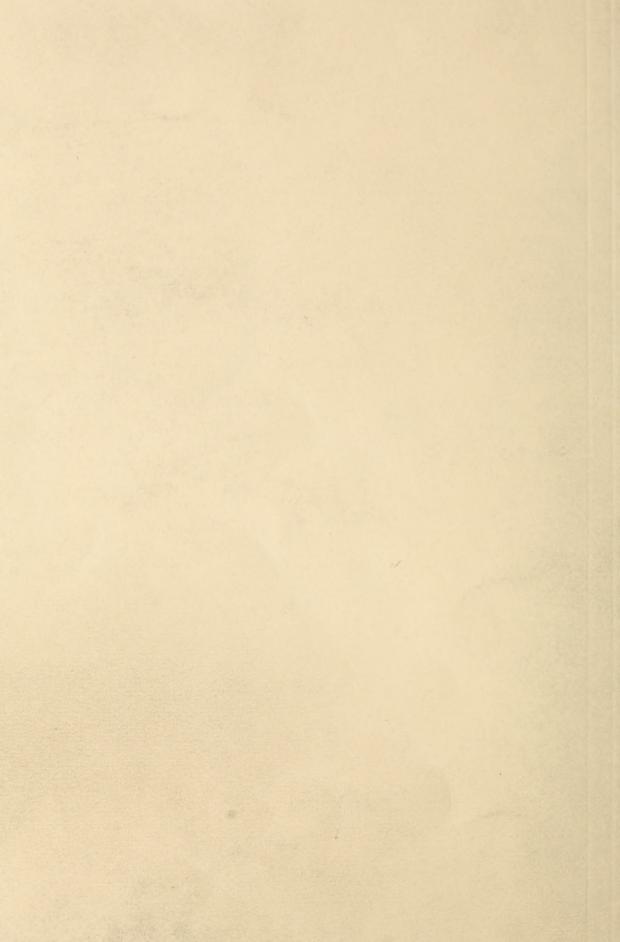
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Pacific Nursery

Company

La Department of Augustian

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Portland

Oregon

Table of Contents

			INTRODUCTION	PAGE . 3-10
		Service Control of the Control of th		
•	1	13, 14	Strawberries	. 37
		. 20	Currants, Blackberries, Blackber	cry-
		11-13	Raspberry Hybrids, Dewberr	ies,
		14-20	Gooseberries	38-46
		. 33	Logan Berry, Phenomenal Berry,	43-44
		23-25	Raspberry, Red and Yellow .	38-39
		. 47	Blackcaps	39
		. 33	Purplecaps	39
•		30-33	GRAPES, American	34-35
		21-23	Foreign	36
		21, 22	ORNAMENTAL DEPARTMENT	51-75
		. 21	Deciduous Trees	53-59
		. 23	Deciduous Trees, Weeping.	60-61
		25-28	Hardy Climbing Vines	71-73
		28, 29	Bulbs and Tuberous Plants	73-75
		. 34	Evergreen Trees	52-54
		48-50	Evergreen Shrubs	61-63
		. 48	Hedge-plants	70
		. 48		76-86
		. 48	SHASTA DAISIES	86
		. 48	SPRAYS	7-9
		48-50	Spray Calendar	9
				11-50 INTRODUCTION 11-34 SMALL FRUITS 11-20 Asparagus, Rhubarb 13, 14 Strawberries 20 Currants, Blackberries, Blackber 11-13 Raspberry Hybrids, Dewberr Gooseberries 14-20 Gooseberries 15-25 Raspberry, Red and Yellow 16-20 Purplecaps 17-20 Purplecaps 18-20 Purplecaps 18-20 Purplecaps 18-20 Purplecaps 18-21-23 Foreign 18-21-23 Foreign 18-21-23 Foreign 18-22 ORNAMENTAL DEPARTMENT 18-22 ORNAMENTAL DEPARTMENT 18-23 Deciduous Trees 18-25-28 Hardy Climbing Vines 18-25-28 Hardy Climbing Vines 18-25-28 Evergreen Trees 18-25-28 Evergreen Trees 18-25-28 Evergreen Shrubs 18-25-28 Ev

For General Index and Index to Roses, see pages 87-89.

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ESTABLISHED 1892-INCORPORATED 1911

DESCRIPTIVE CATALOGUE

OF THE

Pacific Nursery Company

INCORPORATED

PORTLAND OREGON

CAPITAL STOCK \$25,000.00 FULLY PAID

DRENCO, OREGON

NOTICE!

All persons authorized to act as agents for us are provided with a written certificate to that effect, and we request that they be required to show their certificates. Stock is not unfrequently sold by persons without authority, and not furnished from the places they represent, by which means many poor trees and plants are distributed, causing great dissatisfaction and disappointment.

¶ Buy Good Stock of Reliable Men, and this may be avoided.

To Correspondents

N THE transaction of any business, a mutual desire for mutual satisfaction between parties should prevail. Let us, then, ask of our patrons an observance of the following requests:

That all orders addressed to us be written out in a legible style, with the name in full on a separate sheet, and not in the body of the letter, that no mistake may occur.

That particular and plain directions may be given how they wish their packages marked, and by what route sent, and to whose care consigned. When no route is designated, we will send by the one we deem most advisable; but let it be distinctly understood that we will, in no case, be responsible for any loss or damage that may occur after we have delivered them to the forwarders. They alone are responsible.

While we exercise the greatest care to have all our trees and plants true to name, well grown and packed in the best possible manner, and hold ourselves in readiness, on proper proof, to replace all trees or plants that may accidentally prove untrue to label, free of charge, or refund the amount paid therefor, it is mutually understood and agreed to between the purchaser and ourselves that our guarantee of genuineness shall in no case make us liable for any sum greater than that originally received for trees or plants that prove untrue. Our reputation for upright dealing, and the uniformly high standard of quality of our products, is our guarantee to our customers.

When orders are received specifying the kinds wanted, the purchaser will please say whether we shall fill up with other varieties should some of those which he has ordered be exhausted. We will, so far as in our power, give him his choice; but when the varieties specified cannot all be furnished, or are known to be unworthy of cultivation, we will take the liberty of substituting others in their place, unless special orders are given to the contrary. When the purchaser is not well acquainted with the fruit by name, he would do well to leave the selection to us, briefly stating at what season he wishes the fruit to ripen; and in such cases we will exercise our best judgment in making a judicious and profitable selection of the standard sorts and good trees.

Prompt attention will be given to all letters requesting information, all of which should enclose a postage stamp.

It is expected that orders for trees from those with whom we have no acquaintance will be accompanied by the cash or a suitable reference.

Our terms are INVARIABLY CASH.

From past experiences we have learned that we cannot afford to delay collections, and must henceforth insist upon prompt payment. Our business is attended with heavy expense and we must have the cash to push it.

Trees, plants, etc., will be carefully taken up, each kind tied by itself and labeled, the roots packed so as to carry safely, and delivered to the transportation companies free of charge.

All communications should be addressed to

PACIFIC NURSERY CO.,
Portland, Ore.

Preface

T IS WITH PLEASURE that we present to our friends and patrons this edition of our DE-SCRIPTIVE CATALOGUE OF FRUITS, ORNAMENTAL TREES, Etc., and in doing so we tender to them our sincere thanks for the many expressions of encouragement and substantial aid they have given us. We will endeavor in the future, as we have in the past, by strict attention to business, to merit their patronage and good will.

The lamented Downing said in his introduction to his work on fruit and fruit trees, that "A man born on the bank of the noblest and most fruitful river in America and whose best days have been spent in gardens and orchards, may perhaps be pardoned for talking about fruit trees," We must claim indulgence for similar reasons; and if we seem to urge these subjects beyond the rules of propriety, our apology is, that we think we are working in a good cause and for the good of our fellow men. He said further, "Indeed, the subject deserves not a few but many words. Fine fruit is the flower of commodities. It is the most perfect union of the useful and the beautiful that the earth knows. Trees full of soft foliage; blossoms fresh with spring beauty; and finally fruit, rich, bloom dusted, melting and luscious. Such are the treasures of the orchard and garden, temptingly offered to the landholder in this bright and sunny though temperate climate." We are pleased to note an increasing interest throughout the whole country in the cultivation of the useful and beautiful. Both fruits and flowers are more highly appreciated by the masses than formerly, and we regard it as a most happy indication, not only in the effect it will have upon the health of the body, but also on the softening influence it will have on the harsher feelings of our nature.

To the planter or purchaser of nursery stock, at least three things are indispensible. First, varieties true to name; second, healthy, vigorous, well-matured trees or plants; third, careful and judicious packing, without which all will be lost.

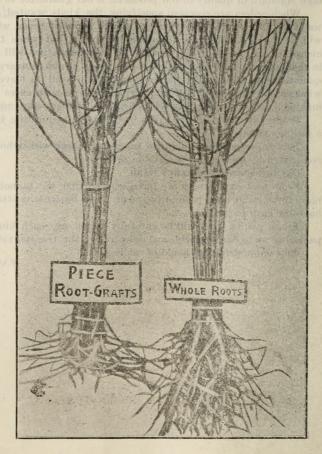
We give the most careful scrutiny to the propagation of varieties, endeavoring by all methods known to us to protect ourselves from error or imposition, and rejecting anything of which we may have reason to be suspicious. By careful and constant watching and attention, we are warranted in offering our stock as pure and absolutely true to name.

Our soil being of character best suited to produce the healthiest conditions of growth, that solid, firm texture of the wood, with abundant, fibrous root, so necessary to successful transplanting, we are enabled to offer the product of our nurseries with entire confidence to planters in all sections of the country.

We give to our packing and shipping careful and personal supervision and to still further protect our patrons as well as ourselves, against los in this direction, we employ the most skilled and competent hands to assist us.

We aim to keep fully abreast of enlightened and cultivated taste, in the introduction of new and valuable varieties of fruit and novelties and valuable acquisitions in ornamentals—accepting with pleasure everything that has real merit, we shall with equal readiness discard and discountenance the sale of worthless humbugs.

We grow all our trees on WHOLE ROOT STOCKS, and our one-year-old trees have the same age root as two-year-old piece root graft; but a much better root system, as can be readily seen by referring to our illustration showing trees grown by both systems.



Hints on Transplanting.

It would be hardly possible, in a small space, to give complete directions on all the points connected with tree planting. We simply give a few hints on the more important operations. We would advise every purchaser of a bill of trees to buy some good treatise on tree culture that will furnish full and reliable instructions of the routine of management.

The following points should never be overlooked:

Select thrifty young trees in preference to old or very large ones; the roots are more tender and fibrous and they bear transplanting better and are far more apt to live; they can also be more easily trimmed and shaped to any desired form, and in the course of a few years will usually outstrip the older ones in growth.

THE SOIL

A rich loam is the best for fruit, made sufficiently dry by artificial draining if necessary, but all soils may be made available by judicious treatment.

PREPARATION FOR PLANTING

Plow and subsoil repeatedly, so as to thoroughly pulverize to a depth of 12 to 18 inches. When planting upon the lawn or grass plots, remove the sod for a diameter of 4 or 5 feet, and keep this space well worked and free from weeds. Dig the hole deeper and larger than is necessary to admit all the roots in their natural position, keeping the surface and subsoil separate. Cut off broken and bruised roots and shorten the tops to half a dozen good buds. If not prepared to plant when your stock arrives, "heel in" by digging a trench deep enough to admit all the roots and setting the trees therein as they can stand, carefully packing the earth about the roots, taking up when required. Never leave the roots exposed to the sun and air, and "puddle" before planting.

PLANTING

Fill up the hole with surface soil, so that the tree will stand about as it did when in the nursery after the earth has settled, except Dwarf Pears, which should be planted deep enough to cover the quince stock upon which they are budded, two or three inches. Work the soil thoroughly among the roots, and when well covered tamp firmly. Set the tree firm as a post, but leave the surface filling (of poorer soil) light and loose. No staking will be required except with very large trees. Never let manure come in contact with the roots.

How to Winter Trees Procured in the Fall

The practice of securing supplies of trees in the fall is becoming more and more general as each season demonstrates its wisdom. To insure its success, you have only to get the trees before freezing weather and bury them in the following manner: Choose a dry spot where no water will stand during the winter, with no grass near to invite mice. Dig a trench, throwing out enough dirt to admit one layer of roots below the surface, and place the trees in it, inclining to an angle of 45 degrees or more. Widen the trench, throwing the soil among the roots in position; place another layer in the trench, reclining the tops on the others, and so on until all are in the trench; then finish by throwing up more soil until the tops of the trees are nearly or quite covered. It is also well to bank up the soil around the sides to insure more thorough protection. The exposed tops should then be covered with pine boughs, which insure them against any possibility of injury. Care should be taken to fill solid all the interstices among the roots. In the spring the roots will be found to have formed the granulation necessary to the production of new spongioles, and when planted at the proper time will start to immediate growth.

DAMAGED TREES

If dried from long exposure, bury in the ground or keep in water until the shriveled appearance disappears. If the trees are frozen when received they should be buried immediately in the earth, tops and all, and allowed to thaw in this condition.

PLANT YOUNG TREES

We cannot too strongly recommend to our customers the procuring of young trees, especially for orchard planting, instead of selecting the largest that can be had, to secure more immediate effect. They can be taken up with more perfect roots and will become sooner established in a new location. They can also be more readily trained to any desired shape. The largest and most suc-

cessful planters invariably select young, thrifty trees as the surest in the end to give thorough satisfaction.

For small grounds or street planting, when it is necessary to make a show as soon as possible, large trees are often more desirable, and when handled with care should not fail to do well, but with the general planter the average of loss will be much less and both time and money will be saved if young trees are selected to begin with.

DISTANCE FOR PLANTING

Walnuts	40 to 50 feet apart each way
Standard Apples	30 feet apart each way
Standard Pears and strong growing Cherries	20 feet apart each way
Duke and Morello Cherries	18 feet apart each way
Prunes, Plums, Apricots, Peaches and Nectarine	16 to 20 feet apart each way
Dwarf Pears	10 to 12 feet apart each way
Dwarf Apples	10 to 12 feet apart each way
Grapes	rows 10 to 15 feet apart, 7 to 16 feet in rows
Currants and Gooseberries	3 to 4 feet apart
Raspberries and Blackberries	3 to 5 by 4 to 7 feet apart
Strawberries, for field culture	1 to $1\frac{1}{2}$ by 3 to $3\frac{1}{2}$ feet apart
Strawberries, for garden culture	1 to 2 feet apart
THE PARTY OF THE P	

NUMBER OF TREES TO AN ACRE

50 feet apart each way 17	112 feet apart each way 300
40 feet apart each way 27	10 feet apart each way 435
30 feet apart each way 50	8 feet apart each way 980
25 feet apart each way 70	6 feet apart each way1210
	5 feet apart each way1742
	4 feet apart each way2723
15 feet apart each way 205	3 feet apart each wav4840

RULE, SQUARE YARD 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 the acre.

RULE, EQUALATERAL 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.

A Plain Talk About Prices

Why Cheap Stock Is Dear At Any Price

It costs more to produce a good thing than a poor one, and in buying any article the first question should be: Not how cheap is it, but how good is it? Many people understand this well enough and yet how few ever stop to apply the rule to nursery stock. Yet the fact is that in no other kind of purchase is the quality of the article of such vital importance as in nursery stock. If a man, for instance buys a poor coat at a cheap price, it is true that he gets cheated and loses something, as the coat doesn't wear as long nor look as well as a good one, but yet the loss is not great, as he gets some wear out of it. But note the difference.

The price of a tree is the smallest part of its cost by the time it has come into bearing.

If a man buys cheap trees to save a few cents on each, instead of buying first class, warranted stock, what is the result? It is impossible for him to tell by the looks of the stock delivered to him, whether he is getting trees true to name or not, and he cannot for several years. If the trees are of decent size the purchaser is apt to think they are all right, so he plants them on valuable land, takes good care of them for several years, losing the use of the land and putting in time and labor. Now mark carefully the fact that by the time the trees come into bearing, the expense of the land, labor, etc., etc., has amounted to several times the cost of the trees, and consequently if his cheap stock turns out, as it uniformly does, to be of inferior and worthless varieties, then it is a serious loss to him and he has to begin all over again.

Now is it not plain to all that it is rank folly for anyone to risk this dead loss of trees, use of

land for years, expense of cultivation, etc., to save a few cents on a tree, when for a trifling increase in price he can get the very best warranted stock?

As a matter of insurance, a man cannot afford to buy anything but the best warranted nursery stock.

It is a general rule which can be relied upon, that "cheap" stock is worthless stock, and therefore dear at any price. If a man wont pay for good stock, but buys cheap stock in order to save money, he is very sure to lose all he puts into it. Most of the worthless stock is worked off by strange agents who sell on their own account, and are not authorized by any responsible firm to take orders for them. Such men buy up refuse stock from large nurseries for almost nothing and fill their orders with it, claiming it to be good. They also warrant the stock but as they are unknown or irresponsible, their warranty is absolutely worthless.

If people would buy only from agents who can show a certificate authorizing them to represent a responsible firm there would be no danger of being cheated.

We Cannot Get Something for Nothing.

Now, in conclusion, did you ever stop to consider that this is not a world where we can get something for nothing, and where an article is offered at an extraordinary low price there must be some good reason for it?

The very simple reason is that, as the article is of bad quality, it cannot be sold in competition with first-class goods and is therefore worked off on the public at a low rate to catch the people who will bite at things cheap, without regard to quality. Such people never get ahead, because they waste their money on poor trash that gives no "value received" for their outlay. We do not pretend to compete with "cheap" stock, as we will not send out cheap stock at any price. What we really do is to furnish the very finest grade of genuine stock at as low prices as other responsible firms furnish the same grade of stock. Our agents have regular certificates of agency, and all orders given to them will receive as careful attention as though sent direct to us, and at the same prices.

SPRAYING

Spraying has come to be an established part of fruit growing. With all that has been written on the subject, the fruit grower should be competent to perform the ordinary spraying of his trees without further advice; but for the benefit of those who may not be familiar with the best methods and practice, we give the following from the last report of the State Board of Horticulture:

REQUISITES FOR SUCCESSFUL SPRAYING

Materials of standard strength, carefully compounded applied in thorough manner at regular intervals. Fruit thinned so that the spray liquid can reach every portion of that remaining on the tree.

Insecticides

Used for codlin moth larvæ, caterpillars, slugs and all biting and chewing insects.

Spray No. 1-Arsenate of Lead

For codlin moth and all other chewing insects. The formula for making the arsenate is as follows:

4 ounces arsenate of soda

12 ounces acetate of lead.

Dissolve in water in separate buckets, pour together and you have sufficient arsenate of lead for 50 gallons of water, and all you have to do is to pour your arsenate into the water and stir well Its advantages over other forms of arsenate are as follows:

First-It remains in suspension longer than any other arsenate spray, and hence requires but little agitation.

Second-It is very adhesive, but little affected by the rains, and therefore requires a less number of applications.

Third-It is more pleasant to handle, and can be used any strength without injury to the foilage.

The arsenate of lead has been highly endorsed by the University of California, Professor Steadman, entomologist of the State of Missouri, Professor Gillette of Colorado, and many other authorities. In Colorado but three sprayings were used, with excellent results. Professor Steadman recommends four: (1) when petals fall, (2) two weeks later, (3) 30 days after the second, and (4) 30 days still later. If used with bordeaux, use only one-third of the arsenate.

Spray No. 2-Arsenate of Soda

1 pound of white arsenic 2 pounds of sal soda * 1 gallon of water.

DIRECTIONS—Boil 15 minutes; add amount of water equal to that evaporated, giving I gallon of arsenite of soda. For 50 of water use 1½ pints of the arsenite of sod aand 6 pounds of freshly slacked lime. Can be used safely.

Spray No. 3-Paris Green

1 pound of paris green 4 pounds of quick lime 200 gallons of water

Slack the lime in part of the water, sprinkling in the paris green gradually then add the rest of the water. For the peach and other tender leaved plants use 300 gallons of water. Keep well stirred while spraying.

Insects that Suck the Juice of Fruits or Trees

Spray No. 4-Sulphur and Lime

(Formula)

15 pounds of unslacked lime 15 pounds of flowers of sulphur 50 gallons of water

Slack the lime in enough water to do it thoroughly; add the sulphur and boil for an hour at least, adding water as necessary. Spray warm through a coarse nozzle.

Spray No. 5-Whale Oil Soap, or Quassia Chips

Boil I pound of soap dissolved in 4 gallons of water, or boil for 2 hours 1 pound of quassia chips; add water to extract to make four gallons.

Winter Spray When Trees are Dormant

Fungicides

Spray No. 6-Bordeaux Mixture

6 pounds of copper sulphate (blue vitrol.) 6 pound lime (unslacked.) 50 gallons of water

Dissolve the copper in hot or cold water, using a wooden or earthen vessel. Slack the lime in a tub, add the water cautiously and in sufficient amount to insure thorough slacking. After thorough slacking, more water can be added and stirred in until it has the consistency of thick cream. When both are cold pour the lime into the diluted copper solution of required strength, straining it through a fine mesh sieve or gunny sack, and thoroughly mix.

It is then ready for use. Considerable trouble has frequently been experienced in preparing the bordeaux mixture. Care should be taken that the lime is of good quality and well burned, and has not been air slacked. Where small amounts of lime are slacked it is advisable to use hot water. The lime should not be allowed to become dry in slacking, neither should it become entirely submerged in water. Lime slacks best when supplied with just enough water to develop a large amount of heat, which renders the process active. If the amount of lime is insufficient, there is danger of burning tender foliage. In order to obviate this the mixture can be tested with a knife blade or with ferro-cyanide of potassium (1 ounce to 5 or 6 ounces of water.) If the amount of lime is insufficient, copper will be deposited on the knife blade, while a deep browning red color will

be imparted to the mixture when ferro-cyanide of potassium is added. Lime should be added until neither reaction occurs. A slight excess of lime, however, is desirable.

The bordeaux mixture is best when first prepared. Stock solution of lime and copper can be made and mixed when required.

For summer spray, use only half strength, 3 pounds of copper sulphate instead of 6 pounds.

Spray No. 7—(For Rose Mildew)

1 ounce potassium sulphide 2 to 3 gallons of water

Dissolve the potassium sulphide in water.

Scale.

*In Western Oregon, and moist sections, use 3 instead of 2 pounds of sal soda.

Spraying Calendar

APPLES	FIRST APPLICATION	SUBSEQUENT APPLICATIONS
Apple scab	Use Spray No. 6 before buds swell	Use Spray No. 6
Bitter rot	This disease may be treated in essentially the same way as scab. As the bitter-rot fungus often continues its destructive work after the fruit is harvested, care should be taken in storing to remove all fruit showing evidence of the disease.	half strength, when buds are swelling.
Codlin Moth	Use No. 2 or No. 3 one week after blossoms fall	Repeat No. 2 and 3 at intervals of 2 to 4 weeks, up to
	Use No. 4 when trees are dormant.	within 3 weeks of harvest
	Use No. 5 as soon as eggs hatch	Use No. 4 when- ever aphis ap-
Apple Canker or dead spot	Cut all dead and diseased tissue clean and wash with bor- deaux mixture; spray with winter strength No. 6 as soon as possible after first fall rains.	pears on foliage
Collar rot or mush- room disease	Dig a trench around tree, cutting off all roots, as the disease is communicated from tree to tree through the	
CHERRY	roots; destroy all affected trees.	
	When aphis appears use Spray No. 5.	
	When fruit has set if slug appears, dust leaves with air-slacked lime.	
Gummosis PEARS	Cut out gum pockets, split outer bark from roots to branches when sap begins to flow; wash with bordeaux mixture.	
Scale, Codlin moth	doudy mixture.	
and scab	Use same spray as for apple.	
Leaf blight		
PEACH		
Cut leaf	Spray with No. 6 before buds open.	
ROSES		
Mildew	· ·	
	Use pray No. 6, half strength.	
Chewing or biting insects	Use spray No. 1	
0 1	77	

Note—Bordeaux mixture is a sovereign preventative for all fungus growth, using the modified form when trees are in foliage.

_Use Spray No. 4

Note-Lime should always be fresh slacked and the combined fungicide and insecticide sprays should be used soon after making.

POINTS TO KEEP IN MIND

- 1. Sprays are preventatives, not cures.
- 2. Early spraying is the key to success in the use of fungicides.
- 3. Combined fungicides and insecticides, the copper arsenic solutions, are recommended whenever applicable.
- 4. It is too late to begin making applications of fungicides after the disease has made its appearance.
 - 5. Only with a nozzle throwing fine spray can fungicides and insecticides be properly applied.
- 6. Agitators must be used to keep solutions thoroughly mixed if satisfactory results are to be obtained.
- 7. The number of applications necessary cannot be stated. It depends upon the weather and the extent of the disease.
- 8. Great care must be exercised to have the mixture properly made and applied to prevent serious injury to foliage.
- 9. Diseased portions of trees affected with some fungi must be removed and the rubbish burned. In "canker" and "gummosis" remove the affected parts, wash with copper sulphate, and bind.
- 10. Spraying must be done in a thorough manner, every leaf must be reached, vigilance in repeating the treatment must be observed, and spraying must not be delayed until diseases have appeared to a damaging extent.



This cut shows the splendid root system of our trees.



Fruit Department

Apples-

"The Apple," says Downing, "is the world renowned fruit of temperate climates." Although not possessed of the richness and melting and delicious qualities of the pear or peach, yet from its adaption to a variety of soils, together with the long time through which many varieties can be kept in a fresh state, its various uses, and the profit accruing from its cultivation, as a market fruit, it must be regarded as holding the very first rank among fruits. There is no country in the world where it attains such perfection as it does in this, nor where its cultivation can be made more profitable: but the orchardist is at a loss to say what variety to plant, knowing as he does that a great error may be committed in selecting sorts that will do well. First, he wants those that bear well; secondly, a fruit of handsome appearance; and thirdly one that will carry well to market. These qualifications are necessary to a profitable market fruit.

The following very pertinent remarks on this subject we copy from Dr. John A. Wardner's excellent work on apples:

"Every orchard planter who examines the extended varieties of fruits presented to him in the books and by the nurserymen must feel greatly embarrassed when he comes to select the varieties for his own orchard. Almost every one in the long list is recommended for some good quality, and the number of best, which he is apt to conclude means indispensable to him, is wonderfully large. Some persons are bewildered by the array presented in the catalogue and fall back upon their own slender stock of information, selecting only one well-known variety; but most persons commit a far greater fault by attempting to grasp all varieties that are offered and commended, which is very well for some one person in every region to do. It is labor of love for the benefit of his fellow townsmen; but it is far better for him who is about to plant an orchard, either large or small, to determine which varieties are best adapted to his purpose. For the small planter who is providing for the wants of his family a number of varieties that will ripen in quick succession will be best, and the sorts should be selected with regard to their qualities for household use. The planter of extensive commercial orchards, on the contrary will need but a limited number of varieties which should be selected with a view to the wants of the market he intends to supply, as well as the productiveness of the fruit and its ability to bear transportation. While it is desirable to have but a few well selected varieties in such an orchard, it must be recollected that even when there is a general failure of the crop there are always some sorts that bear fruit, and this is an argument against making the list too small.

"All attempts to make lists of fruits for general cultivation over the great extent of our country have been abortive. State and regional lists are made by the pomological and other societies, which are useful in rendering approximate information; but, at last every planter should observe the fruits that succeed in his neighborhood, and upon soil similar to his own, and select the varieties for planting accordingly.

"In making up our judgment of the excellence of a fruit, there are many elements that enter into the question of what constitutes a good apple, and so much depends upon the taste of the individuals who have the questions to decide, that at last everyone is left to make up his own mind as to what will be the best for his particular case."

Our descriptive list embraces the best and most popular varieties known. Of course it runs in too great a variety for any one orchard for profit; besides there is probably not a spot in the country where they would all flourish—but the latitude of our trade not only admits of, but demands a large list to supply the wants of the different sections of the country. After a long experience in the nursery business, we have with great care made the following selections, from which we trust all our patrons can supply their wants:

SUMMER VARIETIES

American Summer Pearmain. Medium to large; skin red, spotted with yellow in the shade, and streaked with lively red in the sun; flesh yellow

remarkably tender, juicy and rich; a good tearer. August.

Astrachan, Red. Large roundish; nearly covered with deep crimson, overspread with a thick bloom; juicy rich acid, beautiful. The tree is a vigorous grower, with large foliage and a good bearer.

SUMMER APPLES; continued.

Bough, Large Sweet. See Sweet Bough.

Carolina Red June. (Red June.) Medium size; red; flesh white, tender, juicy, subacid, and abundant bearer. June.

Early Colton. Entirely hardy in all parts of the country. Has stood the extreme cold of Minnesota, Wisconsin, New Hampshire. Annual and abundant bearer. Never in the history of over half a century has it been known to entirely fail of a crop. Very early, beginning to ripen so it is good to eat 10 days before Early Harvest, and continues to ripen for some time, making it very valuable for family use. Of beautiful appearance; fine quality.

Early Harvest. (Yellow Harvest.) Medium to large; pale yellow; fine flavor. Tree a moderate, erect grower, and a good bearer; a beautiful and excellent variety for both orchard and garden. Middle to end of August.

Early Strawberry. Medium; striped with deep red; tender, subacid and excellent. A poor grower, but productive. August.

Golden Sweet. Rather large; pale yellow; very sweet and good. Strong grower and good bearer. August.

Ideal. A new and promising variety; originated near Jefferson, Oregon. Above medium in size regularly formed, roundish oblate; greenish color, turning to a rich golden when fully ripe; firm, crisp, sub-acid. July and August.

Keswick Codlin. Large conical; tender, juicy acid; excellent for cooking. Tree erect, vigorous, exceedingly productive, and early in bearing. July to October.

Red Russian. Early; very hardy; medium size, conical; red, slightly striped with deep red; flesh white, tender, juicy, sub-acid. Abundant bearer. Resembles the Red June, but flesh more solid and better shipper, and color not as solid a red, but slightly striped. July and August.

Summer Queen. Medium to large, roundish; surface yellow blotched and streaked with red; flesh yellow and tender, with an acid, aromatic flavor. July and August.

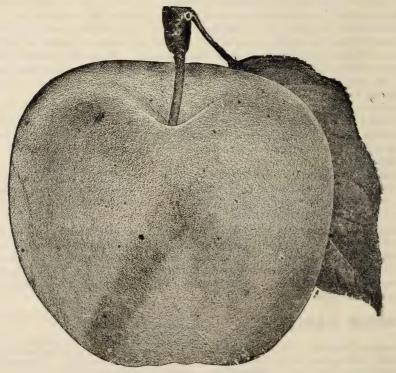
Sweet Bough. Large; pale greenish yellow; tender and sweet. Moderate grower and good bearer. August.

