair quality, and highly esteemed as a market variety.

Sabal Kanski. Said to be the Imperial table grape of Russia. A very handsome, very large coppery-red, oval grape, tapering at the ends; bunches immense, often weighing eight pounds; flesh sweet and crackling; a much superior grape to the Tokay in flavor, and on account of its firmness undoubtedly a good shipping grape.

Sultana. Bunches long and very compact; berries small, amber colored, seedless; makes fine seedless raisins; vine an immense bearer; grows on sandy soils, producing large crops.

Thompson's Seedless. Identical with the Seedless Sultanas of Asia Minor. Vine an enormous bearer and very rapid grower; bunches very large; berries greenish-yellow, firm, oval, seedless; skin thin; much larger than the Sultana. This variety is attracting a great deal of attention in this valley, and it is preferred to the Sultana. having many qualities superior to it. The raisins are of a very superior quality, and are in good demand; a very early shipping grape, ripening in July. As a sherry grape much can be said in its favor.

White Corinth. Bunches small and compact; berries small and seedless; skin amber.

White Tokay. Fruit greenish white, large, ovate; flesh firm with a sweet, pleasant flavor when mature; bunches large and broadly shouldered.

The Thompson Seedless Grape, showing bearing qualities and habit of growth.

Zante Currant (Black Corinth.) Bunches medium; berries small, seedless; skin thin, black, blue bloom; flesh sweet, juicy and highly flavored; distinguished from White Corinth by the color of the berries, which are black and larger. This is the variety producing the currant of commerce, and imported from Greece under the name "Zante Currant."

FOREIGN WINE GRAPES.

Alicante Bouschet. A strong grower with a bunch of medium size; berries medium, very high in sugar, juice red. Gives a very superior wine, bright in color, and pleasant. Good bearer.

Aramon Noir. Vine strong, vigorous grower and immense bearer; bunch large, nearly cylindrical; berries large, bluish black; thin skinned; one of the most extensively planted grapes in southern France for wine purposes; a fine table grape but not adapted to long distance shipments.

Black Malvoise. Vine a strong grower; berries large, oblong, reddish-black, with faint bloom; flesh juicy, flavor neutral; an immense bearer; an excellent table, as well as a wine grape.

Burger. A German variety; produces a light, white wine; an immense bearer.

Cabernet Sauvignon. A strong grower; bunch medium compact; berries small, thick skinned; bluish black; gives a highly-colored wine having the so-called Cabernet flavor.

Cinsaut. A good table grape for California market; berries large, black, sweet and palatable; makes excellent wine.

Carignan. Berries oblong, black; an excellent wine grape.

Fehér Zagos. Vine a vigor grower and immense bearer; very hardy and exceedingly productive in sandy and heavy soils; bunches large and compact; berries oval, yellowish-green; good for wine or raisins.

Folle Blanche. Berries medium-sized, white; used extensively for manufacture of brandy.

Franken Riesling. The most popular white wine grape; bunches medium, very compact; berry round, yellowish-green, very sweet and spicy.

Gray Riesling. Bunches long; berries small, colored light red; very sweet.

Grenache. A strong growing variety; berries bluish-black; makes a high-grade wine.

Johannisberg Riesling. Very productive, yields an excellent white wine; bunches medium, compact; berries small, round, skin thin; flesh tender, sweet, juicy and highly flavored. This is the grape from which the celebrated Hoch Wines are made.

Mataro. One of the finest grapes for claret: good bearer and heavy grower. All the great French authorities agree in placing the Mataro as the finest red wine grape of the Southern regions.

Moselle Riesling. Bunches long; berries small, greenish-white; produces a fine grade of light wine.

Mission. This is the old and well-known grape, first grown in California; bunches shouldered; berries medium, round, purple black; sweet and delicious. An old standby for making a good quality of claret.

Palomino Blanco. Vine a very vigorous grower and prolific bearer, bunch large shouldered, berry large, round, greenish-white; a magnificent grape for either sherry or white wine. Does remarkably well in the interior valleys.

Pedro Ximenes. One of the noblest of all white grapes; used for imparting flavor and aroma to poorer grades of white wine.

Picpoul. Vigorous grower; berries small pinkish gray; a medium bearer; does well on sandy soils.

Petit Bouschet. Strong grower; bunch loose but not equal to that of the Alicante Bouschet.

Petite Syrah. Medium grower, bunch long, wine of good quality, high color and with a good bouquet.

Semillon. Strong grower; bunch large winged; berries uneven in size, transparent, golden color when ripe; thin skinned, with an agreeable, special flavor; is one of the finest white wine grapes of the Sauterne type and very extensively grown in France in the Sauterne district.

Terret Bourret. Vine fairly vigorous; bunch large, berries large, oblong, pinkish gray; rather agreeable as a table grape; gives a neutral white wine; used for blending; blooms late and is, therefore, adapted to frosty locations.

Trousseau. Bunches elongated, berries black; a strong grower; yields a dark colored wine of good quality.

Ugni Blanc. Starts very late in the spring; does very well in gravelly soils, where it gives a wine of the Marsalla type.

Zinfandel. Bunches large and compact; berries round, dark purple; the most extensively planted grape in California for making claret.

AMERICAN VARIETIES.

This class of grapes we recommend to be planted in locations where the foreign varieties do not mature well. They are also particularly adapted for training on arbors, as they are strong growers and good climbers; the foliage is also very showy; they have a peculiar musk flavor.

Agawam. One of the best of red varieties; bunches good size; berry tender and juicy.

Brighton. Bunches large and loosely set; berries large, round coppery-red; flesh rich and sweet; quality and flavor unexcelled.

Catawba. Bunches large and loose; berries round, of a coppery-red color; vinous and rich.

Champion. Berry round, large, bluish-black; the chief value consists in its earliness; a good sort where the seasons are short.

Concord. Large, black grape; bunches compact; berries round, sweet and pleasant.

Delaware. One of the most desirable garden varieties. Ripens with the Concord; bunches small and very compact, berries small, violet-red, sweet and highly flavored.

Early Ohio. Said to be the earliest black grape known; bunches compact; berry medium, covered with blue bloom; quality good; first-class for market.

Eaton. Bunches very large and compact; berries large, round, covered with thick blue bloom; skin thick; a very showy grape.

Elvira. Berries greenish-white; bunches small and compact; flesh sweet and pleasant; vine vigorous and productive.

Geneva. Berries large and obovate; color light yellow when fully ripe; flesh juicy, vinous, sprightly and agreeable; bunches loose and shouldered.

Goethe. Bunches medium; berry large; skin thin, yellowish-green, tinged with red; flesh tender, melting, sweet and delicious; ripens late.

Green Mountain. The earliest white grape; bunches medium with small berries and few seeds; sweet and highly flavored; a good grower and very productive; should be included in every garden collection.

Herbert. Bunches large and compact; rich black in color; berries large, tender and sweet; very productive: a very desirable variety.

Isabella. Our most extensively planted Eastern grape; bunches long, large and loose; berries black, oval, juicy and sweet, with distinct musky flavor; an immense bearer; a valuable market variety.

Jefferson. Bunches large, compact; berry large, bright red with a lilac bloom; flesh meaty, juicy, sweet, aromatic; said to be one of the finest red grapes either for market or home use.

Moore's Diamond. A most desirable new white grape; originated in Brighton, N. Y.; bunches large; berry greenish-white, with yellow tinge, when fully ripe; flesh juicy, and almost without pulp; very few seeds.

Moore's Early. Bunches medium; berry very large, resembling Concord in quality, but more pulp; ten days earlier.

Niagara. Bunches medium; berries large, roundish, uniform; skin thin but tough, pale yellow, with whitish bloom; flesh tender and sweet; vine vigorous and productive; one of the best white grapes.

Pierce. A remarkable, giant-leaved and very prolific variety, or rather, sport of the Isabella, produced by Mr. J. P. Pierce, of Santa Clara. The berries, like the leaves, are of extraordinary size, and when ripe the fruit is exceedingly sweet and strongly aromatic; berries bluish-black when fully matured; commands a ready sale in the market, the demand exceeding the supply; for size and quality it cannot be surpassed by any of the American varieties of grapes.

Rebecca. A fine and delicious grape; skin thin, pale amber color at full maturity. Regarded as one of the highest flavored of the native grapes, and recommended for garden culture.

Triumph. Bunches and berries very large; color golden yellow, nearly transparent, with delicate bloom; skin thin; flesh sweet and meaty; one of the handsomest white grapes.

Vergennes. Bunches and berries large; color red; flesh sweet, of fair quality: one of the very best long keepers.

Wilder. Large, black berries; tender, juicy and sweet; vine vigorous, hardy and good bearer.

Woodruff. Vine a vigorous grower; bunches and berries very large and attractive and of very good quality; ripens early and among the native grapes takes the lead as a red market grape.

Worden. Bunches very large and compact; berries large, black; an improved Concord.

RESISTANTS.

The gradual decimation of the vineyards throughout the State, brought about by the Phylloxera and Mysterious Vine Disease, will make it necessary ultimately to plant all new vineyards on resistant stocks and replace old vineyards with the same class.

In order to secure the very best stocks in the line of resistants we have imported the larger part of ours from one of the leading nurserymen at Montpellier, France.

The descriptions of varieties and their adaptability to various soils are largely taken from Mr. F. Richter's recommendations, whose conclusions are the result of twenty-five years' experience in France, Austria, and in many other countries of Europe, where the ravages of the Phylloxera have destroyed the vineyards.

Aestivalis X Colcicola—Riparia X Rupestris, 554-5. Adapts itself to the driest of soils, and can be used for the same soils as 106-8; possesses advantages over that variety, however, in the fact that it will also grow where there are heavy lime formations.

Chasselas X Berlandieri, No. 41B. This variety is grown just as easily from cuttings as the *Riparia* and *Rupestris* sorts; they possess a great affinity for the European or *Vinifera* grapes, which seem to ripen more uniformly on this sort than on any of the other hybrids, and contain from 1 to 1½ per cent. more sugar; they thrive well on chalky soils.

Aramon X Rupestris Ganzin, No. 1. Said without question to be one of the best Franco-*Rupestris*, and which for the past eighteen years has given excellent results and general satisfaction. Thrives well on a light and heavy, compact soil, and grows luxuriantly on a soil containing a large percentage of lime. Better adapted to moist than to dry soils.

Berlandieri X Riparia, No. 420A. This variety has a very close affinity to the European varieties of grapes, and adapts itself to moist and dry soils, including those having a large amount of lime. It is said to have a decided influence on the vine when grafted, causing the grapes to mature more evenly than on the *Rupestris*. or hybrids of *Rupestris*.

Berlandieri X Riparia, 157-11. Has a large amount of *Riparia* blood, and thrives in a deep, alluvial soil. The *Berlandieri X Riparia* hybrids are easily propagated and are recommended for deep, alluvial soils and those heavily charged with moisture in the spring, but which dry out during the summer months.

Berlandieri X Riparia, 34E. Has more of the *Berlandieri* blood than the preceding, and is adapted as a stock not only in an ordinary soil, but is also recommended for very dry and poor soils.

Lenoir. This variety has been very extensively planted in the State, but is now being replaced with varieties more resistant to the attacks of the *Phylloxera*. It is well adapted to heavy clay soils. Has been found to be very satisfactory as a resistant in Napa and Sonoma counties on such soils. The grapes are rich in coloring matter, and are used very largely for coloring clarets.

Mourvedre X Rupestris, 1202. A variety which has been experimented with to a limited extent in this State. It gives promise of being a valuable stock. Particularly adapted to alluvial as well as compact, heavy soils underlain with lime formations. Will not do well where the hardpan is too close to the surface.

Riparia X Rupestris, 101-14. (Millardet.) Very vigorous; thrives best in a deep, alluvial soil, not heavily charged with lime. This family possesses all the good qualities of its parents without their drawbacks; that is, they can be planted in soils where the *Riparia* will become yellow and the *Rupestris* will grow too vigorously.

Riparia X Cordifolia X Rupestris, 106-8. (Millardet.) This is a very desirable hybrid for very dry soils, having no substrata of lime. For such soils it has been found to be superior to all the other resistants.

Riparia Gloire de Montpellier. Also called *Portales*, and is the best sort of the innumerable and many forms of *Riparia* that have been used in France for a period of 25 years. Of late years this variety has superseded all other varieties of *Riparia*. It is not suited to dry, compact soils, but should be planted in moist, alluvial soils. Is a vigorous grower, with large, luxuriant and heavily-ribbed foliage. It does well in California, where conditions are favorable for its development. growing finely in very shallow soils, providing they have the necessary amount of fertility.

Riparia X Rupestris, 3309. (Couderc.) Will withstand a very large amount of lime, and thrives in the driest locations; does equally well in a compact clay, or in a gravelly soil, where the water is not too close to the surface.

Riparia X Rupestris, 3306. Will thrive in soils having a large percentage of lime; hence is particularly recommended for moist soils. In Southern France it is being planted, in locations where the *Solonis* had been planted, it having been found that, that variety was not sufficiently resistant to the *Phylloxera*.

Rupestris X Berlandieri, 301A. (Millardet.) A vigorous hybrid, having a very close affinity to the *vinifera* family. The roots are large and strike down deep. The great advantage of this variety over the pure *Berlandieri* is that it is suitable to dry, rocky, limestone soils.

Rupestris St. George (also called *Rupestris du Lot*, *Monticola*, *Phenomine*.) Stands in the same relation in the large family of *Rupestris* as the *Riparia Gloire de Montpellier* does among the *Riparia*. Has been more widely distributed and more extensively planted, not only in France, but throughout Europe and in California, than any other resistant. Of all the resistants it is the most vigorous grower; makes a strong head with heavy, closely-jointed canes, and adapts itself to a great variety of soils; does equally as well in a moist, very heavy and compact, clay soil as in the driest hillsides, having the remarkable faculty of sending its roots straight down in search of moisture. Will thrive in soils with a moderate amount of lime, but should never be planted in shallow soils.

Write us for special quotations on grape vines in quantities.

The Loganberry, a California Favorite.

THE SMALL FRUITS.

This term usually applies to the berry family—Blackberries, Raspberries, Currants, Gooseberries, Strawberries, etc. Their general requirements are so well understood as to demand no special mention. The whole Pacific Slope, wherever fruit soils and sufficient moisture prevail, is adapted to their successful culture. In California there is almost a continuous growth, and intermittent cropping can be carried on almost during the entire year. Every family orchard should have a plot devoted to small fruits, and where the conditions are exceptionally favorable and near to markets, they can be made immensely profitable when grown along commercial lines.

Logan Berry. Originated with Judge J. H. Logan of Santa Cruz, Cal., from whom it derives its name. This berry is unlike any other in existence, being a hybrid between the Raspberry and the Blackberry. The fruit is sometimes an inch and one-quarter long, dark red, as large as the largest Blackberry, and produced in immense clusters. It partakes of the flavor of both the Blackberry and Raspberry, a mild, pleasant, vinous flavor, delicious and peculiar to this berry alone; seeds small, soft and few; fruit ripens early, just after Strawberries, and before Blackberries or Raspberries. The vine or cane of the Logan berry grows entirely unlike either the Blackberry or the Raspberry; it trails or grows upon the ground more like a Dewberry. The canes are very large, without thorns, but have very fine, soft spines; leaves more like those of the Raspberry than Blackberry. It is excellent for the table, eaten raw or stewed, and for jelly or jam it is without an equal.

Mammoth Blackberry. Supposed to be a cross between the Wild Blackberry of California and the Crandall's Early. Grows entirely unlike any other Blackberry plant known. It is a rampant grower, trailing on the ground, and under favorable conditions will grow twenty feet in a season; the canes are large, of deep red color when exposed to the sun; the foliage is large, thick, of a deep green color; enormously productive and exceedingly early, ripening three weeks before other cultivated kinds; fruit enormous, specimens measuring $2\frac{1}{2}$ inches long; seeds small, soft and abundant; core small, soft; in size and flavor said to surpass all other varieties of Blackberries.

THE BLACKBERRY.

Crandall's Early. Everbearing; large and firm; very early; bears during the entire season.

Erie. Very productive of berries of the largest size; coal black, firm and solid; sells in the market at the highest prices; fine form; ripens early.

Evergreen. Introduced from Oregon; beautiful, lacinated foliage, which it retains all winter; berries large, black, sweet, rich and delicious; ripens from July to November; a fine berry for family use.

Kittatinny. Large, roundish, conical; glossy black; juicy, sweet, excellent when fully ripe; the most popular variety in California.

Lawton. Fruit large; ripens late; very productive.

Wilson's Junior. A seedling of Wilson's Early; said to be hardier and more productive than its parent.

THE DEWBERRY.

Lucretia. A trailing variety of the Blackberry, producing an abundance of large, glossy black, handsome fruit, of excellent quality; the fruit ripens much earlier than the Blackberry.

THE RASPBERRY.

Cuthbert. Berries very large; deep rich crimson; fine; good for shipping; the most popular of all Raspberries; stands the sun and heat well.

Golden Queen. Large, beautiful amber color; firm and of fine quality.

Gregg. Of good size and fine quality; very productive and hardy. Occupies the same position among black caps as Cuthbert among the red sorts.

Hansell. Medium to large; bright crimson; canes vigorous and productive; very early.

Malboro. The largest early red Raspberry, ripening a few days after Hansell; beautiful bright scarlet; good but not high quality.

Mammoth Cluster. A large and very productive variety of the Black Cap; quality very good.

Souhegan. A valuable market variety; its earliness and large size make it one of the most valuable of the Black Raspberries; firm and sweet.

THE CURRANT.

Black Naples. Very large and black; valuable for jams and jellies.

Cherry. Very large; deep red; fine for preserving; valuable market variety.

Fay's Prolific. A new Currant, which has well sustained the claims of its disseminator. It is larger than the Cherry, has less acid, and is much more prolific.

The Mammoth Blackberry. See page 63.

La Versailles. A French variety of very large size, resembling the Cherry; of great beauty and very productive.

White Grape. Large; yellowish-white; valuable for the table; the finest of the white sorts.

THE GOOSEBERRY.

AMERICAN VARIETIES.

Downing. Fruit good size; roundish oval; whitish-green; skin smooth; flesh soft and very good.

Oregon Champion. Berries very large; brownish-red color; very sweet and fine for table use and pies; bush strong, not very thorny; a very prolific bearer.

Smith's Improved. A seedling from Houghton; fruit quite large, and a stronger grower than the parent; light green; flavor sweet and excellent; very productive.

ENGLISH VARIETIES.

Berkeley. Immensely prolific; large and handsome; ripens very early; always commands the highest market price.

Industry. Regarded as the best English Gooseberry yet introduced; the fruit is of the largest size; dark red and hairy; rich and agreeable.

THE STRAWBERRY.

Brandywine. Large, roundish, conical; of fine quality; flesh firm; a valuable medium to late variety.

Haverland. Plants very vigorous and healthy; a great yielder; berries large; light red; ripens evenly; flesh fine-grained and delicious; a good market variety.

Jessie. Large, handsome; roundish, conical; dark red; firm and of good quality; plant vigorous and productive.

Longworth's Prolific. One of the best-known varieties in this State; an old favorite, always commanding a high price in the markets.

Laxtons Noble. Berries extra large, fine flavor, firm, excellent shipper; well adapted for hot climates.

Marshall. One of the best all-purpose berries; very large, roundish; dark, rich crimson; quality good, firm; a good market sort.

Sharpless. This old and well-known sort is still very popular, and is probably more extensively cultivated than any other variety; fruit large; bright scarlet; flesh light red; moderately firm, sweet, rich and of good flavor; very profitable for market and also for home use.

ESCULENT ROOTS.

ARTICHOKES.

Large Green Globe. The best for general cultivation.

ASPARAGUS.

Conover's Colossal. A standard kind of first quality; tender and highly flavored.

Palmetto. Southern origin; earlier, larger, tender, and more regular in growth than the above.

RHUBARB.

Myatt's Linnaeus. Large, early, tender and fine; the very best of all.

Burbank's Crimson Winter. A vigorous grower, producing medium-sized stalks of good length; of a pale, greenish, crimson color; blooms freely, which is easily remedied by topping; practically a perpetual producer of fresh, crisp, stalks of delicious flavor. Excellent for forcing under glass or in open ground,—especially adapted to the long seasons of California.

Early Prince and Golden Syrup. These two varieties were imported from England, where they are general favorites; the former is large and early, and the latter is popular for its size and flavor.

HOP ROOTS.

QUALITY OF THE CALIMYRNA FIG.

Chemical analysis made by Prof. Hilgard, of the University of California, showed that figs submitted to him by Mr. Roeding contained 1.42 per cent. more sugar than the best imported Smyrna figs. Samples which the writer has received are of exceptional edibility. The flavor is delicious and precisely comparable to that of the imported figs, except for the lack of the slight acidity noticed in those ordinarily bought on the market, and which is of a rather disagreeable quality. Wholesale grocers to whom the writer has shown samples speak with strong approval of their quality, and there seems little doubt that a great and profitable trade in figs of this grade can readily be gained in the United States.—[Report U.S. Department of Agriculture.]

ORNAMENTAL DEPARTMENT.

ORNAMENTAL PLANTS.

No country in the world offers so many natural advantages for the growing of ornamental trees and shrubs as California. With a variety of climates embraced in a limited area from the torrid heat of the Colorado Desert to the balmy and equable climate of the southern coast counties, thence extending to the far northern counties, with their abundant supply of rainfall during the winter months, and where the temperature never goes above 70 degrees F., conditions prevail in which any variety of tree or plant from the temperate, sub-tropical and tropical zones finds surroundings and soils conducive to successful culture. California people are lovers of trees and are becoming impressed with the advantages which nature has bestowed upon them so bountifully, hence there is a steady and increasing demand for the very best that can be obtained in ornamental stock.

WHEN TO PLANT.

All varieties of deciduous trees should be planted in the dormant season from January to April, whenever sufficient rain has fallen to soften up the ground, so that large enough holes can be dug to receive the roots readily. Evergreens transplant best in the spring, just before they start a new growth, but can be planted even as late as April, or as soon as the new growth has hardened up some; planting can also be done in the fall and early winter months from September 15th to December 15th, in fact, large sized evergreens transplant better at this season of the year, than any other. Palms should never be taken up in the winter; they transplant best in the early summer months or early fall when in a growing condition. Our plants are either balled or boxed in the fall of the year, so that orders for this class of stock can be filled during the winter months when other trees are being shipped. Palms handled in this manner can be planted at once. Before planting the ground should be thoroughly plowed or spaded and the holes should be dug sufficiently large to accommodate the roots, without cramping. Far better to dig the holes too large, and then fill in with surface soil, than to err on the other side, by having them too small. It is a safe rule to plant trees a few inches deeper than they stood in the nursery rows. Evergreens taken up with a ball of earth, should be handled with care so as not to break the ball. In planting, the rope used in tying the sacking to the ball should be cut, but the sack can remain or be allowed to drop to the bottom of the hole. The earth around the roots of deciduous trees should be well

tramped and in case of evergreens, tamped with a bar, or heavy stick, to render it firm, then water freely. Never place manure or fertilizer of any kind in the hole, as the young and tender roots will be killed and the plant otherwise injured, sometimes fatally.

PRUNING AT TIME OF PLANTING.

Deciduous forest trees should be cut back at least one-third, and all lateral branches removed, to six feet from the ground, allowing from three to five to remain, these forming the nucleus for a new head, which should be cut back about one-half of their growth. All bruised roots should be removed, and all others shortened in slightly. After planting, all evergreens, and especially the conifers, should have their branches shortened in at the base of the tree, cutting back at least a third of their growth. When completed the shape of the tree should resemble in appearance the outline of an acute triangle.

Other varieties should have their branches shortened and thinned out to secure good form. This pruning is necessary to reduce the amount of foliage, lessen evaporation, and to reduce the growth so that the remaining roots can retain life in the subject until such a time as it begins to develop; when root and top will grow in a corresponding ratio.

AFTER CULTURE.

Trees of all kinds require careful attention the first season after planting. The soil should be kept normally moist, and after each irrigation, well worked with a hoe or spade. In the hot interior valleys where the heat is intense, partial shading by building a skeleton frame and covering with burlap will do much to insure evergreens growing and becoming established.

Standard deciduous trees branching six to eight feet from the ground should have their bodies wrapped with burlap or paper the first and second years, to prevent sunburn.

PRUNING.

As far as possible, trees and shrubs should be allowed to assume a natural form. Nothing is more hideous than to see trees pruned to assume shapes and forms entirely foreign to them. The individuality of trees, is what renders a pleasing feature to our landscapes and makes them appeal to every lover of nature. In pruning the predominant idea should be to retain the natural shape of the tree, cut off straggling branches, thin out the head where it is becoming too dense, and to remove dead wood. This applies to deciduous trees. In evergreens the branches should be allowed to touch the ground, removing none, except

in such instances where there are two parallel leaders, when the weaker one should be cut out. Nothing is more unsightly than to see a majestic evergreen tree, with the branches removed and exposing to sight an ugly gnarled stem.

These remarks apply to specimens or individual trees; in hedges, to retain their form, cutting is necessary.

It is our constant endeavor to keep pace with the demand for this class of stock, while the experience we are gaining in this line of work, gives assurance that we are in a position to advise customers what they should plant, and what to avoid, in their particular section.

DECIDUOUS TREES.

Acer campestre, "English, or Cork-Barked Maple," Europe and Asia, 50 ft. A native of Europe; a slow-growing, stocky tree of compact, roundish habit, and with rough bark full of deep fissures.

Acer macrophyllum, "California Maple," 100 ft. A rapid-growing variety, with large leaves; indigenous in this State, and found mostly along creek bottoms.

Acer Monspessulanum, "Montpellier Maple," Native of Central Europe; forms a handsome, small tree, with rounded head; leaves equally three-lobed.

Acer negundo, "Box Elder or Ash-Leaved Maple," 70 ft. Large, fine-spreading tree of rapid growth; foliage ash-like, smaller than other Maples; a fine avenue tree.

Acer platanoides, "Norway Maple," Europe, 100 ft. A large, handsome tree, with broad, deep green foliage, and of very compact growth, rendering it one of the most desirable varieties for the street, park or garden.

Acer platanoides Reitenbachii. "Reitenbach's Norway Maple," 120 ft. An excellent and striking variety with dark purple leaves, which retain their color through the season.

Acer Pseudo-platanus, "Sycamore Maple," 70 ft. A handsome tree of rapid, upright growth, with large foliage and smooth, ash-gray colored bark.

Acer saccharinum, "Silver or Soft Maple," 120 ft. A rapid-growing tree of large size; irregular rounded form; foliage bright green above, silvery beneath; a favorite street and park tree.

Acer saccharum, "Sugar or Rock Maple," 120 ft. A well-known native tree of stately growth; valuable both for the production of sugar and for its wood, and also very desirable as an ornamental shade tree.

Aesculus carnea, "Red-Flowering Horse Chestnut," 60-80 ft. A handsome tree of a height of 20 to 40 feet; producing deep red flowers; very ornamental, and well adapted for lawn culture.

Aesculus Hippocastanum, "European Horse-chestnut," 60-80 ft. A handsome tree of regular form with showy foliage, and covered in the spring with panicles of showy, white-tinged, red flowers; a very ornamental tree.

Albizia Julibrissin, "Acacia Nemu," Asia and Africa, 30-40 ft. A handsome shade and avenue tree; fine, feathery foliage; highly adapted to California, and unsurpassed for grace and beauty.

Alnus glutinosa, "European Black Alder," 70 feet. A remarkably rapid-growing tree, adapted to moist situations.

Alnus glutinosa, imperialis, "Imperial-Cut-Leaved Alder." A stately, vigorous growing tree, of graceful habit, with large and deeply lacinated foliage; a grand lawn tree.

Betula alba, "European White Birch," Europe to Japan, 80 ft. Remarkable for its elegance; very graceful with silvery bark and slender branches; quite erect when young, but afterwards assumes an elegant drooping habit.

Betula-atro purpurea, "Purple-Leaved Birch." A variety having purple foliage.

Betula nigra, "Red Birch," 60-80 ft. An American species of moderate growth, graceful habit, with fine foliage and reddish-brown bark.

Broussonetia papyrifera, "Paper Mulberry." China and Japan, 30-50 ft. A low, bushy-headed tree of rapid growth, with light green, downy leaves; a fine tree for city streets; fruit round and covered with small succulent red seeds, not edible.

Caragana arborescens, "Siberian Pea Tree," Siberia, Manchuria, 20 ft. Very ornamental; flowers yellow; leaves abruptly pinnate; tree of medium growth.

Castanea sativa (C. vesca), "Spanish or Italian Chestnut," 60-80 ft. A very ornamental tree; effective for lawns.

Catalpa bignonioides. (C. syringifolia.) "Common Catalpa," S. United States, 30-50 ft. A rapid-growing, spreading, irregular tree, with large, heart-shaped leaves; remarkable for its clusters of white and purple fragrant flowers in spring.

Catalpa Bungei, "Chinese Catalpa." A remarkable species, forming a dense, round, umbrella-like head. Makes a beautiful tree when grafted or budded on a high stem; extensively used in formal gardening.

Catalpa ovata (C. Kaempferi,) "Japan Catalpa." A dwarf Japanese variety with large leaves; flowers cream-colored, speckled with purple and yellow.

Catalpa speciosa, "Western Catalpa," Lower Mississippi Valley, 100 ft. A hardy variety; valuable for forest and ornamental planting.

Celtis Occidentalis, "Hackberry or American Nettle Tree." A rare tree of large growth, occasionally 120 ft. high, with numerous slender branches which spread out horizontally, and thick, rough bark, Elm-like foliage; produces a small edible drupe of an orange-red color, when ripe. A most desirable tree for street planting. Does splendidly in this valley.

Cladrastis tinctoria, (*Virgilia lutea*), "Yellow Wood," S. E. United States, 50 ft. One of the finest of American trees; of moderate growth; foliage of a light green color; flowers pea-shaped, white, sweet-scented, appearing in June in white profusion, in long drooping racemes, covering the tree.

Melia Azedarach umbraculiformis. The Texas Umbrella Tree.

Cercis Canadensis, "American Judas Tree or Red Bud," United States, 40 ft. A medium-sized tree, with perfect heart-shaped leaves. It derives its name of Red Bud from the profusion of delicate reddish-purple flowers with which it is covered before the foliage appears; a very fine ornamental tree, thrives well in this valley.

Cercis Siliquastrum album, "White Flowering Judas Tree," S. Europe, 40ft. Tree of the same habit as the above, but flowers are pure white.

Chionanthus Virginica, "Fringe Tree," 30 ft. A small native tree with large, glossy leaves and drooping racemes of pure white flowers, having narrow fringe-like petals.

Crataegus monogyna alba plena, "Double White Thorn." Has small, double, white flowers; a highly ornamental variety, on account of both foliage and flowers.

Crataegus monogyna Pauli, "Paul's Double Scarlet." Flowers in clusters; very double, large and full, and of a deep crimson color; superior to any of its color.

Crataegus monogyna rosea plena, "Double Pink Thorn." Similar to above in all respects but color, which is pink or rose.

Crataegus Oxyacantha, "English Hawthorn," Europe, N. Africa, 15 ft. The celebrated English hedge plant; flowers white.

Diospyros Lotus, "Asiatic Persimmon," W. Asia and China, 40 ft. A rapid-growing tree, with smooth and glossy leaves, producing a small, reddish-yellow fruit.

- Fagus sylvatica**, "European Beech," Europe, 80-100 ft. A beautiful tree.
- Fagus sylvatica purpurea**, "Purple-Leaved Beech." Foliage is deep purple in spring, changing to crimson in the fall.
- Fraxinus excelsior**, "European Ash," Europe and W. Asia, 120 ft. A lofty tree of rapid growth, with spreading head and gray bark; pinnate leaves and black buds.
- Fraxinus Ornus**, "Flowering Ash," S. Europe and W. Asia, 25 ft. Flowers greenish-white, produced in large clusters on the ends of the branches.
- Ginkgo biloba**, (*Salisburia adiantifolia*), "Maidenhair Tree." A remarkable tree from Japan, of medium size; foliage fern-like, yellowish-green, curiously lobed and marked with delicate, hair-like lines.
- Gleditsia triacanthos**, "Honey Locust," 70-140 ft. A handsome, hardy tree, with small foliage and formidable thorns.
- Gymnocladus Canadensis**, "Kentucky Coffee Tree," U.S., 80-100 ft. A tree of medium growth, rough bark, and blunt cane-like branches devoid of small twigs.
- Juglans Californica**, "California Black Walnut." A rapid-growing native tree, bearing a nut with a very hard shell.
- Juglans nigra**, "American Black Walnut" 150 ft. A native species of great size and majestic habit; bark very dark and deeply furrowed; foliage beautiful; nut round.
- Kolreuteria paniculata**, "Varnish Tree," China and Japan, 20-30 ft. A charming small tree, with glossy, divided foliage and large terminal panicles of showy, golden yellow flowers; a most desirable tree for the lawn.
- Liquidambar styraciflua**, "Sweet or Star-Leaved Gum." A native tree 80-140 ft. Very stately, with corky bark and beautiful star-shaped leaves which change to rich yellow, red and purple in autumn. A very desirable tree for avenue planting.
- Liriodendron Tulipifera**, "Tulip Tree," Eastern U. S. and China, 150 ft. A rapid-growing tree with rich, glossy foliage; flowers tulip-shaped; greenish-yellow; a very fine shade tree.
- Magnolia acuminata**, "Cucumber Tree," 90 ft. A majestic, pyramidal-growing tree, with large, conspicuous leaves and yellowish-white flowers; fruit, when green, resembling a cucumber, hence the name.
- Magnolia stellata**, "Halleana or Hall's Japan Magnolia." A beautiful dwarf species, producing pure white, semi-double, fragrant flowers in April; earlier than any other Magnolia.
- Morus alba**, "White Mulberry," China, Tree of rapid, slender growth; will grow in any soil when once established; cultivated chiefly as food for the silk worm.
- Melia Azedarach umbraculiformis**, "Texas Umbrella." Entirely different from the Pride of India; takes the shape of an umbrella; is of striking beauty, and is one of the handsomest of shade trees; shade very dense; foliage bright dark green: produces lilac-colored flowers, succeeded by a fruit with an external pulp, and a hard nut within. We are making a specialty of the culture of this, the most beautiful of all deciduous trees, and can recommend it as something extraordinarily fine; one of the best trees for this valley, thriving and growing luxuriantly in almost any soil.
- Morus alba Tatarica**, "Russian Mulberry." Brought to notice by the planting of them by the Mennonite Colonists of the Northwest; valuable for its fruit and timber.
- Morus multicaulis**, "Italian Mulberry," China. Valuable tree for shade and timber; fruit worthless; leaves large; one of the best for silk worms.
- Morus nigra**, "Persian or English Mulberry." A variety of slow growth, but producing the largest and finest fruit of all Mulberries; very productive; the fruit is large, black, one to one and a half inches long; very juicy, aromatic, with a sub-acid flavor; ripens from June to October; good for preserves.
- Morus rubra**, "Downing's Everbearing Mulberry." A very rapid grower; a valuable shade tree; produces a good fruit.
- Morus rubra**, "Lick's American Mulberry." Originated by the late James Lick; fruit large, black and of exquisite flavor; tree a strong, thrifty grower.
- Morus rubra**, "New American Mulberry." A rapid-growing tree, with fine, large leaves; very handsome and valuable as an avenue or shade tree; fruit large and black.
- Paulownia Imperialis**, "Empress Tree," Japan, 40 ft. A rapid-growing, tropical-looking tree, with enormous, round leaves; produces large clusters of purple, trumpet-shaped flowers in the spring. If the tree is cut down to the ground each winter, new suckers will shoot up from 6 to 10 feet high, with leaves of immense size and splendid tropical effect.
- Platanus orientalis**, "Oriental Plane, Sycamore," S. E. Europe to India, 80 ft. A rapid, erect-growing tree, with bright green foliage; far superior to the common American Sycamore; thrives very well in this valley, and is a very desirable avenue tree. More extensively used in southern Europe for avenue and shade purposes than any other variety. A grand tree.
- Populus alba Bolleana**, "Bolles' Poplar." Of recent introduction; a very compact, upright grower, with glossy leaves, green above and silvery beneath; the most desirable of all poplars.

- Populus balsamifera candicans*, "Balm of Gilead," Eastern U. S. Of remarkably rapid and luxuriant growth, with large, glossy foliage; buds covered with a fragrant resin.
- Populus deltoides aurea*. (P. Van Geertii,) "Golden Cottonwood." Has fine golden yellow foliage, retaining its brilliancy throughout the season; effective in masses.
- Populus deltoides Carolinensis*, "Carolina Poplar." A vigorous-growing variety, with large, bright green leaves.
- Populus nigra Italica*, "Lombardy Poplar," Asia. A very rapid, erect-growing tree, with tall, spiry form; very desirable in landscape gardening.
- Populus pyramidalis*, "Pyramidal Poplar," U. S.. A compact, pyramidal grower; leaves dark green above and pale green underneath.
- Prunus cerasifera atropurpurea* (Prunus Pissardi,) "Purple-Leaved Plum." Tree of medium size; wood and leaves dark purple; the fruit from its formation is also purple until it ripens; introduced from Persia.
- Prunus Padus*, "Hagberry or Bird Cherry," Europe and Asia. Medium sized, wide-spreading tree, with small dark-green leaves and bearing a small black fruit resembling the Wild Cherry, but nauseous to most palates; very ornamental and thrives well in this valley.
- Prunus Persica camelliaeflora alba*, "Double White Peach." Flowers pure white and double; superb.
- Prunus Persica camelliaeflora rubra*, "Double Red Peach." Flowers semi-double, bright red; superb.
- Prunus Persica purpurea*, "Blood-Leaved Peach." Foliage of a deep, blood-red color; valuable on account of its handsome foliage and rapid growth.
- Prunus spinosa flore pleno*, "Double-Flowering Sloe." A low spreading tree or large shrub from Japan, covered in spring with small, double daisy-like white flowers, succeeded by small dark purple fruit.
- Quercus Aegilops*, "Vallonea, or Velani Oak." A native of Asia Minor and the Grecian Archipelago, 50 to 75 ft. high, with fully the same spread of branches. A magnificent shade tree remarkable for its enormous cups from an inch to two inches across. The cups are exported in large quantities from the Levant, being in great demand for tanning purposes. Recently introduced by us.
- Quercus lobata*, "Valley or Weeping Oak." One of the great and striking trees of California, attaining a height of 100 ft., with wide-spreading limbs and slender drooping branches.
- Quercus Cerris*, "Turkey Oak," South Europe, 120 ft. A rapid, symmetrical grower; foliage finely lobed; leaves change to brown in autumn; fine for lawns.
- Quercus coccinea*, "Scarlet Oak," 80 ft. A rapid-growing, pyramidal tree; especially remarkable in the autumn, when the foliage changes to a bright scarlet.
- Quercus palustris*, "Pin Oak," 40 to 50 ft. Beautiful deep green foliage which changes to rich scarlet and yellow color in autumn. A magnificent tree for single specimens on the lawn, and unexcelled in beauty for street and avenue planting.
- Quercus pedunculata*, (Q. robur,) "English Oak," 120 ft. The Royal Oak of England; a well-known tree of spreading, low growth; a majestic and grand shade tree in maturity.
- Quercus rubra*, "American Red Oak," 80-140 ft. An American species of large size and rapid growth; foliage purplish-red in the autumn.
- Robinia hispida*, "Rose-Flowering Locust." Of dwarf habit; beautiful rose-colored flowers; branches bristly; quite interesting.
- Robinia Neo Mexicana*. A new variety from Mexico, said to be a strong grower and producing an abundance of rose-colored flowers.
- Robinia Pseudacacia*, "Common or Black Locust," Eastern North American, 80 ft. A rapid-growing tree, with spreading branches; a valuable timber tree; lumber used for various mechanical purposes.
- Robinia Pseudacacia Bessoniana*, "Umbrella Locust," (Thornless.) The most ornamental of all the locust family; forms a solid, compact head, with dark green, luxuriant foliage.
- Robinia Pseudacacia Decaisneana*. A vigorous, straggling-growing variety, producing an abundance of fine rose-colored flowers in the springtime.
- Robinia Pseudacacia Inermis foliis variegatis*. A magnificent novelty. A dense growing vigorous tree with rich white-margined foliage and variegated shoots. Does not sun-burn.
- Robinia Pseudacacia semperflorens*. A rapid-growing variety, flowering during the entire summer.
- Salix viminalis*, "Osier Willow," Europe, Asia, 10-20 ft. Low-growing tree; valuable for making baskets.
- Salix vitellina aurea*, "Golden Willow." A handsome tree, conspicuous at all seasons, particularly in winter, on account of its golden yellow bark.
- Sophora Japonica*, "Japan Pagoda Tree," 60 ft. A handsome, locust-like tree, but with better and glossier foliage than the common locust; very desirable for the interior valleys; flowers creamy white. Flowers all summer; a valuable tree for bees.

Sorbus Aucuparia, "European Mountain Ash or Rowan Tree," 60 ft. A fine tree, with dense and regular head, covered from July to winter with great clusters of bright scarlet berries.

Sorbus Americana, "American Mountain Ash or Dogberry." A tree of coarser growth and foliage than the European, and producing larger and lighter colored berries. Wood is valuable for handles of tools and similar small articles.

Sorbus domestica, "Service Tree." A round-headed tree, 30-60 ft. high. White flowers produced in rather loose, tomentose corymbs. Small apple-shaped yellowish fruit with orange or red cheek.

Sterculia platanifolia, "Japanese Varnish Tree, Chinese Parasol Tree," China and Japan. A strong growing, smooth-barked, round-headed tree of medium size, with maple-like, large, glossy leaves.