Sweet June. Medium, roundish, regular; light yellow; very sweet, pleasant and rich. August.

Tetofsky. A Russian Apple which has proven profitable for market growing. The tree is a spreading, upright grower, forming an open head; comes into bearing extremely early, usually the second year after transplanting, and bears every year. Hardy as a crab. Fruit good size, nearly round; yellow, beautifully striped with red; flesh white, juicy, pleasant, acid, aromatic. July and August.

White Astrachan. Very large, roundish; skin smooth and nearly white. A favorite market sort, where it always attracts attention and brings good prices. August.

Williams' Favorite. A large, handsome dessert Apple. Originated at Roxbury, Mass. Fruit medium size, roundish, oblong conical; long stem; skin smooth; color light red ground, but nearly covered with fine dark red; flesh yellowish white, of very mild, agreeable flavor; abundant bearer. July to September;



YELLOW TRANSPARENT

SUMMER APPLES, continued.

Yellow Transparent. A new Russian variety imported in 1870, through the Agricultural Department. Pronounced by some who have seen it as the most valuable early Apple ever introduced. Tree an upright grower and a very early and abundant bearer Fruit of good size; skin clear white, turning to a pale yellow; flavor acid and very good. Ripens from 10 days to two weeks earlier than Early Harvest.

AUTUMN VARIETIES

Alexander. (Emperor.) Of Russian origin. Large; deep red or crimson; flesh yellowish white, crisp; tender, with pleasant flavor. Tree hardy. October.

Autumn Strawberry. Medium; streaked; tender, juicy, subacid, fine. Vigorous and productive. September and October.

and brown dots; flesh yellowish and a little coarse, tender, juicy, slightly subacid; core small. One of the best cooking varieties. Nov. to Feb.

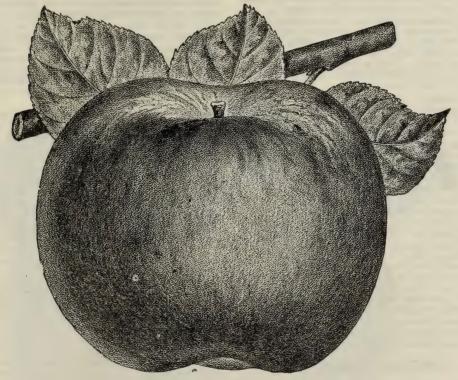
Fall Pippin. Very large; yellow; tender, juicy and rich. Tree vigorous. October to December.

Fall Jennetting. (Summer Jennetting.) Fruit large, oblate, slightly conical, almost ribbed; pale greenish yellow, with a blush; flesh whitish, tender, juicy brisk, subacid. Tree vigorous and productive. September to October.

Fameuse. (Snow Apple.) Medium size, roundish, oblate; whitish ground, striped with deep red; flesh very white, juicy and pleasant. Tree very hardy. One of the most valuable northern sorts. November and December.

Emperor. See Alexander.

Gloria Mundi. Very large; greenish yellow. Valuable for cooking and drying. October



DUTCHESS OF OLDENBURG

Duchess of Oldenburg. Of Russian orgin. large size, roundish; streaked with red and yellow; flesh whitish, juicy; flavor sprightly, subacid. Tree a vigorous grower, very hardy; very early and abundant bearer. While it is indispensable in the North; it is almost equally so in the South. We confidently recommend it for the orchard as one of the most valuable sorts for market, or in the garden for domestic use. September.

Dutch Mignonne. A popular Apple introduced from Holland. Tree moderately vigorous, upright, spreading. Fruit medium, roundish, oblate, slightly conical; skin rather tough, yellow, shaded, striped and splashed with shades of light and dark, rich red, moderately sprinkled with light

Gravenstein. Large; striped and beautiful; tender, juicy and high flavored. Vigorous and productive. September and October.

Haas. (Gros. Pommier, Fall Queen.) Medium to large, slightly conical and somewhat ribbed; pale greenish yellow, shaded and striped with red; flesh fine white, sometimes stained, tender, juicy, subacid, good. Tree vigorous and very hardy; upright grower, with well-formed head, bears early and abundantly. September to November.

Hoover. (Wauttaugah.) Large, oblate; dark red; juicy, acid, crisp and of good flavor. Tree vigorous, short-jointed grower. Very distinct. September and October.

AUTUMN APPLES, continued.

Jefferis. Medium to large; yellow, striped, mostly red; flesh tender aud delicious. One of the finest dessert Apples. Moderate growth; productive. September to November.

Jersey Sweet. Medium size; striped red and green; tender, juicy and sweet. A free grower and good bearer. Very popular both for table and cooking. September and October.

King of Tompkins County. Large and handsome; striped red and yellow. Tree vigorous and productive. One of the best. November to May.

Maiden's Blush Medium size, flat; quite smooth and fair; pale yellow, with beautiful red cheek. tender, sprightly, pleasant acid flavor. Fair grower and good bearer. Sept. and Oct.

Rambo. Medium; yellowish, streaked with dull red and somewhat dotted; mild, tender and good. Fine grower, productive. More especially valuable in the West. October to December.

Red Bietigheimer. A rare German variety, recently introduced. Fruit large to very large; skin pale green, mostly covered with purplish crimson; flesh white, firm, subacid, with a brisk, pleasant flavor. Tree a fine grower and abundant bearer. September and October.

Snow. See Fameuse.

St. Lawrence. Large, yellowish, striped and splashed with carmine; flesh white, slightly stained, crisp, juicy, tender and vinous. Tree hardy and productive. September.

Stump. Medium-sized, conical; yellow, striped and shaded with light red; flesh juicy, tender, with sprightly subacid flavor; fruit very uniform in size and of fine appearance. Very prolific. September and October.

Twenty-Ounce. (Cayuga Red Streak.) Very large, nearly round; yellow, striped red; quality good. Vigorous and good bearer. Popular as a market variety. November and December.

Waldron Beauty. A new variety originated near Oregon City, Oregon. Medium size, roundish oblate; flesh white, resembling the McIntosh Red; color almost full red, underlaid with greenish yellow; skin smooth and takes a very high polish. A profuse bearer; quality good. A promising autumn variety. September to December.

Waxen. Medium; pale yellow, oily, sprinkled with a few dots; flesh whitish yellow, crisp, tender, juicy, sprightly, subacid, good. November.

WINTER VARIETIES

Akin. (Akin Red.) Size and color very much like Jonathan, but keeps three months longer; quality even better than that most excellent apple.

Illinois Horticultural Society: "The original Akin tree is 7 feet 3 inches in circumference, about 40 feet high, and over 60 years old; a regular bearer; keeps until April or May. Of great beauty and excellent quality; fine-grained, crisp, spicy and mild. Its fine quality and beauty make it worthy of general trial, for the time will come when such fruit will be in demand. So beautifully colored as to be almost irresistible to the eye, and of equally fine flavor. It is of good quality, medium size, red color, and a late keeper. Tree productive."

Antonovka. One of the true ironclads. Of

Russian origin and perfectly hardy, withstanding our coldest winters. Fruit large, slightly oblong, and when fully ripe of a light golden color. Good keeper.

Arkansas Beauty. Large; beautiful crimson; flavor rich, subacid; fine-grained. Free and good grower and enormous bearer. Nov. to March.

Arkansas Black. Large, round or slightly conical; regular, smooth, glossy yellow were not covered with deep crimson, almost black; flesh very yellow, firm, fine-grained, juicy; flavor sudacid, pleasant, rich.

Babbitt. A strong, large grower; wood hard and tough; heavy bearer. Fruit one-third larger than Baldwin; brighter red; flesh fine-grained, juicy, crisp, rich and of a peculiarly fine acid; use—backing, stewing, pies or jelly, for each and all of which it is simply the best; in cooking it literally melts. Ready to cook as soon as grown, but it is so acid that few like to eat it uncooked until the latter part of the season, when it is a favorite eating Apple.

Baldwin. Large, roundish; deep bright red; juicy, crisp, subacid, good flavor. Tree vigorous, upright and very productive of fair, handsome fruit; one of the best and most popular winter Apples. Originated on farm of John Ball, Wilmington, Mass., about the middle of the 18th century. January to April.

Black Twig. See Mammoth Black Twig.

Bell de Boskoop. Large; bright yellow, washed with light red on the sunny side, and sometimes with a sprinkling of russet; flesh crisp, firm, juicy, sprightly, subacid; quality very good; a late keeper. Tree a vigorous grower.

Bellflower, Yellow. Large; yellow, with blush cheek; very tender, juicy, subacid. In use all winter. Very valuable. A moderate grower and good bearer.

Ben Davis. (New York Pippin, Kentucky Red Streak, etc.) A large, handsome, striped Apple of good quality; tree very hardy, vigorous and productive; a late keeper. Highly esteemed in the West and Southwest.

Benton County Beauty. Originated in Benton county, Arkansas. Tree is a good grower, early and abundant bearer. Fruit large size, fine-grained, juicy and crisp; color a bright red all over. One of the finest appearing Apples grown.

Bismark. In respect to its early fruiting habit, the most remarkable Apple ever introduced; one-year grafts frequently produce fruit and two-year ones seldom fail. Has fruited in many sections of the United States; we hear only words of commendation. A two-year single stem tree about 18 inches high, has been known to ripen a fine specimen. Originated in New Zealand; has been tested in nearly every apple-growing country, and promises to succeed wherever Apples can be grown, proving healthy, hardy, productive and without a rival in its early fruiting quality. Tree of short, stocky growth, thick, healthy foliage; makes beautiful specimens grown in pots for decorative purposes. Fruit large, handsome; yellow, sometimes shaded, red cheek; flesh tender, pleasant, subacid, good for dessert, superior for cooking. Will keep well into winter.

Blenheim Orange. Fruitlarge, roundish, oblate, concial; yellowish, becoming deep orange, stained

on the sunny side with dull and dark red stripes; flesh yellow, breaking, very sweet, pleasant, good. October to December.

Blue Pearmain. Very large; dark purplish red over dull ground, appearing bluish from white bloom; flesh yellowish, mild, aromatic. October to February.

British Columbia. New. Named by the Fruit Growers' Association of British Columbia. Originated by H. P. Cales, at Nicomen in the Fraser Valley. The tree is a vigorous grower and very hardy, annual and abundant bearer; fruit large; russet on yellow ground, sometimes striped with red; somewhat irregular; flavor mild, subacid of the highest quality. Mr. Cales has now 400 trees of this variety bearing. The original tree, when 34 years old, measured 60 inches in circumference, and is still in a perfectly healthy condition. Mr. Cales has picked 36 50-psund boxes of Apples from it in one season, and always gets from 25 to 50 cents per box more for them than for other varieties. We consider this one of the most valuable Apples to plant* for commercial purposes. January to June.

Canada Reinette. Extra large size flattened and ribbed; greenish yellow, with russet dots and patches; flesh firm, rich, juicy and finely flavored; tree grows strongly and is a good bearer. November to March.

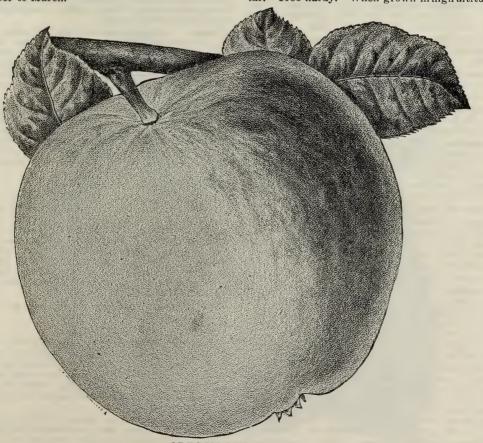
Cooper's Market. Medium size, conical; shaded and striped with red on yellow ground; flesh white, firm tender, rather acid. Valuable for marketing. Nov. to March.

Coos River Beauty. From Douglas county, Oregon. First known as Geourney Seedling, later renamed by a Marshfield, Oregon, nurseryman, Coos River Beauty. Tree a good grower, an annual and prolific bearer; does not break or split, no matter how heavily loaded. Fruit large; red, turning to dark red on the sunny side; flesh white, firm, breaking crisp and juicy; flavor mild, subacid, spicy, something like Gravenstein. Season November to March at Coos Bav.

Bay.
Cox's Orange Pippin. Medium size, roundish, ovate; color yellow, suffused with red streaks; flesh crisp, juicy, sweet, and best in quality. This is regarded by the English as the finest Apple in cultivation, either as a dessert fruit or for culinery purposes. The tree is a moderate, stocky grower. October to April.

Cunningham. New. Form conical; size medium; smooth, deep red; very attractive; flesh yellow, fine grained, pleasant, subacid, almost sweet; splendid keeper and good shipper. Annual and prolific bearer. March to May.

Delicious. Dark, brilliant red; large, irregular. Tree hardy. When grown in high altitudes



OREGON RED WINTER

the quality is very fine. October to February on the Pacific coast.

Delaware Red Winter. (Lawver). Large, roundish, flat, mild, subacid; very heavy and hard; beautiful dark red. Handsomest of all the extra late keepers, very valuable as a late market sort. Tree a vigorous grower and very hardy; bears well. December to May.

Fallawater. (Fornwalder, Tulpehocken). Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant, subacid flavor. Tree a strong grower; very productive even while young. November to March.

Gano. Originated in Missouri. Form conical good size and smooth; deep red, shaded on sunny side to Mahogany; very attractive; flesh pale yellow, fine-grained, tender; pleasant, mild, subacid; is a good shipper and keeper. Tree healthy, vigorous and hardy. An annual and prolific bearer. February to May.

Gideon. Vigorous, early and prolific bearer. Medium; golden yellow; fine, juicy, subacid.

Grimes' Golden. (Grimes' Golden Pippin, Sheepnose.) An apple of the highest quality. Medium to large size; yellow. Tree hardy, vigorous, productive. January to April.

Hubbardston Nonesuch. Large; striped yellow and red; tender, juicy and fine. Strong grower and good bearer. November to May.

Hyde's King. Large to very large; handsome yellowish green; good quality; keeps all the year round.

Iowa Blush. Medium or less; finest tart flavor.

Tree extremely vigorous and hardy; most excellent variety. November to February.

Isham Sweet. Large, dark red; juicier than its parent, Bailey Sweet, and a better keeper. Tree very scraggy but hardy.

Jonathan. Fruit medium or small, roundish; skin yellow, nearly covered with dark or lively red; fine-grained, very tender and finely flavored. Tree slender and spreading, with light-colored shoots. Originated about 1828 at Woodsted, N. Y. November to April.

Kentucky Red Streak. See Ben Davis.

Lady. A beautiful little dessert fruit. Quite small, flat regularly formed; skin pale yellow or lemon color, with a brilliant red cheek; flesh crisp, juicy and excellent. Bears abundantly. December to May.

Lawver. See Delaware Red Winter.

Longfield. A Russian variety, imported some years since. Tree a free, upright grower, early and abundant bearer. Medium to large; yellow with a blush on the sunny side like Maiden's Blush; rich, sprightly, subacid; quality as good as Fameuse and something like it. December to March.

McIntosh Red. An exceedingly valuable, hardy, Canada sort. Medium size, nearly covered with dark red; flesh white, very tender, juicy and refreshing. A good annual bearer of fair, handsome fruit. Resembles the Fameuse, but larger and more hardy, and fully equal in quality to this standard sort. November to February.

Marshall or Red Bellflower. Very large, shaped

like Yellow Bellflower: deep crimson; of fine quality. Tree productive. Originated near Napa, by J. L. Marshall, being a cross between Yellow Belflower and Red June. One of the most valuable market varieties.

Minkler. Fruit medium, roundish, oblate, slightly conical; pale greenish yellow, striped and splashed with two shades of red; flesh yellowish, compact, moderately juicy, mild, pleasant, subacid. Tree an irregular grower, and vigorous. January to April.

Missouri Pippin. Large; rich red, with darker red stripes; very handsome and of fair quality. Good grower; early and immense bearer, late

keeper.

Mammoth Pippin. (Red Cheek Pippin) Large; greenish yellow with a fine red cheek; juicy, tender and good. Tree erect, vigorous and productive. Keeps well till March or April.

Mammoth Black Twig. (Paragon) A Tennessee seedling. The original tree, over 50 year old, is still vigorous and bearing, though broken by storms. Thought to be a cross between Winesap and Red Limber Twig; combines the good qualities of both. Excels Winesap in nearly every important point; a better and much stronger grower, hardier, and the fruit much larger—often measures 12 inches in circumference; color even a darker red; flesh firmer, flavor milder, but fully equal. Remarkably heavy and a long keeper.

Mann. Fruit medium to large; roundish; oblate, nearly regular; skin deep yellow when fully ripe, flesh yellowish, half fine, half tender juicy, mild, pleasant, subacid. The tree grows straight and symmetrical and makes a large tree in the orchard. It is an early and annual bearer.

Newtown Pippin. One of the very best Apples as to quality; tree a light grower while young; very juicy, crisp, and highly delicious flavor; fine keeper. Does not succeed in all sections. Originated in early part of eighteenth century. The first American Apple to attract attention in Europe. December to May.

New York Pippin. See Ben Davis.

Northern Spy. Large, roundish, slightly conical, somewhat ribbed; striped, with the sunny side nearly covered with purplish red; flesh white and tender, with a mild subacid, rich and delicious flavor; in perfection in January and keeps till June. The tree is a strong, upright grower, and forms a very compact head; should be kept open by pruning, so as to admit the air and light freely. Originated about 1800, at East Bloomfield, N. Y.

Northwestern Greening. Hardy, yellow, rich; of good size; extra long keeper.

Nonesuch. See Red Canada.

Okabena. A seedling of the Wealthy, fertilized by the Duchess. Fruit medium sized, slightly flattened. A native of Minnesota, first introduced in 1886. Very highly colored where exposed to the rays of the sun; resembling the Duchess. Flesh fine grained; as an eating apple it is hard to excel.

Ontario. Fruit large, oblate, slightly conical, skin whitish yellow, nearly covered with bright, rich red; flesh whitish yellow, fine, tender, juicy;

sub-acid; refreshing, slightly aromatic; core small. January to April.

Opalescent. New. Probably the handsomest Apple ever put on the market. Color; ght shading to very dark crimson with many yellow dots; skin smooth, susceptible of a very high polish reflecting objects like a mirror; flesh yellowish, tender, juicy and good. The orignal tree has never failed to produce from a mode ate to a full crop. It is not only a beauty but all right for size, quality and productiveness, qualities rarely combined in one variety. Season, December to March.

Oregon Red Winter. Fruit large, fine grained, crisp, juicy and rich. It could well be named the Winter Gravenstein, as its flavor so nearly resembles that variety. Color a bright red, with a dark, maroon-colored cheek. Tree healthy and a strong grower, holding its fruit well until late in the season. Season from January to May.

This new claimant for public favor originated in the hills a few miles east of Oregon City, in Clackamas County, Oregon, probably half a mile distant from any other orchard or fruit tree, and as near as the old settlers of that sections can remember, is now (1906) about 25 years old. It has bourne a regular and annunual crop of the most delicious apples for about 20 years. The tree is apparently just in

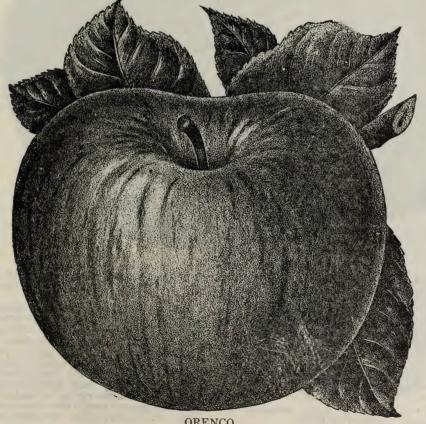
its prime, as it is at this time hardy, vigorous and thrifty, although it has never received any attention or cultivation, yet it is a handsome and symmetrical tree, with sturdy branches that bear up the heaviest loads of fruit without breaking. In its general habit of growth the tree resembles the Northern Spy, and in the nursery row it is almost impossible to tell the two varieties apart. The foliage of the Orenco is darker and more luxuriant and is apparently even more hardy and vigorous than that popular variety. To describe the fruit of this beautiful apple is not so easy, for it suggests entirely new flavor in apples. Many who have tasted it express the idea that it has the flavor of a banana. In general terms it may be described as having a mild, subacid flavor, with a very pleasant aroma. The flesh is crisp, tender and juicy and pronounced by those who have tasted it as being the most delicious of dessert apples. The color is bright red, overspread with numerous light dots.

Ortley. See White Belfiower.

Palouse. Large, bright red, juicy, crisp and fine flavor. A vigorous-growing tree; the fruit somewhat resembling the Baldwin, but better keeper. January to May.

Paragon. See Mammoth Black Twig.

Peck's Pleasant. Large; pale yellow; very tender and rich, with a Newtown flavor. Tree



ORENCO

erect and a fine bearer. November to March.

Peter. Another seedling which originated with Peter Gideon, the pioneer in Apple culture in Minnesota. The tree is stout, erect, symmetrical, healthy, vigorous grower, an immensely productive tree. Fruit large, red, subacid and a long keeper. It possesses all the good qualities of the good sorts and none of the defects so common to many of them. It is hardier than the hardiest. The Peter has endured 45 degrees below zero without the least injury, and in 1885, at Excelsior, Minn., bore a crop of fruit when the Duchess and wealthy killed to the ground. It is four to six weeks later than the Wealthy.

Pewaukee. A seedling from Duchess of

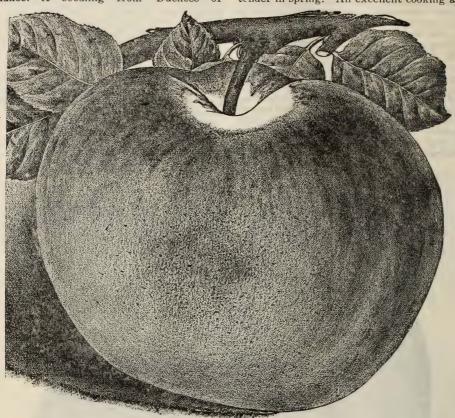
Rawle's Janet. Medium to large; yellow, stripes with red; flesh yellow, tender, juicy, with a pleasant vinous flavor. Prolific bearer, January to May.

Red Bellflower. See Marshall.

Red Canada. (Old Nonesuch, of Mass., Steele's Red Winter.) Medium, oblate; red, tender, crisp, rich, subacid, refressing and delicious. Tree thrifty but a slender grower; productive. January to May.

Red-Cheek Pippin. See Mammoth Pippin.

Red Romanite. (Gilpin') Size medium, roundish; smooth, handsome; streaked with deep red and yellow; flesh yellow, firm, rich, becoming tender in spring. An excellent cooking and des-



ROME BEAUTY

Oldenburgh. Fruit medium to large, oblate; surface bright yellow, partially covered with dull red, striped and splashed, covered with a gray bloom and overspread with whitish dots; cavity small; basin shallow and slightly fluted; calyx rather large; stem variable in length, with a fleshy substance on one side from one-half to one inch long; core small; flesh yellowish white, breaking juicy; flaver subacid, rich, aromatic, spicy, something like the Jonathan; quality good to best. Tree a strong grower, heavy bearer and very hardy. January to June. New.

Pryor's Red. Medium, juicy, pleasant, very rich, subacid. January to March.

sert Apple. Very prolific; holds on tree late. A fine winter Apple and one of the best keepers. February to June.

Rhode Island Greening. Large; greenish yellow; tender, juicy and rich, with rather an acid flavor; grows strong and spreading, and an abundant bearer. December to April.

abundant bearer. December to April.

Ribston Pippin. Fruit of medium size, roundish; greenish yellow, mixed with a little russet near the stalk, and clouded with dull red on the sunny side. Stalk short, slender, planted in a rather wide cavity; calyx small, closed and set in an angular basin. Flesh deep yellow, firm, crisp, with a sharp, rich, aromatic flavor; very

good. The tree forms a spreading top. Novem. ber to April.

Rome Beauty. Large, yellow, shaded with bright red; flesh yellowish, tender, juicy, subacid, Moderate grower. November to February-

Russett, English. This is a most valuable, long keeping variety. Good the first of January and will keep till July, and no Apple, to our taste, has a richer flavor. Medium size, but smooth, firm, crisp and rich, and never loses its richness to the last.

Russet, Golden. Medium size; dull russet, with a tinge of red on exposed side; flesh generally crisp, juicy and high flavored. Tree a vigorous grower and a great bearer. Very popular. November to April.

Russet, Roxberry or Boston. Medium to large; greenish or yellow russet; crisp, good, subacid flavor. Tree vigorous and productive. Very popular on account of its long keeping. June

Salome. Long keeper; annual bearer. Medium and uniform size; good quality

Scott Winter. Hardy and vigorous. Bright red; crisp, juicy and of a brisk acidity; long keeper.

Seek-no-Further (Westfield) Medium to large, slightly russeted with dull, red stripes; tender rich, spicy and fine. Good grower and bearer. November to February.

Shackelford. Tree hardy, free grower an early and profuse bearer. Fruit large, well colored, purplish red in the sun, with a delicate bloom; flesh yellow; flavor mild, subacid; aromatic; long keeper.

Sierra Beauty. Originaned at a high altitude in the Sierra Nevada Mountains, 30 miles east of Chico, Butte County, Cal. This beautiful crimson-red Apple is certainly a great acquisition to the standard commercial sorts, and will pack better than four tier. The original tree is now (1906) 36 years old and is a regular annual bearer. The flesh is white, crisp and tender, with a delicious juicy flavor. The tree is a hardy, upright grower, resembling the Northern Spy. A splendid cooking and eating Apple. Season January to May.

Smith Cider. A fine market Apple. Large, handsome; yellow striped with red; flesh juicy, crisp, subacid; quality medium. Tree vigorous, abundant bearer. December to March.

Spitzenberg, Esopus. Medium to large; deep red; flesh yellow, crisp, subacid, high flavored. Tree a light grower in the nursery, but bears and grows well transplanted in rich soil. November to April.

Spokane Beauty. Largest Apple known, a prodigy for size; of extraordinary beauty; color greenish yellow, shaded and striped with deep red; flesh crisp, juicy, rich, with a a delicious; high flavor. Unsurpassed for cooking and drying; a very long keeper, having kept until August 1. Was awarded first prize at the Spokane Fruit fair in 1895 and 1896.

Springdale. Color dark red; size medium to large; fine flavor and of good quality; a good keeper. Introduced in Kansas. Winner at 15

different Apple shows for home and market use. Tree a strong grower.

Stark. Esteemed in Ohio as a long keeper and valuable market fruit. Fruit large, roundish; skin greenish yellow, much shaded with light and dark red, and sprinkled with brown dots; flesh yellowish, juicy, mild subacid. January.

Stayman's Winesap. Similar to Winesap, but very much larger and better flavored; oblate, conical; greenish yellow, mostly covered, striped and splashed with two shades of dark red, with numerous gray dots; flesh yellow, firm, tender, juicy, mild, subacid, aromatic; best quality. A seedling of the Winesap, originated in Kansas. Tree resembles the Winesap, but more vigorous in growth. December to April.

Steele's Red Winter. See Red Canada.

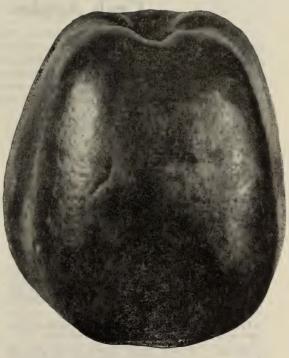
Sutton Beauty. Medium to large, roundish; handsome, waxen yellow, striped crimson; flesh tender, juicy, subacid; good quality; keeps well. Tree a free grower and productive. One of the most beautiful and valuable Apples.

Swaar. Fruit medium size, yellow, tender, rich and spicy. One of the best and very productive. November to May.

Tolman's Sweeting. Medium pale yellow, slightly tinged with red; firm, rich and very sweet. The most valuable baking apple. Vigorous and productive. November to April.

Tulpehocken. See Fallawater.

Vanderpool Red. Originated in Benton county, Oregon. Size medium to large: color bright



SPITZENBERG

red; fine flavor and one of the best keepers. Specimens of this variety, in good condition, were shown at the Oregon State Fair one year after picking from tree.

Vandevere. (Newton Spitzenburg of the West.) Medium size; waxen yellow, striped with red, and becoming deep crimson next the sun; flesh tender, yellow, rich and fine; rich and subacid flavor. Valuable cooking variety. Free grower and good bearer. Succeeds best in light, warm, dry soils. November to March.

Wagener. Medium to large; deep red in the sun; flesh firm, subacid and excellent. Very productive; bears very young. December to

May

Walbridge. Medium size; striped with red; handsome and of excellent quality. Vigorous grower and productive; very hardy and considered of great value in the North and Northwest. March to June.

Wealthy. A native of Minnesota where it has proven perfectly hardy, vigorous and productive. Fruit of medium size, red, streaked with white; quality good. December to Feb-

White Bellflower. (Ortley) Fruit medium to large, roundish, oblong, conic; greenish yellow, becoming fine yellow at maturity, sometimes with a sunny cheek; flesh white, finegrained, tender, juicy and subacid, very pleasant. November to February.

White Winter Pearmain. Large, roundish, oblong, conic; pale yellow, extra high flavor.

One of the best. December to February.

Winesap. Medium; dark red, subacid, excellent. Tree a moderate grower and abundant bearer. A favorite market variety in the west. December to May.

Winter Banana. Fruit large, perfect in form; golden yellow and beautifully shaded and marbled with bright crimson-red; flesh lemon yellow, fine grained, subacid, richaromatic flavor, and of the highest quality. A good keeper, tree remarkably strong grower, and on account of its great hardiness will thrive in any climate. Its early bearing is simply wonderful, generally producing a fine crop of fruit the second year. Foliage large and free from blight and mildew.

A valuable market variety. November to May.
Wismer's Dessert. Size medium to large,
smooth, beautifully colored with yellow, shaded with bright red, in stripes and blotches, marked with russet dots. Exquisitely delicious flavor, juicy, melting, buttery, pear like texture. Tree a strong grower and extremely hardy. Originated in northern Ontario, Canada. Season November to April.

Wolf River. The tree is very hardy and productive. Fruit large and handsome, red color, flesh white and of exceedingly fine quality; sub-

One of the largest.

N. Y. Pippin. See Newtown Pippin.

York Imperial. Medium; whitish, shaded with crimson in the sun; firm, crisp, juicy and pleasant, mild subacid. Tree moderately vigorous and productive. A popular Pennsylvania variety. November to February.