Taxodium distichum, "Deciduous or Bald Cypress," Southern U. S., 150 ft. The latest tree to put forth green leaves in the spring; a distinct and handsome tree of slender habit, with soft, feathery foliage; the trunk is as straight as an arrow, and tapers regularly from base to tip; requires rich, moist ground; a very desirable and ornamental tree.

Tilia Americana. "American Linden or Basswood." A rapid-growing, large-sized tree with very large leaves and fragrant flowers.

Tilia platyphyllos, "European Linden." 90 ft. A very fine pyramidal tree of large size, with large leaves and fragrant flowers; better suited to our climate than the former variety.

Tilia tomentosa, "White or Silver Linden." Showy, heart-shaped foliage; light green above and silvery beneath. Its handsome form and foliage render it worthy of being classed among the finest of our ornamental trees.

Ulmus Americana, "American White Elm," 120 ft. A magnificent large tree, with drooping, spreading branches; requires moist soil; one of the grandest of our native forest trees.

Ulmus Americana nigra, "American Black Elm." A variety of the above of more erect habit.

Ulmus campestris, "English or French Elm," Europe, Africa, Japan, 100 ft. An erect tree of rapid compact growth, with dark green foliage; very robust, attaining an immense size; one of the best in this valley.

Ulmus campestris antartica aurea, "Golden English Elm." A very handsome tree, with foliage of a uniform bronzy-gold color.

Ulmus campestris argenteo-variegata, "Variegated Elm." Small leaves, sprinkled over with silver spots; variegation constant; tree a rapid, erect grower.

Ulmus campestris Berardi. A miniature variety of Elm; tree of slender growth; pyramidal habit; deeply and delicately cut foliage.

Ulmus campestris Clemmeri. Medium size, of moderate growth and fine form. A very popular avenue tree in Belgium.

Ulmus campestris major (*U. latifolia*.) A very handsome spreading variety with broad foliage.

Ulmus campestris monumentalis, "Monumental Elm." A slow-growing, dwarf variety, forming a straight and dense column; very distinct and beautiful.

Ulmus glabra vegeta, "Huntingdon Elm." Very erect; bark smooth; leaves large, of light green color; one of the finest of the European Elms.

Ulmus suberosa, "Cork Bark Elm," 100 feet. A valuable shade tree, and very desirable for streets and avenues; young branches very corky; leaves rough on both sides.

Ulmus montana crispa, "Nettle-Leaved Elm." A rapid-growing, handsome variety, with long, serrated and undulating leaves; unique and beautiful.

Ulmus scarba atropupurea, "Purple-Leaved Elm." A striking variety with erect branches; leaves of a rich purple color when young.

Xanthoceras, sorbifolia, China, 15 ft. A tree of small stature with pinnate leaves like the Mountain Ash; flowers white, with red streaks about the base of the petals; very floriferous and a very desirable ornamental tree.

WEeping DECIDUOUS.

Betula alba pendula, laciniata, "Cut-Leaved Birch." A charming tree with deeply lacinated foliage. Its tall, slender, yet vigorous growth, graceful, drooping branches silvery white bark, and delicately-cut foliage present a combination of attractive characteristics rarely met with in one tree.

Crataegus monogyna pendula, "Weeping Thorn." A pretty drooping variety, with slender branches; flowers crimson.

Fraxinus excelsior aurea pendula, "Golden-Barked Weeping Ash." A conspicuous tree at all times, but particularly in winter, on account of its yellow bark and twisted branches.

Fraxinus excelsior pendula. "European Weeping Ash." One of the finest lawn trees, covering a great space and growing rapidly.

Juglans regia pendula, "Weeping English Walnut." Branches droop like those of a Willow; foliage similar to the ordinary Walnut; strong grower; good bearer, and good nuts; highly ornamental.

Morus alba Tatarica pendula, "Teas' Weeping Mulberry." A very graceful weeping tree, with long, slender branches, drooping to the ground, parallel to the stem; one of the most graceful of weeping trees.

Populus grandidentata pendula, "Large-Leaved Poplar." A variety with slender, drooping, graceful branches, like cords; foliage dark, shiny green and deeply serrated.

Salix Babylonica, "Napoleon's Weeping Willow." The well-known Weeping Willow.

Salix Babylonica dolorosa, "Wisconsin Weeping Willow." A handsome weeping tree, with large, glossy leaves; a stronger grower, with a more pendulous habit, than the common Weeping Willow.

Sophora Japonica pendula. A beautiful weeping tree of very regular and graceful habit.

Tilia petiolaris, "Weeping, White or Silver Linden." Europe. One of the finest of Lindens, with large foliage and slender, drooping branches.

Ulmus fulva, "Slippery Elm." U. S., 70 ft. A variety of luxuriant growth and elegant drooping habit; branches shoot upward at first, then bend in graceful curves toward the ground.

Ulmus scabra pendula, "Camperdown Elm." Vigorous branches, having a uniform weeping habit, overlapping very regularly and forming a roof-like head; the leaves are large, dark green and glossy, and cover the tree with a luxuriant mass of verdure.

DECIDUOUS SHRUBS.

Berberis vulgaris. A native species, with handsome, distinct foliage, and yellow flowers, succeeded by red berries.

Berberis vulgaris atropurpurea, "Purple-Leaved Berberry." A very pretty shrub, with purple foliage; fruit is acid, and is highly esteemed for preserving; very effective in groups or masses, or planted by itself.

Calycanthus floridus, "Sweet Shrub," Southern United States. A very desirable shrub with fragrant wood and rich foliage; flowers of a rare chocolate color, having a peculiar agreeable odor.

Calycanthus praecox, China, Japan. A very vigorous growing variety having larger leaves than the preceding.

Chamaecerasus, Alberti, "Upright Honey-suckle." Violet, bell-shaped flowers; leaves narrow; of somewhat creeping habit.

Corchorus argenteo-variegata, "Globe Flower," or "Japanese Rose." A very pretty dwarf shrub from Japan with small, green foliage edged with white.

Cornus sanguinea, "Red-Branded Dogwood." A native of Europe; very ornamental in the winter, the bark being blood red.

Cornus Sanguinea variegata. Beautiful variegated foliage; covered with white flowers in June.

Corylus maxima purpurea, "Purple-Leaved Filbert." A large bush, with pretty, dark purple leaves; makes a very effective contrast when planted among green-foliaged plants.

Cydonia Japonica, "Flowering Quince," Remarkable for the brilliancy of its blossoms, which vary from the richest scarlet to the most delicate blush color; the fruit deliciously fragrant, but is not edible.

Cydonia Japonica alba, "White Flowering Quince." A very beautiful variety, with delicate white and bluish flowers.

Deutzia. Upright-growing shrubs with very effective foliage, blooming in profusion in the spring; flowers white, in large racemes; should have a place in every garden.

Deutzia Fortunei. One of the best.

Deutzia scabra. Very fine; white; profuse bloomer.

Deutzia scabra candidissima. Fine double white flowers.

Erythrina Crista-galli, "Common Coral Tree." A beautiful summer flowering plant, covered with large, pea-shaped, vermillion flowers; freezes down in winter, but starts again in spring; a most effective plant for grouping.

Euonymus Europaeus, "Spindle Tree," 20 ft. A tall-growing shrub; leaves turn scarlet in the fall; produces medium-sized, scarlet berries.

Forsythia suspensa, "Golden Bell," China. 8 ft. A fine shrub, covered before the leaves appear with drooping yellow flowers.

Forsythia viridissima, "China," 10 ft. Foliage dark green; flowers deep yellow.

Hibiscus Syriacus (and varieties) "Althea or Rose of Sharon." These beautiful shrubs are now universally popular; they bloom very freely, and being easily cared for, are worthy of a place in every garden; our collection comprises double and single sorts, from pure white to violet.

Hibiscus Syriacus variegata. A very distinct kind; leaves margined silvery white; flowers double purple.

Hydrangea hortensis. Large, dark green leaves, and globular heads of rose-colored flowers.

Hydrangea hortensis, "Thomas Hogg." Very desirable variety for florists, being a profuse bloomer; flowers white.

- Hydrangea hortensis variegata*. Fine large leaves, distinctly margined with white; very free flowering.
- Hydrangea paniculata grandiflora*. A magnificent shrub, with pure white flowers, in great pyramidal panicles produced in August; one of the finest flowering shrubs.
- Lagerstroemia Indica*, "Crape Myrtle," China, 25 feet. A very beautiful class of shrubs; profuse and continuous bloomers during the entire summer; the flowers are very pretty, having curiously crimped petals.
- Lagerstroemia Indica alba*. Flowers white, but not as profuse a bloomer as the other varieties.
- Lagerstroemia Indica purpurea*. Flowers deep purple.
- Lagerstroemia Indica rosea*. A very free bloomer; flowers pink; a most desirable shrub for grouping; very rapid grower.
- Lippia citriodora*, "Lemon Verbena." A very popular shrub, with very sweet-scented leaves; thrives in any soil.
- Paeonia Moutan*, "Tree Paeony." A beautiful shrub producing in spring immense flowers, very double and strikingly colored.
- Philadelphus*, "Mock Orange," "Sweet Syringa." A vigorous class of shrubs, with large, handsome foliage and beautiful, milk-white flowers, produced in the greatest profusion early in the summer.
- Philadelphus coronarius*. Flowers pure white; delightful orange-blossom fragrance.
- Philadelphus coronarius aureus*, "Golden-Leaved." A dwarf, compact shrub, with bright yellow foliage; very effective as a low foliage plant for edging.
- Philadelphus grandiflorus*. A tall bush, of slender, twiggy habit, with large flowers, slightly fragrant.
- Philadelphus inodorus*. Flowers very large, white; scentless.
- Philadelphus Lemoinei*. Flowers semi-double, with delightful fragrance.
- Poinciana Gilliesii*, "Bird of Paradise." Shrub or small tree, attaining a height of eight to ten feet, with acacia-like leaves; flowers yellow and crimson; very fine.
- Prunus Japonica*, "Amygdalina," "Flowering Almond." A beautiful shrub, bearing double rose-like flowers before any leaves appear.
- Prunus Japonica alba*. Same as above, only the flowers are white.
- Punica Granatum*, "Pomegranate," Persia to India. No garden is complete without these fine shrubs; with bright, shining green foliage; flowering profusely all through the season; flowers very double.
- Punica Granatum alba*, "White Flowering." A very rapid-growing shrub, with double, creamy white flowers.
- Punica Granatum Legrellei*, "Mme. Legrelle." Very fine, large, scarlet flowers, edged with yellow.
- Punica Granatum nana*, "Dwarf Scarlet." A very handsome small shrub, with beautiful double scarlet flowers, blooms when very young.
- Punica Granatum rubra*, "Scarlet." A very rapid-growing shrub, with deep, double scarlet flowers.
- Rhodotypos kerriodes*, Japan, 15 ft. A handsome shrub, with showy foliage and white flowers, resembling those of the rose.
- Rhus cotinus*, "Smoke Tree," 10-12 ft. Much admired for its feathery inflorescences, that cover the whole surface of the tree in midsummer.
- Rhus glabra laciniata*, "Cut-Leaved Sumach." A very striking plant; leaves very large, deeply cut, and drooping gracefully from the branches, and turning to a rich red in autumn.
- Roses. (See Special List.)
- Sambucus*, "Elder." These are showy, large shrubs, quite ornamental in flowers, fruit and foliage; they blossom in June; very desirable for grouping.
- Sambucus Canadensis aurea*, "Golden-Leaved Elder." A handsome variety, with golden yellow foliage; a valuable bush for enlivening shrubberies.
- Sambucus nigra pyramidalis*, "Pyramidal." A new variety, quite distinct from any of the old forms in habit of growth, being erect and stately with very abundant, massive foliage.
- Spiraea*. An indispensable class of small to medium-sized shrubs, embracing a wide range of foliage, habit of growth, color of flowers and season of blooming; all of easiest culture in all soils.
- Spiraea Anthony Waterer*, "Crimson Spirea," (new.) A valuable addition to our list of shrubs; a strong grower, free bloomer, not only in summer, but also during the fall. Said to be an ideal pot plant; in every way a grand *Spiraea*.
- Spiraea Billardi alba*. White flowers in dense spikes; blooms nearly all summer.
- Spiraea Bumalda*. Habit, dwarf and compact; flowers in clusters; rosy pink; very free.
- Spiraea callosa*. Showy pink and white flowers.
- Spiraea paniculata rosea*. A vigorous grower, with cymes of rose-colored flowers.
- Spiraea prunifolia flore pleno*. Purest, double white flowers along the entire length of the small twigs; foliage oval, deep glossy green, assuming a brilliant shade in autumn.

Spiraea Reevesiana, "Bridal Wreath." The well-known variety, with round clusters of white flowers that cover the whole plant.

Spiraea Thunbergii. Of graceful habit; branches slender and somewhat drooping; foliage yellowish-green; flowers small, white, appearing very early in the spring.

Spiraea Van Houttei. One of the very best; in the flowering season the plant is covered with a mass of large, white flowers, presenting a beautiful appearance.

Syringa, "Lilac." This well-known class of beautiful flowering shrubs should have a place in every garden. They are adapted to all soils; are extremely hardy, and are among the best of our beautiful spring flowering shrubs. Besides the common purple and white varieties, there are a number of hybrids a few of which are described below.

Syringa Ambroise Verschaffelt. Dark red in bud, large compact panicles when open. Flowers single; very distinct.

Syringa Alba Grandiflora. Vigorous grower; trusses very large; pure white.

Spiraea Reevesiana. The Bridal Wreath.

Spiraea ulmifolia. Leaves somewhat resembling those of the Elm; large clusters of white flowers in June.

Staphlea Colchica, "Bladder Nut," Caucasus, 12 ft. A fine early-flowering shrub, with showy pinnate foliage and clusters of handsome, pure white, fragrant flowers.

Symphoricarpus vulgaris variegatus, "Variegated Snowberry." A shrub of very pretty habit, with variegated foliage; flowers and fruit small; fruit purple; hangs all winter.

Syringa Charles X. A strong, rapid growing variety with shining leaves and large trusses of single reddish purple flowers.

Syringa Frau Dammann. One of the best of the lilacs of recent introduction; truss being very large; flowers medium size; pure white.

Syringa Charles Joly. A very superior and strong sort; flowers double, reddish purple; very dark.

Syringa Vulgaris Purpurea, "Common Purple." The old tried purple variety, with very fragrant flowers; a strong grower.

Syringa vulgaris alba, "Common White." Similar to the above, but the flowers are white.

Write us for estimates on a list of plants with which to embellish your home grounds.

Syringa Gloire de Lorraine. Individual flowers large, red in bud, lilac when open.

Syringa Japonica. A new species from Japan becoming a good sized tree. Foliage dark green, glossy, leathery; flowers creamy white, odorless, in great panicles. A month later than other lilacs.

Syringa Lemoinei flore pleno. Panicles large; flowers reddish purple, semi-double.

Syringa Madame Casimir Perier. New. Said to be the finest of the double white flowers, large and compact panicles of the purest white. Highly recommended by the originators in France.

Syringa Michel Buchner. Dwarf plant; panicles large, very double; color pale lilac.

Syringa Persica. Native of Persia. From 4 to 6 feet high with small foliage and bright purple flowers.

Syringa Rotomagensis rubra. A distinct hybrid variety with reddish flowers, panicles very large and very abundant. One of the finest lilacs.

Syringa Renoncule. Azure mauve double flowers, very fragrant.

Syringa Villosa. A new species from Japan; flowers light purple in bud, white when open; valuable on account of flowering late.

Syringa Virginialis. Flowers pure white; large, compact panicles.

Tamarix. Elegant, fine foliaged and handsome flowering shrub, thriving in all soils; one of the best plants for growing near the seashore, as it will bear the greatest wind exposure with impunity.

Tamarix Gallica, Europe and Asia. Foliage exceedingly fine and feathery in appearance; branches long and slender; flowers pink, small, but very numerous, giving the plant a very showy appearance.

Viburnum Opulus sterile. "Snowball or Guelder Rose," N. America, Asia, Europe, 12 ft. A very handsome ornamental shrub, covered with terminal corymbs of pure white flowers.

Weigelia, "Liervilla." A valuable class of Chinese shrubs, adapted to any good soil; the flowers are large, trumpet-shaped, of all shades and colors, from pure white to red, and borne in great profusion.

Weigelia floribunda Lavaliei. Dark-purplish flowers; the darkest variety.

Weigelia rosea. Of erect, compact growth; handsome, rose-colored flowers.

Weigelia florida candida. One of the best flowers, pure white, borne in great profusion.

Weigelia florida nana variegata. A neat, dwarf shrub, valuable for the clearly-defined variegation of green and silvery-white in its leaves; flowers nearly white; it stands the sun well, and is one of the best dwarf variegated-leaved shrubs.

Weigelia hybrida Steltzneri. Flowers dark red; a profuse bloomer.

EVERGREEN TREES.

Abies, Spruce. These beautiful evergreens have never received the attention in our gardens that they deserve. They adapt themselves not only to a variety of soils, but species from the far north soon make themselves at home in the interior valleys if they are shaded the first year, in the summer months. In color they vary from silvery glaucous green to the deepest dark green shades. They assume very symmetrical forms and require no special care when once established. For specimen trees on lawns or for grouping they can not be surpassed by any other evergreen.

Abies alba, "White Spruce," 70 ft. A native tree of medium size; foliage silvery-gray and bark light colored.

Abies Douglasii, "Douglas Spruce," Pacific Coast. Large, conical form; spreading, horizontal branches; leaves light green above, glaucous below.

Abies excelsa, "Norway Spruce." An elegant tree; a lofty, rapid grower and of pyramidal form; the branches assume a graceful drooping habit when the tree is twenty feet high.

Abies firma, Japan. An erect tree of great beauty attaining a height of 100 feet; leaves deep glossy green above, and paler beneath.

Abies Menziesii. A hardy and beautiful spruce having a habit similar to the White Spruce; foliage, rich blue or sage color; a striking sort.

Abies Nordmanniana, "Nordmann's Silver Fir." Very symmetrical; foliage massive, dark green, shining above and slightly glaucous below; an exceedingly handsome tree.

Abies orientalis, "Russia." A dense growing lofty tree, remarkable for its graceful habit and slender foliage.

Abies pectinata, "European or Comb-like Silver Fir," Central Europe. A very noble tree with spreading branches and broad silvery foliage.

Abies Pinsapo, "Spanish Silver Fir." One of the most magnificent of the species, very regular and symmetrical in habit; leaves bright green above, faint silvery beneath. Well suited to warm climates.

Acacia cyanophylla, "Blue-Leaved Wattle." 18 ft. Flowers yellow; leaves very large; often one foot long; glaucous green, almost blue; branches drooping.

Acacia cultriformis. More of a shrub than a tree; leaves of a triangular shape, thick glaucous green; a very profuse bloomer.

Acacia dealbata, "Silver Wattle." A fine, rapid-growing tree, with feathery foliage, and covered in the spring with racemes of golden yellow flowers.

Acacia, leucophylla. Flowers yellow; leaves six inches long, ending in a soft point; the whole aspect of the tree is silky.

An Avenue aligned with *Cedrus Deodara*, the Himalayan or Indian Cedar.

Acacia latifolia. An upright-growing variety, with broad leaves; yellow flowers.

Acacia lineata. Of erect growth, with narrow, linear leaves and spikes of yellow flowers.

Acacia lophantha gigantea. A very rapid growing tree, with feathery foliage, very handsome and profuse bloomer. Will grow on the sandiest of soils. Not hardy in the interior valleys.

Acacia melanoxylon, "Australian. Black Wood." A strong, upright-growing tree; very desirable for parks and street ornamentation.

Acacia mollissima, "Black Wattle." A fine, erect, upright-growing tree, with glaucous green, feathery foliage; flowers yellow and borne in racemes; a rapid-growing tree and well adapted to this valley.

Acacia neriifolia, (*A. floribunda*.) A rapid growing tree, of a pendulous habit; flowers profusely.

Acacia pycnantha, "Golden Wattle." Of rapid growth; leaves long and narrow; flowers yellow, in long, solitary axillary spikes.

Acacia pravissima. Thorny; very rapid grower; desirable for hedges.

Araucaria Bidwilli, "Bunya-Bunya." Australia, 150 feet. A magnificent tree; branches in regular whorls, closely set with spiny, shining, deep green leaves; very handsome for the lawn and by far the finest and most attractive of all evergreen trees; thrives well here.

Araucaria excelsa, "Norfolk Island Pine," 200 ft. One of the handsomest of all trees; pyramidal in form and very symmetrical. Not hardy in the interior valley.

Araucaria imbricata, "Chili Pine," or "Monkey Puzzle," 100 ft. A fine tree of regular pyramidal form; leaves bright green, broad, thick, pointed and overlapping each other.