Crab Apples (Pyrus prunifolia)

Within the last few years much attention has been given to improving this class of fruit, because of their adaptability to cold sections where only a few varieties of Apples can be successfully grown. These efforts have been attended with marked success. Crab Apples succeed equally well in all sections, and are valuable for cider, preserving, jelly, ornament, and some of the improved sorts are excellent for eating. Sent to the eastern markets they command a very high price. Every orchard should contain a few, as the trees are handsome, ornamental growers, annual bearers and usually fruit second year.

Alaska. Of northern origin. Fruit large, almost white; tree hardy; vigorous grower. Highly recommended.

Florence. Tree very hardy, a heavy bearer, but a poor grower. Fruit medium in size, good quality.

General Grant. Tree an erect, vigorous grower; fruit in dense clusters; quality equal to Duchess of Oldenburg. October to December.

Hyslop. Almost as large as early strawberry Apple; deep crimson; very popular on account of its large size, beauty and hardiness. Keeps well into the winter.

Large Red Siberian. About an inch in diameter, grows in clusters; yellow, lively scarlet cheek. Tree erect, vigorous; bears young and abundantly September to October.

Large Yellow Siberian. Nearly as large as the above, a fine amber or golden yellow color.

Martha. A new fruit raised from seed of Duchess of Oldenburg. Resembles the Transcendant, but larger. Handsome, showy fruit;

bears enormously; said to be equal, if not superior, to all others for sauce.

Minnesota. Hardy, a medium grower. Janu-

Transendant. All things considered, this is one of the most valuable varieties of Crab Apples grown. Tree remarkably vigorous, growing to a good size and immensely productive. Comes into bearing a little the second year from planting, bearing every year after, and producing good crops by the fourth year. Fruit very large, from 1½ to 2 inches in diameter, being laege enough to quarter and core for preserving and drying. Excellent for sauce and pies, both green and dried. The best of its class for cider, being juicy and crisp, and is also by many considered a good eating Apple. Skin yellow, striped with red. September to October.

Whitney's Seedling. Large, averaging $1\frac{1}{2}$ to 2 inches in diameter, skin smooth and glossy green, striped, splashed with carmine; flesh firm, juicy and rich. Said to be a great bearer and very hardy. Tree a vigorous, handsome grower. Has no superior.

Pears

Our soil is especially adapted to the production of the finest and hardiest pear trees-those containing the most life, body and strength, and it is admitted that they cannot be excelled.

THIN THE FRUIT.-We cannot urge too strongly the following suggestions: When the Pear trees are heavily laden, the fruit should be thinned when about one-third grown, else the fruit will be poor and the fruit injured.

GATHERING PEARS-Most varieties of pears are greatly inferior in flavor when allowed to ripen on the tree. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. This will be from one to two weeks before they are ripe.

Place in a cool, dark room until fully matured. Winter varieties should remain on the tree until time for the Fall rains or frosts.

The following list contains most of those that have been well tested and proven valuable:

SUMMER VARIETIES

Bartlett. Large size, often with a beautiful blush next the sun; buttery, very juicy and high flavored. Tree a strong grower, bearing early and abundantly; very popular Last of August and first of September.

Clapp's Favorite. A large, new, fine Pear, resembling the Bartlett but without its musky flavor; pale lemon-yellow, with brown dots; fine texture, melting buttery, juicy, with a rich, sweet, delicate, vinous flavor. Tree hardy and very productive. Vary desirable in all sections, and especially so where other varieties fail. August and September.

Doyenne d'Ete. Small; melting, sweet; yellow-Tree vigorous and productive. August.

Koonce. Originated in Southern Illinois. Has been largely planted; the most successful early market Pear in that section. A strong, upright grower; hardy, magnificent foliage; has produced crops when all other varieties were killed by freet fruit medium velletties were killed by frost: fruit medium, yellow with carmine cheek; juicy, spicy, sweet and delicious quality. Ripens with the earliest. An excellent shipper; it comes into bearing young. July and August.

Lawson. Tree healthy, a strong grower, early bearer and profitable sort; of splendid quality for a very early Pear. Red cheek with yellow shading.

LeConte. Tree vigorous and productive, partaking of the nature of the Chinese Sand Pear, of which it is a seedling. Large; skin smooth, pale yellow. Quality fair. Ripens about with Bartlett.

Madeline. Medium; yellwish green; very juicy, melting, sweet. Fair grower, productive. Aug-

Souvenir du Congress. Recently imported from France, and of great promise. Fruit large and exceedingly handsome; beautiful yellow, with bright red in the sun; melting and juicy, with a musky flavor; rather tender. September.

Wilder. Handsome, melting, sweet, pleasant and of the best quality for an early Pear. One of the best keeping early pears.

AUTUMN PEARS

Bessemianka. From Russia. Fruit of fair quality. Tree is extremely hardy. Valuable for the north, where other varieties cannot be grown. As hardy as a birch. Strong, vigorous grower.

Beurre Clairgeau. Very large, pyriform; yel-

low and red, nearly melting, high flavored. Tree a very good grower, and an early and abundant bearer; a magnificent market fruit. One of the

finest acquisitions. October and November.

Beurre d'Anjou. A large, fine Pear, buttery and melting with sprightly, vinous flavor. Tree a fine grower and good bearer. October to

Beurre Bosc. A large, fine Pear with long neck; cinnamon-russet, handsome, half melting, juicy, slighty perfumed and delicious. fine grower and productive. September.

Crocker Bartlett Originated by L. L. Crocker, Loomis, Cal., who describes it as follows: "It is preferable to the standard Bartlett; better is preferable to the standard Bartlett; better flavor, about the same size; very juicy and melting; high golden yellow color; a prolific bearer. Trees never overloaded, although they bear heavy every year. The Crocker-Bartlett Pears are picked in October and laid away same as winter apples, till about January, when they mellow up and are delicious; very hardy; will ship to England and back if necessray. It has proven to be blight-proof and has stood the test for the past ten years. Out of 3,000 young test for the past ten years. Out of 3,000 young Crocker-Bartlett trees in my orchard, I offer a liberal reward for any sign of blight on them."

Dempsey. Originated in northern Canada, where it has proven hardy. Fruit medium, excellent.

Doyenne du Comice. Large, yellow, with a crimson and fawn cheek, and russet dots, melting, rich, perfumed and luscious. Tree vigorous and productive. A Pear of much promise. Oct. and Nov.

Doyenne, White. (Fall Butter) Medium, pale yellow, with a faint blush; fine flavor. October to November.

Very large, greenish le russetted. Makes a Duchesse d'Angouleme. yellow, sometimes a little russetted. beautiful tree; does best on quince. One of the best. October and November.

Fall Butter. See Doyenne White.
Flemish Beauty. Large, beautiful, juicy, melting, rich and fine, a strong grower and good bearer, hardy everywhere. September and October tober.

Garber. Originated in Pennsylvania; is large and beautiful, bright yellow with red; juicy and good; delicious canned. Ready to pick with Le Conte, or a few days later, and much better, not only in fruit but in hardiness and health of trees. So far has never been blighted.

Howell. Large, light, waxen yellow, with a

AUTUMN PEARS, continued

fine red cheek; handsome, rich, sweet, melting, perfumed aromatic flavor. Tree an upright, free grower, an early and profuse bearer. Very hardy and valuable. September and October.

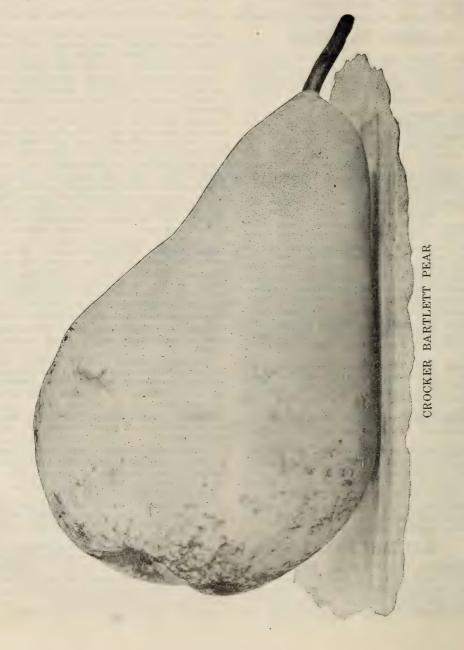
Idaho. Size large, nearly globular, obtusely ribbed; color light, rich yellow surface, covered with many small dots; cavity very deep and narrow, and strongly furrowed; stem small and calyx closed; flesh white; fine-grained, buttery, melting and rich. September and October.

Kieffer's Hybrid. Tree a remarkable grower with so vigorous a constitution that it rarely, if

ever, blights. Fruit of fine size, rich color and good quality. Brings high price in competition with other varieties. Best when picked at maturity and house-ripened. October and November.

Louise Bonne de Jersey. Rather large; greenish yellow, with a bright red cheek; juicy, buttery and melting; excellent; very productive; a fine grower on both pear and quince. September and October.

Rossney. A new and excellent Pear, raised from seed at Salt Lake City, Utah. In size medium to large; very fine grain; flesh melting and



AUTUMN PEARS, continued.

juicy, very sweet. Ripens two weeks after Bartlett. Is an excellent shipper and keeper. The tree is much stronger than Kieffer. Luther Burbank says under date of October 5, 1895: "The samples of Rossney Pear arrived in due season. The large size, handsome form and creamy yellow skin with crimson blush, give the fruit a tempting appearance, and the tender, creamy flesh of just the right texture, with no hard spots and an unusually small core, with its superior flavor, makes it about the best Pear so far seen. If the tree is vigorous, healthy and productive, would prefer it to any other, even the standards, Bartlett or Seckel." Sept.

Seckel. Small, rich, yellowish brown; one of the best and highest flavored Pears known; productive. September and October.

Tonkoviethka. Russian origin Tree a good grower and very hardy. Fruit medium size, fair quality, like Bessimianka. Would advise planting in a northern country where other varieties fail.

Vermont Beauty. Tree hardy and vigorous, early and abundant bearer. Fruit medium, yellow, with red cheeks; rich, juicy, best quality. October.

Worden-Seckle. A seedling of the Seckle, which, for many years has been conceded to be the standard of excellence. Equal in quality to its famous parent, which it much resembles in flavor; is equally luscious, more juicy, and with an aroma equally rich and inviting, while in size, color, form and appearance it is decidedly superior. In color, when well ripened, it closely resembles Clapp's Favorite, with a skin that is usually as smooth and waxy as if it had been varnished. Tree a more upright and rapid grower than Seckle; hardy and enormous bearer; fruit keeps well, retaining its quality to the last.

WINTER PEARS

Beurre Easter. Large, pale yellow, sprinkled with round dots, often dull red cheek; quality good; one of the best winter pears. Keeps all winter.

Kennedy. Originated by General John Bidwell, on Rancho Chico, Butte county, California. Superior to Bartlett or Winter Nelis. Would be classed as a winter variety in north-

ern sections; hardy, vigorous-growing tree; bears well. The most valuable new Pear tree, originated in California.

Lincoln Coreless. Large, green, until thoroughly ripe, when it becomes a beautiful yellowish green; flesh rich yellow, juicy melting, and of a very delicate aromatic flavor; no seeds or core. February and March.

Mount Vernon. Medium to large, of rich, russet color; flesh juicy, rich, melting, with a spicy flavor. New. November to January.

Pound. A monstrous, very showy fruit, often weighing three pounds; yellow, red cheek. Tree very vigorous and productive.

P. Barry. This Pear was originated by the late B. S. Fox of San Jose, and is acknowledged by our best judges to possess qualities unequaled by any of our long-keeping Pears. It is large, deep yellow, nearly covered with a rich, golden russet; flesh whitish, firm, juicy, melting, sweet slightly vinous and rich; an early and prolific bearer. December and January.

Pratt's Seedling. Originated in Salem, Oregon, with Captain Pratt. A Pear with all the good qualities of the Bartlett but will keep until March. In shade and color like the Sheldon, but larger. The tree is a fine grower with a more spreading top than the Barlett. Has been shown at our Fruit Convention and is endorsed by all our fruit growers; a fine acquisition to our winter varieties.

Vicar of Winkfield. (Le Cure.) Large, long; not first quality but desirable for its productiveness. Best on quince. November to January.

Winter Bartlett. This fine Pear originated at Eugene, Oregon. The tree stands in a door yard in that city, bearing fine fruit, and has with possibly two or three exceptions, borne a good crop for over 20 years. Tree very vigorous, a foot in diameter and 40 feet high. Has had no pruning or care, yet it is as symmetrical and pretty shaped tree as one ever sees. Fruit large, closely resembling the Bartlett in shape and appearance; perfectly smooth, flesh tender, juicy and melting; flavor similar to the Winter Nelis, but season a little later, and as good as can be desired.

Winter Nelis. Medium in size; yellowish green and russet; fine-grained, melting, rich and delicious; one of the best winter Pears. Tree straggly, slender grower, but very productive. December.

Cherries

The cherry thrives best on a sandy or gravelly soil and there attains its highest perfection, but will do very well in almost any situation except a wet one. It is one of the most ornamental of all fruit trees, which with its delicious and refreshing fruit, makes it very desirable for planting near dwellings, where beauty and shade, as well as fruit, are so desirable.

We divide them into two classes—Hearts and Bigarreaus, and Dukes and Morellos. The first being strong and vigorous growers, making large, open, spreading heads or tops, are best suited for the purpose of shade, and produce, large, heart-shaped sweet fruit. The Duke and Morellos are all of slower growth and do not ever attain so large size, and are more hardy, less liable to get injured by bursting bark, and generally produce acid fruits and make the most beautiful dwarfs. One and two-year-old trees are the most desirable for transplanting, and are usually from 4 to 6 feet high.

Heart and Bigarreau Cherries.

Fruit heart-shaped, with tender, sweet flesh, tree of rapid growth, with large, soft, drooping leaves.

Allen. Has been fruiting for several years; tree a healthy grower, immensely productive. Fruit of excellent quality; large size and nearly heart-shape, shiny and smooth; color when ripe, nearly black, very meaty and firm; so far free from all rot and disease; ripens late. Good enough for any home use and we believe will prove one of the most profitable market varieties in all sections where the sweet Cherries succeed.

Bing. This grand new black Cherry was originated by Seth Luelling, of Milwaukee, Oregon. Size very large; blackish purple. Flesh very solid, flavor of the highest quality. Tree thrifty, upright grower, very hardy and productive. A fine shipping and market variety.

Black Republican. (Luelling.) A native of Oregon. Fruit very large, shining black; flesh very solid and firm; fine; a good keeper and will bear transportation well. Tree a moderate grower and rather tender. An early and pro-

fuse bearer.



BLACK REPUBLICAN CHERRIES

Black Tartarian. Very large; bright purplish black, half tender, juicy, very rich, excellent flavor. Tree a vigorous grower and productive. June.

Centennial. A new cherry; a seedling of Napoleon Bigarreau, raised by Mr. Henry Chapman, in Napa Valley, California. It is larger than its parent, more oblate in form and beautifully marbled and splashed with crimson on a pale yellow ground. Its sweetness is very marked. Its keeping qualities after being taken from the tree will undoubtedly render it the best for shipment, specimens having been carried to the eastern states and Europe without apparent injury.

Chapman. This grand new Cherry originated

in Napa Valley, California, where it ripens about April 10. It is the earliest of all shipping varieties, bears early and immense crops of fine, luscious fruit, which grows somewhat more in clusters than Black Tartarian. Size very large, form roundish, stem long and slender, surface smooth, color purplish black; flesh half tender; stone small, flavor of the highest quality. On account of its great beauty, quality and earliness, it is a very profitable market variety Said to be a seedling of the Black Tartarian.

Deacon. This new Cherry is supposed to have originated in Sacramento, California. Color black; flesh firmer than Luelling (Black Republican) and much larger. Ripens with Black Tartarians; flavor of the highest quality. It has been shipped from Sacramento to New York, arriving in prime condition.

Early Purple Guigne. (Early Purple.) The earliest fine variety; medium size; heart-shaped; tender, juicy and sweet. Tree a rather slender grower but very hardy and productive. First to Middle of June.

Elton. Large and fine flavor; pale yellow, light red next the sun; vigorous grower. Last of June.

Governor Wood. Large, rich: light yellow with red cheek; juicy and sweet. Last of June.

Hoskin. Originated by C. E. Hoskin, Newberg, Oregon. Very large, color black, flavor similar to Black Tartarian. A very promising variety.

Knight's Early Black. Large, black, tender, juicy, rich and excellent; good grower and productive. Middle to last of June.

Lambert. In size the largest known; smooth, glossy, color dark purplish red with numerous, minute, indented, russett dots; flesh dark, purplish red with whitish veins, firm meaty texture, small oval stone, semi-cling; flavor sweet or very mild subacid, rich and of highest quality; form roundish, heart-shaped, long, slender stem. The finest shipping variety. Originated near Portland, Oregon, about 1887, and named after the originator. Tree thrifty, hardy and vigorous grower, and forms a beautiful head. Donated by Mr. Lambert to Oregon State Horticultural Society, and the sole right to propagate it purchased from them by the Oregon Nursery Company.

Napoleon Bigarreau (Royal Ann) A magnificent Cherry of the largest size. Pale yellow with bright red cheek, flesh very firm, juicy and sweet. One of the best for market and canning. Late.

Oxheart. (Major Francis.) Fruit large, obtuse, heart-shaped; skin dark red, half tender with a pleasant juice, of second quality in point of flavor. Last of June.

Roe. The latest and firmest of all Cherries, ripening fully six weeks after the Lambert and Royal Ann. Firmer than the Black Republican. Light yellow background, overspread with mottled red, with bright blush on sunny side; flavor very sweet, quality excellent.

CHERRIES, continued

Windsor. New seedling, originated at Windsor, Canada. Fruit large, liver-colored, resembling Elkhorn or Tradescant's Black Heart, nevertheless quite distinct. Ripens three or four days after that variety. Flesh remarkably

firm and of fine quality. Tree hardy and prolific, Valuable for late market and for family use.

Yellow Spanish. Large, pale yellow, with red cheeks, firm, juicy and excellent. One of the best light colored Cherries. Vigorous and productive. Last of June.

Duke and Morello Cherries.

These two classes of cherries are very distinct from the preceding. The trees are of smaller size and grow more slowly. The leaves are thicker and more erect and of a deeper green. The fruit is generally round and in color varying from light red to brown.

The Dukes have stout, erect branches usually, and some of them like Reine Hortense, quite sweet fruit, while the Morellos have slender, spreading branches and acid fruit invariably. These two classes are peculiarly for dwarfs and pyramids on the Mahaleb slock, and their hardiness renders them well worthy of attention in localities where the Heart and Bigarreau are too tender.

*Baldwin. This Cherry is a seedling of the English Morello, and it was originally planted for an early Richmond which has been budded on a seedling of the English Morello. The budded part was accidentally broken off and a sprout came from the root, which was so vigorous that it was allowed to grow. The tree is an upright grower more inclined to be round than otherwise. A very rank, vigorous grower; leaves rather broad; bloom pure white, which turns to pink color similar to the hydrangea; fruit very large, almost perfectly round, very dark, yet almost transparent; flavor slightly subacid, yet the sweetest and richest of the Morello type; stems rather large, of medium length, more inclined to grow in pairs than in clusters. It is remarkable for earliness, vigor, hardiness, quality and productiveness. It is a tree to command attention and is so distinct as to attract comments from many upon seeing it, without knowing its superior merit.

*Dyehouse. Partakes of both the Duke and Morello in wood and fruit; a very early and sure bearer. Ripens a week before Early Richmond; of better quality and quite as productive.

*Early Richmond. (Kentish, Virginian May.) Medium size, dark red; melting, juicy, sprightly acid flavor. This is one of the most valuable and popular of the acid Cherries, and is unsurpassed for cooking purposes. Tree a slender grower, with a roundish, spreading head, and is exceedingly productive. The most hardy of all varieties, uninjured by the coldest winters when almost every other variety has been

killed. Ripens through June.

*English Morello. Medium to large, blackish red; rich, acid, juicy and good; very productive. August.

*Late Duke. Large, light red; late and fine. Last of July.

*May Duke. Large, red, juicy and rich. An old, excellent variety. Vigorous, productive. June 15.

*Montmorency Large. A large, red Cherry, larger than Early Richmond and fully 10 days later.

*Olivet. A new Duke of French origin. Unlike most others of this class it is said to be very early, and to ripen over a long period. Fruit very large globulor, and of a deep shining red. Tender, rich and vinous, with sweet subacidulous flavor.

*Ostheim. A hardy Cherry from Russia. It has been tested in the severest winters of Minnesota and has been found perfectly hardy. Fruit large, roundish, ovate. Skin red, dark at maturity; stalk long, flesh liver-colored, tender, juicy, almost sweet.

*Vladimir. Russian variety. Very hardy. A strong grower, wonderfully prolific. Fruit size of early Richmond. Mild, subacid, juicy, excellent quality. July

*Wragg. Much like English Morello. More productive and excels in size, yield and quality. One of the hardiest Cherries and has produced annual crops at the northernmost limit of Cherry culture.

Plums

Abundance. J. (Botan.) One of the best Japan Plums. The tree is a very rapid grower, healthy in limb and foliage, comes into bearing remarkably young and yields abundantly. The fruit is full medium size, color a rich, bright cherry-red, with a distinct bloom, and highly perfumed; flesh light yellow, very juicy and tender and of excellent quality. Vigorous, hardy. Mr. Geo. Thissell, of Winters, Cal., says of this fruit: "I have fruited it three years, have found it very prolific. Fruit large to very large, exceedingly sweet, pit very small. Ripens at Winters June 10. I consider this one of my best shipping Plums."

America. J*. Originated by Luther Burhank. 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. J*. 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.

Apricot Plum. See Prunus Simoni.

Bartlett. J* One of the best of Burbank's recent introductions. Said to be wonderfully pro-

PLUMS, continued

ductive. A very ornamental tree, with glossy, green leaves resembling very closely the famous Bartlett 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.

Blood Plum. See Satsuma.

Bradshaw. D. Fruit very large, dark violet-red; flesh yellowish green, juicy and pleasant. Tree vigorous, erect and productive. Middle of August.

Burbank. J. Very vigorous grower. Early and very heavy bearer, fruit very large, yellowish ground with red cheeks in the sun, flesh yellow, firm and very sweet when fully ripe. Extremely small pit, which clings. Middle of June.

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

Charles Downing. A. Vigorous, healthy tree, fruit large, round, red, handsome and excellent. One of the best of the Wild Goose type.

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

Clyman. D. A beautiful Plum originated in the Napa Valley, Cal. A good bearer, fruit medium to large, mottled reddish purple, with beautiful blue. Freestone, quality of flesh superior, valuable on account of its earliness and its excellent shipping qualities.

Coe's Golden Drop. D. Large and handsome, light yellow, firm, rich, sweet. One of the best of late Plums. Last of September.

Columbia. D. Fruit of the largest size, 6 or 7 inches in circumference, nearly globular. Skin brownish purple, dotted with numerous fawn.colored specks. Flesh orange, not very juicy, but when at full maturity very rich, sugary and excellent. Last of August.

Combination. J*. New Plum, early, regular and Combination. J*. New Plum, early, regular and abundant bearer of large, nearly globular fruit of uniform size. Flesh straw color, extremely sweet with a very pronounced pineapple flavor. Stone small and nearly free when fully ripe. Luther Burbank, the originator says: "An extremely handsome, large, early light crimson Plum of the very best quality, ripening at Santa Rosa July 12, before most of the earliest Plums and about as early as the Climax. The trees and about as early as the Climax. The trees, both old and young are about the best and most symmetrical growers among the Plums, making an early, rapid growth ripenening the wood perfectly hard to the tips early in the season indicating unusual hardiness. The bark, leaves and fruit are all unique. Bark, dark, russet-bronze. The unusually large, broad, glossy coriaceous leaves are bronze-crimson in the spring and fall. 'Combination trees resemble no other trees in cultivation and are certain to please everyone.

Damson. D. Fruit small, oval, skin purple, covered with blue bloom. Flesh melting and juicy, rather tart, separates partly from the stone. Sept.

De Soto. A. Medium size, resembles Miner in form and color but is two weeks earlier. Fine for eating or canning. A moderate grower, bears young and profusely. Hardy and very de-

First. J*. New plum. Fruit of good medium size. Pale amber, faint blush on sunny side, half transparent. Flesh same color, moderately firm, sweet, juicy and good, especially so when just at the right stage of ripeness. Tree of medium growth never fails to produce all it can hold. Luther Burbank the originator says: "Introducing this new Plum, I confidently make the statement that it is the earliest of all plums; ripening at Santa Rosa June 15, fully three weeks earlier than the Red June; and also that it is the largest, handsomest and most productive of all very early plums. It should prove very hardy, and for home use and near markets will be the most useful of all very early plums. It is too soft and ripens too suddenly for shipping to distant markets, but its extreme earliness, large size and good quality make a combination of very unusual value.

Green Gage. D. Small; considered the standard of excellence; slow grower. Middle of August.

Forest Rose. A. A native of Pike county, Mo. Fruit round; larger than Wild Goose; skin rather thick and of a beautiful dark red color, covered with a delicate bloom; stone small; fine quality.

Gueii. D. Extensively grown for market. Tree a hardy, very strong, vigorous, upright grower, an early and very abundant bearer. Fruit large, roundish, oval; skin dark purple, covered with a thick, blue bloom; flesh pale yellow, a little coarse, rather firm, juicy, sweet, sprightly, subacid; freestone. Season last of August and first of September.

Fruit medium to large, yellow, mottled and speckled red; flesh soft and juicy, yellow; cling; of good quality. Tree a moderately spreading. vigorous grower. Follows Burbank in ripening. Last of August.

Jefferson. D. Large. yellow, reddened in the sun; juicy, rich and delicious: one of the best. Last of August.

Kelsey. J. Japanese; very large; rich, reddish purple on yellow ground; tree a prolific and early bearer; very largely planted for shipping East. The largest of all Plums.

Lombard. D. (Bleecker's Scarlet.) Medium, round, oval; violet-red; juicy, pleasant and good, adheres to the stone. Tree vigorous and productive. A valuable market variety; one of the most hardy and popular. Last of August.

Maynard. J*. Originated by Luther Burbank, that great master of modern horticulture. In size it is very large, often measuring 7½ inches in circumference. Form nearly round, slightly flattened at the ends; of richest crimson-purple, deepening to royal damask as full ripeness is reached. Tree hardy, vigorous and compact

PLUMS, continued

grower. Leaves dark glossy green. Bears immense crops of even-sized fruit while very young. Never fails; surpasses all other varieties in keeping and carrying qualities; flesh firm, even when dead ripe but melting and juicy, with a deliciousness indescribable; will command the highest price in both home and foreign markets.

Milton. Rather large; dark red; skin thin; flesh firm; good quality; ripens earlier than Wild Goose; its large size, good quality and extreme earliness make it very valuable; a strong grower; productive.

Miner. Medium size; oblong; skin dark, purplish red; flesh soft, juicy, vinous and adheres to the stone; excellent for canning and cooking and esteemed for market; productive.

Miracle. Burbank's history and description of the stoneless plum Miracle: "About 16 or 18 year ago I sent to a French nurseryman for the Prunus Sans Noyeau, a fruit which has been known as a curiosity for hundreds of years. This soon-fruited with me, producing a fruit about the size of a small cherry, having a Damson color and flavor, with a stone partially covering the pit, and growing on an unproductive, rambling, thorny bush. This was carefully crossed with the French prune and other plums, and after about ten years I began to see the results in sweet and sour

Damson like fruits of all sizes. At last, about 4 years ago, in a lot of these hybrid seedlings, a strongvigorous, close jointed tree with large leaves and very prominent buds was raised, which produced the fruit called Miracle, of much better flavor than even the best Damsons, of greatly improved form, size, color and quality, and the stone wholly eliminated. Like several others of these hybrid seedlings, this new and first really stoneless hybrid plum not only resembles but even surpasses its staminate parent, the French Prune, in size, and resembles it in general form, and especially in its enormous productiveness, but having a much heavier blue bloom, thus more resembling some of the German Hungarian prunes. While not containing sugar enough to be classed among the drying prunes, for cooking it must supplant all the Damsons, as it is larger and more productive, if possible, than any of them which are noted for their productiveness. Experiments are to be continued in this very interesting line, and among the thousands of hybrid seedlings of the last generation a large number show that they have still further valuable distinctive qualities. It has been a tedious and highly expensive matter to breed out the stone from the plum, and at the same time increase its size, quality and productiveness, as only a small proportion of the seedlings are stoneless, and most of them show the many undesirable qualities usually found in seed-



MAYNARD PLUM

PLUMS, continued

lings, so that to produce a stoneless fruit of good quality has been a monumental task which very few would be willing to follow up. Probably not one person in a million realizes the fact that such a plum could hardly be produced for less than the cost of half a score of average New England farms, yet such are the facts."

Moore's Arctic. D. Size medium, purplish black, with a thin blue bloom; flesh greenish yellow, juicy, sweet, and of pleasant flavor. Charles Downing speaks of it as follows: "A new hardy Plum, which originated in the highlands of Aroostook county, Maine, where, unprotected and exposed to cold, it has for many years borne enormous crops, and is claimed to be the hardiest Plum grown, and so far free from black-knot." Tree healthy, vigorous. An early and abundant bearer.

October Purple. J*. Propagated by Luther Burbank, of California. Fruit large and uniform in size; color a dark, rich maroon; stone small, flavor fine. Tree a fine grower. This variety is pronounced by Mr. Burbank one of the best varieties he has produced. Ripens middle of September. Should be in every collection.

Peach. D. Very large and handsome; dull red; good; very productive. Last of August.

Pond's Seedling. See Hungarian Prune.

Pottawattamie. A. A cross of Chickasaw and Swedish Sloe. Quality excellent. Tree perfectly hardy, a strong, vigorous grower; an immense annual bearer; curculio-proof. One of the most profitable trees for the fruit-grower. Four-year-old trees have borne a crop of two bushels to the tree.

Prunus Simoni. J. (Apricot Plum.) A distinct species from China. Growth erect; flowers small, white, appearing early in the spring. Fruit flattened, of the size and appearance of a Nectarine, and of a brick-red color; flesh yellow, with a peculiar aromatic flavor.

Red June. J. The best Japan, ripening before Abundance. Medium to large; deep vermillion red, with handsome bloom; flesh light lemon-yellow, firm; moderately juicy; fine quality. Tree upright, spreading, vigorous and hardy; productive. Ripens between Willard and Abundance. Highly recommended by Prof. Bailey, of Cornell University. Last of July or early August.