Arbutus Menziesi, "Madrone," 75 ft. The well-known native tree growing so abundantly in the Coast Range; foliage thick, leathery, bright green; bark smooth; brownish red; flowers white, fragrant, succeeded by red berries.

Camphora officinalis, "Camphor Tree," China, Japan, 40 feet. A rank-growing, very symmetrical, ornamental tree, thriving in a poor soil; bright green foliage and well adapted for the lawn. To prepare the camphor of commerce, the root, trunk and branches are broken up and treated with water in closed vessels, the volatilized camphor being sublimated on rice straw; no garden is complete without.

Casuarina quadrivalvis, "She Oak or Beefwood," S. E. Australia, 60 ft. Of quick growth; a very handsome and striking tree; wood valuable for shingles and fuel.

Casuarina stricta. Is tougher than the preceding species; excellent wood for tool handles.

Cedrus Atlantica, N. Africa, 120 ft. A very handsome, pyramidal tree, with silvery-green foliage; branches have an upright-growing tendency and are very dense: a fine tree for the lawn.

Cedrus Atlantica glauca. A very fine, upright grower, with glaucous green foliage.

Cedrus Deodara, "Himalayan or Indian Cedar." Exceedingly handsome, with drooping branches and silvery-green foliage, forming a dense net work; the finest, most rapid growing of all Cedars, and worthy of a place in every garden.

Cedrus Libani, "Cedar of Lebanon." A magnificent tree, with short, horizontal branches and dense, dark-green foliage.

Chamaecyparis Lawsoniana. Lawson Cypress.

Cedrus Deodara variegata. This is a very handsome tree, having the habit of the Deodara, with variegated foliage.

Cedrus Deodara Viridis. Of slender habit, very graceful, with bright green foliage.

Cephalotaxus Fortunei, China, Japan, 50 ft. A handsome tree, with yew-like foliage; branches long, slender and pendulous.

Chamaecyparis Lawsoniana, "Lawson Cypress." A native tree, with elegant, slender, drooping branches; leaves dark, glossy green, tinged with a glaucous hue.

Chamaecyparis Lawsoniana argentea. Of slender habit with very glaucous almost silvery foliage.

Chamaecyparis Lawsoniana erecta viridis. Upright dense columnar habit with bright green foliage.

Chamaecyparis Lawsoniana lutea. Of compact medium growth, with whole of young foliage, a light clear yellow.

Araucaria Bidwilli. The "Bunya Bunya" Tree. See page 77.

Cupressus macrocarpa, "Monterey Cypress." A native of California, and one of the most desirable of evergreens; stands pruning well; very extensively planted for hedges.

Cupressus macrocarpa lutea, "Monterey Golden." A variety of the Monterey Cypress with foliage tinged with a golden hue.

Cryptomeria Japonica, China, Japan. A handsome, rapid-growing tree, with an elongated pyramidal outline, attaining a height of 50 to 60 feet.

Cryptomeria Japonica elegans, (C. elegans.) An elegant tree of pyramidal form; foliage turning brown in winter.

Cupressus funebris, "Funeral Cypress." Beautiful drooping branches; especially adapted for cemeteries.

Cupressus macrocarpa Guadalupensis, "Blue Cypress." An erect, pyramidal grower, with glaucous green foliage.

Cupressus sempervirens fastigiata. "Italian Cypress." A tall, erect, tapering tree, with branches running parallel with the stem; very desirable for cemeteries and arches.

Eriobotrya Japonica, "Loquat." A fine ornamental tree, with large crumpled, dark-green, glossy leaves, and fragrant white flowers; producing a delicious, sub-acid golden-yellow fruit in the spring.

Eriobotrya Japonica variegata. Same as above, but foliage is variegated.

Eucalyptus amygdalina, "Pepper Gum." S. E. Australia. Belonging to this variety are the tallest trees in the world. In Gippsland, Australia, are trees over 500 feet in height; makes first-class timber for flooring, boards, scantling, etc., and is well suited for avenue planting; yields more essential oil than any other variety.

Eucalyptus citriodora, "Lemon-Scented Gum," Queensland, 150 ft. A very pretty ornamental tree, with lemon-scented foliage; rather tender.

Eucalyptus corynocalyx, "Sugar Gum," S. Australia and Victoria, 120 ft. Very ornamental; rapid growing; with dark green leaves; timber very durable and used for railroad ties; one of the best.

Eucalyptus crebra, "Narrow-Leaved Ironbark." A very tall, straight, slender-growing tree, with dark, persistent, deeply-furrowed and ridged bark; timber heavy, hard, elastic and durable; used for masts, railroad ties, and in the construction of wagons and bridges; perfectly hardy; should be extensively planted.

Eucalyptus ficifolia, "Crimson-Flowering," S. W. Australia. A most striking variety of dwarfish habit, with very large, dark green leaves, and producing large panicles of brilliant scarlet flowers; one of the most ornamental and effective trees among the Eucalypti; very desirable for small gardens.

Eucalyptus globulus, "Blue Gum." Victoria and Tasmania. One of the most useful of all, and a very rapid grower; planted largely in all warm countries, on account of its malaria-destroying qualities; remarkably good for fuel, being easily sawed and split.

Eucalyptus occidentalis, "Flat-Topped Yate." A native of Western Australia; timber is valuable, and tree resists drought; a very thrifty and attractive tree.

Eucalyptus polyanthema, "Red Box." A moderate grower; perfectly hardy; timber very valuable for underground work, being remarkably hard and durable; one of the handsomest of the family; very graceful in habit; foliage silver-gray.

Eucalyptus robusta, "Swamp-Mahogany Gum." New South Wales, 100 ft. Well adapted to low ground and also to the driest locations; very symmetrical while young; quite brittle as it grows older; branches directly opposite in regular whorls; foliage large, of a deep, glossy, green color; flowers large, creamy-white; blooms late in the fall; very much prized by apiarists.

Eucalyptus rostrata, "Red Gum," S. Australia, 200 ft. Well known and highly esteemed in this section; the timber is unsurpassed for durability.

Eucalyptus rudis. A favorite in arid situations.

Eucalyptus rudis. A native of Western Australia and said to be a great resister of drought. The leaves on the young trees are almost round, later becoming long and of lanceolate shape. The flowers are creamy-white; worthy of extensive cultivation; it is a fine, rapid, symmetrical grower; the bark does not peel off; its branches, being very tenacious, are not easily broken even by the severest wind storms; it is very hardy, and as an avenue tree, is surpassed by no other variety of Eucalyptus.

Three Popular Varieties of Eucalyptus Trees.

1. *Eucalyptus crebra*.

2. *Eucalyptus rudis*.

3. *Eucalyptus robusta*.

- Eucalyptus sideroxylon*, "Red Ironbark." Medium to large with rough dark bark. Wood very hard and valuable for bridge work and for many other forms of construction where strength and durability are required. Leaves narrowly lance-shaped and more or less silvery; flowers in clusters, light pink to a scarlet.
- Eucalyptus stuartiana*, "Apple Scented Gum." Of medium growth, quite erect and stocky. A great resister of frost, enduring temperatures as low as 10 to 18° F. Valuable for wind breaks. Timber is useful for fence posts and for fuel.
- Eucalyptus tereticornis*, "Forest Red Gum." Another rapid growing tree with very durable timber, in general characteristics very similar to *E. rostrata*, but the timber is more durable. As a commercial timber tree in Australia it is said to lead all other varieties.
- Eucalyptus viminalis*, "Manna Gum." A rapid-growing variety and very hardy; on rich soil it grows to a gigantic size; the young bark and leaves yield Australian Manna, a hard, opaque, sweet substance.
- Ficus elastica*, "India Rubber Plant," 100 ft. A magnificent decorative plant when small; leaves large, dark, shining green above and yellowish-green below; one of the grandest of ornamental trees, which attains a very large size in locations not subject to too much frost; will thrive where the lemon will grow.
- Ficus macrophylla*, "Moreton Bay Fig." Australia. Hardier than above and with much larger leaves; valuable as a decorative plant.
- Grevillea robusta*, "Silk Oak." Australia, 150 ft. A very graceful, ferny-leaved tree, covered in the summer months with yellow and crimson flowers; a grand avenue tree.
- Ilex Aquifolium*, "European Holly," Europe and Asia, 40 feet. A small tree, with shining, dark green thorny leaves, somewhat resembling the oak in form; in winter the tree is covered with bright red berries.
- Ilex Aquifolium aureo-maculata*. "Golden Variegated Holly." Leaves with a large blotch of creamy-yellow surrounded by a green border.
- Juniperus communis Hibernica*, "Irish Juniper." An erect, dense, conical tree, resembling a pillar of green.
- Juniperus Bermudiana*. "Bermuda Juniper." A very beautiful tree, with foliage of a pale bluish-green color.
- Juniperus Japonica aurea*, "Golden Japan Juniper." A very attractive variety of moderate growth, and spreading habit, foliage of a beautiful golden color.
- Juniperus Sabina*, "Savin Juniper." A low spreading shrub with reclining or trailing branches. Thrives best in a light soil and is valuable for rock work.
- Juniperus Virginiana*. "Red Cedar." An American tree, varying in habit and color of foliage; very ornamental.
- Libocedrus Chiliensis*, "Chilean Cedar," 60 ft. Foliage glaucous green; branches spreading, pendulous, ascending towards the summit, and quite erect at the top.
- Libocedrus decurrens*, "Incense Cedar." A very ornamental, distinct, erect, compact-growing tree, with a stout trunk; branches a bright, rich, glossy green, glaucous underneath; a native of the Sierra Nevada Mountains; attaining a height of 140 feet.
- Libocedrus viridis*. A beautiful form having bright green foliage, very distinct.
- Magnolia grandiflora*, "Bull Bay" 80 ft. The most noble of American evergreen trees; foliage is thick, brilliant green on the upper surface and rusty underneath; the flowers are pure white, of immense size and very fragrant.
- Magnolia grandiflora exoniensis*. Bears large, pure white, double flowers when only a foot high; the hardiest variety of *Magnolia*, succeeding in localities where others fail entirely.
- Magnolia La Gallisonniere*. A hardy variety, leaves with upper surface glossy green, under surface russet brown.
- Pinus Austriaca*, "Austrian Pine." A robust, hardy, spreading tree, with long, dark leaves.
- Pinus Coulteri*, "Pitch Pine." California, 80 ft. Tree with stout branches, pendulous below and ascending above, forming a loose pyramidal head; a handsome and distinct tree; cones of the largest size 12 in. long and 6 in. in diameter and weighing between 4 and 5 lbs.
- Pinus Halepensis*, "Aleppo Pine," Mediterranean region, 60 ft. A fine variety, with dense, bluish foliage.
- Pinus Pineae*, "Parasol or Stone Pine," South Europe, 60 ft. This very picturesque tree thrives best in a sandy soil in a sheltered situation, branches spreading like a parasol and usually confined to the top of the tree. A feature of the landscape in southern Italy.
- Pinus ponderosa*, "Yellow or Bull Pine," 150 ft. A noble tree; very rapid grower and perfectly hardy.
- Pinus radiata*, (*P. insignis*), "Monterey Pine." The most desirable for shade, and more extensively planted than any other variety in this State.
- Pinus sylvestris*, "Scotch Pine," Europe and Asia, 70 ft. A fine, robust-growing tree, with erect shoots and silvery-green foliage.
- Quercus agrifolia*, "California Live Oak," 40 ft. This is the well-known, majestic, evergreen growing so abundantly along the shores of San Francisco Bay.
- Quercus suber*, "Cork Oak," S. Europe, N. Africa, 50 ft. A very ornamental variety of evergreen oak; thrives well here; the outer bark furnishes the cork of commerce.
- Retinospora ericoides*, "Japanese Cypress." A dwarf shrub with bright green branches above and glaucous beneath, assuming a ruddy tint in winter; very ornamental.

Retinospora plumosa aurea. A dense growing species with conical habit, young shoots and foliage of a golden yellow color.

Schinus molle. "California Pepper-tree." Peru, 40 ft. A most popular shade and ornamental tree, with fine feathery foliage, producing clusters of reddish berries in autumn; perfectly hardy with us, and one of the most popular street trees.

Sciadopitys verticillata, "Umbrella Pine," Japan, 100 feet. A very handsome tree, of slow growth; the branches are arranged in regular whorls and are covered with deep green, narrow leaves; a fine lawn tree.

Sterculia diversifolia, (*B. poplarifolium*.) "Victorian Bottle Tree," Australia. Foliage resembling that of a Poplar in shape.

Taxus baccata, "English Yew." A densely branched, spreading bush, of a dark, somber hue; one of the best evergreens for clipping into artificial forms.

Taxus baccata argentea, (*T. elegantissima*.) "Dwarf Golden Yew." One of the most valuable golden-leaved evergreens; the leaves of the new growth are of a bright straw color, rendering the plant highly effective; of slow growth.

Taxus baccata fastigiata, "Irish Yew." An upright-growing variety, with deep, dark green foliage; branches erect, closely

Bloom of *Magnolia grandiflora*. A noble tree, fine for lawns. See page 81.

Sequoia gigantea, "California Big Tree," 200, 350 ft. The famous Big Tree of this State; it makes a handsome pyramid when young; very desirable for lawn decoration; a very attractive evergreen; thrives well in this climate.

Sequoia Pyramidalis compacta glauca. Very similar to the California Redwood, but more compact and of beautiful glaucous blue color.

Sequoia sempervirens, California "Redwood," 400 ft. California's finest timber tree; very graceful.

Sterculia acerifolia, (*Brachychiton acerifolium*.) "Flame Tree," Australia, 60 ft. A sturdy tree of pyramidal habit, with large, handsome foliage, producing masses of scarlet flowers, which are thrown out well above the foliage, making a grand effect when mixed with other trees.

compressed, forming a pyramidal or broom-shaped head; a very distinct and beautiful variety.

Thuja gigantea or *Thuja Lobbi*, California. A fine, graceful Arbor-Vitae, indigenous in California. Branches spreading, slender, regularly and closely set; foliage bright green and glossy above and dark green beneath; trunk buttressed and clothed with cinnamon bark.

Thuja occidentalis, "American Arbor Vitae." A beautiful native species commonly known as the White Cedar; especially valuable for screens and hedges.

Thuja orientalis aurea, "Chinese Golden Arbor Vitae." One of the most elegant and justly popular; very compact and regular in habit; the foliage assuming a beautiful golden tint in the spring.

Thuja orientalis filiformis stricta. A most beautiful, compact, upright-growing variety, having threadlike foliage.

Thuja orientalis semperaurescens, "Ever-Golden Arbor Vitae." A new variety of dwarf habit, but of free growth; retains its golden tint the year round; one of the very best of the variegated evergreen trees.

Sequoia gigantea. The California Big Tree.

See page 82.

Thuyopsis borealis, "Nootka Sound Cypress or Yellow Cedar," 120 ft. A desirable species from Nootka Sound; it is pyramidal in habit, with light, glossy green foliage, sometimes with bluish shade.

Thuyopsis dolobrata, "Hatchet-Leaved Arbor Vitae." A most peculiar-looking tree from Japan; leaves shining green above, silvery white beneath; of a pendulous and dwarfish habit.

Thuyopsis dolobrata variegata. Same as the above, only that the ends of the branches are tipped with a pale yellow color.

Torreya Californica, "California Nutmeg." 75 ft. A handsome, yew like tree, forming a compact head and producing a nut very much resembling the nutmeg of commerce.

Torreya nucifera, Japan, 30-40 ft. Branches in regular whorls; leaves leathery, pointed; nuts oval, about an inch long.

Umbellularia Californica, "California Laurel or Bay Tree," 80 ft. A very handsome native tree, with light green foliage, which emits an agreeable perfume when bruised.

EVERGREEN SHRUBS.

Abelia grandiflora, (*A. rupestris*.) A garden hybrid. A pretty shrub of straggling growth, bearing small, fragrant, tube-like flowers, colored light rose on the outside and white on the inside.

Aralia Japonica, (*A. Sieboldii*.) Japan. A beautiful plant, with large, glossy, palmate leaves.

Aralia Japonica variegata. Same as the preceding, except that the leaves are broadly marked with creamy-white.

Arbutus Unedo, "Strawberry Tree." Foliage dark green, peculiarly beautiful in the fall, when the tree is covered at once with blossoms and ripe fruit, which is edible; a native of the South of Europe.

Arctostaphylos glauca, "Manzanita." Indigenous in the mountainous district of this State; produces an abundance of white flowers in racemes; followed by red berries, maturing in Fall; wood is very hard, is subject to a high polish and is valuable for canes.

Ardisia crenulata (*A. Crispa*.) A very handsome, dwarfish shrub, with drooping red flowers in panicles, followed by red berries, size of peas; foliage dark, glossy green.

Aucuba Japonica, "Gold-Dust Plant." Himalaya to Japan. A very handsome shrub, and one of the best of the colored-leaved foliage plants; leaves large, distinctly speckled with golden-yellow; should be grown in partial shade.

Azara microphylla. A graceful shrub with dark shining green leaves; flowers greenish yellow succeeded by orange colored berries. Very desirable as a single plant or for covering walls.

Berberis Darwinii. A densely branched spreading shrub, with thick and leathery foliage; flowers orange yellow, very fragrant, followed by dark purple fruit; the best of the species.

Berberis Thunbergii. Especially prized for its low dense growth, brilliant red fruits, and its bright scarlet fall coloring.

Buxus sempervirens, "Common Box Tree." A handsome lawn shrub with small, deep green foliage; also very suitable for making hedges; wood is very hard.

Buxus sempervirens argentea, "Silver Striped-Leaved Box Tree." Of the same habit as the above, but with silvery-striped leaves.

Buxus sempervirens suffruticosa. "Dwarf Box." A fine small bush, with glossy, roundish leaves; the variety so extensively used for edging.

Sequoia Sempervirens. The California Redwood Tree. See page 82.

Camellia Japonica. Very beautiful winter flowering evergreens; their handsome, shining, dark green foliage and magnificent, wax-like flowers of various colors, render them indispensable for the conservatory, and well adapted for parlor or window culture; perfectly hardy in this climate, in the open ground, but should be planted in a shady place and protected the first year. We offer the single red and the double varieties, of various colors; also the variegated-leaved.

Carpenteria California. An ornamental, tall growing shrub, a native of the Sierra Nevada mountains; flowers pure white, from three to four inches across, and very fragrant. A shrub which should have a place in every garden.

Cassia corymbosa. An elegant evergreen shrub with glabrous branchlets and leaflets; flowers yellow, borne in terminal corymbs.

Ceanothus azureus, Mexico. Of easy culture; flowers pale blue, appearing in April and May; leaves acutely serrated, bright green above and downy beneath.

Cestrum aurantiacum. A free flowering evergreen shrub covered with orange-colored flowers during the entire summer.

Choisya ternata, "Mexican Orange." A pretty shrub with glossy, bright green leaves, producing an abundance of white, sweet scented flowers on the tops of the branches in July.

Coronilla glauca, S. Europe. A pretty evergreen shrub, with glaucous green foliage, and covered during the summer with yellow flowers; fragrant in the day time, but scentless at night.

Crataegus Pyracantha, "Evergreen Thorn," "Burning Bush," Europe and Asia. A thick, thorny, evergreen shrub; valuable either when grown single, or as a hedge; foliage small, of a rich, dark, glossy green color; covered with white flowers, followed by masses of crimson berries, remaining on the plant all winter, making it very attractive.

Daphne odora, China and Japan. A low growing shrub, with dark, bright green foliage, and very fragrant white flowers.

Daphne odora variegata. Leaves variegated and flowers purplish.

Diosma ericoides, "Breath of Heaven." A handsome little shrub, with heath-like foliage, and small, star-shaped flowers; the leaves when bruised emit a powerful perfume.

Elaeagnus argentea, N. America, 12 ft. A beautiful shrub of erect growth; leaves covered with silvery scales.

Elaeagnus pungens variegata. More ornamental than the above; with dark green, leathery leaves, peculiarly margined and dusted with golden yellow.

Erica Mediterranea, "Mediterranean Heath." A small, compact evergreen; with feathery foliage, and producing purplish-pink flowers in the Spring.

Escallonia Montevediensis. Of dwarf growth; with bright, shining green leaves; flowers white.

Escallonia rubra, South America. Same as the above except that the flowers are red.

Eugenia myrtifolia. Commonly known as the double flowering myrtle. A neat little shrub with glossy leaves and crowned with an abundance of small double white flowers.

Euonymus. A very interesting genus of evergreen shrubs; very desirable for hedges; stands pruning well; the variegated varieties are very effective when planted alone; are of very easy culture.

Euonymus Japonicus. Bright green leaves; can be trimmed in any way desired.

Euonymus Japonicus argenteo-variegatus. "Silver Variegated." A very choice, upright-growing shrub, with silvery variegated foliage.

Euonymus Japonicus aureo marginatus. "Golden-Margined." Leaves edged with golden yellow; very fine.

Thuya orientalis aurea. Chinese Golden Arbor Vitae. See page 83.