Reine Claude de Bavay. D. (Bavay's Green Gage.) Large; greenish yellow, spotted with red; firm, juicy, sugary and of fine quality; very productive. September.

Satsuma. J*. (Blood Plum.) Native of Japan. The tree looks much like the Wild Goose, and is likely to prove more hardy than Kelsey. The fruit

has a pleasant flavor, and, unlike all others, has red flesh, with a remarkably small stone.

Shipper's Pride. D. Large, nearly round; dark purple; quite juicy, sweet; splendid shipper and marketer, moderate grower, productive. Originated in northwestern New York.

Shiro. J*. Originated by Luther Burbank. Fruit egg-shaped, medium size, smooth, bright yellow, thin bloom; flesh clings to the pit. Said to be more productive than the Burbank.

Sultan. J*. Said by the originator Luther Burbank, to be one of the most attractive Plums. Its huge size and deep purplish crimson color render it valuable for market. The flesh is very firm, fragrant, sweet, dark crimson, clouded and shaded with pink, salmon and light yellow. Very rapid grower, with wood and leaves much like a Royal Ann Cherry.

Tatge. D. Another new Plum of the Domestica type that bids fair to rival all others in this class. It is of the Lombardy family. Originated in Iowa. A good grower. Comes early into bearing, and is immensely productive.

Washington. D. Large, green, somewhat reddened; juicy, sweet and fine; very productive. Last of August.

Wickson. J*. Originated by Mr. Burbank, who says: "Among the many thousand Japan Plums I have fruited, so far, this one stands preeminent. A sturdy, upright grower, productive almost to a fault. Fruit remarkably handsome, deep maroon red, covered with white bloom; stone small; flesh fine texture, firm, sugary and delicious. Excellent keeper and shipper."

Weaver. A. This remarkable Plum was found near Cedar Rapids, Iowa, growing in the old Indian camping ground. Flesh firm, with flavor resembling the apricot. As a substitute for the peach it has no rival. Curculio-proof.

Willard. J. Medium in size, spherical in general outline, but prominently cornered or angled, and never pointed; the sinus very light, but stem cavity deep; color dark, clear red, with minute yellow dots; flesh rather firm, yellow, sweet and of fair quality; freestone. A strong, vinous and hardy tree, productive and one of the earliest market Japan Plums yet tested in the North.

Wild Goose. A. An improved variety of the Chickasaw, evident in the great vigor of the tree and increased size of the fruit, which is nearly as large as the Green Gage. Skin purple, with a bloom; flesh juicy, sweet and adheres to the stone. Last of July.

Yellow Egg. D. (Magnum Bonum, Yellow.) A very large and beautiful egg-shaped yellow Plum. A little coarse, but excellent for cooking. Tree a free grower and very productive. End of August.

Prunes

We follow the distinction made between plums and prunes, as is common in the horticultural literature of the Pacific Coast. By the term "prune" is signified a plum which dries successfully without the removal of the pit and produces a sweet, dried fruit, though in the confusion of our nomenclature not even this broad classification is faithfully followed. For example: We have the "Hungarian Prune" as a local traditional name for "Pond's Seedling Plum" which has no value as a prune.

Dosch. D. Introduced by Hon. H. E. Dosch, after whom it is named. Originated near Port-

PRUNES, continued

land, Oregon, about ten years ago. Color purple, very large; flesh juicy, delicious, sweeter than the Italian but not so sweet as the Petite; flavor excellent and for canning has no equal; dries very heavy. Tree hardy, thrifty grower, ten days to two weeks earlier than the Italian. Received a gold medal at Omaha Exposition in 1898, both in green and dried states.

Fellenberg. See Italian Prune.

French. See Petite.

German Prune. D. Alarge, long, oval variety, much esteemed for drying; color dark purple; of very agreeable flavor. September.

Giant Prune. D. (California.) One of the largest Prunes known, the fruit averaging one and one-half to two ounces each. Its unequalled size, handsome appearance, rare keeping qualities and great productiveness make it desirable for home use or market. September.

Golden. D. A seedling of Italian Prune. Originated in Oregon. Light golden color, good flavor and heavy drier; strong grower and abundant bearer; freestone. September.

Hungarian Prune. D. (Grosse Prune, or Pond's Seedling Plum.) Very large, dark red, juicy and very sweet. Its large size, bright color, productiveness and shipping qualities render it a profitable variety for home or distant markets. Sept.

Imperial. D. (Epineuse.) Large size, light or reddish purple color; thin skin; sweet and high flavor. Tree stout, stocky, rapid grower.

Italian. D. (Fellenberg.) A late prune; oval; purple; flesh juicy and delicious, parts from the stone; fine for drying. Tree very productive. September.

Petite d'Agen. D. (French Prune.) The well-known variety so extensively planted for drying. Medium size; reddish purple; juicy, sugary, rich and sweet. Bears immense crops. Sept.

Pacific. D. Originated at Mt. Tabor, Oregon. Tree hardy; borne abundantly since three years

old. Fruit freestone, very large and handsome. Flavor the finest; rich, sugary and luscious. A good shipper. The best of drying Prunes.

Robe de Sargent. D. A variety lately introduced from France. It is this which in a dried state forms the celebrated "Pruneau d' Agen." 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, slightly adhering to the stone. A valuable drying and preserving variety. Ripens in September.

Silver. D. Originated in Oregon and said to be a seedling from Coe's Golden Drop, which it very much resembles; is much more productive and tree more vigorous. The fruit, on account of its large size, is ranked among the most valuable Prunes and drying plums. October.

Splendor. D. Large, very long in shape; clear even purple, turns quite black in curing. Cooked has a slight acid flavor.

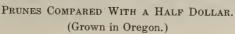
Sugar. Originated by Luther Burbank, Ripens 28 days earlier than French (Petite d'Agen). Almost one-fourth sugar (analysis shows it to be 23.92 per cent sugar). Three times larger than French, of which it is a seedling. On account of its earliness, large size and high per cent of sugar, is sure to revolutionize the prune industry of the world. Tree vigorous, hardy and very productive; bears young. Color purple; good shipper. Aug.

Tennant. D. Originated in Whatcom county, Washington, where it has been tested for 20 years, and has never failed to produce a good crop of fruit. Large; dark purple, with a blue bloom; flavor of the highest quality; rich, sugary and delicious. Tree hardy and very productive. Bears transportation well. August.

Tragedy. D. This most valuable of all Prunes for early eastern shipments appears to be a cross between the German Prune and the Purple Duane, medium size, nearly as large as Duane; skin dark purple; flesh yellowish green, very rich and sweet, freestone. Ripens in July.









Peaches

To secure healthy, vigorous and fruitful trees and fine fruit, the following points must be well attended to in peach culture: First—Keep the ground clean and mellow around the trees, and give it an occasional dressing of wood ashes. Second—Keep the head low. Third—Attend regularly every spring to pruning and shortening the shoots of the previous year's growth. This keeps the head round, full and well furnished with bearing wood. Cut shoots back about one-half, and strong ones one-third, but see that you have a sufficient supply of fruit buds. Sickly and superfluous shoots should be cut clean out.

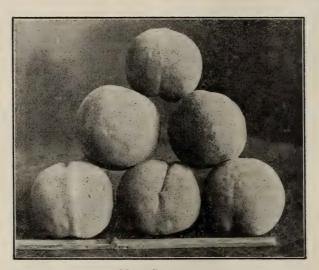
It should always be borne in mind that the fruit is produced on wood of the last season's growth, and hence the necessity for keeping up a good supply of vigorous, annual shoots all over the tree. F., freestone; S. C., semi-cling; C., cling.

Admiral Dewey. F. Skin deep orange-yellow, with crimson cheek; flesh clear yellow, of uniform color and texture to the stone; juicy, melting, vinous; quality very good. Ripens with Triumph; has better form and brighter color on surface; equally hardy and productive; tree a strong and symmetrical grower. One of the best early free-stones.

Alexander's Early. (Alexander.) C. Originated near Mt. Pulaski, Ill. Medium size; skin greenish white, nearly covered with rich red; flesh melting, juicy, sweet; tree vigorous and productive. Ripens two weeks earlier than Hale's Early.

several years bearing well when all other varieties in Ontario failed. Tree very hardy both in wood and bud, bears young and very productive, equaling the Prolific. Fruit large, deep yellow, with crimson cheek; flesh yellow to the pit; firm, rich and of excellent quality; pit small, free; equal to any as a shipper or keeper. Prof. W. W. Hilborn, Director of the Experimental station at Leamington, Ontario, has known it for many years, fruited it for several seasons in experimental orchard, and recommends it as the very best late market variety. Last of September and October.

Blood-Leaf Peach. See Deciduous Ornamentals.



Muir Peaches

Amsden's June. (Amsden.) C. Originated at Carthage, Mo., in 1882. Medium size; skin greenish white, nearly covered with purple in the sun. Ripens with the Alexander and closely resembles that variety, but some think it a little higher flavored.

Australian Saucer. F. 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.

Banner. New. F. Originated at Woodslee, Ontario. The original trees have borne 16 crops,

Bokhara. F. A Russian variety, which is claimed to be the hardiest Peach grown; in fact, it has withstood a temperature of 28 degrees below zero without injury. It is a beautiful yellow Peach, with bright red cheek; perfect freestone; delicious flavor; its exceedingly tough skin makes it a splendid shipper.

Briggs' Red May. F. 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 one of the most extensively planted in California. Middle of June.

California Cling. C. Very large, round, regular;

PEACHES, continued

orange, nearly covered with dark rich red; flesh deep yellow; flavor delicate, rich, vinous. Middle of August.

Carman. F. Large, resembling the Elberta in shape; creamy white or pale yellow, with deep blush; skin very tough; flesh tender and of fine flavor, juicy; prolific bearer. Profitable market variety. Ripe June 20.

Champion. F. A particularly hardy seedling of Old Mixon, from the west, which is noted for the hardiness of its blossoms, thus insuring a good yield in spite of heavy spring frosts. It is a very large, handsome Peach, with a creamy white skin and beautiful red cheek. In flavor it is exquisite, and is a true freestone. Ripens the middle of July.

Chinese Cling. C. Large, globular; skin white, shaded with light red; flesh white, red at the stone; very juicy, melting and rich. July.

Crawford's Early. F. A magnificent large, yellow Peach, of good quality. Tree vigorous and very productive. Its fine size, beauty and productiveness make it one of the most popular sorts; no other variety has been so extensively planted.

Crawford's Late Melocoton. (Late Crawford.) F. Fruit of large size; skin yellow, or greenish yellow, with dull red cheek; flesh yellow; tree vigorous, moderately productive. One of the finest late sorts. Last of September.

Crosby. F. An iron-clad Peach. The tree is of low, spreading, willowy habit of growth, similar to Hill's Chili, Wagner and others of that class of hardy Peaches. However, it is even more dwarf than these, and often the entire product of a tree, two bushels, or even more, can be picked by a man standing on the ground. The fruit is of medium size, roundish in form, slightly flattened, with a distinct seam on the blossom end; bright orange-yellow, splashed with streaks of carmine on the sunny side; of beautiful appearance, and not so acid as most yellow Peaches of the Crawford class. It ripens between Early and Late Crawford or about with Old Mixon. A good family Peach at all times, and, on account of its beautiful color, will command a ready sale alongside of the best standard sorts, in a season of abundance. However, when it is considered that its fruit-buds are so hardy as to withstand the frosts of winter and spring, that often kill all other good varieties, its special value is apparent; a fine yellow Peach to supply the market when there are no others.

Dewey. See Admiral Dewey.

Early Charlotte. F. An improved seedling from Early Crawford, originated at Salem, Oregon, in 1878, by O. Dickenson, where it has attracted much attention among fruit-growers. This remarkable Peach succeeds in Oregon, where many other varieties fail. Flesh yellow, melting and juicy, with a rich and excellent flavor. Freestone. Ripens ten days after Crawford's Early.

Early Imperial. F. Originated by W. W. Smith, Vacaville, Cal. Fruit large, deep yellow, with dark red cheek; flesh rich, juicy and very firm. A very highly colored peach and remarkable for its firmness. Resembles Yellow St. John in form but earlier, larger and more highly colored. Rip-

ens with Hale's Early, and its rich color and earliness combined will make it one of the most profitable varieties for early shipment.

Elberta. F. Introduced from Georgia. A cross between Crawford's Early and Chinese Cling; very large; bright yellow, with a beautifully 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, often selling at double the quotations of other peaches. Ripens last of July.

Everbearing. F. A remarkable peach, having the peculiarity of ripening its fruit successfully over a period of eight weeks. Creamy white, mottled and striped; flesh white, with red veins; juicy, rich and fine.

Fitzgerald. F. An improved Early Crawford, being fully equal to it in size, quality and color. The tree commences bearing young, is productive and one of the hardiest. Fruitlarge, brilliant color, bright yellow, suffused with red; flesh deep yellow, best quality. Early September.

Foster. F. Originated in Medford, Mass. Large, deep orange-red, becoming very dark red on the sunny side; flesh yellow, very rich and juicy, with subacid flavor, ripening 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.

Gillingham. F. Large yellow, resembling the Early Crawford in form and appearance, ripening a few days later; flavor exellent. Bears young and abundantly. A very promising new variety.

Globe. F. Large; flesh firm, juicy, yellow; quality good, pleasant, rich, vinous and luscious. October.

Greensboro. S. C. Origin, North Carolina. Ripens with Alexander, but much larger. Round; flesh white, very juicy, of good quality; bright red over yellow, highly colored in the sun. A promising market variety.

Hale's Early. S. C. Medium size; greenish white, with red cheek; first quality. Tree healthy, good grower and productive. One of the earliest good peaches we have, and promises to be a leading orchard variety.

Heath Cling. C. 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 closes early September.

Henrietta Cling. See Levy Late. Imperial. See Early Imperial.

Indian Cling. (Indian Blood.) C. Large, deep claret color with red veins; downy; flesh red, very juicy and refreshing. Highly valued by all lovers of Indian peaches. Last of August.

Lemon Cling. C. A very large and beautiful lemon-shaped variety; skin light yellow, reddened in the sun; flesh firm, yellow, with a rich, vinous, subacid flavor. Ripens first week in August.

Lemon Free. F. Originated in Ohio; very large; pale yellow; shaped a good deal like a lemon; of extra fine quality; tree very productive; ripens before Salway.

PEACHES, continued

Levy's Late or Henrietta Cling. C. 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. F. A California seedling; large, almost perfectly round; flesh yellow to the pit, firm and of excellent quality; a superb canning, shipping and drying Peach; tree a good grower and bearer. Worthy of extensive cultivation; ripens a few days after Muir.

McDevitt's Cling. C. Originated with Neal Mc-Devitt, of Placer county, Cal. Very large, rich, golden yellow, becoming quite red when ripe; flesh yellow, firm and of superior flavor; excel-

lent shipper. Last of August.

McKevitt's Cling. C. A California seedling introduced by A. McKevitt, Vaca Valley, Calif. 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.

Mountain Rose. F. Large, handsome, red cheek; flesh white, juicy; one of the best. Aug.

Muir. F. Large; pale yellow; very firm flesh; ery sweet. Best for drying. Last of August. very sweet.

Newhall. F. Originated with Sylvester Newhall, of San Jose. A superb Peach, of very large size; skin yellow, with a dark red cheek; flesh deep yellow, juicy and rich, vinous flavor. Tree very hardy, healthy, vigorous and not affected by curl like Crawford's Late. Ripens about one week before Crawford's Late.

Orange Cling. See Runyon's Orange Cling.

Perfection. F. This new and valuable peach originated about three miles above Weston, Umatilla county, Oregon, near the timber line of the Blue Mountain Range, at a high altitude which proves its hardiness. The fruit is of the largest size, yellow with a beautiful blush cheek. The flesh is thick and very fine grained, yellow, with red around the pit, which is nearly as small as a prune seed. Its tough skin, firm flesh and good keeping qualities place it in the lead for a good shipping and market variety. We cannot recom-mend this new peach too highly to our friends and patrons, and it should be largely planted. Ripens from September 10th to 15th.

Phillip's Cling. C. 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.

Prolific. (New.) F. Fruit large, attractive, firm; color yellow, crimson cheek; flesh yellow to pit, very firm; pit small. The tree is very productive, and one of the hardiest peaches known. Sept.

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

Salway. F. Fruit large, roundish; deep yellow, with a rich, marbled, brownish red cheek; flesh yellow, firm, juicy, rich and sugary. A new Eng-lish variety. Promises highly as a late, showy, market sort.

Sellers'. A variety of OrangeCling, of the largest size, raised by Mrs. Sellers, of Antioch. Skin, fine yellow, with a dark red cheek; flesh yellow, firm, very juicy and rich. A very desirable sort for canning , ripening a few days after Runyon's.

Sneed. S. C. It is claimed for this peach that it is fully ten days earlier than the Alexander, of same size and appearance, but more yellow; the flesh is tender, juicy, melting and delicious; clings slightly to the pit. Said to be the first peach to ripen, which makes it a very desirable variety.

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

Susquehanna. F. A large, handsome variety, nearly globular; skin rich yellow, with beautiful red cheek; flesh yellow, sweet, juicy, with a rich vinous flavor.

Triumph. S. C. Above medium; skin downy, dark orange-yellow, nearly covered with dark carmine; flesh yellow half-way to the stone, where it changes to greenish white and adheres to the stone like Alexander; juicy, melting and slightly sub-acid; quality good. Maturity June 15. The great value of this peach for shipping purposes is its yellow color and attractive appearance, it be-ing the earliest peach so far known, and has brought very high prices.

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

Twenty-Ounce Cling. C. A fine, very large peach, very desirable for canning. August.

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

Wager. F. Large; yellow, more or less color in the sun; juicy and of a fair flavor. While high quality and great beauty cannot be claimed for this fruit, the trees have such remarkable vigor and vitality that they not only produce fruit in great quantities, but produce it with a degree of certainty and regularity which is quite unusual. These facts commend it to all planters for market purposes. Last of August.

Waterloo, S. C. Originated at Waterloo, N. Y. Of medium to large size; color whitish green, marbled with red, deepening into dark purplecrimson in the sun; flesh greenish white, with an abundance of sweet, vinous juice, adheres some to the stone, like Amsden, Hale's Early, etc. Ripened at Waterloo, July 14, 1878; in 1879, three or four days ahead of Alexander. For so early a peach it is a remarkable keeper, ripe specimens having been kept in perfect condition for nearly a week.

This makes it valuable for shipping.
Wheatland. F. Large, roundish; skin golden yellow, shaded with crimson on the sunny side;

PEACHES, continued.

flesh yellow, rather firm, juicy, sweet and of fine quality; tree vigorous. August.

Wonderful. F. A freestone; color rich golden yellow, overspread with carmine. It ripens after nearly all other varieties have disappeared, and

is a remarkable keeper. The tree is wonderfully prolific.

Yellow St. John. F. Fully one week earlier than Early Crawford; a trifle smaller than latter, especially old trees; yellow, with deep red cheek; juicy, sweet and highly flavored; quite free.

Apricots

The Apricot is one of the most beautiful and delicious fruits we possess, and its value is greatly enhanced by the season of its ripening—between cherries and peaches.

In the selecting of choice garden fruits it is quite indispensable. It succeeds admirably trained in Espalier form, which will be found advantageous in small gardens, as it may occupy a house wall, fence or trellis, leaving the open ground for other trees. In cold sections, too, where trees get winter killed or the bloom injured by the late spring frosts, these Espalier trees can easily be protected by mat or board screens.

Alexander. Very hardy and immense bearer; fruit large; yellow, flecked with red; very beautiful, sweet and delicious. July.

Alexis. Very hardy and abundant bearer; yellow, with red cheek, large to very large; slightly acid, rich and luscious. July.

Blenheim. Large, oval; flesh full to the pit; yellow, rich and juicy; ripens evenly and soon after the Royal; regular and prolific bearer; profitable for canning, drying and marketing.

Gibb. Tree hardy, grows symmetrical, productive. Fruit medium; yellowish, subacid, juicy and rich. The best early variety, ripening soon after strawberries. A great aquisition.

Hemskirk. Large, roundish, but considerably compressed or flattened on its sides; orange, with red cheek; flesh bright orange, tender; rather more juicy and sprightly than the Moorpark, with a rich and luscious plum-like flavor. July.

J. L. Budd. Tree a strong grower and profuse bearer. Fruit large, white, with red cheek, sweet, juicy, with a sweet kernel, as fine-flavored as an almond. The best late variety and decided acquisition. August.

Moorpark. One of the largest. Orange, with a red cheek; firm, juicy, with a rich flavor; very productive. August.

Nicholas. Tree hardy and prolific. Fruit medium to large, white, sweet and melting. A hand-some valuable variety. July.

Peach. (Marysville Peach.) Very large, handsome and of delicious flavor; skin deep orange, mottled pith dark brown; flesh of a fine saffronyellow color; juicy, rich and high-flavored. One of the best. August.

Royal. Large, oval, slightly compressed; yellow, with orange cheek, faintly tinged with red;

flesh pale orange, firm and juicy, with a rich vinous flavor; exceedingly productive. July.

Tilton. New. We have pleasure in introducing this Apricot to the public. Its large size, rich Apricot color, high flavor, uniform ripening, sure and unusual productiveness, with frost-resisting qualities and vigorous growth, easily place it far in advance of all other varieties. For drying or canning it is much superior to any of these older varieties.



LIMB LOADED WITH TILTON APRICOTS.

Nectarines

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.

Boston. Very large and handsome; deep yellow, with a bright blush and mottles of red; flesh

yellow to the stone, sweet, with a pleasant and peculiar flavor; freestone. One of the most valuable sorts for market.

NECTARINES, continued

Early Violet. (Violet Hative.) Medium size; yellowish green, with a purple cheek; flesh pale green, melting, rich and highly flavored; freestone. August.

Lord Napier. Large; cream-color, dark red cheek; flesh white, tender, juicy and sugary; freestone. July.

New White. Large, white, nearly round; flesh white, tender, very juicy, with a rich, vinous flavor; stone small and separates freely. August.

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.

Quinces

The Quince is generally well known and highly esteemed for cooking and preserving. It thrives best in a deep, rich soil and is benefitted by a clean, high cultivation. It is said to be improved by the application of salt in small quantities. The Quince is usually sold at the age of 2 or 3 years, and is from three to four feet in height.

Apple, or Orange. Large, roundish; bright golden yellow; cooks tender and is of very excellent flavor. Valuable for preserves or flavoring; very productive. The most popular and extensively cultivated of the old varieties. October.

Angers. Somewhat later than the preceding. Fruit rather more acid, but looks well. Tree a thrifty grower and abundant bearer.

Bourgeat. A French variety. Very productive, healthy and thrifty. It grows in tree form, like pears or plums. It has almost perfect foliage, leaves green and fresh until the end of the season. The fruit is very large, smooth, golden yellow, of the best quality, tender; ripens just after the Orange and will keep past midwinter in perfect condition.

Champion. Fruit very large, fair and handsome. Tree very handsome, surpassing other varieties in this respect, bears abundantly while young; flesh cooks as tender as an apple and without hard spots and cores; flavor delicate, imparting an exquisite Quince taste and odor to any fruit with which it is cooked. One of the most valuable.

Orange. See Apple.

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 superiour 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 equaled by any other Quince.

Luther Burbank says: "Quinces can probably be grown with less expense than any other fruit, and if the quality could be improved, would be extensively grown and more generally used. A more promising fruit for improvement cannot be named. For about 15 years we have been working in this direction and have succeeded in obtaining the Pine apple, a Quince which will cook as tender in five minutes as the best cooking apples and with a flavor never before equaled. Jelly made from it is superior to that made from any other known fruit-absolutely unapproachablesomething which could never have been thought of until it was brought into existence. The fruit, in form and size, very much resembles the Orange Quince, but is smoother and more globular; in color much lighter yellow; average weight about three-qurters of a pound each. The tree is a strong grower and as productive as the Orange. Some one may produce a better Quince; we never expect to.

Rea's Mammoth. A seedling of the Orange Quince; one-third larger, of the same form and order; fair, handsome; equally as good and said to be as productive. Tree a hardy and healthy grower.

Grapes

Too much cannot be said in praise of the Grape. It is one of the best and most popular fruits, delicious for eating, especially for cooking and preserving, and everywhere in large demand.

The vine comes quickly into bearing, yielding fruit usually the second year after planting; requires but little space, and when properly trained is an ornament to the yard, garden or vineyard.

Almost everyone can find room for from six to a dozen or more grape vines. They can be trained up the side of any building or over a garden fence, but the best and cheapest way to grow them, either in large or small quantities, is on a wire trellis.

Work the ground deep for grape vines and plant a little deeper than they were in the nursery. Make the rows 8 feet apart and plant vines 6 to 8 feet apart in the rows. Some of the tender varieties would be benefitted by laying the vine flat on the ground during winter, with a light covering of earth or litter. B., black varieties; R., red or amber; W., white.

Brighton. R. A cross between Concord and Diana Hamburg. Resembles Catawba, in color, size and form and bunch of berry; flesh rich, sweet and of the best quality. Ripens earlier than Delaware. Vine vigorous and very hardy.

This variety has been thoroughly tested, and it may now be truly said to be without an equal among early grapes.

Campbell's Early. B. Its strong, hardy, vigorous growth, thick, heavy, perfectly healthy foli-

GRAPES, American Varieties, continued

age, very early ripening and abundant bearing of large and handsome clusters of excellent quality, combined with the most remarkable keeping and shipping qualities, form a combination unequaled by any other Grape. Its period of full maturity is from the middle to the last of August, according to the season. Ripening with Moore's Early but, unlike that variety, it has kept sound and perfect, both on and off the vine, for weeks after Moore's Early was decayed and gone. In dessert quality it is unrivaled by any of our present list of first-early market Grapes. It is, both as to luster and berry, of large size, of a glossy black color, with a beautiful blue bloom; pulp sweet and juicy, free from foxiness; seeds small, few in number and part readily from the pulp.

Catawba. S. Well known as the great wine Grape of Ohio, Kentucky, etc. Bunches large and loose; berries large, of a coppery red color, becoming purplish when well ripened; requires the most favorable soils and situations, good culture and warm seasons to mature perfectly. Last of September.

Concord. B. A large, handsome Grape, ripening a week or two earlier than Isabella; very hardy and productive. Succeeds over a great extent of country, and, although not of the highest quelity, it is one of the most popular market Grapes.

Delaware. R. Still holds its own as one of tde finest Grapes. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red; flesh very juicy, without any hard pulp, with an exceedingly sweet, spicy and delicious flavor. Vine moderately vigorous, pardy and productive. Ripens two weeks before the Isabella.

Early Ohio. B. Very early, hardy and productive; strong, thrifty grower; good-sized bunch; berry smaller than Concord; adheres firmly to the stem. A profitable early market sort.

Eaton. B. Seedling of the Concord. Bunch and berries of largest size, showy and attractive; leaf large, thick and leathery; berries round, covered with heavy blue bloom; pulp tender, separating freely from the seeds.

Green Mountain. (Winchell.) W. This, the earliest white Grape, has been thoroughly tested over a wide area, and has proved most satisfactory. It combines hardiness, fruitfulness, vigor, good size and excellent quality. Bunch medium to large, shouldered; berries medium; greenish white, skin thin, tough; pulp tender, sweet, with few seeds, of excellent quality; free from foxiness, and the flavor is excellent, ranking in this respect as a grape of the first class. It is the first white Grape to ripen, maturing even in the worst of seasons, a consideration which will be appreciated by all planters. Its habit of growth is vigorous and the foliage clean and healthy, while its bearing quality is all that can be desired. It is a most valuable white Grape, either for the amateur or professional grower.

Hartford Prolific. B. Bunches rather large; berries large, globular; color almost black, covered with a beautiful bloom; of fair quality. Ripens

three weeks before the Isabella; valuable for its abundant bearing and early maturity.

Isabella. B. An old standard sort, higly prized where it will thoroughly mature. Bunches long, large, loose; berries large, oval, sweet and musky. A good keeper.

McKinley Early. New. W. It is with intense satisfaction that we introduce a new early white Grape, of the Niagara type, which bids fair to add millions to the wealth of the nation, and which will be hailed with delight by fruit-growers, dealers and consumers throughout the world. Produced by Mr. Young near where the Niagara, originated. It is fully 10 days earlier than the Niagara, and as strong a grower, with very rich flavor. A strong, vigorous grower, with thick, healthy foliage and perfect self-fertilizing blossom. Bunches large and compact, usually shouldered; berries large, nearly round, very sweet, with no acid around the seeds, and no puckery taste in the skin; skin thin, green at first, then turning yellow when fully ripe, very tenacious, bearing handling and shipping. It has remarkable keeping qualities for an early Grape and will hang on the vine sound and perfect for six weeks or more after ripening, with no tendency to shell off or fall from the stems. As good a shipper as any of the American Grapes.

Moore's Early. B. A comparatively new Grape raised from seed by John B. Moore, Concord, Mass., in 1872. It is described as follows: Bunch large; berry round (as large as the Wilder or Rogers' No. 4); color black, with a heavy blue bloom; quality better than the Concord; vine exceedingly hardy, has never been covered in the winter, and has been exposed to a temperature of more than twenty degrees below zero without injury to it; has been entirely exempt from mildew or disease. Its earliness makes it desirable for an early crop, and more particularly adapts it to New England and the northen portion of the United States, maturing, as it does, ten days before the Hartford and twenty days before the Concord.

Moore's Diamond. W. A vigorous grower, with dark, healthy foliage, entirely free from mildew. A prolific bearer; bunches large, handsome and compact, slightly shouldered; color delicate, greenish white, with rich, yellow tinge when fully ripe; skin smooth and free from specks; pulp tender, juicy and nearly transparent, with very few seeds; berry about the size of Concord; quality best, rich, sprightly and sweet, resembling the foreign Chasselas. Ripens about two weeks before the Concerd.

Niagara. W. Occupies the same position among the white varieties as Concord among the black; the leading profitable market sort; bunch and berries large, greenish white, changing to pale yellow when fully ripe; skin thin, but tough; quality much like Concord.

Pocklington. W. Originated at Sandy Hill, N. Y. Vine very vigorous, hardy and productive; bunch and berry of good size; color a light lemonyellow; flesh moderately tender, sweet, with a peculiar aromatic flavor. The great vigor and hardiness of the vine, with the beauty and size of the cluster, place this in the front rank of white Grapes; ripens with Concord.

GRAPES, continued

Salem. (Rogers' No. 22.) R. A strong, vigorous vine; berries large, Catawba color; thin skin; free from hard pulp, very sweet and spright y; ripens first of September.