Euonymus Japonicus, Duc d'Anjou. Foliage light green, with center of the leaves variegated with golden yellow.

Euonymus Japonicus aurea, "Golden-Leaved." A shrub highly esteemed for its mottled, golden yellow foliage.

Euonymus Japonicus microphyllus, (*Euonymus pulchellus*). A dwarf growing variety; with small, deep, dark green leaves; very desirable for low hedges.

Euonymus Japonicus radicans argenteo-marginatus, "Trailing Euonymus." A vigorous creeping variety, with light green, silver-edged foliage.

Fabiana imbricata, South America., 3 ft. An erect-growing shrub: with dark green foliage, and numerous tube-shaped white flowers.

Garrya elliptica, California to New Mexico, 8 ft. Leaves elliptical; dark green and shining above, hoary beneath; worthy of extensive cultivation.

Genista Andriana, "Scotch Broom." A very handsome shrub, with drooping branches; covered in the spring with bright yellow, pea-shaped flowers; very effective for grouping.

Genista Hispanica, "Spanish Broom." An upright-growing shrub; flowers yellow, produced very freely in the spring on long, pendulous, round, leafless branches.

Heteromeles arbutifolia, "Christmas Berry." A native shrub of California, growing quite abundantly in the coast counties; the berries are in great demand, during the holidays, for decorating purposes.

Hypericum Moserianum, "Golden Flower." A perfectly hardy shrub; producing large, single, yellow flowers of a peculiar satiny texture, in great profusion during the summer; should be in every garden.

Laurus cerasus, "English Laurel." Southern Europe to Northern Persia, 10-15 feet. A fine, large evergreen; with broad, shining, green leaves; produces large panicles of creamy white flowers, followed by purple berries.

Laurus Lusitanica, "Portugal Laurel." A dwarfish shrub; with glossy, dark green leaves; flowers intensely fragrant at night, in very large panicles.

Laurus nobilis, "Sweet Bay." Mediterranean region, 40-60 ft. A very ornamental, upright-growing shrub; with deep, dark green, fragrant leaves, and covered in the Fall with berries; if properly pruned, one of the handsomest of decorative plants; the leaves are placed between the layers of the Smyrna Figs and impart a peculiar pleasant flavor to the fruit.

Ligustrum Japonicum. A very large shrub; with glossy, dark green, leathery leaves; flowers white, borne in clusters; followed by purplish-blue berries; a very desirable hedge plant; stands trimming well.

Ligustrum Japonicum variegatum. Of more compact growth than the preceding; leaves margined and blotched creamy white; very effective for grouping.

Ligustrum ovalifolium, "California Privet," Japan, 12-15 ft. A pyramidal shrub, with bright green, medium sized leaves; producing white flowers in June; a valuable hedge plant.

Mahonia Aquifolium, "Holly-Leaved," A native variety with shining, purplish, prickly leaves; bright yellow flowers.

Mahonia Japonica. Very distinct species with unbranched stems and leaves about one foot long; the bright yellow flowers are produced in terminal clusters of long racemes.

Melaleuca decussata, 20 ft. An Australian shrub; with glabrous foliage and covered with spikes of lilac colored flowers in August.

Metrosideros robusta, "Bottle Brush." A very interesting and quaint shrub with narrow leaves and covered with rich, crimson flowers, in dense racemes in July.

Myrtus communis, "Common Myrtle." A dwarf shrub; with shining green leaves, and fragrant white flowers.

Myrtus microphylla, "Small-Leaved Myrtle." A variety with small, dark green foliage; set closely along the branches.

Nandina domestica. A beautiful, upright-growing dwarfish shrub, crowned with deep, glossy, green leaves and with tall spikes of white flowers; succeeded in the Fall with masses of small, red and white berries.

Nerium Oleander, "Oleander." We are making the growing of these beautiful plants a specialty, and have selected the following fine varieties as the best in our collection of over fifty sorts imported direct by us from the principal nurseries of Europe. Oleanders are particularly adapted to this climate and are deserving of more cultivation than has been given to them; their large, deep green foliage, combined with their fragrant flowers of many hues, which appear all summer, render them our most attractive and effective ornamental plants; the single and semi-double Oleanders are very floriferous, and equally as fine as the double ones; in fact, some of the very finest are among the single varieties.

The following varieties of Oleanders have all been thoroughly tested by us; hence we have no hesitation in recommending them with the utmost confidence to all plant lovers.

Album plenum. Very fine; small, double white flowers; very perfect and sweet-scented.

Atropurpureum duplex. One of the finest double Oleanders; color deep crimson-carmine, streaked with pure white; very fine and effective.

De Brun. Color carmine-lake; double; very fine and desirable; streaked with white stripes.

Frederick Guibert. Truss large, single; light rose; throat light rose, streaked with crimson; very floriferous.

Laurifolium. Especially remarkable on account of its stiff, broad foliage like that of a laurel; flowers rosy pink, streaked white.

Madame Peyre. Triple corolla; changeable from pure ivory to bright straw color; throat deeper yellow; very fine and desirable.

Madame Sarah Bernhardt. This is a most magnificent single Oleander; and one of the very best; flower truss very large and full; flowers the color of the rose *Souvenir de la Malmaison*, center streaked with light crimson; large.

Madoni Grandiflorum. Flowers large, semi-double, white, throat creamy color; very fine and floriferous.

Mrs. F. Roeding. This magnificent double Oleander, originated by us, is a chance seedling out of several thousand raised from the imported varieties; if properly pruned to one stem, the branches form a fine, compact, dense head, covered in summer with trusses of beautiful double pink flowers, (the color of the *La France rose*) delightfully fragrant, with fringed petals, which completely envelope the plant. More hardy than any other variety and is in every respect a very superior Oleander; worthy of a place in every garden.

Nankin. One of the very best; flower truss large, single; upright; flowers light salmon yellow, changing to deep salmon yellow; throat deep yellow, streaked orange and crimson; especially fine in fall.

Nankin variegated. Leaves beautifully variegated and grained yellowish-white; very fine in the shade; flowers double, light pink.

Photinia serrulata. A handsome shrub; with glossy, green leaves, assuming the most beautiful tints and shades in the winter; flowers small, white; in terminal, flat corymbs.

Pittosporum eugenioides. A very handsome, upright-growing shrub; with silvery light green leaves, and black stems; a good hedge plant and very ornamental as an individual.

Pittosporum Tobria, "Japanese Pittosporum." A low-growing shrub; with dark green leaves; a native of Japan.

Pittosporum Tobria, variegatum. Same habit as above, but foliage is margined with white.

Pittosporum undulatum. A shrub or tree with lance-shaped, deep green, glossy leaves flowers intensely fragrant at night.

Polygala Dalmaisiana. A most desirable shrub and decorative plant; ever-blooming; flowers lilac and rose.

Raphiolepis ovata. A beautiful, compact-growing shrub; a native of China; with dark, shining green leaves, and covered in summer with white flowers, followed by black berries.

Rhamnus Californicus, "California Wild Coffee." A striking shrub, indigenous to the Coast counties of this State; flowers greenish, in panicles; with long elliptical, oblong, glabrous leaves.

Veronica Imperialis. The finest of the species; flowers amaranth.

Veronica variegata. A handsome shrub; blue flowers and variegated foliage.

Viburnum Tinus, "Laurustinus," Mediterranean region, 8-12 ft. A well-known winter flowering shrub of great beauty; producing an abundance of white flowers; well adapted for hedges.

Viburnum Tinus variegatum, "Variegated Laurustinus." Leaves beautifully blotched with silvery white; very fine.

Viburnum Tinus rotundifolia. Far superior to the common variety; leaves rounded, to the common variety; leaves rounded, deep glossy green; flowers much larger than the above; adapted to this valley; never sun-scalds.

CLIMBING AND TRAILING PLANTS.

Akebia quinata, China and Japan. A beautiful vine, with magnificent dark green foliage and purple blossoms.

Ampelopsis quinquefolia, "Virginia Creeper." The common American Ivy, with large, luxuriant foliage, which in autumn assumes the most gorgeous and magnificent color; one of the finest vines for covering walls or verandas.

Ampelopsis Veitchii, "Boston Ivy," "Japan Ivy," China and Japan. This is the handsome creeper so generally used for covering brick, stone and wooden walls; when once established the vine grows very rapidly and clings to the walls with the greatest tenacity; the leaves are of a shining, glossy green, taking on beautiful, autumnal coloring; flowers small, followed by dense clusters of deep blue berries.

Aristolochia Sipho, "Dutchman's Pipe." A very rapid and dense climber, with heart-shaped leaves and curious pipe-shaped yellowish-brown flowers.

Asparagus medeoloides, "Smilax," S. Africa. Well-known climber; valuable for bouquets and garlands.

Asparagus plumosus nanus, S. Africa. Very ornamental, with beautiful, feathery foliage.

Asparagus Sprengeri, Natal. A most desirable new species, especially useful to grow as a pot plant for decorative purposes, or for planting in suspended baskets; the fronds are frequently four feet long, are of a rich shade of green, and most useful for cutting, retaining their freshness after being cut for weeks; it will make an excellent house plant, as it withstands a dry atmosphere.

Asparagus tenuissimus, S. Africa. A beautiful climber; used largely for floral work.

Bignonia grandiflora, China and Japan. A moderate climber with large, orange-scarlet flowers; very showy when in full bloom; a beautiful object when trained to a stake and made to assume the form of a standard shrub or tree.

Bignonia magnifica. A good climber, covered in summer with panicles of very large flowers, varying from a delicate mauve to rich, purplish-crimson, throat light primrose.

Bignonia venusta. A vigorous grower, producing large, deep, orange-colored flowers. A magnificent vine for covering old stumps and trunks of trees.

Bougainvillea glabra Sanderiana. A beautiful climber, producing deep, rosy flowers in great abundance.

Bougainvillea spectabilis lateritia. Flowers larger than above, of a brick-red color. A very desirable climber.

Clematis Flammula. An old variety, prized for the fragrance of its small white flowers and remarkable dark green leaves.

Clematis Jackmani. Large, intense, violet-purple flowers, striking for their richness.

Clematis Princess of Wales. A deep bluish mauve, with a satiny surface.

Clianthus puniceus, "Parrot's Bill," New Zealand. A beautiful vine, with clusters of crimson flowers.

Cobaea scandens, Mexico. A beautiful climber of rapid growth, bearing large, purple-bell-shaped flowers; very attractive and desirable for arbors and trellises.

Ficus repens (Climbing fig.) China and Japan. A very handsome little climber; with small, roundish, dark green leaves. Hardy in this State; a very attractive plant, attaching itself to walls, etc., like ivy.

Gardena florida. "Cape Jasmine," China. A popular plant producing large, fragrant white flowers from May to September.

Hedera Helix, "English Ivy." A very fine variety, with large, thick, leathery leaves.

Hedera Helix variegata. Small leaves, prettily variegated.

Jasminum gracillimum, Borneo. A new Jasmine, remarkable for its freedom of bloom and beautiful pure white flowers, borne in clusters; very fragrant.

Jasminum grandiflorum, "Catalonian Jasmine." Flowers pure white, star-shaped; of exquisite fragrance.

Jasminum nudiflorum. A rather dwarfish variety, covered with fragrant yellow flowers in the spring, before the foliage appears.

Jasminum officinale, Persia and India. Delicate white flowers.

Jasminum revolutum, "Italian Yellow Jasmine," Asia. A vigorous variety; can be grown as a vine or shrub; covered with rich, yellow flowers all summer.

Lonicera flava, "Yellow Coral Honeysuckle," U. S. A well-known native vine, with trumpet flowers.

Five Popular Decorative Plants.

1. *Ficus elastica*, the Rubber Tree.

2. *Cyperus alternifolius*, Umbrella Grass.

3. *Adiantum cuneatum*, Maidenhair Fern.

4. *Rhaps flabelliformis*.

5. *Livistonia chinensis*.

Lonicera Japonica aurea reticulata, "Honey-suckle," Japan. Flowers yellow, very fragrant; leaves are beautifully netted and veined with clear yellow.

Lonicera Japonica Halleana. A vigorous climber, with pure white flowers, changing to yellow; evergreen.

Lonicera semperflorens, "Red Coral Honey-suckle," A strong, rapid grower; blooms all summer; flowers scarlet.

Lonicera Standishii, "Chinese Honeysuckle." A well-known variety, with dark green foliage; remains green all winter; flowers white and pink; fragrant blossoms.

Mandevilla suaveolens, "Chili Jasmine," S. America. Fine summer climber, with great clusters of large waxy, star-shaped blossoms, exquisitely fragrant.

Manettia bicolor, Brazil. A rapid and beautiful new climber; flowers an inch in length, of the most intense scarlet color, tipped with bright golden-yellow; blooms through the fall and winter months.

Passiflora coerulea, "Passion Flower," Brazil. Flowers purplish hue; fruit egg-shaped, yellow when ripe.

Passiflora coerulea, "Constance Eliot." Very fine; white; hardy variety.

Passiflora coccinea. Flowers deep red.

Passiflora edulis, Brazil. A very rapid-growing plant, with beautiful, glossy green foliage; flowers white, with blue or violet base; fruit edible, as large as a goose egg and of a purplish color.

Periploca Graeca, "Silk Vine." An exceedingly rapid grower, reaching up to a great height, with shining, long, narrow leaves and umbels of purplish-brown blooms.

Phaseolus Caracalla, "Snail Vine." A very rapid climber, with fragrant and peculiarly twisted flowers of many colors.

Plumbago Capensis. Can be trained as a bush or climber; flowers light sky-blue, produced through the entire summer; stands drought and water and the brightest sunshine.

Plumbago Capensis alba. Pure white; form of the above.

Solanum jasminoides, "Potato Vine," S. America. A very rapid-growing vine, with dark green leaves; flowers white with yellow centers.

Solanum Wendlandii, Costa Rico. A magnificent, rapid-climbing vine, with large dark glossy green leaves; flowers large, lilac-blue, borne in cymes six inches and more across; flowers profusely, and is very showy.

Sollya heterophylla, "Australian Bluebell Creeper." A fine, hardy evergreen, covered during the summer months with pale blue, flowers.

Swainsona galegifolia albiflora, Australia. A very graceful climber and desirable for a trellis; flowers pure white, resembling Sweet Peas in form; produced in pure white sprays in the greatest profusion.

Tecoma jasminoides, "Australian Bower Plant." A beautiful climber, with bright glossy green leaves; flowers white, shaded at the throat to a deep purple.

Tecoma radicans, "Trumpet Creeper," United States. Similar to *Bignonia grandiflora*, but a stronger and more rapid climber; flowers smaller; desirable for covering the trunks of trees or unsightly buildings.

Tecoma Tweediana argentina. A fine plant for covering walls, which it does about as well as the "Boston Ivy;" flowers yellow.

Vinca, "Periwinkle." Showy, creeping plant; will thrive in the sun or in spots too shaded for grass to grow, and admirably adapted for borders or rock work.

Wistaria. A charming climber.

Vinca major. Rich, glossy green foliage; light blue flowers.

Wistaria. One of the most graceful of climbers; a quick, rapid, vigorous grower; it is surpassed by no plant for covering walls or piazzas, and this, combined with its rich, pendulous panicles of pea-shaped flowers appearing in the spring in great profusion, renders this one of the most desirable of climbing plants.

Wistaria Chinensis, "Chinese Wistaria." A beautiful climber of rapid growth; producing long, pendulous clusters of pale blue flowers.

Wistaria Chinensis albiflora. A very choice variety; a vigorous grower, with long racemes of pure white flowers.

Wistaria Chinensis flore-pleno, "Double Purple," A rare variety, with long clusters of double, pale blue flowers.

Wistaria Chinensis rosea. A fine variety with clusters of pink flowers.

Phoenix dactylifera. The Fruiting Date Palm.

1. Spike of male blossoms.

2. Immense cluster of Fruit.

THE HEDGE PLANTS.

We are paying considerable attention to this class of plants, and beg to offer several novelties.

Buxus sempervirens suffruticosa, "Dwarf Box." Makes a fine, low hedge for small gardens.

Crataegus Pyracantha, "Burning Bush." An evergreen, full of thorns; a hedgerow of this variety is impenetrable and presents a magnificent appearance, both in flower and when the berries are ripe; the latter are scarlet and produced in great numbers.

Cupressus macrocarpa, "Monterey Cypress." The most extensively planted of hedges.

Euonymus Japonicus microphyllus, (E. pulchellus.) Fine for borders around a garden.

Lycium horridum, "African Box Thorn." In Australia this plant has superseded every

other hedge plant; it is an evergreen, rapid grower; makes an impenetrable hedge in two years; can be trimmed in any way desired.

Punica Granatum, "Pomegranate." Very suitable for hedge.

Punica Granatum nana, "Dwarf Pomegranate." Suitable for garden hedge.

Roses. Nothing is more magnificent than a hedge of ever-blooming Roses; very few varieties, however, are suitable, as a compact growth and continuous flowering are necessary. After years of experience, we recommend the following varieties; Mme. Chas. Wood, Antoine Mouton, La France and Agrippina.

Thuja occidentalis, "Common Arbor vitae." Finer than Monterey Cypress.

Viburnum Tinus. (Laurustinus.) A very pretty hedge plant; always in flower.

THE PALMS.

It was Linnaeus, the great Swedish botanist, who always spoke of the palms as the "Kings and Princesses of the Vegetable Kingdom," an appellation fully warranted by their erect carriage and noble appearance. They certainly are the most highly ornamental of all plant life, and it is upon them chiefly that we depend for that distinctive tropical appearance of our gardens which is the admiration of all tourists from less favored climes.

The soil and climate of nearly the whole of California is peculiarly adapted to their successful culture, and after being once established, they require but little care to keep them in first-class condition.

There are species so hardy that they endure, without injury, the frosts and snows of the southern part of both England and Ireland.

Here, where they grow so luxuriantly, we should make them the most prominent feature of our landscapes, and no California garden, however small, is complete without one or more members of this strikingly handsome family; plants whose beauty constantly increases with age.

We are making a specialty of the growing of these beautiful, graceful plants and our collection is very complete.

PALMS AND CYCADS.

Areca lutescens, Madagascar, 30 ft. One of the most graceful and beautiful palms in cultivation; the foliage is of a bright, glossy green, with rich, golden stems; adapted only to greenhouse or house culture.

Chamaerops excelsa. "Windmill Palm." China, Japan, India, 30 ft. Leaves fan-shaped, deeply cut. This is the hardiest palm we have, and, although it is not such a rapid grower as some, it is worthy of extensive cultivation, as it is very ornamental, a symmetrical grower, and has very handsome palmate leaves.

Chamaerops humilis, the Mediterranean region. A dwarf-growing Fan Palm, with divided, fan-shaped leaves; stems thorny; perfectly hardy, and of easy culture; a fine lawn plant, especially for small places.

Chamaerops Nepalensis. Resembles *Excelsa* in habit, but more dwarf in growth; the leaves are smaller, stiff, more rounded; and the leaf-stalk shorter and stouter; the leaves are of a deep, dark green color; a rare and handsome, hardy palm, worthy of a place in every garden.

Cocos australis, "Pindo Palm," Paraguay, 8 ft. A slow-growing, decidedly ornamental and hardy palm; leaves pinnate; glaucous green; stem very much recurved; suitable for small gardens.

Corypha australis, Australia, 60-80 ft. One of the handsomest of the fan palms; the fan-like leaves are dark green, supported upon brown petioles, which are armed at their edges with stout spines; well suited for the decoration of apartments; hardy only in localities not subject to severe frosts.

Cycas circinalis, Moluccas, 20 ft. Stem stout, cylindrical, increasing in size very slowly; the leaves are much larger than the *Cocos*, and deeply pinnated; the most beautiful of the Cycad family; not adapted to outdoor culture.

Erythea edulis. The Guadalupe Island Palm.

Cycas revoluta, "Sago Palm." Japan. A hardy Cycad; stem crowned with dark green pinnate leaves; few plants are more graceful or effective; should find a place in every garden.

Erythea armata, "Blue Palm," Lower California, 40 ft. One of the most exquisite fan palms; foliage glaucous blue; very hardy; a pretty palm, especially suited to small gardens.

Erythea edulis, Guadalupe Island. Resembles the California Fan Palm somewhat but the stem is more slender and graceful; the leaves are without filaments and of a deeper green, so that it is readily distinguished from that variety; perfectly hardy.

Jubea spectabilis. "Wine or Honey Palm." Chile, 40-60 ft. A palm honey, which is very much in demand, is prepared from the sap in its native home; a handsome palm, of spreading habit and with very long pinnate leaves.

Kentia Belmoriana, "Curly Palm," Lord Howe's Island. One of the most valuable of house palms; elegant, pinnate leaves; beautiful, even when small.

Kentia Canterburyana, Lord Howe's Island. A handsome species, with pinnate leaves and very robust habit; called in its native country, the Umbrella Palm; a fine conservatory or house plant.

Kentia Forsteriana, "Thatch-Leaf Palm," Lord Howe's Island. A robust-growing variety, only for house culture; very graceful and attractive.

Livistonia Chinensis, (*Latania Borbonica*), China. The most popular palm for decorative work, for apartments or conservatories; leaves large, fan-shaped, of a rich, dark green color; hardy in sheltered spots only.

Cycas revoluta. The Sago Palm.

Phoenix Canariensis, "Canary Island Palm." The most graceful and the handsomest of our hardy palms; leaves pinnaate and of a deep, dark green color; one of the most effective palms on a lawn, and worthy of the attention of all admirers of the Palm family; fruit not edible.

Phoenix dactylifera, Arabia and N. Africa, 100 ft. Produces the famous date of commerce; the date palm is dioecious that is, the male and female flowers appear on different trees; fruit is secured by suspending the male blossoms in the tree developing female flowers, when the same are in the receptive stage; luxuriates in the strongest alkaline soils, where other trees fail entirely.

Phoenix reclinata, "Dwarf Date Palm," S. Africa, 12-20 ft. Very graceful, drooping leaves; very handsome for avenue or lawn use; not as hardy as some of the other sorts.

Phoenix rupicola, Himalaya. 15-20 ft. Has wide-spreading, arching leaves, and one of the finest of the genus for pot culture.

Phoenix sylvestris, "Wild Date Palm," India, 25-40 ft. Very hardy and useful, the leaves being used for mats, ropes and baskets, and the sap furnishing the palm sugar in its native country; leaves long, arched and of a glaucous green color; closely allied to the date of commerce.

Rhapis flabelliformis, "Chinese Umbrella Palm," China and Japan. A very pretty, cane-like palm, which suckers from the roots, like Bamboo, with many-fingered dark green leaves, borne at the end of the reed-like stems.

Rhapis humilis, "Walking Stick Palm," China, 3-5 ft. Very similar to the preceding, except that the stems are thinner and the palmated leaves are narrower.

Sabal Adansoni, "Dwarf Palmetto," Southern States, 3-6 ft. Leaves a dark, rich green, with smooth edged stems; flower-spike rises above the leaves to a height of six or seven feet; this palm resists severe cold unharmed.

Sabal Blackburnianum, West Indies, 30-40 ft. A very distinct, slow-growing variety: leaves long, bluish-green.

Sabal Palmetto, "Cabbage Palmetto." 20-80 ft. A native of the Southern States and famous for its historical associations and for the imperishable nature of its wood when under water; leaves long and deeply divided; the bases of the leaf stalks remain on the trunk until the tree advances in age, when they fall off, leaving a rough trunk, eight to ten inches in diameter; this palm is entirely hardy, and on account of its unique appearance is very desirable.

Phoenix Canariensis. The Canary Island Palm.

Seaforthia elegans, (*Archontophoenix cunninghamii*), Queensland, N. S. W., 60-80 ft. One of the most beautiful of the palm family, and one of the best in cultivation for the conservatory or greenhouse; the pinnae leaves are two to ten feet in length, dark green and perfectly smooth.

Washingtonia robusta. A hardy sort.

Washingtonia filifera, "California Weeping Palm." It is of graceful habit and quick growth; the leaves are palmated with numerous divisions and whitish filaments; the most desirable of all palms; should be planted everywhere, as it does well on almost any soil.

Washingtonia robusta. One of the hardiest and most beautiful of Palms; in habit of growth resembling our well-known California Fan Palm, but more symmetrical and spreading, and by far a superior palm; leaves fan-shaped, medium size; no filaments; retaining its dark green color during the winter months; stems short, thorny, of upright, compact growth; should have precedence over the California Fan Palm, and no doubt will have when its value as one of the grandest of our decorative plants is fully appreciated.

Agaves, Dracaenas, Yuccas and Bamboos.

THE AGAVES.

Agave Americana, "Common Century Plant" Tropical America. The well-known, so-called Century Plant, with glaucous green leaves.

Agave Americana variegata. A variegated form of the preceding with leaves edged with a broad margin of yellow.

THE DRACAENAS.

Cordyline australis, (*Dracaena australis*), New Zealand, 12-20 ft. A palm-like tree growing to a considerable height; stem stout; leaves two or three feet in length; fine for avenues.

Cordyline indivisa, (*Dracaena indivisa*). New Zealand, 20-30 ft. Broader, longer leaves than the preceding; fine for hall or porch decoration.

PANDANUS AND YUCCAS.

Pandanus utilis, "Screw Pine," Madagascar, 60 ft. The well-known "Screw Pine," so called from the screw-like arrangement of the leaves around the stalk; leaves green, with small red spines along the edge; a very handsome house plant.

Yucca. These are among our most effective plants; palm-like, with spikes of white flowers; they require, after being established, no care, and will flower year after year. A group of these plants will always remain very attractive; the foliage is in some varieties bluish, in others, green and white.

Yucca aloifolia quadricolor. Very fine; beautifully variegated and marked with narrow stripes of yellow and green.

Chamaerops excelsa. The Wind-Mill Palm.
See page 91.

Yucca aloifolia Marginata. An erect-growing plant; leaves variegated green and white.

Yucca filamentosa, "Adam's Needle," South-eastern U. S. A variety of compact growth, with dark green leaves and majestic spikes of yellowish-white flowers.

Yucca glauca, (*Y. angustifolia*.) Rocky Mountain region. A low-growing species with long, narrow, variegated green leaves and fine spikes of immense, creamy white flowers.

Yucca Whipplei, "Spanish Bayonet," California. Very fine; sends up a flower-like stem eight feet high.

THE DASYLIRIONS.

Dasyllirion, Mexico. *Yucca*-like plants, very hardy; fine decorative plants, and those with graceful drooping leaves are desirable for the lawn.

Dasyllirion glaucophyllum, (*D. glaucum*.) A grand plant, with compact head of leaves, fringed at the edges with small teeth.

Dasyllirion graminifolium, (*D. longifolium*.) A very handsome plant, with long, narrow leaves proceeding from a common center and drooping to the ground; very desirable for a lawn; very hardy; sends out an immense spike covered with small, delicate, yellowish-white flowers.

We have a fine collection of large *Phoenix Canariensis* and *Chamaerops excelsa* in boxes, which we are offering at low prices considering size and quality. For decorative purposes on either lawn or indoors these plants are in every way desirable.

Herbaceous Bedding and Border Plants.

Abutilon, Tropical America. We have a very fine assortment of these beautiful shrubs, with large, maple-like leaves and golden and crimson flowers. A group of abutilons in flower is one of the finest decorations possible.

Achyranthes, (Iresine,) S. America. Very bright foliated plants, indispensable for bedding.

Ageratum conyzoides, Tropical America. A very useful plant for ribbon work, producing blue flowers in great profusion.

Arundo donax variegata, Mediterranean region. A large, graceful reed, with variegated foliage.

Aspidistra lurida, China. A very pretty foliated plant, with dark green, long leaves; produces odd-looking purplish flowers, just above the ground.

Aspidistra lurida variegata. Similar to the preceding, except that the leaves are broadly margined and striped with white.

Begonia, Tropics. We have a fine collection of these showy plants, with brilliant green leaves and many-colored flowers.

THE BAMBOOS.

The genuine Bamboo should be grown by every farmer. The time will come when these giant reeds will be found as useful here as in other countries, where they are considered necessities; they grow to perfection in well-drained, deep, rich soil, and are very ornamental.

Bambusa Striata, China. A decorative garden plant, slender and graceful; leaves variegated; makes a splendid pot plant.

Phyllostachys bambusoides, "Arrow Bamboo," Japan, 12 ft. Arrows were formerly made from the reed-like shoots of this plant; nodes very prominent; stalks very smooth and shiny.

Phyllostachys Henonis, (*Bambusa Henonis*.) Japan, 15 ft. Very ornamental; when fully grown stems are two inches in diameter, much branched and producing flowers freely.

Phyllostachys mitis, Japan, 30 ft. The tallest bamboo; not strictly hardy; stem often six inches in diameter; used in Japan for water pipe, furniture, etc.; young sprouts are eaten as a vegetable.

Phyllostachys nigra, "Black Bamboo." When fully grown, the shoots of this variety are black; attains a height of twenty-five to thirty feet; one of the most ornamental of this family, the black stalks and branches forming a marked contrast with the bright green foliage.

Phyllostachys Quiloi, "Giant Bamboo," Japan, 18 ft. Stems four to five inches in diameter at the base; leaves the largest in the family; of easy growth and very ornamental.

Bellis perennis, "English Daisy," Europe. Very pretty double flowering plants: suitable for edging.

Canna, Tropics. Very attractive plants, with large green leaves, often shaded with red and crimson; flowers scarlet and yellow. Our collection comprises all the newest and best varieties.

Chlorophytum elatum picturatum, (*Anthericum vitatum variegatum*), S. Africa. Beautiful plants with re-curved graceful foliage. Leaves are dark green, beautifully marked with broad stripes of creamy white.

Chrysanthemum. Very careful attention has been given to the culture of these beautiful Winter-blooming plants, which now embrace nearly every shade of color, and the varieties we offer are the very best of the several distinct classes. They will thrive in almost any soil, and as they are the only plants that bloom at that season of the year, no garden is perfect without them.

- Chrysanthemum coccineum*, (*Pyrethrum roseum*), Caucasus, Persia. Fine ever-blooming plants; in three varieties, white, yellow and blue.
- Chrysanthemum frutescens*, Marguerite, Canary Islands. Fine, ever-blooming plants; in two varieties, white and yellow.
- Chrysanthemum praealtum aureum*, (*Pyrethrum*.) "Golden Feather," Asia. A very pretty border plant, of compact habit and golden, feather-like foliage.
- Clerodendrons*, Tropics. Ornamental plants with large, heart-shaped leaves, producing large panicles of red, scarlet and white flowers.
- Coleus*, Tropics. We have a fine collection of these many-tinted and shaded foliage plants.
- Cyperus alternifolius*, "Umbrella Plant," Madagascar. A very desirable house plant; bearing upon erect jointless stems a crown of long, narrow leaves, resembling in shape a small umbrella; easy culture; requires an abundance of water.
- Cuphea Llavea* "Red, White and Blue Flower." Guatemala. A remarkable flowering plant, combining three distinct colors,—scarlet, purple and white; belongs to the same family as the "Lady's Cigar Plant," but is vastly superior to it. The plant is bushy, and presents an elegant appearance; always in bloom.
- Dianthus caryophyllus*, "Carnation." Our assortment of carnations cannot be surpassed. We have all the leading varieties, but do not give any names, as there are new varieties constantly being introduced, which we are adding to our collection, which consists of twelve sorts; all very fine.
- Echeveria*, "Hen and Chicken." A very pretty class of succulent plants; suitable for rockeries, edging or carpet-bedding.
- Eulalia Japonica variegatus*, "Japanese Striped Grass." A very robust, perennial grass from Japan, with graceful leaves, marked with alternate stripes of white and green. The flower stalks appear in September, and the plant is then four to six feet high.
- Eulalia Japonica zebrina*, "Japanese Banded Grass." In form and habit this resembles the above, but differs essentially in the manner of variegation, the markings running crosswise.
- Fern*. We offer a very nice collection of these graceful, delicate foliaged plants. To grow them successfully, they should be grown in a shaded place.
- Fuchsia*. Tropical America. A very pretty and charming class of plants, requiring good, rich soil and partial shade in order to succeed well; desirable for pot culture; when in full bloom present a very pretty appearance. Our collection embraces all the latest and best varieties.
- Geranium* (Botanically *Pelargoniums*.) We have a fine assortment of these showy bedding plants, growing only the latest and best of the many new varieties recently introduced; also a fine assortment of the handsome flowering section known as "Lady Washingtons, or *Pelargoniums*."
- Gynerium argenteum*, "Pampas Grass," S. America. This splendid grass, with its long, narrow foliage and white plumes, is very attractive; the most desirable of all grasses for a lawn; the plumes, when properly handled and dried, are used for decorative purposes; there is a good market for them every season.
- Gynerium variegata*. Foliage beautifully edged with silver
- Heliotrope*. Of these interesting plants we grow four varieties; they deserve attention on account of their rich, fragrant flowers, and dark green leaves; with plenty of water they thrive well in this climate.
- Hibiscus*. A rapid-growing plant, blooming all summer, and producing the most gorgeous flowers.
- Hollyhocks*. We offer a choice collection of these attractive plants; flowers, single or double, and of various hues.
- Lantana*. We offer a fine collection of these popular plants.
- Lobelia Erinus*, S. Africa. Fine bedding plants, with deep blue flowers; fine for hanging baskets.
- Malvaviscus arboreus*, (*Achania malvaviscus*) "Turk's Cap," Tropical America. A handsome shrub with large, bright green, heart-shaped leaves and brilliant scarlet flowers shaped somewhat like the fez or the Turk.
- Musa Ensete*, "Abyssinian Banana." This magnificent foliage plant, if given plenty of water, attains a height of 12 feet in a single season. This variety produces no suckers, and requires several years to come into flower and seed, then it dies.
- Petunia*, S. America. Fine, new, double and single.
- Phlox*, N. America. The most brilliant colors.
- Phormium tenax*, "New Zealand Flax." Large, erect; dark green leaves, with narrow, reddish-brown margin.
- Phormium tenax variegata*. This variety has shorter leaves, and has broad, creamy-white stripes extending the entire length of each leaf.
- Pilea*, "Artillery Plant," Mexico, S. America. Two varieties, (*P. microphylla*, *P. serpyllifolia*.)
- Primula Japonica*. Flowers in whorls; magenta color.
- Primula Sinensis*, "Chinese Primrose." Very free bloomers.

Salvia. Very handsome, and rapid-growing plants; flowering all summer.

Saxifraga sarmentosa, China and Japan. A very handsome trailing plant; fine for hanging baskets.

Sedum. Two kinds; fine for bedding.

Telanthera, (Alternanthera). Gorgeous foliage plants, used for carpet and ribbon gardening.

Thymus, "Thyme." Two varieties; fine for edging.

Tradescantia, "Wandering Jew." Three varieties; fine for bordering small beds.

Tritoma Uvaria, (Kniphofia aloides.) "Red Hot Poker," S. Africa. A fine, late-blooming plant, with bright, orange-scarlet flowers; borne on long, straight stems.

Verbena. We have succeeded in obtaining the latest introduced varieties of these plants, the flowers of which are far superior to the old sorts.

Viola odorata, "California Violet." A single blue violet; a profuse bloomer and very fragrant; flowers the size of a half-dollar; borne on long stems.

Czar. Single, purple.

Viola Czar. Single, purple.

Viola Marie Louise. Deep violet blue, with white center; very fragrant and free flowing.

Viola Princess of Wales. Of French origin and recently introduced; flowers of the largest size, of a true violet blue, and borne on long stems; very fragrant; foliage dark and of strong growth.

Viola Swanley White. Large, double white flowers.

Viola tricolor, "Pansy." Extra choice varieties, from the best imported seed; flowers flamed, striped and blotched.

Bulbous and Tuberous Rooted Plants.

Agapanthus umbellatus, "African Lily," S. Africa. A fine plant, with long, rather fleshy leaves, and bearing a many-flowered umbel; flowers of a bright blue color.

Amaryllis Johnsoni, Garden hybrid. Wine-red, striped white; flowers very large.

Amaryllis lutea. Golden yellow.

Amaryllis vittatum (hybrid of *Amaryllis vittata*.) Peru. White, with double red stripes.

Anemone. These fine flowers are among the best of all spring flowering plants.

Caladium esculentum, "Elephant's Ear," Hawaii and Fiji Islands. Plant with enormous leaves, growing luxuriantly in very moist situations during the summer months.

Caladium variegata. Fine variegated foliage, quite similar in appearance to the well-known "Elephant's Ear."

Convallaria majalis, "Lily of the Valley," Europe, Asia, Southern U. S. A charming plant, with large, green leaves, producing a profusion of delicate, bell-shaped, delightfully fragrant flowers.

Cyclamen latifolium, Greece, So. Syria. A pretty, small plant with round, fleshy leaves, borne on long stems; flowers of various shades and of peculiar form.

Dahlia, Tropical America. We grow a fine assortment of double and single varieties of these elegant, showy plants. The tubers should be taken up in winter in cold countries, but in California they may be left in the ground for years.

Gladiolus, S. Africa. This class of plants should be cultivated in every garden, as they thrive well in all soils, and the coloring of the flowers is very rich.

Hyacinth. Single and double flowers; blue, white, red and pink.

Iris Germanica. These are neat, robust, hardy, herbaceous, early blooming plants, with large, ornamental flowers of rich and beautifully-blended colors.

Lilium Auratum, "Golden-Banded Lily," Japan.

Lilium longiflorum eximium, (Harrisii,) "Easter Lily." Long white flowers; very fragrant.

Lilium speciosum album. Pure white.

Lilium speciosum rubrum. White, with crimson spots.

Lilium tigrinum, "Tiger Lily," Japan, China. Flowers red, spotted black; very double; fine.

Narcissus. We have a choice collection of these fragrant winter-blooming plants.

Polyanthes tuberosa, "Tuberose." These deliciously fragrant plants should be in every garden; California is particularly adapted to their successful culture.

Richardia Africana, (Calla Lily.) "Lily of the Nile." A handsome plant with rich, dark green foliage and pure white flowers.

Richardia alba maculata, "Spotted Calla." Foliage spotted white; flowers smaller than the common Calla; hardy.

Tulipa, "Tulips." Our collection comprises the best of the imported bulbs.

Eucalyptus in variety are with us quite specialty. These trees, either for wood, windbreaks or general planting, do well in all portions of the San Joaquin Valley.

Maman Cochet. See page 101.

THE ROSE.

Among all the flowering shrubs that grace the garden or add to the beauty of hall or conservatory, none can compare to the rose. Of diverse color and character of foliage, of endless design and color of blooms, it lends itself to a wider range of decoration than any other single group of plants, being equally desirable as pot plants, garden culture, and for cut flowers. When to these qualifications are added ease of culture and quick and ample responses in flowers, it is explained why the rose has been aptly termed, "The Queen of Flowers." In our collection of flowering and ornamental shrubs, it occupies first place; hence we have been careful to always have on hand a large stock of only the better vigorous plants, and only those sorts producing freely of blooms possessing good substance and strikingly individual characteristics; we have aimed to list only those sorts known to be hardy, free bloomers and possessing beauty of flowers. All our roses are field

grown, thus insuring plants of strong constitution and robust growth. Our large assortment is well calculated to meet every want of the rose planter, both as to quality of bloom, as well as soil and climate.

Some objection has been expressed to budded roses, owing to the fact that plants are apt to sucker. This is almost invariably due to the fact that the plant when set out was not planted sufficiently deep to submerge the junction with the bud under ground. If planters will observe to do this, much of this difficulty will be removed. Nevertheless, and in spite of this precaution, the budded rose will often sucker, owing to the vigor of the root or the richness of the soil. These shoots or suckers are easily distinguished by rampant growth and thorny and coarse like appearance. These should be removed as fast as they appear. Obviously, those varieties known to be delicate or slow growers are usually budded to stronger root stalks, which stimulate and accelerate the growth of the plant.

PLANTING AND PRUNING.

The best season of the year for planting roses is from January 1 to March 15, with the

recommendation in favor of early planting—always to secure the best results. In planting the same care should be observed as with any other tree or plant, the ground should be spaded thoroughly, and if any well rotted manure is available, it should be worked into the soil. Dig hole large enough to receive the roots. Prune the top, cutting back the branches at least one-half, and thinning out those that are too thick. The roots should also be cut back a third, and all bruised roots removed. After planting settle the soil around the plant by watering freely.

No definite rule can be laid down for pruning roses, except that the Teas do not require as severe pruning as the Hybrid Perpetuals. A thinning out and shortening in of branches should be done each season to make the plants flower freely. When the roses have stopped blooming in the early summer, the faded buds should be cut and the plants should be given a light pruning, or more correctly a pinching back, which will have the effect of making them respond with a bounteous bloom in the fall.

The reader will notice that we have arranged this list in alphabetical order, irrespective of the class or group to which a variety may belong. To afford the novice, however, means of distinguishing one class from another, we have prepared the following explanatory paragraphs:

STANDARD ROSES. Commonly known as Tree Roses are budded on a thrifty stalk of the vigorous wild rose from 3 to 4 feet from the ground. Care should be taken to wrap this stem the first season with paper or burlap to prevent sunburn. The pruning knife used with judgment to cut back straggling branches and retain a good shape to the plant, will well repay the trouble.

MISCELLANEOUS. Under this head we have placed a number of different varieties, belonging to separate classes, as there is not enough of any one class to warrant separate classification.

TEA OR EVER-BLOOMING. This is one of the most important groups of roses and on account of their free flowering qualities, exquisite fragrance, combined with their delicate tints, and fine form, are deservedly popular. They require more care and attention than any of the other classes and should not be pruned too closely.

THE BANKSIAS. Roses of this class have very small flowers, and bloom in clusters; are vigorous climbers and very useful for covering trellises, etc. With their small but most abundant flowers, interspersed among the smooth, glossy green foliage, they form an object of great beauty; require very little care when once established.