Wilder. (Rogers' No. 4.) B. Large and black; bunches generally shouldered; berry round and large; flesh buttery, with a somewhat fibrous cen-

ter; sweet, rather sprightly.

Worden. B. This new variety is a seedling of the Concord, which it greatly resembles in appearance and flavor, but the berries are larger. The fruit is said to be better flavored and to ripen several days earlier.

Wyoming. R. Vines very hardy, healthy and robust, with thick, leathery foliage; color of berry similar to Delaware, but brighter, being one of the most beautiful of the amber or red Grapes, and in size nearly double that of the Delaware; flesh tender, juicy, sweet, with a strong native aroma. Ripens before Delaware. Best early red for market.

FOREIGN VARIETIES

For Table, Raisins, Shipping and Wine

Black Hamburg. B. A fine, tender Grape, producing large, magnificent, compact bunches; berries black, very large and oblong. A great favorite everywhere, especially for table.

Black Malvoise. B. 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.

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

Chasselas de Fontainbleau. See White Sweetwater.

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

Cornichon Black. B. 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.

Emperor. R. Vine a strong grower and heavy bearer; bunches very large, long and loose-shouldered; berries large, oblong, deep rose-colored, resembles the Tokay, 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 eastern market every year. Withstands rain better than any other variety. Does well on granite soil of the foothills. Should be staked to get best results.

Feher Zagos. W. Vine a vigorous 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.

Flame Tokay. R. 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 is more extensively planted than any other variety.

Gordo Blanco. See Muscat.

Malaga W. 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.

Montaro B. 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.

Mission of California. B. A well-known variety. A strong, sturdy grower, bearing large bunches of black, medium-sized berries. Valuable for wine.

Muscat of Alexandria (Gordo Blanco). W. Bunches long and loose, shouldered; berry oval, sometimes round; yellowish green; skin thick; flesh with a decided Muscat flavor. This is the variety so extremely planted for raisins. The distinctive feature between the Alexandria and the Gordo Blarco is supposed to be in the shape of the berries, the former being oblong and the latter round. On this coast, in most localities, 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.

Rose of Peru. B. Vine a strong grower; bunch very large, shouldered, loose; fruit roung, large, with firm and crackling flesh. A very handsome Grape of fair quality, and highly esteemed as a market variety.

Seedless Sultana. W. Small, white Grape, turning to amber; clusters large. It makes a fine raisin for culinary purposes, at the same time it is a fine wine Grape. It is the only one we know of that is good for both raisins and wine.

Thompson's Seedless. W. This is a new variety of great merit. It is perfectly seedless, and will doubtless become the most popular sort for seedless raisins. It is very attractive, larger than the Seedless Sultana, more oblong, and in color greenish yellow; resembles the Muscat. It is of good quality, claimed to be superior to the Seedless Sultana. It dries rapidly and evenly, and, being a sweet, heavily. A strong grower and unusually productive.

Tokay. See Flame Tokay.

White Sweetwater. (Chasselas de Fontainbleau.) W. Bunches large and compact; berries medium size; round; skin thin, transparent, greenish yellow; pulp tender, juicy, sweet and richly flavored. One of the best early Grapes.

Binfandel. B. Bunches large, compact; berries round, dark purple. The most extensively planted Grape in California for making claret.

Strawberries

First of the small fruits comes the beautiful and wholesome strawberry, and the profit resulting from its wise cultivation will satisfy any reasonable expectation. They may be successfully grown on any soil adapted for garden purposes, or where good crops of grain or potatoes can be raised. The ground should be well prepared, thoroughly enriched and be kept mellow and free from weeds.

Admiral Dewey. New. Originated near Salem, Oregon. Larger than the Wilson; very firm; good shipper and unexcelled for canning. Color beautiful dark red, and, unlike other berries, the flesh is red to the center; no white core; shape conical, much like Clarke's Seedling. Very early and abundant bearer, continuing through the season, coming nearest to an everbearing berry of any in this vicinity. Flavor resembles that of the wild strawberry.

Clark's Seedling. (Hood River.) This new berry originated at Hood River, Oregon, where it is planted to the exclusion of all others, for long distance shipments. Larger than Wilson; very firm; beautiful dark red, and in quality unsurpassed.

Gold Dollar. One of the earliest berries on the market. Fruit good, medium size, and dark red all through; rather tart; fine flavor; foliage heavy, large and spreading, which protects the blooms from early frosts. Has a perfect bloom, and strong stems that hold the berries up from the ground, which helps to keep color and flavor during the early rainy season. A very heavy cropper for so early a berry.

Hood River. See Clark's Seedling.

Jessie. On rich soil, and with good culture,



MAGOON STRAWBERRIES

STRAWBERRIES, continued

this is a valuable sort. Fairly productive; berries average large; of great beauty and high



STRAWBERRIES COMPARED WITH A SILVER DOLLAR berry.

Magoon. Has proved to be a leader in hardiness, in addition to all of its other good qualities. The Magoon alone has come through the trying weather of hard winters without injury. It always brings top prices in the Portland market, and is a remarkable yielder.

New Oregon. (Improved.) One of the finest and most satisfactory strawberries ever introduced. Always looks bright, fresh and attractive. Berry is very large, firm and handsome: rich, dark red extending to the center. The flavor is rich, sweet and delicious. For table use and canning it cannot be equaled. The "Oregon" ripens very early and continues in bearing until late in the season.

Oregon Overbearing. A vigorous grower, and adapted to all soils and locations. On the Pacific coast it is a constant and abundant bearer of large, handsome berries of good quality, from early May until killed by frost.

Wilson's Albany. Medium to large, dark red; very hardy, vigorous and productive. The most widely known and universally successful Straw-

Raspberries

Coming immediately after Strawberries, when there is a dearth of other fresh fruit, Raspberries are equally desirable for planting in the garden for home use and in the field for market. They are easily cultivated. Beds seldom require renewing. Their season of ripening is long. The fruit bears transportation well, and aside from its immediate consumption, it brings highly remunerative prices for drying and canning.

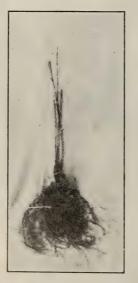
RED AND YELLOW

Brandywine. (Susqueco.) Large, bright red; very fine. Valuable for market on account of its fine shipping qualities.

Cuthbert. (The Queen of the Mar-(The ket.) Large, conical; rich crimson; excellent quality. A vigorous grower, en-tirely hardy and immensely productive. "I regard it as the best Raspberry for general culture."— Charles Downing.

'Now regarded by careful and experienced horticulturists as the best Raspberry in existence for general cultivation. have it in a specimen bed with 25 other kinds, and it surpasses all others."— E. P.

Golden Queen. This variety is a seedling of the Cuthbert, but the color of the fruit is a rich golden yellow. The flavor is of the highest quality, pronounced by some superior



Raspberry plants, pruned for planting.

to the old Brinkle's Orange, the finest flavored of all the Raspberries. Equal to the Cuthbert in size; immensely productive. A very strong grower and hardy enough even for extreme northern lati-Rating should reven for extreme northern latitudes, having stood uninjured even when the Cuthbert suffered. The desire for a yellow Raspberry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this variety.

Herbert. A large early red Raspberry, originated at Ottawa. In hardiness it easily takes first place, standing a lower temperature than any other kind. The cane is very strong and vigor-ous, slightly prickly. Fruit bright red, some-what oblong, larger than Cuthbert or Loudon. Flavor very sweet and juicy, one of the very best for table use. Enoromously productive. Season 5 to 6 days before Cuthbert. Holds its size well to end.

Japanese. (Wineberry.) Ornamental both in fruit and plant. Canes covered with purplish red hairs; leaves dark green, silvery gray beneath. Fruit in large clusters, and each berry at first tightly enveloped by the large calyx, forming a sort of bur, which is covered with purplish red hairs. These gradually open and turn back, exposing beautiful wine-colored fruit of medium size; brisk subacid, retaining flavor when cooked. Highly esteemed for canning, preserves, jellies, etc.

Loudon. The best red midsummer berry. Its points of superiority are vigor of growth, large fruit, beautiful, rich dark crimson color, good quality and marvelous productiveness and hardi-

RASPBERRIES-Red and Yellow, continued

ness, enduring winters without protection and without injury to the very tips. It stands shipping the best of any variety, and will remain on bushes the longest without injury.

Marlboro. The largest early red Raspberry, ripening only a few days after Hansell. Beautiful bright scarlet; of good but not high quality.

Hardy and productive.

Miller's. Bright red color, which it holds after picking. Stout, healthy, vigorous grower; canes not so tall as Cuthbert, but well adapted to carrying their immense load of berries. Berries large and hold their size to the end of season; round, bright red; cores small, do not crumble; firmest and best shipper; rich fruity flavor. Commences to ripen with the earliest. We can highly recommend this for either home or market.

Queen of the Market. See Cuthbert.

Susqueco. See Brandywine.

Turner. (Southern.) Very desirable as an early sort for the home garden. Berries good size; bright crimson; sweet.

PURPLE CAPS

Cardinal. New. This wonderful berry is a surprise in the fullness of its merits—its great growth, its extreme hardiness and the exceeding productiveness of its choice red, rich, pure-flavored berries. It will pay. It is not a novelty, but a variety of great merit. The new Cardinal is claimed to grow 10 feet high and bear in proportion. Leading horticulturists who have seen this berry say that it is one of the wonders of the century, so far exceeding all others as to put it entirely beyond comparison. Judge Wellhouse, president of the Kansas State Horticultural Society, said at a meeting of the Society, that the introduction of the Cardinal Raspberry would add millions to the wealth of the farmers of the country, because of its inherent great vigor and exceeding productiveness.

exceeding productiveness.

This most promising Raspberry is another natural product of Kansas. It is not a hybrid, but a result where nature combined its best in one little seed that produced the first Cardinal Raspberry plant. It also germinated that seed in its own way, not under the pet care of an expert gardener who could control the temperature, moisture, sunshine and weeds, but came up in a neglected clump of Gregg Raspberry bushes, and there showed its makeup by growing far above them and producing its great crop of red berries in contrast to the few Greggs beneath them. When first seen by the owner, the Greggs were

dug and the Cardinals had the room.

Columbian. An improvement on Shaffer's, which it resembles, but the berry is finer, dark red, adheres to the bunch much longer, and retains its shape better, both on the market and for canning. Bush a stronger grower, attaining a very large size. One of the hardiest and wonderfully prolific. Unexcelled for productiveness, and stands at the head for canning, making jam, jelly, etc.

Haymaker. New. A purple cap, not so dark as Columbian or Shaffer, and much larger and firmer than either of those varieties, never crumbles and stands up well in shipping. Sam-

ple crates have been shipped to distant points with entire satisfaction. It is a berry to grow for either home use or market. The originator has found it the most profitable berry ever raised for market, and has never yet been able to supply the local demand. So much of a favorite has the Haymaker become that local growers have said that it ruined the sale of other varieties. Very popular as a canning berry. Many orders for this berry are placed a year in advance. One writer located near a canning factory has thus written: "If any one about here had several acres of it in bearing, he could dispose of the entire crop to good advantage to the canning factory."

Schaeffer's Colossal. (Puthill.) A stronggrowing variety, producing berries of great size, excellent todry, and unsurpassed for canning; flavor peculiar and fine.

BLACKCAPS

Cumberland. In size the fruit is simply enormous, far surpassing any other sort. The berries run from \$\frac{1}{2}\$ to \$15-16\$ of an inch in diameter, and are of such handsome appearance that the fruit has often sold for \$10\$ cents per quart when other varieties were selling for from \$5\$ to \$7\$ cents per quart. The quality is very similar and fully equal to Gregg. In spite of its unusually large size, the fruit is possessed of great firmness and is thus well adapted for standing long shipments. Midseason. The bush is exceedingly healthy and vigorous, throwing up stout, stocky canes, well adapted for supporting their loads of large fruit.

Gregg. Of good size; fine quality; very productive and hardy. It takes the same position among blackcaps as Cuthberts does among the red sort. No one can afford to be without it.



GOLDEN QUEEN RASPBERRIES



MARLBORO RASPBERRY

RASPBERRIES—Blackcaps, continued

The standard Blackcap by which others are judged.

Kansas. Strong, vigorous grower, standing extremes of drought and cold, and bearing immense crops. Early, ripening just after Palmer. Berries size of Gregg; of better color; jet black, and almost free from bloom; firm, of best quality; presents a handsome appearance and brings highest price in market.

Mammoth Cluster. Large in size; next to Gregg Canes of strong growth and very prolific. Berries large and of fine quality.

Munger. The fruit of Munger is black, and resembles Gregg very much. It is a better flavored berry than Gregg, tougher in texture,

and therefore a better shipper. In size it excels Gregg by almost 25 per cent, being extra fine for canning and evaporating. In seasons when most others are dry and seedy, Munger ripens up sweet and juicy, and readily brings an advance of 50 cents per bushel over other kinds. The canes, too, resemble Gregg, are free from disease; upright in growth and extremely hardy.

Ohio. A very strong-growing, hardy sort; fruit nearly as large as Mammoth Cluster; more productive than any other variety, and one of the most, if not the most valuable for market.

Souhegan. (Tyler) A new variety, commended very highly as a market sort by those who have grown it. The bush is said to be enormously productive, perfectly hardy and free from disease.

Blackberries

These require the same kind of soil and treatment as raspberries, except that they should be planted in rows 8 feet wide and four feet apart in rows. For self-sustaining bushes clip off the points of the growing canes as soon as the plants are about 4 feet high, and repeat the operation several times until they assume the form of a bush. Mulching is of great advantage to both raspberries and blackberries.

Early Harvest. A variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and upright in growth, branching stout and vigorously. Hardier than Kittatinny or Lawton; an enormous bearer. Berries sweet and of the highest quality, though not so large as some varieties.

Erie. Said to be the only large, productive, absolutely hardy Blackberry yet introduced. Or-

iginated in northern Ohio. Free from rust and all other diseases, and wonderfully productive (exceeding even the prolific Lawton), bending the robust canes to the groung with the weight of fruit. Fruit very large, excellent quality, handsome and firm, and ripens exceedingly early; fruit uniform both in size and shape.

Eldorado. A new seedling from Preble county, Ohio. The vines are very vigorous and hardy,

BLACKBERRIES, continued

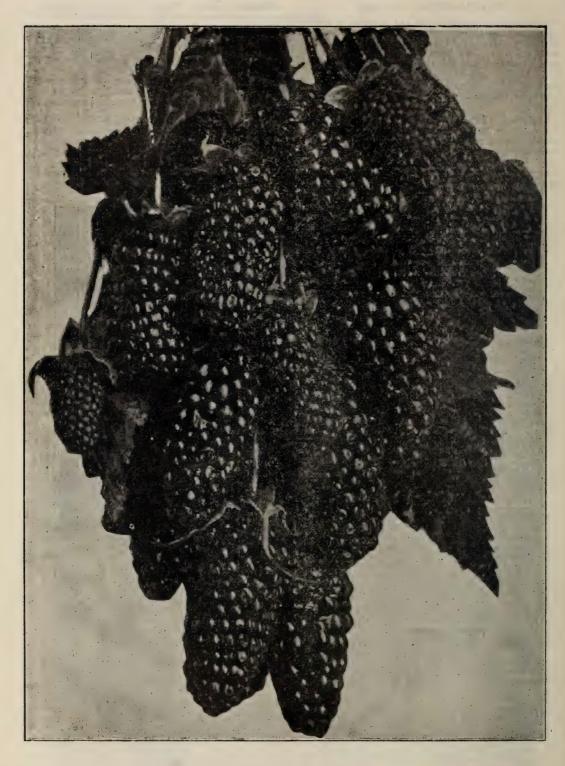
enduring the winters of the far northwest without injury, and their yield is enormous. The berries are large, jet-black, borne in large clusters, and ripen well together. They are very sweet, melting and pleasing to the taste, have no hard core, and keep eight or ten days after packing with quality unimpaired, combining nearly all the good qualities found in a Blackberry.

Evergreen. Introduced from Oregon; origin unknown; beautiful cut-leaved foliage, which it retains during the winter; berries large, black, sweet, rich and delicious. It continues to ripen from July to November, which makes it one of the best berries for family use; an excellent trellis and arbor plant.

Himalaya Giant. New. Vigorous grower; canes sometimes reaching 30 to 40 feet; must be trained on a trellis. Fruit large, black; very abundant bearer and excellent shipper; shape more round than Kittatinny or Lawton, more juicy and smaller seed. Mr. Brodie, Superintendant Experimental Station, Puyallup, states that it has yielded at the rate of 400 crates (9,600 quarts) per acre, and thinks it might be made to yield 600 crates per acre on proper soil.

Iceberg. This wonderful berry is the origination of the far famed Luther Burbank, whose remarkable success in the production of valuable new plants has given him the title of the "Wizard of Horticulture." The fruit is white, transparent; the seeds, which are unusually small, can be seen in the ripe berries. The clusters





MAMMOTH BLACKBERRIES

BLACKBERRIES, continued

are larger than those of Lawton; individual berries as large, but earlier, sweeter and more melting than Lawton. Like all Blackberries the Iceberg is slightly bitter when not thoroughly ripe.

Kittatinny. Large, black, sweet: soft when black; very hardy; ripens up gradually like Lawton. One of the best except in northern sections.

Lawton. (New Rochelle.) The well known market variety.

Mammoth. New. Supposed to be a cross between the wild Blackberry of California and the Crandall's Early. 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 20 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 21 inches long; seed small and abundant; core small, soft. In size and flavor said to surpass all other varieties of Blackberries. We offer it to the public only after a most thorough test, covering a period of several years.

Mercereau. New. This early mammoth ironclad Blackberry is by far the most valuable variety that has ever appeared since the advent of the Wilson, over 30 years ago. It originated in northwestern New York, where the mercury falls from 15 to 25 degrees below zero and where it has stood in open field culture for many years without the slightest protection, never being injured in the least. It has never had a leaf affected with orange rust, blight or other disease or produced a double or "rose" blossom.

In hardiness it is doubtless without an equal among Blackberries, having endured a temperature of 20 degrees below zero without being injured in the least, even at the tips, although Snyder and Taylor's Prolific were much damaged. Just how low a temperature it will withstand uninjured is not known. The berries are brilliant, sparkling black throughout, and what adds great value to it as a market berry, it remains black under all conditions and circumstances, never turning red when gathered in hot, muggy weather, after the manner of Snyder, Lawton, Erie and many other varieties. In quality it is exceptionally sweet, rich, melting and luscious, being without core; the seedy character of Snyder and most other sorts is noticeably ab-As a shipper and keeper it is unsurpassed, remaining firm without bleeding in handling.

The canes are of exceedingly strong, upright habit, attaining upon fairly good soil a height of 8 feet if permitted to grow unchecked, and are so stout as to always remain erect; foliage large, deep green, abundant and entirely free from rust or blight. The yield is simply enormous, producing double the quantity of fruit per acre of the Snyder, Kittatinny or Taylor's Prolific and affording heavy pickings from the first until the crop is all matured. Its season is early to midsummer, ripening with the Snyder, in advance of Kittatinny, Lawton, Taylor's Prolific

or Erie, but not so early as Early Harvest or the Wilson.

Rathbun. Origin, western New York. A strong, erect grower with strong stem, branching freely; will root from tip of branches like a raspberry. Hardy, having endured 20 degrees below zero and produced a good crop. Forms a neat, compact bush 4 to 5 feet high, producing its immense fruit abundantly. Fruit is sweet and luscious without hard core, of extra high flavor, jet-black, small seeds, firm enough to ship and handle well. Very large size, resembling the Wilson and fully equal to that grand variety, with the addition of hardiness.

Snyder. Extremely hardy, enormously productive; medium size, no hard, sour core; sweet and juicy. The leading variety where hardiness is the consideration. Ripens early.

Ward. New. It was found growing in the fence-row adjoining a plantation of Wilson's, on the Michael Ward farm in Mammoth county, New Jersey. Its fine fruit, healthy canes and very prolife bearing qualities attracted the attention of the owners. A few plants were removed to a position where it could be cultivated and planting extended yearly, as fast as the sucker plants allowed, where it has been fruiting for several years, canes never winter-killing, bearing a crop every year and the fruit coming into competition in the market with all other varieties, and always commanding the highest price and producing twice as many bushels per acre as the Wilson alongside (and as many bushels per acre as the Wilson when in its prime.) The Ward Blackberry is undoubtedly a seedling of the Kittatinny, which it closely resembles, having all the good qualities of the parent with none of its defects. The Ward is a very strong grower, perfectly hardy (in New Jersey), the fruit black throughout and very prolific. For complete description, send for four-page circular.

BLACKBERRY--RASPBERRY

(HYBRIDS)

Logan Berry. (Raspberry-Blackberry.) Judge J. H. Logan, of Santa Cruz, is the discoverer of this wonderful fruit. It is thought to be raised from a cross of the Aughinbaugh Blackberry and Red Antwerp Raspberry. The vine grows entirely unlike the blackberry or raspberry; it trails upon the ground like a dewberry. The canes are very large, without the thorns of the blackberry, but have very fine spines like those found on the raspberry. Leaves resemble those of the raspberry more than of the blackberry, are of a deep green color, coarse and thick. An exceedingly strong grower and an enormous bearer. The fruit is as large as the largest sized blackberry, of the same form and shape, a dark bright red color when fully ripe, and combines the flower of both the raspberry and the blackberry, having a mild and very pleasant vinous flavor not found in any other fruit. Raw, it is excellent for the table, as also stewed and for jelly and jam it is without an equal. Fruit ripens early, the bulk being gone before the blackberries or raspberries become plentiful. It is firm and a fine shipper.

The Phenomenal Berry. One of the most val-

BLACKBERRY-RASPBERRY, continued

uable of all Luther Burbank's novelties. It is the result of a cross between the Improved California Dewberry and the Cuthbert Raspberry. Mr. Burbank describes it as larger than the largest berry ever before known, bright crimson raspberry color, productive as could be desired and the most delicious of all berries for canning and drying. The berries grow in clusters, each having five to ten or more, and individual berries often measure 3 inches around one way by 4 the other and weigh one quarter ounce each. Even larger ones were weighed and measured last summer and when exhibited provoked the question: "Will they be sold by the dozen?"

DEWBERRIES (Rubus Canadenis)

Austin Improved. New. From Texas; has been tested several years. We note the following good points. Surpasses in productiveness anything ever seen in Blackberry or Dewberry. It is of a glossy, shining black color; its very ap-

pearance has a tempting effect on those who see it. Its flavor is most excellent. When fully ripe it will melt in your mouth most pleasantly. Has the hardy character common to the Dewberry family.

Lucretia. One of the low-growing, trailing Blackberries; in size and quality it equals any of the tall-growing sorts. Perfectly hardy, healthy and remarkably productive, with large, showy flowers. The fruit, which ripens early, is often 1½ inches long by 1 inch in diameter; soft, sweet and luscious throughout, with no hard core, ripe before late raspberries are gone. Should be mulched to keep berries from the ground. We highly recommend this variety.

Premo. A new extra-early Dewberry; very large, jet-black, firm and good; ripens its crop very fast. The special points in this Dewberry are: Ripens 7 to 10 days earlier than Lucretia, ripening the crop so fast that it is nearly all gone at the second picking of the Lucretia; better and firmer quality; foliage darker green and more healthy than Lucretia; not inclined to burn when hot sun comes.



HIMALAYA GIANT



Currants

Ripens just before raspberries are gone, and continuing in prime order for several weeks. There is no more useful fruit than the currant, and it is among the easiest

Plant in very fertile soil made so by liberal manuring. The tops should be cut back so only three or four branches will grow the first season. Thin out the old wood early,

> At the first appearance of currant worms they are easily destroyed by sprinkling with a can of water in which powdered white hellebore is stirred (one ounce to three gallons.) Plant in rows 5 feet apart and 3 feet in row.

Black Champion. Very productive; large bunch and berry; excellent quality; strong grower. The leading, well-tested black sort.

Black Naples. Very large; black; rich; tender, and excellent for jellies and wine. Very productive.

Cherry. Large; deep red; rather a cid; bunches short; plants erect, stout, vigorous and productive.

Fay's Prolific. Originated in Chautauqua county, N. Y. A cross between Cherry and Victoria; of large size fine flavor and extremely productive.

La Versaillaise. Very large; red, bunch long; of great beauty; good quality. One of the finest and best. Should be in every collection. Prod u c-

Lee's Prolific Black. A new English vari-

ety. The fruit is large and of superior quality; the bush is a vigorous grower and enormously productive.

North Star. The strongest grower among the red varieties; should be given plenty of room and ground kept well enriched; bunches average 4 inches in length and are freely produced. Combines extreme hardiness, vigorous growth, extra quality and great productiveness.



Currant bushes, cut back ready for shipment. Our plants are all heavily rooted, and will frequently bear some fruit the first year, but will with proper care always produce the second year.

Perfection. New. This grand fruit was originated by Charles G. Hooker, of Rochester, by crossing the Fay's Prolific with the White Grape Currant, with the view of combining the large size and color of the Fay with the good quality and productiveness of the White Grape. From quite a number of plants of this cross, the Perfection was selected as the best, and after a thorough trial by the originator, proved so satisfactory and superior in many respects, combining, as it does, the good qualities of both parents that it was decided to enter it for the \$50 Barry Gold Medal of the Western New York Horticul-Gold Medal of the Western New York Horticultural Society. The Perfection Currant was the fruit first to receive the Barry Medal. It also received the highest award given to any fruit at the Pan-American Exposition. Plants were also sent to the New York State Agricultural Experiment Station, at Geneva, N. Y., for testing there, in competition with about 60 varieties in their trial block, including all the best varieties in cultivation. The result of the trial for ieties in cultivation. The result of the trial for four years at the station has been exceedingly satisfactory, Perfection coming out at the head of all introduced varieties on its general merits. The color is a beautiful bright red; size as large or larger than the Fay, the clusters averaging longer. The size of the berry is well maintained to the end of the bunch. The Perfection has a long stem, from point of attachment to the bush to the first berry, making it easy to pick without crushing the fruit. The Perfection is a great bearer, resembling its parent, the White Grape, in this respect, superior to the Fay, or any other large sort with which we are acquainted. On account of this great productiveness the plants should be kept well cultivated and fer-tilized, as should all heavy bearers. Under these conditions they will regularly produce heavy crops of large fruit of the very best quality. The season of ripening is about the same as that of the Cherry or Fay. Rich, mild, subacid, plenty of pulp with few seeds. Less acid and of better quality than any other large currant in cultivation. The White Grape has always been

CURRANTS, continued

considered one of the best varieties for table use, and the effect of this strain is very plainly seen in the very fine quality of Perfection. habit of growth it is intermediate between its parents Fay and White Grape, with remarkably large, healthy foliage. For complete description, see our eight-page colored circular. Each bush will bear a Perfection label as a guarantee of genuineness.

Pomona. While not the largest, is of good size. It is a beautiful, clear bright, almost transpa ent red; has but a few small seeds; easily picked; hangs a long time after ripe, and is one of the best to hold up in shipping or on the market. A vigorous grower, healthy and hardy;

the most productive; one of the sweetest and best in quality; continues longest in profitable bearing; retains its foliage; hangs on bush in good condition the longest; comes into bearing early; is easily and cheapily picked. Holds an unparalled record for actual acreage yield in ordinary field culture.

Victoria. A splendid variety, ripening two or three weeks later than the others. Bunches extremely long; berries of medium size, brilliant

White Grape. Very large; yellowish white, sweet, or very mild acid; excellent quality and valuable for the table. The finest of the white White Grape. sorts. Very distinct from White Dutch, having a low, spreading habit and dark green foliage. Very productive.

Gooseberries

Gooseberries thrive well on a variety of soils if well drained and fertile. The cultivation should be thorough early in the season.

European varieties are of large size and various colored. The green fruit is sent to the early markets and is profitable.

The best American gooseberries are superior to European sorts in productiveness, hardiness, quality and freedom from mildew. The curse of the European varieties and their seedlings is mil-

Mildew may be kept under control by frequently spraying with potassium sulphide. Bordeaux mixture is not recommended because it spots the fruit. After the fruit is gathered the Bordeaux mixture may be used against the leaf blight.

Crown Bob. Very large; thin skin; hairy; bright red; flavor very good.

Downing. Originated at Newburg, N. Y. Fruit much larger than Houghton; roundish; light green, with distinct veins; skin smooth; flesh soft; juicy and very fine-flavored. Vigorous and productive.

Houghton's Seedling Vigorous grower, abundant bearer; fruit of medium size; pale red, sweet and juicy. Free from mildew.

This is Gooseberries. Note the root the best system, the result of being carefully dug. Industry. said to be the best English Gooseberry yet introduced. It is of vigorous, upright growth, and a great cropper. The berries are of the largest size, dark red, hairy, rich and a-greeable. Mildews in Willamette Valley.

Josselyn. (Red Jacket.) An American seed-ling of large size; smooth, prolific and hardy; of



best quality. Has been well tested over a wide extent of territory by the side of all the leading varieties, and so far the freest from mildew, both in leaf and fruit, of them all. A wonderful cropper, with bright, clean; healthy foliage.
Originated by Professor Wm. Saunders, of

Central Experimental Farm, Ottawa, Canada, and named Red Jacket in memory of an old Indian chief, the introducer not being aware at the time, of the existence of another Gooseberry (English) named "Red Jacket." The committee on Nomenclature of the Western New York Horticultural Society, at Rochester, Jan. 25, 1899, to hereafter prevent confusion in varieties, renamed the American Red Jacket Josselyn, in honor of the introducer.

Oregon Champion. A new variety introduced from Oregon, where it originated; fruit large, round; an immense bearer, and entirely free from mildew. One of the best yet introduced.

Victoria. New. The best Gooseberry in England and the champion bearer for the London market. Strong grower, making shoots 3 feet 9 inches in a season. Berries larger than Crown Bob or Lanchashire Lad, pale red, of excellent flavor. A late bloomer and a sure cropper; hardy. A 3-year-old bush, bearing 28½ pounds of fine, large fruit, was shown in 1900. All around, it seems well suited for market purposes

Asparagus

To make a good asparagus bed the plants may be set in the fall or early spring. Prepare a place of fine loamy soil, to which has been added a liberal dressing of good manure. Select 2-year or strong 1-year plants, and for a garden set in rows 18 to 20 inches apart, with plants 10 to 12 inches in the row.

The roots should be spread and planted so that the crowns when covered shall be 3 inches below the surface of the ground. If planted in the fall the whole bed should be covered before winter sets in with 2 or 3 inches of stable manure, which may be lightly forked in between the rows as soon as the ground opens in the spring.