THE BENGALS OR CHINAS. Natives of China. Of moderate growth and not very fragrant. The foliage and flowers are small. They are valuable for borders on account of their compact growth and the profusion of brilliant crimson buds they produce.

THE BOURBONS. The varieties of this class differ greatly in their general characteristics; those of moderate growth require close pruning. They are constant bloomers; the flowers are generally of light shade; the foliage is leathery, rich and luxuriant; and they are at their best in the Autumn.

THE HYBRID NOISETTES. These roses are always in bloom, and are very valuable; should be in every collection, where they are sure to give satisfaction.

THE HYBRID PERPETUALS. These constitute a very striking and distinct family of roses, easily distinguished from all others by their luxuriant foliage, prodigious blooms and vigor of growth. They are perfectly hardy and of very robust habit, thriving with little care or attention. The more vigorous growers require close pruning. Although styled perpetual bloomers, they are not so in reality, blooming only in the Spring and Fall. As a class they are deservedly popular, varying in color from snowiest white to the deepest crimson.

THE HYBRID TEA. The roses in this group are much stronger growers than the preceding and combine free flowering qualities with the rich coloring of the Hybrid Perpetuals.

THE JAPANS OR RUGOSAS. Of Japanese origin. The flowers are mostly single; plant highly ornamental on account of its good habit and beautiful glossy foliage.

THE MOSSES. The Moss Rose originated, in Switzerland. Sepals are covered with moss-like glands; unsurpassed as buds. Should be heavily pruned in the winter.

THE NOISETTES OR CHAMPNEYS. This class of roses is of American origin. The group is of vigorous growth and the flowers have a tendency to grow in clusters. With a few exceptions all the varieties are vigorous climbers, and their rich bright green foliage, combined with the delicate tinted flowers, render them most attractive for this purpose.

THE POLYANTHAS. This is a new group from Japan. They are ever-blooming; flowers are small but exquisitely formed, and are borne on slender stems in panicle clusters. Growing low and compact, they are very desirable for edging.

THE PRAIRIES. This is a very distinct class, remarkable for its hardness. The leaves are large, rather rough, and of a rich dark green. They grow very rapidly, exceeding in this respect any other variety, and are excellent for covering walls, and old buildings; bloom in large clusters after all common roses are gone and present a very striking appearance.

NEW VARIETIES.

Admiral Dewey, (Hybrid Tea). A grand new variety, said to be very hardy and a good, strong grower with very pretty foliage; flowers large, fragrant and of good

substance, produced on long, stiff stems; color a beautiful rich carmine; graceful, long pointed buds; should have a place in every garden.

Climbing Bridesmaid, (Tea). Identical with its well-known, popular and unrivaled parent, the Bridesmaid with the exception, that it is a thrifty climber; in every respect a grand rose.

Climbing Kaiserin Augusta Victoria, (Hybrid Tea). Said to be the very best climbing white rose of recent introduction; a

Empress of China, (Miscellaneous). A very hardy, free-flowering climbing rose, of good size; blooming in clusters; color soft red, becoming lighter as the flowers open; an entirely rank and vigorous grower.

Enchantress, (Tea). A free-blooming rose, of vigorous growth and fine foliage; color creamy-white, slightly tinted with buff in center.

Gruss An Teplitz, (Bourbon), "Crimson Hermosa." A rose that every florist should have, inasmuch as it is easy to propagate

Captain Christy—Hybrid Perpetual. See page 103.

strong and rapid grower, making shoots fifteen feet in a season; flowers superb, of good texture and substance, extra large, deep and full, very double, and are produced on long stiff stems; buds long and pointed; deliciously fragrant.

Climbing Meteor, (Hybrid Tea). Climbing Meteor is the acme of all red Climbing roses. It is a free, persistent bloomer and will make a growth of from ten to fifteen feet in a season. At the head of the list of all roses for summer blooming, loaded with its deep, rich red flowers all the time.

Climbing White Pet, (Tea). A strong grower, with handsome, clean foliage, and pure white double flowers, borne in clusters and produced in great profusion.

Climbing Wootton, (Hybrid Tea). A sport from the famous rose Souvenir de Wootton and identical with it, except that it is a strong, rampant climber, producing in wonderful profusion, its superbly formed flowers, with thick, leathery petals, and deliciously scented; as a climbing rose it will rank among the best.

and a color that is always in demand. When first opened it is a rich dark crimson quickly changing to a velvety fiery red. A strong grower, blooms continuously, flowers good sized and delightfully fragrant.

Helen Gould, or Balduin, (Hybrid Perpetual). Not only ourselves, but the general public, believe this rose to be one of the best ever-blooming roses ever introduced. Its color is quite attractive, being a soft intense carmine, with shades of cerise and sulferino, very much the color of American Beauty. Blooms very freely.

Ivory, (Tea). A most valuable addition to our list of Roses for cut flower purposes. A "sport" from the fine old variety Golden Gate. "Ivory" embodies all the good points of its parent, size, freedom of bloom, strong, vigorous, healthy growth with a pure white color, which makes it an invaluable acquisition to the list of forcing roses. It has received highest honors wherever shown.

Madame Norbert Levavasseur, (Polyantha), Recommended very highly by the origina-

tor; said to be a dwarf Crimson Rambler, but a perpetual bloomer; very vigorous foliage, of a beautiful, deep, bright green color. Wherever exhibited it has secured valuable prizes.

Belle Siebrecht —Hybrid Tea. Page 102

Single Cherokee at the Base.

Maman Cochet, (Tea). One of the finest roses of recent introduction from France; a vigorous grower, with beautiful foliage; the bud is long and pointed, borne on long, stiff stems; color deep rose-pink, the inner petals being a silver-rose, shaded and touched with golden yellow; a beautiful rose.

Queen of Edgely, (Hybrid Perpetual). "Pink American Beauty." A sport from the famous American Beauty, resembling it in every particular, except that the flowers are a beautiful cerise pink. It is a strong vigorous grower and its flowers are produced on vigorous stems. A great rose standing as a new creation with a type distinctly its own.

Souvenir de President Carnot, (Hybrid Tea.) One of the finest of garden roses; flower is of large size, of exquisite shape, with heavy, thick, shell-like petals, retaining its magnificent shape when full blown; bud long and pointed, borne on stiff, erect stems; color delicate, rosy flesh, shaded a trifle deeper at the center.

White Maman Cochet. The finest rose of the year; like its parent the growth is vigorous, with rich, healthy foliage, producing large, fine flowers of the purest white;

in fact, it is an exact counterpart of the beautiful Maman Cochet, and all who have tried it pronounce it the finest cut flower Tea rose in existence.

White Rambler, (Polyantha). A rank grower having the same habit and characteristics as the Crimson Rambler, except that the flowers are white.

Wichuriana, (The Japanese Trailing Rose). This pretty novelty is a most valuable plant for covering embankments, rockeries, etc., and particularly for use in cemeteries; it is a low, trailing species, its stems creeping on the ground almost as closely as the Ivy; foliage small, dark green, lustrous; flowers are produced in July, and are small, single pure white and very fragrant.

Williams' Evergreen, (Miscellaneous). A free growing and very hardy climbing rose, blooming in large clusters; flowers white, center rosy flesh; foliage dark shining green, remaining on the plant during a greater part of the winter.

Yellow Rambler, (Polyantha). Characteristics identical with the Crimson Rambler and producing flowers in large clusters; blooms are large, full and double, very fragrant and of a decided golden-yellow color; will undoubtedly become the most popular of the Ramblers.

GENERAL COLLECTION.

Abel Carriere, (Hybrid Perpetual). Purple crimson, fiery red center; very double and fine.

Agrippina, (Bengal.) Fine, rich crimson; moderately double; fine in bud; a valuable bedding variety; is not affected by the heat, and blooms profusely during the entire summer; as a hedge rose it cannot be surpassed.

Alice Leroy, (Moss). Rich glossy pink; very sweet.

American Beauty, (Hybrid Perpetual). Color rosy-crimson, exquisitely shaded and very handsome; extra large full flowers, exceedingly sweet; makes magnificent buds; is a constant bloomer and a grand forcing rose.

Annie Marie de Montravel, (Polyantha). Very small, pure white, double flowers; very sweet scented, and borne in large clusters completely covering the plant.

Antoine Mouton, (Hybrid Perpetual). Fine rose, constant bloomer, flower large and very fine in bud; should be in every collection.

Augustine Guinoiseau, (Hybrid Tea). "White La France." A beautiful rose, same form as La France, but pearly white, tinted with fawn. When known, it will be even more popular than La France.

Augustine Guinoiseau, or White La France — Hybrid Tea. See page 101.

Baltimore Belle, (Prairie). Pale blush, becoming nearly white; compact and fine.

Baroness Rothschild, (Hybrid Perpetual). Pale bright rose, shaded white; very large and finely formed; flowers borne on erect thick canes, and are closely set in the foliage; very handsome and attractive; one of the best of the Hybrid Perpetuals.

Beauty of Europe, (Tea). A vigorous grower and free bloomer; flowers deep yellow, with salmon fawn center; large and full.

Belle Siebrecht, (Hybrid Tea). A superb rose; the buds are beautifully formed, of long tapering shape and when half blown the petals reflex in a graceful manner; the flowers have great substance and the petals are of heavy texture; color imperial pink.

Beauty of Stapleford, (Hybrid Tea). Color a clear, bright pink, shading to a bright

rosy-crimson; it makes large beautiful buds, and is a constant and profuse bloomer.

Bertha Clavel, (Bourbon). A striped sport from Souv. de la Malmaison. The color is a creamy-white, with rose center, reverse of petals striped carmine and light rose, making a charming combination of colors.

Black Prince, (Hybrid Perpetual). Deep, dark crimson, richly shaded; very globular and good.

Bon Silene, (Tea). Very fine in bud; dark crimson rose, often changing to crimson; extensively grown by florists for its highly colored buds.

Bougere, (Tea). Flowers extra large; bronze pink, shaded with lilac; a grand rose.

Bridesmaid, (Tea). A sport from Catherine Mermet. This new variety has all the

- good qualities of its parent, but is of a deeper shade of clear bright pink and is a more constant bloomer.
- Camoens, (Tea).** Large flowers; bright China rose, shaded yellow; very pretty in bud; a constant bloomer.
- Captain Christy, (Hybrid Perpetual).** A lovely rose, blooming almost the entire season; very large double buds of a deep flesh color; strong grower and grand foliage; very beautiful and valuable.
- Captain John Ingram, (Moss).** Purple-crimson; color fleeting; small foliage.
- Catherine Mermet, (Tea).** Light flesh-colored; large, full and globular; one of the finest teas; when the flowers are fully expanded they yield a delightful perfume.
- Celine Forrestier, (Noisette).** Deep sulphur-yellow; a very abundant bloomer; a beautiful rose and a vigorous grower.
- Charles Lefebvre, (Hybrid Perpetual).** Reddish-crimson, center shaded purple; large and globular; a fine rose.
- Cherokee, Double, (Miscellaneous).** Flowers double; pure white.
- Cherokee, Single, (Miscellaneous).** A beautiful pure white rose, blooming only in spring; not fragrant, but very showy.
- Cheshunt Hybrid, (Hybrid Tea).** Cherry carmine; large, full open flowers; an excellent climbing or pillar rose.
- Christine de Noue, (Tea).** A splendid grower, with bright, deep green foliage; a constant and free bloomer; flowers deep pink, full and fine; a grand forcing rose.
- Claire Carnot, (Noisette).** Fine coppery-yellow, bordered with white and carmine; not very double but exceedingly fine.
- Climbing Captain Christy, (Hybrid Perpetual).** Of climbing habit, flowers same as Captain Christy; a very profuse bloomer; one of the best of the new roses.
- Climbing Devoniensis, (Tea).** Creamy white, center sometimes with blush; very large, nearly full; delightfully scented.
- Climbing La France, (Hybrid Tea).** A sport from the La France, resembling it in every particular. A strong rapid grower, producing large delicate, silvery pink flowers in great abundance.
- Climbing Niphetos, (Tea).** A sport of the Niphetos; flowers identical; a very vigorous climbing plant; a much stronger grower than its parent.
- Climbing Perle des Jardins, (Tea).** Same as the Perle des Jardins, except in growth, it being a very vigorous climber.
- Cloth of Gold, (Noisette).** Deep yellow center, edges sulphur, very sweet scented; a magnificent variety.
- Clothilde Soupert, (Polyantha).** Medium size, very double, and beautifully imbricated like an aster; flowers variable; color glowing pink center, shaded to white; red and white flowers often produced on the same plant; one of the most valuable roses of recent introduction.
- Comtesse de Frigneuse, (Tea).** A beautiful rose, deep golden yellow; flowers extra large and full, with long pointed buds; good grower and bloomer.
- Comtesse Eva Starhemberg, (Tea).** Bud long, fine form, opening into a fine double flower of great beauty and heavy texture; color creamy white, shaded to ochre at the center; borders of the petals touched with rose.
- Comtesse Riza du Parc, (Tea).** A fine variety; color bright coppery rose, tinged and shaded with soft velvety crimson; a profuse bloomer.
- Cornelia Cook, (Tea).** Pale yellowish-white sometimes tinged with flesh; flowers large and full; a free bloomer, buds of immense size and very double.
- Crimson Rambler, (Polyantha).** This superb novelty was originally received from Japan. The flowers are produced in great pyramidal panicles or trusses, each carrying from 30 to 40 blooms, the individual flowers measuring about one to one and a half inches in diameter and remaining perfect on the plant upwards of two weeks with the freshness of color unimpaired; the foliage is bright green and glossy, and contrasts finely with the bright crimson of the flowers; for verandas, walls, pillars and fences this rose cannot be excelled; a remarkably vigorous grower, making shoots from 10 to 15 feet long in a season.
- Dinsmore, (Hybrid Perpetual).** Flowers are large and perfectly double; color rich crimson scarlet; showy and handsome; delightfully fragrant; a very popular rose.
- Docteur Grill, (Tea).** Large; clear buff pink, changing to rose and fawn, elegantly suffused with pale yellow; a very free bloomer; a most exquisite rose.
- Duchess of Albany or Red La France, (Hybrid Tea).** A sport from the La France. Resembles that variety, but the bud is more perfect in contour and the color is of a richer, deeper, more even pink tint; one of the most important of recent acquisitions for forcing or growing in the open air.
- Duchesse de Brabant, (Tea).** Brilliant rosy pink; globular; standard tea; in every way a charming rose.
- Duchesse of Edinburgh, (Tea).** A very free bloomer; deep rosy crimson, turning lighter; a tea with Bengal blood.
- Eliza Sauvage, (Tea).** Very large, double, globular flowers; color pale yellow to white, with orange center.

Single Cherokee — Miscellaneous. See page 103.

Empress of India, (Hybrid Perpetual). Dark brownish-crimson; large globular flowers.

Empereur du Maroc, (Hybrid Perpetual). One of the most perfect of the dark roses; color rich velvety maroon, intensely dark.

Etoile de Lyon, (Tea). This is considered one of the finest yellow bedding roses for outside planting; one of the hardiest in the Tea section; blooms freely, and every flower is a gem; equals Marechal Niel in size, on strong bushes; color a deep chrome yellow; a remarkable rose, deserving extensive culture.

General Jacqueminot, (Hybrid Perpetual). Bright shining crimson, very rich and velvety, exceedingly brilliant and handsome; makes magnificent buds; one of the best for open ground and for forcing.

General Washington, (Hybrid Perpetual). Crimson; a popular rose; flowers flat and of fine color.

Gloire de Dijon, (Tea). Buff, orange center, very large and double; very early flowering and the hardiest of any of the tea roses; a very popular variety.

Gloire Lyonnaise, (Hybrid Perpetual). A grand rose. Color a pale shade of chamois or salmon yellow, deepest at the center, and sometimes passing to rich creamy-white, finely tinted with orange and fawn; flowers have all the beauty of Tea Roses, and are very fragrant.

Golden Gate, (Tea). The flowers are large, nicely formed, and of excellent substance; buds are long; color creamy-white, base of petals golden yellow, tinged with pink.

Gold of Ophir, or **Beauty of Glazenwood**, (Noisette). A medium-sized rose, blooming in clusters; of a very singular color, entirely different from any other rose known, being a bright coppery-apricot yellow. A grand pillar rose, also known as the San Rafael Rose.

Greville or Seven Sisters, (Prairie.) Flowers in large clusters; varies in color from white and crimson.

Henry M. Stanley, (Tea) Flowers large, finely formed, full and fragrant; color amber rose, tinged with apricot yellow to

- wards the center, reverse of petals, clear buff rose; a valuable acquisition to the list of tea roses.
- Hermosa.** (Bourbon.) An old variety; very double and perfect; color delicate rose; a very abundant bloomer.
- Homer.** (Tea.) Flesh-colored rose, edged with velvety lilac rose; one of the best teas; very vigorous and perfect.
- Hon. Edith Gifford.** (Tea.) White flesh color, slightly tinted with rose; fine form both in bud and when expanded; a grand new rose.
- Improved Rainbow.** (Tea.) It is entirely distinct and far superior to Rainbow. The improved Rainbow is penciled with brightest Gontier color, every petal in every flower and base of petals of a brighter amber color, making a very distinct and charming flower.
- James Sprunt.** (Bengal.) A climbing sport from Agrippina; same color as the parent; flowers fuller and larger.
- James Veitch.** (Moss.) A very fine bloomer; color dark velvety crimson; one of the best roses.
- Jean Pernet.** (Tea.) Pale sulphur yellow, center deeper; a fine tea.
- Jules Finger.** (Tea.) Flowers large, and of fine form; rosy scarlet; beautifully shaded with intense crimson.
- Kaiserin Augusta Victoria.** (Hybrid Tea.) This beautiful rose has not only a royal name, but is a royal rose as well; is a grand white rose, blooming continuously, with large petals of best substance, showing no center when fully open; color pure ivory white; one of the finest roses for corsage wear, or any other use to which flowers can be put.
- Lady H. Grosvenor.** (Hybrid Tea.) Flowers flesh color, large, full and globular; an exceedingly free and effective variety; also a fine young forcing rose.
- La France.** (Hybrid Tea.) One of the finest of roses; the color is a most lovely rose, with silvery luster; it is a constant bloomer, and very sweet-scented.
- Lamarque.** (Noisette.) Pure white, with shaded sulphur-yellow center, a magnificent climber and a most popular rose.
- La Reine.** A good bloomer; color rosy lilac; fragrant; half globular. A standard sort.
- Louis Van Houtte.** (Hybrid Perpetual.) Rich crimson; good globular shape; one of the best dark roses.
- Luciole.** (Tea.) A grand rose; flowers extra large, full and double; color clear cherry red, with rich golden yellow center; finely shaded; buds very long and beautiful with petals very much reflexed; one of the best of the new roses.
- Mabel Morrison.** (Hybrid Perpetual.) White, sometimes tinged with blush; large and globular; a superb rose.
- Madame Alfred Carriere.** (Hybrid Noisette.) One of the strongest and most vigorous growing roses; very fine in bud; color white, shaded yellow at the center.
- Madame Alfred de Rougemont.** (Hybrid Noisette.) White shaded rose; medium size.
- Madame Angelique Veyssset,** (Hybrid Tea.) (Striped La France.) A grand rose, possessing all the good characteristics of the La France, but differing from it widely in two points. First, it blooms more freely; secondly, it is nicely striped, the variegation being a bright rose on a satin pink background.
- Madame Berard.** (Tea.) A magnificent rose; color rich salmon, tinged with rosy yellow; a strong, vigorous grower and profuse bloomer.
- Madame Caroline Testout.** (Hybrid Tea.) One of the best Hybrid Tea roses up to date. It is clear pink and there is nothing in the rose line that can approach it in color; the flower is as large as Baroness Rothschild and as free as La France; should have a place in every collection.
- Madame Charles Wood.** (Hybrid Perpetual.) One of the most popular roses; a really ever-blooming rose, of a most brilliant color; should be in every collection; unsurpassed in forming a rose hedge.
- Madame Chedanne Guinoiseau.** (Tea.) A fine deep yellow, beautiful, free flowering sort; buds long and pointed; a valuable and exceedingly beautiful variety.
- Madame Cusin.** (Tea.) Crimson, with light center, slightly tinted with violet; medium size, good form; quite distinct.
- Madame de Watteville.** (Tea.) A grand new rose; color salmon white, tinged with carmine, each petal bordered with bright rose, like a tulip; fine perfume and a most prolific bloomer.
- Madame Gabriel Luizet.** (Hybrid Perpetual.) A beautiful large rose, with broad shell-like petals; very double and full and delightfully perfumed; color an exquisite shade of clear coral rose, beautifully suffused with lavender and pearl.
- Madame Joseph Schwartz.** (Tea.) A lovely rose; pure white, elegantly tinged and shaded with pale yellow and rosy blush.
- Madame Maurice Kuppenheim.** (Tea.) Flowers elegantly formed, large, full and double; color pale canary yellow, shaded with rose, sometimes soft rosy flesh; very fragrant.
- Madame Plantier.** (Miscellaneous.) Fine, pure white, blooming in Spring; above medium size; one of the best white roses; very sweet.

Perle des Jardins—Tea. See page 107.

Madame Scipion Cochet. (Tea.) Beautiful creamy-rose; flowers large, somewhat tulip shaped, quite full and very sweet; handsome and striking; a charming new rose.

Madame Welche. (Tea.) Pale yellow, deep coppery center; flowers large and double and of beautiful rounded form.

Mademoiselle Cecile Brunner (Polyantha.) Blooms salmon pink, with deep salmon center, borne in clusters; very small, full and delicately scented; admirable in bud and open flower; a very profuse bloomer.

Marchioness of Londonderry. (Hybrid Perpetual.) One of the late introductions of the Messrs. Dickson & Sons, of Newtownards, Ireland. Flowers of great size,

measuring five inches across, perfectly formed, and carried on stout stems; color ivory white; petals of great substance, shell-shaped and reflexed; free flowering; highly perfumed; growth vigorous and foliage very handsome; undoubtedly one of the finest roses raised by this firm; awarded the gold medal of the National Rose Society of England.

Marechal Niel. (Noisette.) A beautiful deep sulphur-yellow rose; large, globular, very full and highly scented; the finest yellow rose in existence.

Margaret Dickson. (Hybrid Perpetual.) Of magnificent form; white, with pale flesh center; petals very large; shell-shaped, and of great substance; foliage very large, dark green.

Marie Bauman. (Hybrid Perpetual.) Crimson-vermillion, suffused carmine; large, full of exquisite color and form; fragrant; a very beautiful rose.

Marie Van Houtte. (Tea.) Canary yellow, with the border of the petals tipped with bright rose; large, full and fine form; a most charming sort and one of the best of its class.

Marion Dingee. (Tea.) Brilliant crimson; one of the richest and darkest colored Tea roses in existence; a very profuse bloomer.

Medea. (Tea.) Flowers large, of fine form, perfectly double and deliciously fragrant; color lemon-yellow, canary-yellow center; foliage dark green and leathery.

Merveille de Lyon. (Hybrid Perpetual.) Flower large, double and perfectly cupped; purest white; a seedling from Baroness Rothschild.

Meteor. (Hybrid Tea.) A reliable ever-bloomer of the deepest glowing crimson; flowers very double, and petals slightly recurved; a beautiful open rose, a vigorous grower and very fine bloomer; a grand rose in this climate.

Microphylla, or Burr Rose. (Miscellaneous.) Deep red; flowers covered with burr-like moss.

Mignonette. (Polyantha.) One of the most lovely and beautiful miniature roses; flowers very small, double; color delicate rose, changing to blush; a strong grower and very free bloomer; very fragrant.

Mrs. Degraw. (Bourbon.) Resembles Appoline in leaf and flower, but more compact in growth; color a rich glossy pink; very fragrant, and a continuous bloomer; one of the most desirable of the new roses.

Mrs. John Laing. (Hybrid Perpetual.) A splendid rose; color clear bright pink, exquisitely shaded; the buds are long and pointed; the flowers extra large and full, borne on long stems and exceedingly sweet.

Mrs. Pierpont Morgan. (Tea.) A sport from Mad. Cusin, but much superior to it. The long-stemmed buds and flowers are elegantly shaped, fragrant, and of fine substance; color intense bright cerise or rosy pink.

Mrs. W. C. Whitney. (Tea.) A charming new rose delightfully fragrant; flowers are large, with fine elongated buds; color, a beautiful shade of clear, deep pink.

Niphetos. (Tea.) Pure white; very large and full; long pointed buds; very free flowering; purest of white roses; very attractive in the bud form.

Papa Gontier. (Tea.) A magnificent bold flower; finely formed buds, color brilliant carmine, changing to rose and lilac; in

brilliancy of color fully equal to Gen. Jacqueminot; it is delightfully fragrant and is the most popular forcing rose of its color.

Pauline Labonte. (Tea.) Salmon rose; very fine.

Paul Neyron. (Hybrid Perpetual.) Deep rose; the largest of all roses; very fine and showy; somewhat fragrant.

Perfection des Blanches. (Hybrid Tea.) Flowers large, pure snow-white; a constant bloomer; very double and fragrant.

Perle des Jardins. (Tea.) Very large and full, bright straw, sometimes canary color; very fragrant; one of the best Tea Roses; one of the most popular forcing roses.

Persian Yellow. (Miscellaneous.) The deepest yellow of all roses; should not be pruned.

Pink Soupert. (Polyantha.) A seedling from Clothilde Soupert, which it resembles very closely in color, which is a bright, clear pink.

Prairie Queen (Prairie.) Flowers are very large, and of a peculiar globular form; color a bright rosy red, changing to lighter as the flower opens; a strong, rapid grower.

Prince Camille de Rohan or La Rosier. (Hybrid Perpetual.) Very dark crimson; one of the best dark roses; unexcelled in every respect.

Reine de Bourbon. (Bourbon.) Flowers large, finely formed; very double and fragrant; petals very regularly arranged; color rose slightly tinged with buff.

Reine Marie Henriette. (Hybrid Tea.) Large, finely formed flowers; color a beautiful cherry-red; flowers tea-scented; a very pretty and deservedly popular climbing rose.

Riene Olga de Wurtemberg. (Hybrid Tea.) A very strong climber and one of the best for covering porches and trellises; color a rosy-carmine; very pretty in the bud.

Reve d'Or. (Tea.) Very similar to Safrano, but climbing; very fine; will grow in almost any soil.

Rubens. (Tea.) White, delicately tinted with rose; beautiful in form; a capital grower; a free bloomer; an excellent rose.

Rugosa Alba. (Rugosa.) Single, pure white flowers of five petals; highly scented; elegant.

Rugosa Rubra. (Rugosa.) Flowers single, of a most beautiful bright rosy crimson, succeeded by large berries of a rich rosy red color, which are a great addition to the ornamental character of the plant.

Papa Gontier — Tea. See page 107.

Safrano. (Tea.) A magnificent rose; color, deep fawn, changing to light fawn when fully opened.

Salamander. (Hybrid Perpetual.) Bright scarlet crimson; very vivid in summer; very free bloomer; a brilliant and most effective rose.

Sappho. (Tea.) Fawn color, shaded yellow and buff; center a deep bright yellow; blooms with extraordinary profusion, even for a tea rose; a splendid rose.

Senator McNaughton. (Tea.) White Perle des Jardins and sport from Perle des Jardins; resembles that grand old rose, excepting in color, which is a delicate creamy-white; the flowers are very large and full and the buds beautifully shaped; foliage dark and glossy.

Snowflake. (Tea.) A vigorous grower and by far the most profuse bloomer of the Tea Roses; color pure white; for forcing and as a pot plant, it can not be excelled; a grand rose for floral designs.

Sombreuil. (Tea.) Petals stiff; flowers fine when open; color white shaded salmon; a strong grower.

Souvenir d'un Ami. (Tea.) Standard sort; globular; flowers brilliant rose.

Souvenir de Malmaison. (Bourbon.) Clear flesh, edged blush, very large and double; deliciously scented and beautiful.

Souv. de Mme. Pernet. (Tea.) Rose large, globular, very full; base of petals tinged yellow.

Kaiserin Augusta Victoria — Tea. Page 105.

Souv. de Paul Neyron. (Tea.) Creamy white shaded and edged with salmon rose; flowers double, full, very fragrant; free bloomer.

Souv. de Victor Hugo. (Tea.) Large, full and of fine form; color a beautiful mingling of China rose, coppery yellow and carmine; a rose of decided merit, ranking with the best of the new roses.

Souvenir de Wootton, (Hybrid Tea). A brilliant rose; color magenta red, shaded violet-crimson; flowers large, full and regular, with thick, leathery petals, and delicious tea scent.

Sunset, (Tea). A fine novelty, a sport from *Perle des Jardins* which it strongly resembles, except in color, which is a remarkable shade of rich golden amber, elegantly tinged and shaded with dark ruddy copper, intensely beautiful, and resembling in color a splendid "after glow;" very fragrant.

The Bride, (Tea). A sport of *Catherine Mermet*. Pure white, large fine form, very fragrant; free bloomer; buds very full and double; a beautiful rose, and should have a place in every collection.

The Queen, (Tea). A beautiful pure white sport from *Souvenir d'un Ami*; finely formed buds, showing the center but slightly when open; petals thick, and of good substance; opens well; is very sweet, and has proved to be a valuable acquisition to the list of pure white roses.

Ulrich Brunner, (Hybrid Perpetual). Brilliant cherry-red, a sport of *Paul Neyron*. Flowers of fine form and substance.

Valle de Chamounix. (Tea). Base and back of petals are a bright yellow, the center is coppery yellow; elegantly shaded and tinted with rosy blush.

Vick's Caprice. Flowers large, slightly cup-shaped; petals are thick, clear satiny-pink, distinctly striped and dashed with white and bright carmine; makes lovely, elegant shaped buds, which show the stripes and markings to great advantage.

Waban, (Tea). A sport from *Catherine Mermet*, which it resembles in every respect except in color, which is bright, deep pink.

White Banksia, (Banksia). Small, double white flowers, in clusters; very fragrant.

White Baroness, (Hybrid Perpetual). Pure white, sport from *Baroness Rothschild*; a beautiful rose.

White Bath, (Moss). Large, full and very fragrant; color pure white, sometimes delicately shaded with rosy blush; elegantly mossed and very beautiful.

Wm. Allen Richardson, (Noisette). Beautiful orange-yellow; flowers small; very fine and floriferous.

Xavier Olibo, (Hybrid Perpetual). A magnificent rose of fine color; one of the very best; its shade of violet-crimson is not to be found in any other rose; finest of all dark red roses.

Yellow Banksia, (Banksia). Flowers large, but not so fragrant as *White Banksia*.

THE INDEX

FRUIT DEPARTMENT

Almonds	29	Grapes, American Varie-	Peach	25
Apples	15	ties	Pears	17
Apples, Crab	17	Grapes, Foreign Wine	Pecan	31
Apricot	24	Grapes, for Table, Raisins	Persimmons	49
Artichokes	65	and Shipping	Pistachio	31
Asparagus	65	Grapes, Resistant	Plum	21
Banana	52	Guavas	Pomegranates	51
Blackberries	63	Hickory	Pomelos	49
Butternut	30	Hop Roots	Prune	23
Carob	52	Japan Fruits	Quince	28
Cherry	20	Jujube	Raspberries	63
Chestnut	30	Lemons	Rhubarb	65
Citron	49	Limes	Small Fruits	63
Citrus Fruits	45	Logan Berry	Smyrna Fig at Home and	
Currants	63	Loquat	Abroad	41
Dewberry	63	Medlar	Smyrna Fig of Commerce	33
Elaeagnus	52	Miscellaneous Fruits	Somewhat Personal in	
Esculent Roots	65	Nectarine	Tone	5
Figs	33	Nut Fruits	Walnut	31
Filberts	31	Olives	Strawberries	65
Fruit Department	15	Oranges	To Intending Purchasers	4
Gooseberries	65	Our Exports in Nursery	When to Plant and How	8
Grapes	53	Stock		

ORNAMENTAL DEPARTMENT

Abelia	83	Bignonia	87	Clematis	87
Abutilon	95	Birch (Betula)	67	Clerodendron	96
Acacia	75	Birch, Weeping (Betula)	71	Clianthus	87
Albizzia	67	Bougainvillea	87	Climbing and Trailing	
Achania (Malvaviscus)	96	Box (Buxus)	83-91	Plants	87
Achyranthes (Iresine)	95	Brachychiton (Sterculia)	82	Cobaea	87
African Box Thorn, (Ly-		Broom (Genista)	85	Cocos	91
cium)	91	Broussonetia	67	Colens	96
Agapanthus	97	Bulbous and Tuberous-		Corchorus	72
Agave	94	Rooted Plants	97	Coronilla	84
Ageratum	95	Caladium	97	Corypha	91
Akebia	87	California Bay Tree (Um-		Crape Myrtle (Lagerstro-	
Alder, (Ainus)	67	bellularia)	83	emia)	73
Almond Flowering (Pru-		California Big Tree (Se-		Crataegus (Pyracantha)	
nus)	73	quoia)	82	Cryptomerias	71
Alternanthera (Telan-		California Nutmeg (Tor-		Cuphea	96
thera)	97	reya)	83	Cycas	91
Althea (Hibiscus)	72	California Redwood (Se-		Cyclamen	97
Amaryllis	97	quoia)	82	Cypress (Cupressus)	77-91
Ampelopsis	87	California Wild Coffee		Cypress Lawson (Cham-	
Anemone	97	(Rhamnus)	86	aecyparis)	77
Anthericum (Chlorophy-		Calla Lily (Richardia)	97	Cyperus	96
tum)	95	Calycanthus	72	Dahlia	97
Aralia	83	Camellia	84	Daisy (Bellis)	95
Araucaria	77	Camphor Tree	77	Daphne	84
Arbor Vitae (Thuja)	82-91	Canna	95	Dasyllirion	95
Arbutus	83	Cape Jasmine (Gardena)	87	Deciduous Shrubs	72
Ardisia	83	Carnation (Dianthus)	96	Deciduous Trees	67
Areca	91	Carpenteria	84	Deutzia	72
Arundo Donax Variegata	95	Cassia	84	Diosma	84
Ash (Fraxinus)	69	Casuarina	77	Dogwood (Cornus)	72
Ash, Weeping (Fraxinus)	71	Catalpa	67	Dutchman's Pipe (Aristolo-	
Asparagus	87	Ceanothus	84	chia)	87
Aspidistra	95	Cedar (Cedrus)	77	Dracaena	94
Aucuba	83	Cephalotaxus Fortunei	77	Echeveria	96
Azara	83	Cestrum	84	Elaeagnus	84
Bamboos	95	Chamaecerasus	72	Elder, (Sambucus)	73
Banana (Musa)	96	Chamaerops	91	Elms (Ulmus)	71
Beech (Fagus)	69	Chestnut, (Castanea)	67	Elms, Weeping (Ulmus)	72
Begonia	95	Choisya	84	Erythea	92
Berberberry (Berberis)	72-83	Christmas Berry (Hetero-		Erythina	72
		meles)	85	Escallonia	84
		Chrysanthemum	95		

Eucalypti	79	Manettia	89	Roses, Noisette	99
Eugenia	84	Manzanita (Arctostaphylos)	83	Roses, Polyantha	99
Eulalia	96	Maples (Acer)	67	Roses, Prairie	99
Euonymus	85-91	Marguerite (Chrysanthemum)	96	Roses, Tea	99
Euonymus, Spindle Tree	72	Melaleuca	86	Roses Standard	99
Evergreen Shrubs	83	Metrosideros	86	Sabal	93
Evergreen Trees	75	Mock Orange (Philadelphus)	73	Salisburia Ginkgo	69
Fabiana	85	Mountain Ash (Sorbus)	71	Salvia	97
Fern	96	Mulberries (Morus)	69	Saxifraga	97
Ficus	81	Mulberry, Weeping (Morus)	72	Sciadopitys	82
Ficus Repens	87	Myrtle (Myrtus)	86	Seaforthia	93
Filbert (Corylus)	72	Nandina	86	Sedum	97
Forsythia	72	Narcissus	97	Siberian Pea Tree (Caragana)	67
Fringe Tree (Chionanthus)	68	New Zealand Flax (Phormium)	96	Silk Vine (Periploca)	89
Fuchsia	96	Oak (Quercus)	70	Sloe, Flowering	70
Garrya	85	Oak, Cork and Live (Quercus)	81	Smilax (Asparagus)	87
Geranium	96	Oleander (Nerium)	86	Smoke Tree (Rhus)	73
Gladiolus	97	Ornamental Department	86	Snail Vine (Phaseolus)	89
Grevillea	81	Palms, Dracaenas, Agaves, and Yuccas	91	Snowball (Viburnum)	75
Hackberry (Celtis)	68	Pampas Grass (Gynerium)	96	Snowberry (Symphoricarpus)	74
Hagberry (Prunus)	70	Pansies	97	Solanum	89
Heath (Erica)	84	Pandanus	94	Sollya	89
Hedge Plants	91	Passion Vine (Passiflora)	89	Sophora Japonica	70
Heliotrope	96	Paulownia	69	Sophora Pendula	72
Herbaceous Plants	95	Peach, flowering (Prunus)	70	Spiraea	73
Hibiscus	96	Pelargoniums (Geranium)	96	Spruce (Abies)	75
Holly (Ilex)	81	Pepper Tree (Schinus molle)	82	Staphylea	74
Hollyhocks	96	Persimmon (Diospiros)	68	Sumach (Rhus)	73
Honey Locust (Gleditschia)	69	Petunia	96	Swainsonia	89
Honeysuckle (Lonicera)	87	Phlox	96	Sycamore (Platanus)	69
Horse Chestnut (Aesculus)	67	Phoenix	93	Tamarix	75
Hyacinth	97	Photinia	86	Taxodium	71
Hydrangea	72	Pilea	96	Tecoma	89
Hypericum	85	Pine (Pinus)	81	Texas Umbrella (Melia)	69
Iris	97	Pittosporum	86	Thorn (Crataegus)	68
Ivy (Hedera)	87	Plum, purple (Prunus)	70	Thorn, Weeping (Crataegus)	71
Jasmine (Jasminum)	87	Plumbago	89	Thuyopsis	83
Jubea	92	Poinciana	73	Thyme (Thymus)	97
Judas Tree (Cercis)	68	Polysala	86	Torreya	83
Juniper (Juniperus)	81	Pomegranate, Flowering (Punica)	73-91	Tradescantia	97
Kentia	92	Poplar (Populus)	69	Tree Paeony	73
Kentucky Coffee Tree (Gymnocladus)	69	Poplar, weeping (Populus)	72	Tritoma Uvaria (Kniphofia)	97
Kolreuteria	69	Primula	96	Trumpet Vine (Bignonia)	87
Lantana	96	Pyrethrum	95	Tuberose (Polyanthes)	97
Laurel (Laurus)	85	Quince, Flowering (Cydonia)	72	Tulip	97
Laurustinus (Viburnum)	87-91	Raphiolepis	86	Tulip Tree (Liriodendron)	69
Lemon Verbena (Lippia)	73	Redwood (Sequoia)	82	Varnish Tree (Sterculia)	71
Libocedrus	81	Retinospora	81	Verbena	97
Ligustrum	85	Rhapis	93	Veronica	87
Lilac (Syringa)	74	Rhodotyros	73	Verica	89
Lily of the Valley (Convallaria)	97	Roses	91-98-112	Violet	97
Lillies (Lilium)	97	Roses, Banksia	99	Virginia Creeper (Ampe-lopsis)	87
Linden (Tilia)	71	Roses, Bengal	99	Virgilea (Cladrastis)	68
Linden, Weeping	72	Roses, Bourbon	99	Walnuts (Juglans)	69
Liquidambar (Sweet Gum)	69	Roses, Hybrid Noisette	99	Walnuts, weeping (Juglans)	71
Livistonia	93	Roses, Hybrid Perpetual	99	Washingtonia	94
Locust (Robinia)	70	Roses, Hybrid Teas	99	Weeping Deciduous Trees	71
Lobelia	96	Roses, Japanese	99	Weigelia (Diervilla)	75
Loquat (Eriobotrya)	79	Roses, Miscellaneous	99	Willows (Salix)	70
Madrone (Arbutus)	77	Roses, Moss	99	Willows, weeping (Salix)	72
Magnolia	69	Roses, New	99	Wistaria	89
Magnolia Grandiflora	81			Xanthoceras	71
Mahonia	85			Yellow Wood (Cladrastis)	68
Maiden Hair Tree (Ginkgo)	69			Yew (Taxus)	82
Mandevilla	89			Yucca	94

The Roeding Herds

OF

Standard-Bred Cattle and Swine

HOLSTEIN-FRESIAN CATTLE.—No. 1. The superb bull Hwah Rivee de Kol 28364. Three years of age, weight 1900 pounds. No. 2. The fine cow Lady Newton Romeo 42194. Record, average yield seven gallons of milk per day when in full flow.

BERKSHIRE SWINE.—No. 3. The magnificent boar Fresno Prince 64006, sired by the famous English breeder Artful Lee 52630. No. 4. Miss Plattsburg XIV 62803; age two-and-a-half years; weight 600 pounds.

☛ A few thoroughbreds are always valuable additions to the farm. It does not pay to raise scrubs. Let us figure with you if you are interested in high-grade live stock. Correspondence invited.

GEORGE C. ROEDING, Fresno, Cal.

FROM AN ORIGINAL OIL PAINTING.

THE CALIMYRNA (GENUINE SMYRNA) FIG. NATURAL SIZE. SEE PAGE 37.

THE KRUCKEBERG PRESS