Conover's Colossal. This variety is much superior in size and quality to any of the old common varieties, being remarkably tender and of very fine flavor

Columbian Mammoth White. Produce shoots which are white and remain so as long as fit for use. In addition to the marvelous advantage of its white color it is even more robust and vigor-

ous in habit, and grows larger shoots, and fully as many of them, as the Conover's Colossal. Market-gardeners, growers for canners and amateurs, should give this great acquisition a thorough trial.

Palmetto. A very early variety. Even, regular size; of excellent quality.

Rhubarb or Pie Plant

This deserves to be ranked among the best early products of the garden. It affords the earliest material for fine pies and fresh table sauce, continues long in use, and is valuable for canning. Make the ground rich and deep and thus secure a more tender growth.

A deep, rich soil is indispensible to secure large, heavy stalks. Plant in rows 4 feet apart, with the plants 3 feet distant. So that the crowns are about an inch below the surface. Apply annually in the fall top dressing with stable manure and fork under in the spring.

Australian Crimson Winter. Introduced by Luther Burbank: "Fully six months earlier than any other Rhubarb. The stalk is of medium size, well-grown ones averaging 12 to 18 inches in length and about \(\frac{3}{4}\) to 1 inch in diameter; they are a pale, greenish crimson color, turning, when cooked, to a light clear crimson, and of very best quality. The plants are somewhat more inclined to blossom than the other kinds, which is easily remedied by topping. Crimson Water starts to grow vigorously by October and continues to produce stalks continuously until after the common varieties make their first appearance. If kept moist, will produce stalks abund-

antly at any season in warmer districts."

Dodge Prolific. A valuable new variety; seedling from the Myatt's Linnaeus. Ripens between the Victoria and Linnaeus. Very large, stalks often 3 to 4 feet high; very tender. The best variety that has been introduced, unless it is the Australian Crimson Winter, which stands in a class by itself.

Linnaeus. Large, early, tender and fine. The very best of the old varieties.

Victoria. Very large and valuable for market.

Mulberries

The Mulberry is valuable as an ornamental shade tree, and the fruit is much liked in many sections. Plant in deep, rich, sandy loam. The tree requires little or no pruning, and is of easy culture.

Downing's Everbearing. The beauty of this as a lawn or a street tree is quite enough to commend it, but, in addition, it yields an abundant supply of its large, refreshing berries for about three months. Henry Ward Beecher says: "I regard it as an indespensable addition to every fruit garden; and I speak what I think when I say I had rather have one tree of Downing's Everbearing Mulberries than a bed of strawberries."

New American. Equal to Downing's in all respects, and a much hardier tree. Vigorous grower; very productive; the best variety for fruit. Ripe from middle of June to middle of September.

Noir of Spain. A new everbearing Mulberry of large size, larger than the Lawton blackberry, which it greatly resembles. Color black; flavor tart, like a blackberry, and not the insipid sweet of most of the Morus family, and preferred by

many to a blackberry. The tree is a sure bearer, strong grower, very hardy and has a tendency to weep, and could almost be classed as a weeping tree, making the fruit easily gathered. A very desirable ornamental tree, as well as one of the hardiest and most abundant bearers. By far the most desirable of the Mulberries.

Russian. (Morus Tatarica alba.) A very hardy, rapid-growing timber tree of great value, especially of the West. Introduced by the Menonites. Foliage abundant and said to be very desirable in the culture of silkworms. Fruit good size and produced in great abundance.

White. (M. alba.) This has both white and black-fruited trees. It is also known under the names Moretti, Italica, etc. It forms a large, spreading tree, and, in addition to its fruit, its foliage makes good food for silkworms.

NUT TREES

The past few years has witnessed a remarkable development in the planting of nut-bearing trees. Probably no branch of tree cultivation pays larger profits or is as well assured of a profitable market for all products. The immense importation of foreign nuts every year gives some idea of the market to be supplied. But few farms contain land that, if planted to nut-bearing trees, would not pay better than anything else to which it could be devoted. The nuts in many cases pay better than farm crops or fruits, while most kinds are making a growth of valuable timber that will of itself pay a large percent on the investment. Our native nut-bearing trees are admirably adapted for planting in streets, farm lanes, pastures, etc., for shade, ornament and profitable returns.

ALMONDS. (Prunus; Amydalus)

The Almond requires a light, warm soil.

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.

Hard-shell. A fine hardy variety, with large, plumb kernel. The tree is very ornamental when in bloom.

I. X. L. Large, generally single kernels; hulls easily; soft shell. Tree a strong, upright grower and bears heavily and regularly.

Jordan. Introduced from Spain about 1893. Origin of name, "Jordan," unknown. Nut very long, narrow, but very plump, with hard, smooth shell, truncated base and somewhat bent at apex, edge sharp and knife-like. Fruit thin-fleshed and covered with a heavy pubescene; kernel nearly fills the entire cavity and is covered with a most delicate papery skin, much thinner than on any other Almond, which is one of its most valuable qualities. In flavor and texture the flesh far surpasses in delicacy any other variety. The most valuable addition to the nut list that has been made for many years.

Nonpareil. Large, full kernel, thin shell. Tree of a weeping habit and a strong grower. One of the best varieties.

Ne Plus Ultra. Similar to above, but of different habit of growth.

Peerless. Originated near Davisville, California. A sure and heavy bearer; shell harder than I. X. L. and preferred by some to that excellent variety; single large kernel.

CHESTNUTS. (Castanea.)

American Sweet. (Castenea Americana.) The fruit of this variety is smaller than the European kinds, but very sweet and well flavored; highly esteemed in the eastern states.

Italian or Spanish. (C. Vesca.) A highly ornamental tree of free growth, esteemed alike for its beautiful foliage and valuable timber. The nut is sweet and generally large, but, as the tree being raised from seed, the fruit often varies in size and quality.

Japan Mammoth. A monstrous fruit, larger than the European; and flavored like the American Sweet. Tree bears when quite young.

FILBERTS. (Corylus.)

Barcelona. A magnificent variety of Spanish origin; nut large, round, first quality. Very

productive; trained as a low standard tree or as a bush.

Du Chilli. The largest filbert fruited on the Pacific Coast. Elongated oval, very broad; often more than an inch long by three-quarters of an inch wide. Nuts uniformly large, well formed, full fleshed and sweet.

English. This is of the easiest culture, growing 6 to 10 feet high, entirely hardy and one of the most profitable and satisfactory nuts to grow, succeeding well on almost all soils, bearing early and abundantly. Nut nearly round, rich and of excellent flavor. Admired by all for dessert. The Kentish Cob and Red Hazel are the two leading varieties.

Kentish Cob. Not very large, oblong, and somewhat compressed; shell pretty thick, of a brown color; kernel full and rich, and great bearer. The best of all the nuts.

Purple-leaved. (C. Avellana, var. atropurpurea purpurea.) A very conspicious shrub, with large, dark purple leaves. Soon after the leaves expand they are almost black, but later on fade to a light purple. Valuable for planting in groups of large shrubs to secure color effect. Distinct and fine.

Red Hazel. Medium size; shell rather thick, kernel crimson skin, with a peculiar excellent flavor.

HICKORY (Carya, or Hickory Pecan)

Shellbark. (Carya alba.) To many, no other nut that grows, either foreign or native, is superior to this; in quality it possesses a peculiar rich nutty flavor, excelled by none. The tree is of a sturdy, lofty growth. The wood, on account of its great strength and elasticity, is highly prized for making agricultural implements and is unsurpassed for fuel.

WALNUTS (Juglans.)

Black American. (Juglans nigra.) This specie of Walnut is a common and stately forest tree in the middle and western states. Makes a fine shade and ornamental tree. Produces large crops of rich and oily nuts.

Butternut, White Walnut. (J. Cinerea.) A native of the eastern states. The cultivation of this sort, so highly prized in the eastern states, has been neglected here. It is a beautiful-growing tree, and yields large nuts with a rough, hard shell, within which are sweet, rich, white, oily kernels, of marked, though most delicate flavor. This variety does well in the coast countries and in well-watered regions of the foothills; not suited to the dry, hot valleys.

WALNUTS, continued

California Black Walnut. (J. California.) This species of Walnut is indigenous to California. The fruit is spherical, the nut hard but smooth, and not furrowed like the eastern black Walnut; the kernel is rich and oily. This Walnut is of a rapid growth, spreading out more than the eastern kind, but bears sooner.

PERSIAN WALNUTS. (Juglans regia) Also known as English, Madeira and French Walnut

We would call special attention of the public to the following most valuable varieties of Walnuts. The varieties we recommend to plant for market are well tested varieties that cannot be surpassed for beauty, size of Walnut, quality of meat or hardiness of tree. Commercial Walnut culture is concerned with Juglans regia, commonly known as English Walnut, but in reality the Persian, and sometimes known as the Maderia and French Walnut, as it was imported into England from France. It is, however, a native of Persia or Southern Asia.

Placentia Perfection. The favorite soft-shell walnut in Southern California. Nut is large and of high quality. The tree is a strong and vigorous and begins to bear young. An improved Santa Barbara soft-shell.

Santa Barbara Soft-shell. A variety originating with Joseph Sexton, of Santa Barbara, California. Tree a vigorous grower, early and abundant bearer. The nut is large; kernal white, sweet and readily extracted; shell thin, easily broken. One of the favorites in southern California.

FRENCH VARIETIES OF THE PERSIAN

These we grow from nuts secured in France, excepting the Franquette (see our 16-page Walnut Book), from grafted first-generation trees, thus making ours the second-generation trees, thus making ours the second-generation tree. These should not be confused, or prices compared, with the common, tender varieties grown by most nurserymen as "English Walnuts," which are not hardy enough for Oregon or the northern states, and are very often barren, caused by the staminate (or male) blossom or catkin being out, while the pistillate (or female) blossom is yet in a dormant state; so that, when the latter are out, there are no male catkins to fertilize the nuts, which drop off after attaining about the size of a pea. Thousands of good healthy trees can be seen both in California and Oregon of this class which are worthless, except for shade.

Grafted Walnuts.—We are prepared to furnish grafted trees on American and California Black, also on English roots. Franquettes will be grafted directly from the Vrooman orchard and guaranteed to be first generation. Other French varieties are grown from best French types of their kind that we have been able to secure in France.

Chaberte. An old and most valuable variety; late in budding out. The nut is well-shaped, roundish oval, and of fair size, though it is not what is called a large nut; the kernel is of extra-fine quality; a good bearer. The Chaberte was originated over a century ago by a man named Chaberte, hence its name.

Vrooman Franquette. An admirable and distinctive form of the Franquette Walnut having important and individual characteristics not found in the ordinary Franquette. It is especially adapted to the northwest, and is hardy, prolific and blight resisting to a marked degree. It is also an early bearer, which further commends it. We will



The Vrooman Franquette is generally recognized as the highest grade and most desirable Walnut on the market today. See our special Walnut literature.

WALNUTS-French Varieties, continued

gladly send special descriptive literature concerning the Vrooman Franquette, on request.

Franquette. Possesses distinct characteristics. The tree is very hardy, withstanding the cold winters of eastern France, where it originated. It is a clean, vigorous grower, has never been attacked by disease; a late bloomer, escaping late frosts; a regular and abundant bearer. The hull, or outside covering, is much thicker than in the soft-shelled varieties, and consequently the nuts do not sunburn during hot spells, when most other varieties burn very badly. The Franquette is the ideal nut for dessert and confectionery use; it is of large, uniform size, long in form, and has a smooth, well-filled shell of medium thickness, which insures its safe shipment to market. Being long in form, it carries one to two ounces more meat per pound of nuts than the round or chunky sorts. Its pellicle is pale yellow in color; meat of exquisitely rich, oily, nutty flavor.

The Franquette is the peer of all French varieties and the heaviest bearer; unlike the Mayette, which produces a nut of fair quality, but is a decidedly shy bearer; not like the Praeparturien or other early-blooming soft-shelled varieties, which only occasionally bear a crop of nuts of mixed sizes and inferior quality. The tender soft-shell varieties that have been planted in southern California must be left severely alone in the North, in order to insure an annual and successful crop. First, because the tree of the soft-shelled kinds are not hardy enough to withstand our coldest winters; and, second, because they bloom too early, they are almost sure to be

caught by the frost.

Mayette. This is a fine dessert nut; it is quite large, well shaped, with light-colored shell; the kernel is full-fleshed, sweet and nutty. It is said to be very late in budding out, enabling it to escape the disastrous effect of late frosts in the spring. This is the nut imported into the United States under the name of Grenoble, but on account of the duty of three cents per pound as the nut is a high priced nut in France, a common and cheaper grade is mixed with it, to the disgust of nut importers in New York and Chicago. The Mayette was originated by a man by the name of Mayet, about 125 years ago, the

nut having ever since been a great favorite. Said to be a shy bearer.

Parisienne. This beautiful nut, also one of the finest for dessert and market, was originated in the southeast of France, and not in the neighborhood of Paris, as the name would imply; its beauty causes it to be called "Parisienne," in honor of the capital of France. The nut is large, broader at the small end than the Mayette and the Franquette, and has a very pretty shape. It is as late and hardy as Mayette.

Praeparturien. Perfect soft-shell of first quality. One of the most productive kinds.

JAPANESE VARIETIES

As the name indicates, they were introduced from Japan, and are sure to prove of great importance in nut-growing districts. Early transplanted, hardy, abundant and early bearers, with little, if any, tap-root compared with other varieties, but abundantly supplied with laterals.

Cordiformis. (J. cordiformis.) This, as the name indicates, is a heart-shaped nut. It differs from the Sieboldi in form of the nuts, which are broad, pointed, flattened, somewhat resembling the shell-back Hickory; meat large, of best quality and easily removed, as the shell is thin and parts easily at the sutures, enabling one to get the kernel out whole. The flavor is something between that of an English Walnut and a Butternut. As a dessert nut it has few superiors; the meat, being very sweet, is used extensively for candied nuts. We recommend it as one of the very best Japanese varieties.

Sieboldi. (J. Sieboldiana.) If it produced no nuts, it would be well worth cultivating for an ornamental tree. Grows with great vigor, surpassing all other nut trees, assuming a handsome form, needs no pruning; leaves large, charming shade of green. Nuts are borne in clusters of 12 or 15 each at tips of previous season's branches; have a smooth shell; thicker than the English, but not so thick as the Black Walnuts, much resembling Pecans; meat is sweet, of good quality, flavor like butternut but less oily. Commences bearing young; trees 3 to 4 years in nursery rows frequently producing nuts. Perfectly hardy, standing 21 degrees below zero without injuring a bud.





SCENE IN THE PORTLAND CITY PARK.

Ornamental Department



T is strange that so few people realize that by expending a little time and study they could have well-kept and attractive grounds, adding to the beauty and comfort of the home and increasing the value of the property, in place of having a few trees, shrubs, roses and vines scattered over the ground at random, with little or no attention given to arrangement, pruning or cultivation, probably allowing them to grow in a thick turf and then saying they could not get as good results as they expected for the money expended.

INCREASES VALUE OF PROPERTY

Although still greatly neglected in many places, people in all sections, especially in cities and towns, are beginning to realize that property, whether in city or country, is of greater value when attractively planted with a judicious selection of choice ornamental trees, shrubs, vines, etc. No better investment can be made than one in trees, roses, vines, etc., used in beautifying the home, nor can better interest be made than is possible to be done in this way, besides adding to the beauty and comfort of the home.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home, few realize how much these add to the commercial value of the place. A purchaser having to decide between a house with bare and unkept grounds and one surrounded by fine ornamentals, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they are intending to put upon the market. Lots thus planned readily secure purchasers at good prices when bare grounds go begging for buyers.

Buy none but the best. We have made a specialty of offering none but the best, both in variety offered and quality of stock shipped. A little thought will convince all that it is not the number but the quality that counts, especially in ornamentals. Few people realize the importance of getting started right, and spend years of regretting which a little forethought in selection and planting would have prevented. Buy none but the best stock carefully selected as to form and size, with a good root system, properly grown by a reliable nurseryman. This will prove much cheaper in the end than forest-grown trees, or cheap inferior nursery stock.

HOW TO PLANT

A fine, well cut lawn is one of the handsomest features of a place. Do not make the mistake of planting at random all over the grounds. Trees and the larger shrubs may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from it. This will secure light, air and a good view from the house. In laying out the grounds, take into consideration economy in labor, and make as few walks as possible. Upright shrubs, roses and flowers should be planted in beds, each kind by itself, and avoid making the lawn look like a checker-board. These beds should be well cultivated and the plants pruned annually. Mass the trees and beds on the boundaries so as to leave a broad space for the lawn, and where there is a pretty view leave an opening. Where there is an unsightly object, conceal it by planting trees or climbing vines. Do not plant large trees near the house, except enough on the sunny side for shade.

Plant shrubs and small trees twice as thick as they should be when fully grown. This will make a good showing at once, and when the growth of the plants has made them too thick, some should be taken out. It will not do to plant so little that years must elapse before a fine effect can be produced, but, by planting a surplus at first, they can gradually be taken out.

VINES

Should be planted near to and allowed to climb upon and about the house, or trained on posts, trellises, arbors or stakes placed in suitable locations on the lawn.

Groups of trees and shrubs possessing bright-colored bark or foliage, and groups of flowering trees and shrubs, are highly effective when in blossom and should be more generally planted.

Weeping trees are especially desirable on small lawns.

NEW VARIETIES

We are constantly adding to our list of ornamentals, as well as in other departments. Before placing new varieties on the market we give them a thorough trial in the nursery, and thus weed out undesirable varieties, offering only the best in each class.

VARIETIES NOT LISTED

In every large, well-conducted nursery there are many varieties of extra size, but in too small quantities to list in the catalogue; also new varieties which have not been thoroughly tested. If you wish any variety in a special size or variety not listed, write to us for special quotations, and if we have it in stock we shall be pleased to supply.

NOMENCLATURE AND DESCRIPTION

Our Catalogue being made especially for the planter, we have given, as far as possible, the common name first, and the botanical name follows in parenthesis; although the common name is never absolutely reliable, as different localities sometimes have different names for the same plant.

There is much confusion even in the botanical names of trees, shrubs and plants at the present time. We have endeavored to follow the later botanists, and to make these as accurate as possible, and hope to correct any errors that may occur in future editions, and will appreciate it if customers will call attention to any misprints.



UPRIGHT DECIDUOUS TREES

AILANTHUS. Tree of Heaven

A. glandulosa. A distinct ornamental tree from Japan; rapid grower, with long, elegant, feathery foliage; exempt from diseases and insects. One of the most distinct of ornamental trees with pinnate foliage. Useful to produce tropical effects. Is sometimes cut off every spring, when the young shoots form a foliage mass of tropical richness.

ACACIA. (False-acacia.) See Locust.

ALDER. Alnus

European. (A. glutinosa.) A tree of rapid growth, attaining a height of 40 to 60 feet; foliage wavy, roundish, wedge-shaped; suitable for damp soils, but thriving well everywhere.

ARALIA

Angelica Tree, or Hercules' Club

All small trees with large, finely divided foliage and snowy heads of white flowers; very useful for lawn planting and subtropical effects. We recommend the two following varieties:

A. Japonica (Angelica Tree.) A handsome, distinct, small tree from Japan; spreading habit of growth, with immense finely divided foliage and spiny stems. Flowers white, in large spikes, in July.

A. Spinosa (Hercules' Club.) A very showy sort. Broad, handsomely cut foliage, and immense clusters of small white flowers in July or August. A singular-looking, small-sized tree, with very prickly stems and pinnate leaves. It



FLOWERING CHESTNUT, see page 55

suckers occasionally from the roots, but not after well established.

ASH. Fraxinus

European (F. excelsior.) A lofty tree of rapid growth, with spreading head, pinnate leaves and black buds.

See also Weeping Trees. BALM OF GILEAD. See Poplar.

BIRCH, Betula

European White (B. alba.) A fine tree of moderate size, with silvery bark and slender branches.

See also Weeping Trees.

BEECH. Fagus

European (S. sylvatica.) A beautiful tree growing to the height of 60 or 80 feet.

Purple-leaved (F. purpurea.) Discovered in a German forest. An elegant, vigorous tree, growing 45 to 50 feet high. Foliage deep purple, changing to crimson. Like all varieties of the Beech, this is difficult to transplant; hence small trees 3 feet high are preferable.

Rivers' Blood-leaved (F. purpurea Riversi.) Smooth-leaved Purple Beech. This variety differs from the ordinary Purple-leaved by its compact, symmetrical growth and crimson foliage early in the spring, changing to dark purple in the summer. One of the finest of all purple-leaved trees.

See also Weeping Trees.
BILSTED. See Sweet Gum.
BOX ELDER. See Ash-leaved Maple.
BUCKEYE. See Horse-chestnut.

BUTTONWOOD. See Sycamore.

CATALPA. Catalpa

C. Bungei (Umbrella Catalpa.) Grafted on stems 6 to 8 feet high, it makes an umbrella-shaped top without pruning. Perfectly hardy and flourishes in most all soils and climates. Leaves large, glossy, heart-shaped, deep green, lying like shingles on a roof; always makes a symmetrical head. One of the most unique trees. A valuable acquisition; desirable for lawn, park and cemetery planting.

C. Specosia. One of the most rapid growers. Valuable for timber, fence-posts, railroad ties, etc., possessing wonderful durability. Large, heart-shaped, downy leaves and compounded panicles of white flowers, tinged with violet and dotted with purple and yellow. Very ornamental and useful.

C. Syringaefolia. A native of the South. A rapid-growing, beautiful tree, with very large, heart-shaped leaves and pyramidal clusters of white and purple flowers. Late in July.

C. Teas' Japan Hybrid. Large luxuriant foliage, handsome white flowers with purple dots

C. Teas' Japan Hybrid. Large luxuriant foliage, handsome white flowers with purple dots and a touch of yellow around the throat, with a pleasant, delicate fragrance. A tree in bloom not only produces a magnificent spectacle to the

CATALPA, continued

eye, but also fills the air quite a distance with its agreeagle oder. In rapidity of growth it ri als the most luxuriant trees of temperate climates.

CHERRY, Cerasus

Double-flowering (C. alba flore pleno). A tree of medium growth, producing clusters of double white flowers in May. Blooms so profusely as to completely hide the branches from view. 15 to 20 feet high when fully grown.

Rhexi fl. pl. Extra fine, double white-flowered variety. Its pure white flowers resemble small roses, and are freely produced at blossoming season.

Japanese Rose Flowering (C. Japonica rose). A Japanese cherry producing deep rose-pink double flowers early in spring in great profusion. One of the most beautiful. We also have several varieties of Japanese flowering cherries of different colors. These are most desirable acquisitions to any collection.

Dwarf Rocky Mountain. See Shrubs.

Japanese Weeping. See Weeping Trees.

CHESTNUTS. See Nut Trees.

CRAB. Pyrus, or Pyrus Malus

Betchel's Double-flowering (P. floribunda). Makes a medium-sized ornamental tree of great beauty; perfectly hardy; succeeds well in all soils not extremely wet. When in bloom in early spring this tree presents the appearance of being covered with perfectly double, small pink roses of delicious fragrance The only sweet-scented double Crab; blooms quite young. Unlike many other trees, it does not bloom until the leaves are fully developed, which adds greatly to its beauty. Sure to become quite popular as soon as it is well known.

DOGWOOD. Cornus

American White (C. florida). A native tree of fine form and beautiful foliage, growing from 20 to 25 feet high, producing white flowers 3 inches in diameter, early in the spring before the leaves appear, also blooms again in autumn. A very desirable tree. Foliage grayish green, turning red in autumn, making the tree one of the most beautiful of that season. One of the most desirable of ornamental trees.

See also Weeping Trees and Shrubs EMPRESS TREE. See Paulownia.

ELM. Ulmus

American White (*U. Americana*). The noble, spreading, drooping tree of our own woods. One of the grandest and hardiest of park or street trees.

Corkbark (*U. racemosa*). The bark is corky, the tree an upright, fast grower.

English (U. compestris) An erect, lofty tree, with rather small leaves.

Purple-leaved (*U. purpurea*). Erect in growth, with slender branches, densely clothed with dark purplish green foliage.

Camperdown. See Weeping Trees.

FRINGE. Chionanthus

Purple (Rhus cotinus). A much-admired small tree or shrub for its curious fringe or hair-like flowers that cover the whole surface of the plants in midsummer.

White (Chionnthus Virginica.) A small native tree or shrub, with dark glossy leaves and drooping racemes of pure white flowers, having narrow fringe-like petals. Its foliage, as well as its flowers, make it one of the most desirable lawn trees.

GINKGO. See Salisburea.
GOLDEN CHAIN. See Laburnum.
GUM. See Sweet Gum.
HERCULES' CLUB. See Aralia
HICKORY. See Nut Trees.

HONEY LOCUST. Gleditschia

Three-thorned (G. triacanthos). A rapid-growin native tree, with powerful spines and delical efoliage, used especially for hedges.

HORSE-CHESTNUT. Aesculus

Red-flowering (Æ. rubicunda). Not so rapid or so fine a grower as the white; foliage of a deep green and blooms later, with showy red flowers.

Common Horse Chestnut—white flowering (A. Hippocastanum). A very beautiful, well-known tree, with round, dense head, dark green foliage, and in early spring an abundance of erect spikes or panicles of snowy white flowers, slightly marked with red specks.

Ohio Buckeye (Æ. glabra). Has pale green leaves and showy yellow flowers. A fine small tree. A very crooked and irregular grower.



DOGWOOD TREE

JUDAS, or RED BUD. Cercis

American (C. Canadensis). A medium-sized, native ornamental tree, covered with delicate pink flowers before the leaves appear. Heart-shaped, pure green leaves, with glossy surface; flowering about same time as Chinese Magnolia, and planted with them, produce fine effect.

LABURNUM. Cytisus

Golden Chain (C. vulgare.) Bears long, pendent racemes of yellow flowers in June; showy and beautiful. Should be in every lawn.

LARCH, Larix

A tree that should be in every collection, because of its beautiful green foliage, appearing early in the spring. As it is one of the first trees to come into leaf in the spring, it should be planted early. The American Larch is known as Tamarack and Hackmatack. We list only the following:

European (L Europæa). An excellent, upright, rapid-growing, pyramidal-shaped tree, with drooping, slender branches; foliage light green, soft and graceful in the spring, turning to golden yellow in the autumn before falling. Unlike most conifers, it is deciduous after the first year; perfectly hardy and thrives in nearly all situations. Makes a very handsome specimen for ornamental planting and is very valuable for timber.

LINDEN. Tilia

Close, dense-headed, rapid-growing tree; excellent for shade, doing well in nearly all situations; well adapted to street, park and large lawns. Should be planted much more freely than they are.

American or Basswood (T. Americana). A rapid-growing, beautiful native tree, with very large leaves and fragrant flowers.

European (T. Europæa). A very fine pyramid-



WHITE FRINGE BUSH (see page 54)

al tree, with large leaves and fragrant flowers. A valuable tree for street and lawn planting, developing into beautiful specimens.

White or Silver-leafed (*T. argentea*). A handsome, vigorous-growing tree; pyramidal form; large leaves, whitish on the under side, and having a beautiful appearance when ruffled by the wind, its white color making it conspicuous among other trees. Blossoms very fragrant.

LIQUIDAMBAR. See Sweet Gum.

LOCUST, or False-Acacia. Robinia

Black (R. pseud-acacia). 50 to 80 ft. Tree with feathery foliage and drooping racemes of very fragrant, pea-shaped flowers. Cut back when transplanting. This is the tree producing the "posts" and "pins" of commerce.

Rose, or Moss (R. hispida). A native species, of spreading, irregular growth; very long, elegant clusters of pea-shaped, rose-colored flowers in June, and at intervals through the season. Compound foliage of a pleasing shade of light green.

LOCUST, HONEY (Gleditschia). See page 54. MACLURA. See Osage Orange.

MAGNOLÍA, NATIVE SORTS

It would be difficult to overpraise Magnolias; they make beautiful trees for ornamental planting, and the Acuminata and Tripetela are also valuable as street and avenue trees. The leaves are large, dark green; the flowers white or yellow white, and most of them sweet-scented. Nearly all bear large and conspicuous fruit-pods, Tripetela being especially handsome in this respect. They should be transplanted in the spring and closely pruned. Figures indicate size of grown tree.

M. Acuminata (Cucumber Tree). 60 to 70 ft. A beautiful pyramidal-growing native species, with large, glossy leaves; flowers yellow, tinted with bluish purple.

M. Tripitala (Umbrella Tree). Named from the whorled arrangement of its great, glossy leaves. The white flowers, also of great size, open in June and are followed by rose-colored fruit cones. Tree grows about 40 feet.

CHINESE AND JAPANESE MAGNOLIAS

The Chinese and Japanese are not so large-growing as the native ones, their maximum height being about 20 to 30 feet. They can be trimmed up to a single stem—tree form—or allowed to grow bushy as shrubs, in which form they could be kept to any desired height.

M. Conspicua (Chinese White). A beautiful Chinese variety, with large white flowers that appear before the leaves. Tree medium size, shrub like in growth when young, but attains size of tree in time.

M. Purpurea (obovata). 6 to 10 ft. Bushy growth; flowers purple, after many others are over.

M. Soulangeana. 15 to 20 ft. Perhaps the most popular of all Magnolias, being of vigorous growth, and blooming profusely, even when quite small. The flowers are large, pink on the outside of petals and white inside. In average

CHINESE AND JAPANESE MAGNOLIAS, continued

seasons the flowers open in the third week in April. It can be grown as a small tree or large shrub.

M. Stellata (Halleana). Hall's Japan, 5 to 6 ft. A dwarf, bush-growing, most valuable species. The flowers are white, tinted with pink in the bud, semi-double, fragrant, and appear as early as April 15. The earliest of all to flower. It is one of the best for massing, as well as for a specimen shrub.

MAIDENHAIR. See Salisburea.

MAPLE. Acer

Silver Variegated (A. argenteo-variegatum) This we consider one of the most attractive ornamental trees grown; so much of the leaf is variegated that at a short distance it has the appearance of the whole leaf being a silver-white. The tree is as hardy as the ash-leaved, and like it inclined to be a crooked grower when young. A specimen should be in every lawn.

Ash-leaved (Box Elder, or Manitoba Maple; A. Negundo). A fine, rapid-growing variety, with handsome, light green pinnated foliage and spreading head; very hardy; desirable for street planting, and succeeds in many sections where other varieties do not thrive.

Golden Variegated. Foliage golden yellow; tree very hardy and attractive.

Norway (A. platanoides). A native of Europe. Its large, compact habit, broad, deep green shining foliage, and its stout, vigorous growth, render it one of the most desirable species for streets, parks and lawns; rather a rough, crooked grower when young, but soon develops into straight, magnificent specimens.

Oregon (A. macrophyllum). A most graceful tree, with wide-spreading branches and large foliage. Very rapid growth.

Purple-leaved Sycamore (A. pseudo-platanus purpureum). Leaves deep green on upper surface, purplish red beneath, producing a beautiful color effect when leaves are in motion. Tree of robust habit; fine for lawns for grouping with other foliage trees.

Red, or Scarlet (A. rubrum). A native species of medium size and rounded head; produces deep red blossoms, which appear before the leaves. In autumn the foliage changes to a brilliant scarlet.

Schwedler's (A. Schwedleri). A beautiful variety, with young shoots and leaves of a bright purplish and crimson color, which changes to purplish green in the older leaves. A distinct and handsome sort.

Silver-leaved or Soft (A. dasy-crapum). A well-known native tree of rapid growth, large size and irregular rounded form; foliage bright green above and silvery white beneath; tree very hardy and easily transplanted. One of

the most useful trees.

Sugar or Rock (A. saccharinam). A popular American tree of excellent pyramidal form. Its upright habit of growth, dense shade and adaptability to different soils have rendered it one of the most extensively used. Valuable for sugar or timber, as well as ornament and shade.

Sycamore (A. Pseudo-platanus). A noble variety, with spacious head and large, deep green foliage; a rapid, upright, free grower; desirable for shade.

Wier's Cut-leaved Silver (A. Wierii laciniatum) This is one of the most remarkable and beautiful trees with cut or dissected foliage yet offered. Its growth is rapid; shoots slender and drooping, giving it a habit almost as graceful as the cut-leaved birch. The foliage is abundant, silvery underneath, and on the young wood especially deeply and delicately cut.

JAPANESE MAPLES

The Japanese Maples are becoming more popular as they become better known. They are all of dwarf habit and are varied in their foilage. They are also shrub-like in growth, and many of them of such rich, bright hues and deep-cut leaves that we class them by themselves. On account of these characteristics they are much used for forming permanent beds, but are very effective whether planted singly or in groups. In groups they can be planted 4 to 6 feet apart. Though succeeding in sun, they prefer light shade at midday. The bright-hued leaves make a fine display, and the blood-leaved (Atropurpureum), Aureum and Purple cut-leaf are especially in demand. We include only those we can especially recommend.

Blood-Red Japan (A. polymorphum sanguin eum). The brightest and most constant in color of the red-leaved sorts and one of the most popular.

Dark Purple-leaved (A. polymorphum atropurpureum). Forms a bushy shrub. Foliage dark purple and deeply cut; very ornamental. The hardiest and altogether the best of the Japan Maples. One of the choicest small trees or shrubs. 12 to 15 ft.



JAPANESE MAPLE

JAPANESE MAPLES, continued

Golden Japan (A. palmatumaureum). The leaves retain their light yellow color with little variation throughout the summer. One of the very best and most effective in a group. 8 to 10 ft. when grown.

Cut-leaved Purple (A. polymorphum dissectum atropurpurea). One of the most striking and hardsome varieties of the Japan Maples. Form dwarf and weeping. The leaves are of a beautiful rose-color when young and change to a deep and constant purple as they become older. They are also deeply and delicately cut, giving them an elegant fern-like appearance. 5 to 7 ft. when grown.

Green Japanese (A. polymorphum). The blood-leaved variety has drawn deserved attention away from this beautiful plant. The most vigorous of the type. Forms a small shrubby tree with various shades of color in the young growth; foliage small, deeply lobed, coppery green, changing to the most brilliant and gorgeous tints in autumn. It is the parent form of many of the Japanese Maples. For planting singly on a lawn it is most handsome, its feathery green leaves making its appearance distinct from that of any other shrub-like tree. 12 to 15 feet.

MOUNTAIN ASH. Pyrus Sorbus

Very ornamental, especially when covered with bright scarlet berries.

American (P. Americana). A favorite, erectgrowing tree of medium size, producing white flowers early in spring, followed by clusters of bright scarlet berries, which remain on the tree through the winter months.

European (P. aucuparia). Similar in appear-



OREGON MAPLE (see page 57)



MAGNOLIA see (page 56)

ance to the above, with finer foliage and smaller deeper colored berries, much more desirable than the American and everywhere very popular. Erect stem, smooth bark, head dense and regular. When fully grown 20 to 35 ft.

Oak-leaved (P. quercifolia). A very distinct and desirable tree, with compact, pyramidal head and dark lobed leaves, downy underneath producing the same flowers and berries as the preceding. Very hardy and desirable for planting on lawns or in dooryards. When fully grown, 20 to 25 feet.

See also Weeping Trees
MULBERRY. See page 48, also Weeping Trees.

OAK. Quercus

Pin (Q. palustris). The Pin Oak is undoubtedly the most valuable variety for all practical purposes. The foliage is dense, firmly divided, of a beautiful shining green that colors to sparking red and yellow in fall. The tree is easily transplanted and grows well on wet and dry ground, is, in fact, the quickest growing of all the oaks. As an avenue and street tree it is unequaled, and is one of the best for park planting.

Red (Q. rubra). A very well known rapidgrowing native species. The leaves are large and bright green and take on a purplish scarlet hue in the fall. It becomes of large size, with a round and spreading head. One of the best sorts for street, avenue and ornamental purposes.

OSAGE ORANGE. Maclura aurantiaca

A native tree of medium size and spreading habit. Leaves bright shining green, broad and sharp-pointed. Fruit resembles an orange. One of the very best defensive hedges. It is of vigorous habit and rapid, dense growth and when properly trimmed makes a very effective hedge and is also ornamental.



Avenue of Carolina Poplar

PAULOWNIA. Paulownia

Empress Tree (P. imperialis). A magnificent tropical-looking tree from Japan. Of extremely rapid growth and surpassing all others in size of leaves, which are 12 to 14 inches in diameter. Blossoms trumpet-shaped, formed in large, upright panicles in May. Quite hardy here, but the flower buds are apt to be killed during severe winter.

PEACH

Blood-leaf. Leaves blood-red; one of the finest colored leaf ornamentals. In the spring it is covered with blossoms. It also bears good white fruit. Will do well any place where Peaches will grow.

PLANE TREE. See Sycamore. PLATANUS. See Sycamore.

POPLAR. Populus

Balm of Gilead (P. candicans Ontariensis). A native species of remarkably rapid, luxuriant growth, with large glossy foliage.

Bolles' (P. Bolleana). New, of pyramidal form; leaves dark green on upper side, brilliant silver beneath; very beautiful. A valuable tree for grouping on the lawn.

Carolina (P. monolifera Carolinensis). One of, if not the most rapid-growing trees, with large, handsome, glossy, serrated, deep green leaves. Succeeds everywhere; especially adaped to large cities, where it makes unusually fast growth, and resists smoke and gas. Pyramidal form, making a spreading head and dense shade when properly trimmed. New growth should be well cut back in spring for the first few seasons. It is unexcelled for quick growth and effect; makes a splendid wind-break or screen; is used in larger numbers than any other one tree for street planting. For new places and streets

where the slower-growing ornamentals are desired, plant the Poplars between, securing an almost immediate effect, removing them as the other trees attain size.

Lombardy (P fastigiata). A well known, tall, erect-growing tree of rapid growth and spire-like outline; very essential in landscape gardening to give variety of form and destroy the appearance of sameness produced by other trees.

Silver-leaved (P. alba). A tree of wonderfully rapid growth and spreading habit; leaves large, dark, rich green above and white as snow beneath.

See also Weeping Trees.

PRUNUS. Plum

P. Pissardi (Purple-leaf Plum). A new shrub of Persian origin. The tree is a decided contrast in itself. The leaves, as they first appear on the tips, are a beautiful orange color, and they mature to a rich purple, clear and distinct, growing darker as the season advances. The leaves remain until late in the fall—a decided contrast to other shrubs. Its beautiful, shining bark and its pink flowers and bright red fruit altogether make it the most rich and beautiful ornamental tree possible. It is remarkably hardy; a very rapid grower, compact, symmetrical in proportion, and attains about the size of the peach.

P. Triloba (Double-flowering Plum). A very desirable shrub, introduced from Japan. Flowers semi-double, of delicate pink, upward of an inch in diameter, thickly set. Hardy; flowers in May.

RED BUD. See Judas tree.

SALISBUREA. Maidenhair, or Ginkgo

S. Adiantifolia. A Japanese tree of large size and columnar growth. When full-grown it is more spreading. The leaves resemble those of

SALISBUREA, continued

the Maidenhair Fern. A valuable, ornamental tree, and useful for street and avenue planting. If pruned several times when young it will make a round, compact-headed tree. It seems to thrive well along sidewalks in the city, and to be generally free from insects and diseases.

SWEET GUM or BILSTED

(Liquidambar styraciflua)

One of the finest American trees. Of medium size and moderate growth; round-headed or tapering form; leaves resemble somewhat those of the maple, but are star-shaped and of a beautiful glossy green color in summer, turning to a deep purplish crimson in autumn; in this respect it is equal to the Sour Gum; bark corky. Beautiful in all stages of growth, it is particularly handsome and striking in autumn. It thrives in low, damp places, though growing equally well in higher ground. A beautiful tree for street and avenue planting. Prune closely when transplanted.

SYCAMORE. Platanus

American Plane, Sycamore, or Buttonwood (P. occidentalis). A well-known, tall, rapid-growing native tree; leaves large, heart-shaped at the base; the lobes sharp-pointed.

European (P. orientalis). Oriental Plane. A lofty, wide-spreading tree; heart-shaped leaves, more deeply cut than above species; valuable for its handsome foliage and free growth; not so subject to disease as our native species. Entirely free from worms and insects. One of the oldest cultivated trees known.

THORN. Crataegus

Double Scarlet (C. coccinea fl. pl.). Flowers

deep crimson, with scarlet shade; very double, and considered larger than the double red; fine rich foliage.

Double White $(C. \ alba \ fl. \ pl.)$. Has small, double, white flowers.

Paul's Double Scarlet (C. coccinea fl. pl. Paulii). Flowers large, deep carmine-scarlet. Superior to any other variety.

TREE OF HEAVEN. See Ailanthus.

TULIP TREE or WHITEWOOD

Liriodendron

Liriodendron tulipifera. Magnificent native tree, of very rapid growth; broad, glossy and fiddle-shaped leaves. It is valuable for its clean smooth bark and handsome green foliage. The flowers appear the first week in June. They are large, greenish yellow, blotched orange, and have the shape of a tulip. It makes a very desirable tree for street planting, thriving in low as well as high ground. Plant only in spring and prune very closely. Allied to the Magnolias, and, like them, difficult to transplant, unless of small size.

WALNUT. See page 48.

WHITEWOOD. See Tulip Tree.

WILLOW. Salix

Golden (S. vitellina). This is valued very much for its bright, golden-barked twigs in the winter season, for the effect of which it is much planted. It is especially showy when planted in large groups. To produce the best results, it should be severely trimmed every winter to induce a quantity of strong young growths.

See also Weeping, page 62.



WEEPING, DROOPING or PENDULOUS TREES

Much attention is now given to this class of trees, and we place them separately for the convenience of our patrons. The superior grace and beauty of the weeping varieties render them especially adapted to yard, lawn or cemetery. No collection is complete without them; among ornamentals they have no superior.

For the benefit of those unacquainted with their habits or manner of growth, we would divide them into two classes:

- (A)—Those which are grafted where the top or head commences to form, which assume that conspicuous, umbrella-like form so well known, as in the Camperdown Elm, and are especially adapted to planting in small lawns or cemeteries, as well as producing beautiful effects in parks among the larger trees.
- (B)—Those having long, slender branches, which droop naturally, like the Cut-leaved Birch and Babylonica Willow, having tall-growing trunks, with long, slender branches. They are best adapted to parks, streets or the larger lawns. Where they can be given sufficient room, the elegance, grace and beauty of their branches, at rest or in motion, are so apparent that they have few, if any, superiors among ornamental trees.

In our list will be found all the choicest varieties, which we deem particularly attractive. Customers, however, will be saved from disappointment if they will realize that it is impossible to deliver them from the nursery with the graceful form to which they will attain with age. This could no more be done than to deliver fruit trees loaded with fruit.

BEECH. Fagus

F. sylvatica pendula. A remarkably vigorous, picturesque tree of large size. Its mode of growth is extremely curious. The trunk or stem is generally straight, with the branches tortuous and spreading; quite ungainly in appearance divested of their leaves, but, when covered with rich luxuriant foliage, of wonderful grace and beauty.

BIRCH. Betula

Cut-leaved (B. laciniata pendula). Probably the most popular and desirable lawn tree in existence, and produces a beautiful effect on streets and avenues. Makes a vigorous growth and is perfectly hardy. Trunk straight, slender, and white as snow. The slim side branches droop in a most picturesque manner; foliage delicate and deeply cut, coloring finely in the fall. The drooping branches and silvery bark form a most effective combination during the winter months. Mr. Scott, in his "Suburban Home Grounds," says of it: "No engraving can do it justice; like the palm tree of the tropics, it must be seen in motion, swaying in the lightest breeze, its leaves trembling in the heated summer air, its white bark glistening through the bright foliage and sparkling in the sun, to enable us to form a true impression of its character."

Young's Weeping (B. pendula Youngii). Originated near Milford, Eng., where it was found trailing upon the ground. Grafted into stems of some height, it forms pendulous heads, drooping to the ground in fine, thread-like shoots. Very beautiful.

CHERRY, Cerasus

Japan Weeping Rose-flower (C. Japonica pendula rosea). Brought from Japan by Van Siebold, and is certainly one of the finest weeping trees for lawns and small grounds. The branches are slender and, when grafted on tall stems, fall gracefully to the ground. The flowers are

rose-colored, appearing before the leaves. The finest weeping Cherry, and one of the finest weeping trees in cultivation.

Japan Weeping, White (C. Japonica pendula alba). Feathery and graceful; flowers single, white; fruit red. One of the finest of the small-headed pendent Cherries. Resembles the Pumila Pendula somewhat, but much more feathery and graceful.

ELM. Ulmus

Camperdown Weeping (*U. pendula*). A vigorous grower, and forms one of the most picturesque drooping trees. Leaves large, dark green and glossy, and cover the trees with a luxuriant mass of verdure; very desirable.

MOUNTAIN ASH. Sorbus

Weeping (S. Aucuparia pendula). A beautiful tree, with straggling, weeping branches; makes a fine tree for the lawn; suitable for covering arbors.

MULBERRY. Morus

Teas' Weeping Russian (M. Tatarica pendula). A weeping variety of the now well-known Russian Mulberry. One of the most graceful and hardy weeping trees in existence. Wholly unlike anything heretofore introduced. Forms a perfect umbrella-shaped head, with long, slender, willowy branches drooping to the ground. All who have seen it agree that in light, airy gracefulness, delicacy of form and motion, it is without a rival. It has beautiful foliage; is wonderfully vigorous and healthy; is one of the hardiest, enduring the cold of the North and the heat of the South; safe and easy to transplant. Admirably adapted for ornamenting small or large grounds, or for cemetery planting. A very happy use of it lately seen was in the form of a canopy or tent, making a most pleasant play-house for children, who set their table and enjoyed themselves in the cool shade of its foilage.

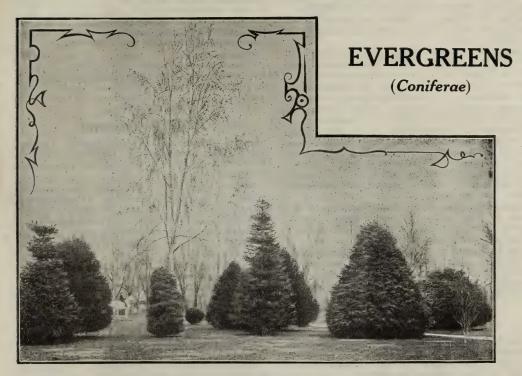
MAPLE. Wier's Cut-Leaf. See page 57.

WILLOW, Salix

American Weeping (S. purpurea pendula). An American dwarf slender-branched species; grafted 5 or 6 feet high, it makes one of the most ornamental of small weeping trees; more hardy than the Babylonica.

Babylonica, or Common Weeping (S. Babylonica). The well-known common Weeping Willow. A large tree covered with drooping branchlets.

Kilmarnock (S. Caprea pendula). A distinct variety, having reddish shoots and large, glossy foliage; grafted at a proper height, about 5 feet from the ground, it makes a very desirable small lawn tree, having a perfect umbrella-shaped head, with the branches drooping gracefully to the ground. It is well suited for planting in cemetery lots or other small enclosures. Extensively planted, and should be in every collection of ornamental shrubbery. Hardy and vigorous growth.



Evergreens are very desirable, as they retain their foliage throughout the winter, and are now everywhere appreciated as indispensable for variety, giving color and effect to lawn or land-scape, and adding to the tone, warmth and verdure, especially in winter. The constant green of the coniferace is the quality most valuable in them; the prevailing color which they give to their surroundings is deep-toned, but if the bright-leaved sorts, now plentiful, are planted among the somber ones, they greatly enliven the effect. They are also very desirable for hedges, shelters or windbreaks, or for screening undesirable objects.

They should be judiciously planted in small lawns as well as large and should be given sufficient room to fully develop. The sap of most evergreens, being of a resinous nature, is not so active in early spring as that of deciduous trees, and, as a rule, all evergreens and coniferous trees succeed better planted later in spring and earlier in autumn than deciduous trees. The latter part of April or during May and latter part of summer, say August, are the best times in ordinary seasons for transplanting in this latitude. August planting is not recommended, however, unless the season be favorable.

ARAUCARIA

Imbricate (Chili Pine, or Monkey Puzzle). A fine tree of regular pyramidal form. Leaves bright green, broad, thick, pointed and overlapping each other.

ARBORVITAE. Thuya, or Thuja

American (T. occidentalis). This is one of the very finest evergreens for hedges. It is very hardy and, if set at the proper time with care and without undue exposure, it may be relied

ARBORVITAE, continued

upon to live: but small plants 12 to 18 inches high, which have been transplanted several times, are preferable. It bears shearing better than any other variety and may be made a very beautiful and dense hedge or screen to divide grounds or for any purpose where it is not required to resist cattle or other animals.

Chinese (Biota orientalis). Of upright growth, slender and bright green foliage. Growth is flat on twigs, arranged mostly vertically.

Compact, Parsons' (T. compacta) Foliage bright light green; habit dwarf and compact.

Globe (T globosa). Forms a natural evergreen globe or ball without any trimming; very pretty and hardy.

Golden (*T. aurea*). Free grower with fine golden yellow foliage; hardy. The most desirable Golden Arborvitae for the northern states.

Hovey's Golden (T. Hoveyi). A seedling from the American. A perfectly hardy, distinct, compact variety; leaves a bright green. A beautiful object either singly or in hedge.

Pyramidni (T. pyramidalis). This exceedingly beautiful Arborvitae is the most compact and erect of all the entire species, being in form almost a counterpart of the Irish Juniper. Foliage a deep green, retaining its color remarkably well through the entire season and perfectly hardy.

Siberian (T. Sibirica). One of the best of the genus of this country. Exceedingly hardy, keeping color well into winter; growth compact and pyramidal; makes an elegant lawn tree.

Tom Thumb (T. Tom Thumb). A dwarf variety of the American Arbor Vitae, which originated on grounds of Ellwanger & Barry. It is remarkable for its slow growth and compact symmetrical habit.

CALIFORNIA BIG TREE (Sequoia gigantea)

The famous Big Tree of California. It makes a handsome pyramid when young. Very desirable for lawn decoration; a very attractive evergreen. Thrives well in this climate.

CEDAR. Cedrus

Himalayan, or Indian (C. Deodara). The Great Cedar of the Himalayan Mountains. Exceedingly handsome, with drooping branches and silvery green foliage; branches feathery and spreading, forming a dense network. The finest, most rapid-growing of all Cedars, and worthy of a place in every garden.

CYPRESS. Cupressus

Lawson's (Chamaecyparis Lawsoniana, or False Cypress, also as Cupressus Lawsoniana). A fine evergreen, native of the Pacific coast. One of the most graceful and beautiful of evergreens; of fine, compact habit; delicate feathery foliage, varying from vivid green to a silvery or bluish tint, according to sub-varieties. 30 to 40 ft.

CRYPTOMERIA. Cedar

Cryptomeria Japonica (Japan Cedar). A beautiful evergreen with delicate foliage and graceful habit. The color changes to a bronze or red-

dish brown in the fall, producing a pleasing contrast. When young resembles Araucaria excelsa. In time becomes a large pyrimidal tree, with straight slender trunk, covered with reddish brown bark, with whorled spreading branches. Leaves spirally arranged. A very satisfactory evergreen for this latitude.

FIR. Abies

Colorado Silver (A. concolor). A stately and beautiful variety. One of the finest of Rocky Mountain evergreens. Graceful habit, broad, handsome foliage, bluish above, silvery beneath. A fairly rapid grower and a very desirable variety for the lawn. Extremely hardy and a fit companion for the Colorado Blue Spruce. Withstands heat and drought the best of Firs.

Silver, or Grand (A. grandis). A large stately tree of pyramidal growth; leaves thin, flexible deeply grooved, very dark green above and silvery white beneath. A native of the Pacific coast.

See also Spruce.

JUNIPER. Juniperus

Golden Variegated (J. aurea variegata). Pyramidal in form, somewhat like the Red Cedar, but the growth is much finer. Golden variegation throughout the year.

Irish (J. Hibernica). Very erect and tapering in its growth, forming a column of deep green foliage. A pretty little tree or shrub, and for its beauty and hardiness is a general favorite.

Golden Japan (J. Japonica aurea). Foliage beautiful golden, of splendid dwarf form and spreading habit.

Swedish (J. Suecica). Similar to the Irish, though not so erect, with yellowish green foliage, of somewhat lighter color, forming a beautiful pyramidal small tree.

Red Cedar (J. Virginica). A well-known American tree, with deep green foliage; makes a fine ornamental hedge.

PINE. Pinus

Austrian, or Black (P. Austriaca). A remarkably robust, hardy, spreading tree; leaves long, stiff and dark green; growth rapid. Valuable for this country.

Mugho, Dwarf Mountain Pine (P. Mughus, or Montana). Of compact, spreading growth; it keeps below 4 feet in height for many years. Does not grow tall, but spreads over the ground, generally assuming a globular form; very dense. Ornamental and hardy.

Scotch (*P. sylvestris*). A fine, robust, rapid-growing tree, with stout, erect shoots and silver-green foliage.

White (P. strobus). The most ornamental of all our native Pines; foliage light, delicate, or silvery green. Flourishes in the poorest soils. Hardy and valuable.

PODOCARPUS. See Yew. RED CEDAR. See Juniper.

RETINOSPORA

Japanese Cypress, Retinospora, or Chamaecyparis

A genus very similar to Cupressus. It comprises many varieties of wonderful beauty.

RETINOSPORA, continued

Botanists class all varieties under two species—Obtusa and Pisifera, but originating in Japan it is almost impossible to say for certain to which a variety belongs, and following most other nurserymen we list under the names as we received them. R. plumosa, R. ericoides, R. filifera, R. squarrosa, generally considered as forms of R. pisifera, also spelled Retinospora. They are very desirable for planting in groups, as they are of medium size. In the far north they must be protected in winter.

Ericoides. A dense, broadly pyramidal or round-headed bush, with upright branches and dull green foliage, changing to brownish green in winter. Leaves linear, soft, grayish green beneath. Very ornamental.

Filifera. Upright leader, main branches nearly horizontal, smaller branches of a graceful and weeping habit. One of the showiest.

Filifera aurea. A golden form of the preceding.

Obtusa. A free growing evergreen, of bright green foliage.

Pisifera. An evergreen of tree-like character when matured. The underside of foliage is silvery.

Plumosa. An exceedingly handsome, small evergreen from Japan, with feathery, light green foliage.

Plumosa aurea. Like the preceding, a plant of great beauty; foliage soft, plume-like, of a golden color; close and compact habit; should be in every amateur collection.

Squarrosa. This valued sort has steel-colored foliage and makes a tufty, compact growth. It



LAWSON CYPRESS (see page 63)

grows to a large size, but by pruning can be kept down to almost any size, as, in fact, can all Retinosporas.

SEQUOIA. See California Big Tree.

SPRUCE. Picea

The names Abies for Fir and Picea for Spruce are used just oppositely by different authors, Linnaeus employing Abies for Spruce and Picea for Fir. We have followed Gray, Bailey and most of the later botanists, who use the name the same as the ancients.

Colorado Blue. (P. pungens). A rare, elegant tree, with foliage of rich blue. One of the most distinct and striking of all the Spruce family. This variety of Spruce was found in the Rocky Mountains, and has always given the best satisfaction wherever planted. Considered as one of the most beautiful of all evergreens. A free grower; perfectly hardy.

Douglas (P. Douglasii or Pseudotsuga Douglasii). Indigenous to Colorado. Of quite rapid growth and conical form; foliage delicate green, glaucous underneath; hardy and easily grown. See, also, Abies.

Norway (P. excelsa). A lofty, elegant tree, of perfect, pyramidal habit, remarkably elegant and rich, and as it gets age, has fine, graceful, pendulous branches; it is exceedingly picturesque and beautiful. Very popular, and should be largely planted. One of the best evergreens for hedges.

YEW. Taxus

English (T. baccata). A large bush or tree, 30 to 40 feet when fully grown. It is densely branched and can be trimmed into any shape.

Erect English (T. erecta). A very fine pyramidal variety of the English Yew, with dark green foliage. Hardy and desirable.

Elegantissima. One of the most valuable golden-leaved evergreens which we have. In June and July the leaves of the new growth are of a bright straw-color, rendering the plant highly effective, either by itself or in connection with other conifers. One of the hardiest of the Yews.

Irish (T. Hibernica). Of tall, slim growth and beautiful dark green foliage; it is of great use to planters. As with all Yews, it winters better when shaded from the sun during the cold months of winter.

PODOCARPUS

Japan Yews (P. Japonica). A peculiar, charming, erect tree from Japan, hardier and denser than the Irish Yew, eminently fitting it for cemetery purposes.



UPRIGHT DECIDUOUS SHRUBS

No yard is complete without one or more beautiful flowering shrubs, and we would urge a more extensive planting of this class of ornamentals covering such a wide range in flower and foliage, habit of growth and season of blossoming. Requiring but small space, they can be used on lawns to fill vacancies, where large trees could not be harmoniously grown, breaking the motony of the land-scape by grouping or distributing singly according to size of grounds and scenic effect.

ALTHAEA. Hibiscus Syriacus

Rose of Sharon. One of the most showy and beautiful shrubs. Flowers large, double, of many brilliant colors. Blooms freely in August and September when few other trees or shrubs are in blossom.

Double Red (H. rubra flore pleno).

Double Purple (H. purpurea flore pleno).

Double White (H. alba flore pleno).

Variegated Leaf (H. variegata flore pleno).

ALMOND. Prunus

Double Rose-flowering ($P.\ Japonica\ rubra\ fl.\ pl$). A beautiful small shrub, bearing in May before the leaves appear, small, double rose-like flowers, closely set upon the twigs.

Double White-flowering (P. Japonica alba fl. pl.) Produces beautiful white flowers in May.

AZALEA Azalea, or Rhododendron Sinense

Mollis. Showy, hardy plants, used extensively in parks and public grounds. The brilliancy of their flowers is not approached by anything in the line of hard shrubs. Excellent for the front of borders or clumps of taller growing shrubs.

BARBERRY. Berberis

Used as a hedge-plant quite extensively. Their showy orange and yellow flowers in May and June are followed by bright and various-colored fruits, making them especially showy in autumn and winter.

Purple-leaved (B. purpurea). Foliage and fruit of violet-purple color, very striking; fine for single specimens; also a desirable ornamental hedge-plant, planted by itself or intermingled with the common.

Thunbergii. A very pretty variety from Japan; of dwarf, graceful habit; foliage small, changing to beautiful bright red early in fall; very showy.

BLUE SPIREA. See Verbena Shrub.

CALYCANTHUS

Sweet-Scented Shrub, or Carolina Allspice

Floridus (Sweet-scented Shrub). The wood is fragrant; foliage rich; flowers are of chocolate color, having a peculiarly agreeable odor. The flowers appear in June and at intervals afterward. Very popular.

CAMELLIA

A very desirable evergreen shrub which comes from Japan. Suitable for either lawn or pot culture. In appearance it is somewhat similar to the Rhododendron, having smooth, glossy, dark green leaves. The flowers appear early in the spring (in the Willamette Valley about the

middle to the close of March), and look like a medium-sized full-blown rose. We carry in stock three colors—Red, White and Pink.

CORAL BERRY. See Snowberry. CORNUS. See Dogwood, page 54.

CHERRY. Cerasus

Dwarf Rocky Mountain. From the mountains of Colorado. Hardy as a Wyoming sage-bush. With its deep green, willow-like leaves, mass of pure white flowers in spring and a load of fruit in summer, it is well worth cultivation for an ornamental shrub. Makes a bush 4 or 5 feet high, usually fruiting in two years, producing large quantities of jet-black fruit about the size of English Morello, and ripening after all other Cherries are gone. See also, pages 54 and 60.

CORCHORUS. Kerria Japonica

A graceful, slender shrub, growing 4 to 5 feet high, covered with double yellow flowers from early summer till fall. As pretty as a rose in shape of flower and makes a very ornamental plant for the lawn.

CURRANT. Ribes

Crimson-flowering (R. sanguineum). Produces an abundance of crimson flowers in early spring.

Yellow-flowering (R. aureum). A native species with yellow flowers.

CYDONIA. See Quince, Japan.

DEUTZIA. Deutzia

This valuable species comes to us from Japan. Their hardiness, luxuriant foliage and profusion of attractive flowers, render them deservedly among the most popular of flowering shrubs. The flowers are produced in June, in racemes 4 to 6 inches long.

Abel Carriere (D. Hortensis Abel Carriere.) Bright rose-carmine; a choice sort. One of the best.

Double-flowering (*D. crenata flore pleno*.) Flowers double, white, tinged with rose. One of the most desirable flowering shrubs in cultivation.

Slender-branched (D. gracilis). A very desirable dwarf-growing variety. Flowers pure white. A valuable plant for winter blooming.

Lemoine's (D. Lemoinei). Single white. A hardy hybrid, partaking to a great extent of the character of Gracilis, but of a stronger growth. Good for forcing.

Pride of Rochester. A new variety said to excel all others in size of the double white flower, length of panicle, profusion of bloom and vigorous habit. A charming acquisition, produced from the Crenata.

Watereri. A grand new variety with very large double white flowers, borne in large, loose racemes. Robust grower and very hardy.

DOGWOOD. Cornus

Red-branched (C. sanguinea). A native species, very conspicuous and ornamental in the winter, when the bark is a blood-red.

Sanguinea, var. elegantissima variegated. One of the finest variegated shrubs; of rapid growth. The leaves are broadly margined with white; bark bright red in winter.

See also page 54

ELAEAGNUS

Japanese Silver Thorn, or Oleaster (E. longipes). A remarkable new shrub from Japan. Foliage glossy, silvery tinge underneath; bark covered with peculiar brown spots which remain all winter. Flowers not large but the bush is covered in July with large bright red berries, which are edible and of a sprightly and agreeable flavor. Foliage remains good until late in autumn. A very desirable acquisition.

ELDER. Sambucus

Golden (S. aurea). From Holland. New and rare. When the leaves first appear they are bright green, but, if planted where they will have plenty of sun, they soon change to a golden green. The blossom, which resembles the common Elder blossom, appears in July. The best effect is produced when they are planted with other shrubs, thus rendering the foliage more conspicuous by the contrast.

EXOCHORDA

Pearl Bush (E. grandiflora). A vigorous-growing shrub from China, forming a compact bush 10 to 12 feet high; can be trimmed to any desired shape. The flowers are borne in slender racemes of eight to ten florets each, on light and wiry branches that bend beneath their load of bloom, just enough to be graceful. It is perfectly hardy; flowers of a dazzling white. Very

useful for cut-flowers. Thrives in any good soil.

FILBERT. Corylus

Purple-leaved (C. Avellana, var. atropurpurea, or purpurea). A very conspicuous shrub, with large, dark purple leaves. Soon after the leaves expand they are almost black, but later on fade to a light purple. Valuable for planting in groups of large shrubs to secure color effect. Distinct and fine. See also page 48.

FORSYTHIA. Golden Bell

Viridissima. This is one most frequently found in cultivation. It is of stiffer and more bushlike growth than the others. The flowers are a shade lighter yellow, and open a little later. Leaves a little larger and darker green. Forsythias are among the first to bloom in the spring.

Fortunei. Similar to the above but of more upright growth.

Suspensa (Weeping Forsythia). Of drooping habit, resembling Fortunei in its flowers.

HEDYSARUM MULTIJUGUM

Hardy perennial of recent introduction, of angular, straggling growth, 2 to 5 feet high; very showy and worthy of general culture; flowers all summer, pea-shaped, violet or purplish magneta, with yellow blotches in racemes, 8 to 18 inches long; leaves oval, grayish green. Fine for rockwork.

HONEYSUCKLE, UPRIGHT. Lonicera

Red Tartarian (L. Tatarica rubra). A beautiful flowering shrub, blooms early in spring; flowers bright pink.

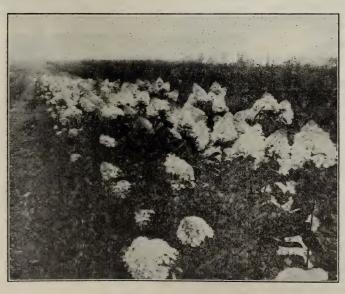
White Tartarian (L. Tatarica alba). Similar to the preceding, with white flowers. See Climbing Honeysuckles, page 71.

HYDRANGEAS

Beautiful free-flowering shrubs, bearing immense panicles or trusses of flowers. Paniculata is perfectly hardy and requires no protection; the other varieties require protection in winter, and should be grown in pots or boxes and wintered in the cellar, except in the warmer sections.

The Japanese flat - headed flowers are the well known pink and blue variety and are worthy of special notice, being so distinctly different from all others. All are perfectly hardy along the seacoast but usually require protection in the winter in cooler section, but are well worth the additional attention. The system of pruning is different, severe winter pruning being avoided, the aim being to preserve the wood, as it is on the old wood that the flowers appear.

Arborescens grandiflora. Also



HYDRANGEAS IN NURSERY ROW

HYDRANGEAS, continued

known as "Hills of Snow," "Snowball Hydrangea" and "American Hydrangea." A magnificent new shrub destined to become one of the most popular hydrangeas. The pure snow white flowers come into full round heads of very large size commencing in May or June according to locality and continuing until August or later—an unusual thing. One of its most valuable characteristics is its coming into bloom just after the passing of all the early spring shrubs, while its long season of bloom renders it doubly valuable to every owner of a garden. Makes a magnificent hedge.

H. paniculata grandiflora. This is one of the most valuable hardy shrubs. It attains a height of 3 to 5 feet, and is perfectly hardy in all parts of the country. The flowers are white, borne in immense panicles nearly a foot in length. It commences flowering in July and continues until November. The plant should be cut back every spring at least one half of last season's growth, as the flowers are borne on new wood and are much finer when the plant is treated in this way. An excellent shrub for cemetery planting.

H.Hortensia Japonica (coerulea). Blue Japanese (dwarf 2 to 3 ft). Flat-heads of flowers which are blue in the center with singular sterile flowers on the margin. Requires winter protection in colder sections.

H. Hortensia Otaksa. Another Japanese variety known by its huge heads of pink or blue flowers as the individual case may be. The color is not constant in either case. Flowers very large, produce freely.

H. Thomas Hogg. This Japanese variety has immense trusses of flowers, at first slightly tinged with green, becoming of the purest white and remaining so a long time.

HYPERICUM. St. John's Wort

H. Moserianum. A grand variety, with large bright golden yellow flowers 2 inches in diameter. A continuous bloomer until cold weather.

INDIAN CURRANT. See Snowberry.

JAPAN SILVER THORN. See Elaeagnus.

JUNEBERRY. Amelanchier.

Improved Dwarf. (A. Canadensis var. oblongifolia). The fruit is borne in clusters, reddish purple in color, changing to bluish black. In flavor it is mild, rich, subacid; excellent as a dessert fruit or canned. It is extremely hardy. In habit it is similar to the currant, the bushes attaining the same size. The blossoms are quite large and composed of fine white petals, which with its bright, glossy dark green foliage, renders it one of the handsomest of ornamental shrubs.

KERRIA. See Corchorus, page 55.

LILAC. Syringa

Well known shrubs that succeed everywhere. Few are aware of the wonderful improvement in the past few years. We offer a choice selection of the best new double varieties, remarkable for their large trusses and beautiful flowers. Should be in every collection.

Common Purple (S. vulgaris). The well-known sort.

Belle de Nancy (Double). Very large; brilliant satiny rose, white toward center. Very fine.

Charles X. A strong, rapid grower, with large shining leaves; large trusses of deep reddish-purple flowers. An old, well known variety.

Common White (S. vulgaris alba).

Josikaea, or Chionanthus-leaved (S. Josikæa). From Transylvania. A fine distinct species, of tree-like growth, with dark, shining leaves and purple flowers in June, after the other lilacs have done.

Madam Ludwig Spaeth. Panicle long; individual flowers large, single dark purplish red, distinct; superb.

Madame Abel Chatenay (Double). Large panicle; double white. Very fine.

President Grevy. A beautiful blue; individual flowers very double and very large, measuring three-quarters of an inch in diameter; the panicle is magnificent and often measures 11 inches in length and 5 inches across. One of the finest Lilacs.

Senator Volland (Double). Flowers rosy red. Persian (S. Persica). Medium size, with small leaves and bright purple flowers.

White Persian. (S. Persica alba). A fine sort, with flowers delicately tinged with rose-color.

MEADOW SWEET. See Spiraea.

MOCK ORANGE. See Syringa Philadelphus.

OLEASTER. See Elaeagnus.

PEARL BUSH. See Exochorda.

PLUM. (Prunus). See under Deciduous Trees.

PRIVET. Ligustrum

The Privet in all its varieties deserve attention as an ornamental plant. It is almost an evergreen, and grows freely in all soils; is com-



LILAC

PRIVET, continued

pact and regular in its form, and bears shearing to any extent. The flowers appear in June and July. Makes fine ornamental single specimens and one of the most desirable hedge-plants; compact, free grower.

Common (L. vulgare) An English shrub with smooth, dark green leaves; showy white flowers; fruit purple. Hardy.

California (L. ovalifolium or L. Japonicum). A vigorous-growing variety, of fine habit, thick, glossy, nearly evergreen leaves. Of all ornamental hedge-plants this is the most highly prized. If cut to the ground one or two years after planting, it makes a very thick hedge right from the bottom, sending up many strong shoots. The leaves are a rich green, and will remain on the plants up to Christmas, and if they are a little sheltered they will keep green almost all winter. This is especially the case if the hedge has attained some age and has frequently been trimmed. Though it is a strong grower, it can be kept to a low size by frequent trimming. Leaves remain on all winter in the Willamette Valley.

QUINCE, JAPAN

Cydonia, or Pyrus Japonica

There are several flowering varieties, differing only in their color. Although of straggling growth, they can be pruned to desirable shapes without injury. Their large, brilliant blossoms appear early in the spring in great profusion; foliage bright green and glossy all through the summer. It is sufficiently thorny and strong to make a valuable hedge, and its beautiful flowers make it very handsome for that purpose.

Scarlet (C. Japonica). One of the best known, and a very handsome, hardy ornamental shrub. Has bright scarlet-crimson flowers in great profusion, early in spring. One of the hardy shrubs; makes a beautiful ornamental hedge.

Blush. A beautiful variety, with white and blush flowers.



JAPANESE SNOWBALL

ROCKY MOUNTAIN CHERRY. See Cherry. ROSE OF SHARON. See Althaea.

SCOTCH BROOM. Genista

G. scoparia, also known as Cytisus scoparia. (Scotch Broom). The branches almost rush-like in appearance, bear lovely yellow flowers.

SILVER BELL, or SNOWDROP TREE. Halesia

H. tetraptera. A fine, large shrub, with beautiful large white, bell-shaped flowers in May. Rare and desirable.

SNOWBALL, Viburnum

Common (V. sterile) A well-known favorite shrub of large size, with globular clusters of pure white flowers in the latter part of May.

V. opulus (High Bush Cranberry). Handsome and dense foliage; flowers white, in drooping flat cymes, followed by brilliant scarlet fruit in showy pendulous branches that remain on the plant all winter.

V. plicatum (Japan Snowball). This Japanese variety of the old-fashioned Snowball is one of the most valuable of our hardy shrubs. It forms an erect, compact shrub, 6 to 8 feet high; blooms in June and for a long time in a solid mass of white, the plants being completely covered from the ground to the top of the branches with large balls of flowers white as snow. The foliage in early summer is an olive-green, turning to very dark green later in the season.

SNOWBERRY. Symphoricarpus

S. vulgaris (Indian Currant, Coral Berry, St. Peter's Wort, or Waxberry). Graceful small shrub; small flowers, followed by persistent deep red berries along the under side of branches.

S. racemosus. A well-known shrub with pink flowers and large white berries that remain on the plant through part of the winter.

SPIRAEA. Meadow Sweet

S. Anthony Waterer. A most beautiful variety of Bumalda. In habit of growth it is the same as its parent. The flowers are crimson in the bud and when first open, fading afterwards to a deep pink. It blooms about the close of June, and, if the flowers are cut off as fast as they commence to decay, there will be a continuance of them throughout the season, to some extent.

S. aurea (Gold-leaved Spirea). Flowers fine, white; foliage of a beautiful golden color, which gives variety to the lawn and renders it very desirable.

S. callosa alba. A white-flowering variety, of dwarf habit; very fine. Remains in flower all summer

S. prunifolia flore pleno (Double-flowering Plumleaved Spirea). Very beautiful; its flowers are like white daisies. From Japan. Blossoms in May.

S. Thunbergii. Profusion of small white flowers in early spring. Forms a rounded, graceful, dwarf bush; branches slender and somewhat drooping.

SPIRAEA, continued

S. Van Houttei. The habit of the plant is pendulous, yet upright, giving a most graceful appearance even when out of bloom. The flowers are pure white and borne in dense clusters along the whole length of the branches, often weighing them to the ground. One of the finest ornamental shrubs that we offer. Excellent as a single lawn plant, or for grouping with other shrubs; also a fine hedge-plant.

ST. JOHN'S WORT. See Hypericum. ST. PETER'S WORT. See Snowberry.

SYRINGA, or MOCK ORANGE

Syringa Philadelphus

Most all the species and varieties of the *Syringa Philadelphus* have white flowers, many of them quite fragrant.

Garland (P. coronarius) A well-known shrub, with pure white, sweet-scented flowers.

Golden-leaved (*P. aurea*). A very pretty plant of medium size, with golden yellow foliage. It retains its color the entire season and is valuable for creating pleasing and striking contrasts with both green and purple-leaved shrubs.

Lemoine's Erect (P. Lemoinei erectus). A charming variety of upright growth; flowers small, yellowish white, fragrant, more clustered than the older sorts, completely covering the bush.

SWEET-SCENTED SHRUB. See Calycanthus.

TAMARIX. Tamarisk

African (T. Africana.) A very beautiful shrub, with very fine, feathery foliage somewhat like the Juniper. This sort has light pink flowers in small racemes, which appear toward the close of May or the first of June. A valuable shrub for near the seashore or in sandy soils where others

do not do so well. They thrive in the very spray of the salt water.

VERBENA SHRUB, or BLUE SPIRAEA

Caryopteris Mastacanthus

A new shrub, which is planted because of its blossoming late in the fall, when but few shrubs are in flower. In the axil of each leafstalk is a bunch of bright blue flowers. It continues in flower from the middle of September until frost. An entire bed of this plant produces a striking effect. 2 to 3 feet high when grown. A valuable plant for bedding.

WAXBERRY. See Snowberry.

WEIGELA. Diervilla

Candida (D. Candida). This is the very best of all the white-flowering Weigalas. A strong, upright, erect grower; flowers pure white and produced in great profusion in June and continue to bloom during the entire summer. One of the most satisfactory of shrubs.

D.Eva Rathke. A very fine variety 3 to 4 feet in height. Rich, deep, scarlet blossoms which follow a week after most other varieties. A beautiful, distinct, clear shade. Sometimes called a brilliant crimson.

Van Houtte. Clear, carmine flowers. Showy and handsome.

Rose-colored (D. rosea.) An elegant shrub, with fine rose-colored leaves. Introduced from China by Mr. Fortune and considered one of the finest plants he has discovered. Quite hardy. Blossoms in May.

Variegated-leaved (D. nana foliis variegata) Leaves bordered with yellowish white, finely marked. Flowers bright pink, and borne in great profusion.



A FIELD OF PÆONIES IN OUR NURSERY

EVERGREEN SHRUBS

This class of shrubs should not be neglected when planting a lawn or park. They fill the same relative position to the flowering shrubs that evergreens (conifers) do to the deciduous trees. Nothing could be more ornamental than a fine bed of rhododendrons.

AUCUBA JAPONICA

Japan Spotted Laurel; Gold Dust Tree

A small, beautiful shrub, with curious goldblotched leaves. Needs protection in winter. We list two varieties.

A. J. maculata, Leaves long and narrow, irregularly toothed. Color deep green.

A. J. lanceolata. A desirable variety with deep green, lance-shaped leaves.

ASHBERRY. See Mahonia.

ADAM'S NEEDLE. See Yucca.

BOX. Buxus

Dwarf (B. nana). Used principally for borders and edgings, for which purpose it is the best plant in cultivation.

Tree (B. sempervirens arborescens). A very desirable small tree in the yard or garden; well adapted to small places; prefers a shady situation. It can be made to assume any form.

B. Variegata. A variety of Tree Box, forming a beautiful small bush, blotched with white.

BURNING BUSH. See Euonymus. CALICO BUSH. See Mountain Laurel.

EUONYMUS

Spindle Tree, Strawberry Tree, or Burning Bush

E. Japonicas radicans variegatas. A neat trailing variety with small, glossy green leaves, broadly margined with white. Valuable for rockwork or borders of beds, also for vases or baskets. This variety is hardy in the North.

GOLD DUST TREE. See Aucuba.

HOLLY. Ilex

American. (I. opaca or I. quercifolia, Meerb). A tree with spreading short branches, sometimes reaching to 50 feet in height, forming a narrow, pyramidal head. Leaves have large remote spiny teeth, rarely entire. Fruit dull scarlet, usually solitary. Hardier than the aquifolium but less handsome.

English or European. (I. aquifolium). A beautiful medium growing evergreen tree, with shining, dark, green leaves with spiny teeth, short, spreading branches, forming an oblong or pyramidal head. In winter it is covered with bright red berries. Much used for Christmas decorations. While in time it will attain a height of 30 to 40 feet, it is slow growing and usually classed as a shrub or small tree.

Pyramidalis. (I. aquifolium pyramidalis)
Pyramidal or sometimes known as "Dutch" Holly. A variety of the European Holly with many of the leaves spineless. Grows to a more pyramidal form than the "English." Berries grow more in clusters and the berries are borne in large quantities at a much earlier age. A fine decorative variety.

Golden Variegated (I. aquifolium golden variegated). Leaves having a large blotch of creamy yellow, surrounded by a green border.

Silver Variegated (I. aquifolium silver variegated). Similar to the Golden variegated except that the leaves are blotched and tinted with silvery white in place of creamy yellow.

KALMIA. See Mountain Laurel.

Lauro-cerasus

CHERRY LAUREL or ENGLISH LAUREL (Prunus lauro-cerasus). A bush or small tree reaching about 10 ft. in height with handsome evergreen foliage. Its glossy evergreen leaves makes it very popular for both summer and winter. Flowers small, white, in axillary or terminal short racemes in spring. Single specimens make fine plantings or in pairs for driveways or entrances, also very fine for hedges.

LAU U ST INUS. (Viburnum Tinus)

A well-known winter-flowering shrub of great beauty, producing an abundance of white flowers; well adapted for hedges.

Rotundifolia. Far superior to the common variety; leaves rounded, deep glossy green; flowers much larger; better adapted to the Willamette Valley; never sun-scalds.

Variegata. Leaves blotched with silvery white. Very fine,

LIGUSTRUM. See Privet.

MAHONIA, (Ashberry) or Holly-leaved Barberry

[Mahonia aquifolium (Berberis)] Oregon Grape.

A handsome shrub with foliage similar to the Holly, bright glossy green in the growing season, turning in the autumn to rich red and bronze shades. Persistent throughout the winter. The yellow blossoms in April are very attractive, and a profusion of blue berries in autumn. Does best where the ground is deep, rich and shaded. Usual height from 4 to 6 feet. The beautiful evergreen foliage is shipped east at Christmas time, taking the place of Holly. One of our most attractive evergreen shrubs, for decorative planting.

MOUNTAIN, or AMERICAN LAUREL

Calico Bush (Kalmia latifolia)

Broad, glossy green, shining foliage; flowers in large and showy clusters of elegant shape, and most beautiful colored, mostly pink or white. Few broad-leaved evergreens are as beautiful in foliage, and none can excel the beauty and delicate forms of its flowers. Requires about the same treatment as the Rhododendron.

OREGON GRAPE, See Mahonia.

PRIVET. See Deciduous Shrubs.

RHODODENDRON, or ROSEBAY

This, wherever known, is universally acknowledged to be the most showy, magnificent, hardy evergreen shrub that grows. It will thrive in any good soil without any special preparation, and in the full blaze of the sun. Rut it is more luxuriant in good, well prepared soil of leaf-mold, or leaf-mold and muck and peat mixed, and in partial shade, and does especially well near the sea-coast. It is abundantly supplied with numerous fibrous roots that retain a quantity of earth in lifting, so that it can safely be removed at any season of the year, except the short period of their rapid growth, covering a portion of June and July. The broad, thick evergreen foliage, with its glossy richness, would alone entitle it to a place foremost in the rank of evergreen shrubs, but when in June this mass of luxuriant foliage is almost hidden by the magnificent array of beautiful flowers in clusters and each cluster large enough for a lady's bouquet, it gives it a preeminence that our pen must fail to portray. Planted singly, in the flower garden or upon the lawn, they are objects of interest; but their greatest beauty, as in many other plants, can only be fully developed by artistically massing them in beds upon the

massing them in beds upon the lawn, when the different varieties of white, blue, purple, cherry, liac, mauve and crimson can be made to blend or contrast at will, producing an effect unrivaled by any other hardy plant in existence. We have a considerable list of hardy grafted varieties that are of higher price and much more desirable than the seedlings of the Catawbiense, as they compass in the different sorts the entire range of colors, and each in itself distinct and definite, while the seedlings, as a rule, vary but little from the original type. When soils are too strongly impregnated with lime, the or-

iginal soil should be removed to a good depth and width where the Rhododendrons are to be planted and the space filled in with leaf-mold and peat or muck mixed, or some other soil tolerably free from lime. They will repay all care that may be bestowed in preparing a bed suitable to their wants.

SPINDLE or Strawberry Tree. See Euonymus.

YUCCA

Spanish Bayonet, or Adam's Needle

Has a fine appearance; the stem is two feet above the ground, covered with large, bell-shaped flowers on laterals, forming a perfect pyramid; valuable for rockwork. We list two varieties.

Y. aloifolia. Slender, simple trunk; daggershaped leaves 1 to 2 inches wide; very stiff; flowers white, often tinged with green or purple; panicle compact, close to leaves.

Y.filamentosa. The well-known garden variety, thread-leaved, creamy white; 2 to 4 feet. The best known and most largely planted of the Yuccas. July.



RHODODENDRONS

HEDGES

Nothing could be more beautiful than a neatly trimmed hedge of evergreens, and they are useful for boundary fences, screens, etc. We give below some of the best varieties for ornamental hedges, screers, windbreaks or boundaries.

				P.	AGE		PAGE
American Arborvitae (Evergreen)	4	ď			61	Euonymus (Evergreen)	. 69
Siberian Arborvitae (Evergreen) .					62	Laurustinus (Evergreen)	. 69
Red Cedar (Evergreen)		۰			62	Privet (Deciduous)	. 74
Norway Spruce (Evergreen)					63	Spirea (Deciduous)	74
Honey Locust (Deciduous)					54		
Japan Quince (Deciduous)	d				74	DEFENSIVE HEDGES	
Ashberry (Evergreen)			ø		69	Honey Locust	. 54
Barberry (Deciduous)					64	Osage Orange	. 57
Box (Evergreen)					69	Both Deciduous	

All described in approprite places in this Catalogue; make beautiful ornamental hedges.



PURPLE (JAPANESE) WISTARIA

HARDY CLIMBING VINES

"It seems unnecessary to speak at length of the value of the climbing plants in our gardens and pleasure grounds. They are equally ornamental on the walls and terraces of the stable, mansion, and on the humblest cottage, over whose low roof a mantle of rose or clematis sheds such a transforming cloud of beauty. They grace the garden walls and take from stiff and hard lines their ugliness by fresh foliage, pretty flowers and, often, pleasing fruit." Invaluable for covering trellises, walls, cottages, etc.

ACTINIDIA. See Silvery Sweet Vine.

AKEBIA

A. quinata. A very beautiful, perfectly hardy, fast-growing Japan vine, with magnificent foliage; produces flowers in large clusters of chocolate-purplish color, possessing a most delicious perfume; unsurpassed for covering trellises and verandas, the foliage never being attacked by insects.

AMPELOPSIS

A. Veitchii (Japan Ivy, or Boston Ivy). A beautiful, hardy climbing plant, of Japanese origin. Leaves a little smaller and more ivy-like than the American. This is one of the finest climbers we have for covering walls, as it clings firmly to the smoothest surface, covering it smoothly with the over-lapping leaves, which form a perfect mass of foliage. The color is a fresh deep green in summer, changing to the brightest shade of crimson and yellow in autumn. It is quite hardy and becomes more popular every

year. For covering walls, stumps, etc., no plant is more beautiful.

A. quinquefolia (Virginia Creeper, or American Ivy). A native vine of rapid growth, with large, luxuriant foliage, which, in autumn, assumes the most gorgeous and magnificent coloring. The blossoms, which are inconspicuous, are succeeded by handsome dark blue berries. Like the bignonia and ivy, it throws out tendrils at the joints, by which it fastens itself to anything it touches.

ARISTOLOCHIA. See Dutchman's Pipe.

BIGNONIA, or TRUMPET FLOWER Tecoma

T. radicans. A splendid climber; vigorous and hardy, with clusters of large, trumpet-shaped scarlet flowers in August.

T. grandiflora. New. Leaves thick and shining, and immense blossoms of gorgeous crimson and vellow.

CLEMATIS. Virgin's Bower

Clematis plants of the improved sorts are exceedingly hardy, slender-branched, climbing shrubs of marvelously rapid growth and handsome foliage, which produce beautiful large flowers of various colors in great abundance, and during a long period. In the several species and varieties of it, the Clematis surpasses all other hardy climbers in its adaptation to many uses and locations. They do best in a rich soil, in a sunny situation.

Duchess of Edinburg. Without doubt the best of the double pure whites. Deliciously scented.

Henryi. This is the finest of all white Clematises, and should find a place in every collection. It is not only a vigorous grower, but is a remarkably free and continuous bloomer, beginning with the earliest and holding on with the latest. Flowers large, beautiful creamy white, with reddish chocolate anthers. Art cannot produce a picture corresponding in any degree to the wealth of beauty found in the flowers of this variety. June to October.

Jackmani. This is perhaps the best known of the fine perpetual Clematises, and should have credit for the great popularity now attending this family of beautiful climbers. The plant is free in its form of growth, and an abundant and successful bloomer, producing flowers until frozen up. The flowers are large, and of an intense violet-purple, remarkable for its velvety richness. Introduced in 1862,—since which time many new varieties have been brought forward. July to October.

Jackmani alba. A strong, vigorous grower, perfectly hardy, and a most prolific bloomer; fine, large, pure white flowers.

Madam Edouard Andre. This is the nearest approach to a bright red Clematis, and has been called the Crimson Jackmini. The plant is a strong, vigorous grower and very free in bloom. Color a distinct crimson-red; a very pleasing shade and entirely distinct from all other varieties.

Paniculata (Sweet-scented Japan Clematis). A Japanese plant possessing unusually attractive merits. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious and penetrating fragrance. The flowers appear in September, at a season when very few other vines are in blossom.

Ramona. A strong, rampant grower and a true perpetual bloomer; flowers appear on the last year's growth and on the new shoots, giving an abundance of blossoms all through the season; color deep, rich lavender.

CINNAMON VINE

Dioscorea divaricata

A fine hardy climber, and well known in some parts of the country as Chinese Yam. The tubers grow very large, and are edible like a sweet potato. The vine is a beautiful rapid grower, producing sweet-scented flowers.

CHINESE MATRIMONY VINE

Lycium Chinense, or vulgare

A neat, half-climbing plant, bearing small, light pink flowers in summer, followed by berries which turn to a beautiful scarlet in the fall, when it is very ornamental.

DUTCHMAN'S PIPE. Aristolochia Sipho

A magnificent hardy native vine of rapid growth, with very large, heart-shaped leaves and brownish flowers, resembling in shape a miniature pipe. Splendid for archways or verandas.

EULALIA

Zebra Grass.

Japonica Zebrina. One of the most striking and distinct plants. Unlike most plants of variegated foliage, the striping or marking is across the leaves instead of longitudinally, the leaves being striped every 2 or 3 inches by a band of yellow ½ inch wide.

HONEYSUCKLE. Lonicera

Chinese Twining (L. Japonica, or L. Sinensis). A well-known vine holding its foliage nearly all winter. Blooms in July and September; very sweet.

Hall's Japan (L. Halliana). A strong, vigorous evergreen variety, with pure white flowers, changing to yellow; very fragrant. Covered with flowers from June to November.

Japan Golden-leaved (*L. aurea reticulata*). A handsome variety, having foliage beautifully netted or variegated with yellow. Flowers yellow; fragrant.

Monthly Fragrant (L. Belgica). Blossoms all summer; flowers red and yellow; very sweet. Rapid grower.

Scarlet Trumpet (L. sempervirens). A strong



HARDY PERPETUAL CLEMATIS

HONEYSUCKLE, continued

grower, and produces bright scarlet, inodorous flowers all summer.

See also Upright Honeysuckle

IVY. Hedera

Evergreen Ivies often suffer in winter if exposed to the sun, and should therefore be planted on the north side of a wall or building.

American, Japan, Boston. See Ampelopsis. English (H. Helix). A well-known old and popular sort.

Variegated-leaved (H. folia variogata). With smaller leaves than the preceding, variegated with white.

Irish (H. Canariensis, or Hibernica). The wellknown old sort.

JASMINE. Jasminum

Hardy Yellow (J. nudiflorum). Bright yellow, fragrant blossoms.

Hardy White (J. officinale). Very sweet-scented and highly desirable.

KUDZU VINE

Kudzu Vine (Pueraria Thunbergiana or Doli-chos Japonica, also called Pachyrizus Thunbergiana). A magnificent climbing vine for all purposes, well established vines growing 40 to 50 feet in a season; especially adapted to covering pergolas or to secure a dense shade. Leaves resemble those of lima bean in shape and are dark green and woolly, often changing during the season to green with cream or yellow along the veins. Flowers rosy-purple, pea shaped, borne in long, handsome racemes.

SILVERY-SWEET VINE

Actinidia polygama

A new hardy climber from Japan, of remarkable beauty. The foliage on the ends of the flowering shoots is of a glistening silvery white color, giving the whole vine, from a little distance, the appearance of being covered with large white flowers blossoming among its bright green leaves. The effect is very marked and beautiful. The flowers, which appear in this latitude about the middle of June, lasting from two to three weeks, are creamy white with purple centers, having numerous stamens and bright yellow anthers; remarkably sweet, resembling the Lily-of-the-Valley in fragrance.

TRUMPET VINE. See Bignonia.

WISTARIA

Chinese Purple (W. Sinensis). A most beautiful climber of rapid growth, and producing long, pendulous clusters of pale blue flowers. When well established, makes an enormous growth. It is very hardy and one of the most superb vines ever introduced.

Chinese White (W. Sinensis alba) Introduced by Mr. Fortune, from China, and regarded as one of the greatest acquisitions. Rather tender.

PAMPAS GRASS. Gynerium digertium

Half-hardy perennial. A native of South America. Very beautiful. Roots require winter protection in cold climates.

Elegans (G. elegans). Plumes silvery white, upon long stems; blooms early. A graceful new variety that is bound to become popular. The large plumes when dried make a splendid addition to a bouquet of dried grasses.



CHINESE WISTARIA

BULBOUS AND TUBEROUS-ROOTED PLANTS

PÆONIA. Peony

Plant in deep, rich, well prepared soil, covering the buds but an inch or two. Do not expect too much the first year as they are a little slow in establishing themselves but will make up in attractiveness later. They may be planted singly or in beds or along borders, a large bed making a fine show, surpassing even the Rhododendron and Rose. It is the flower for the millions, coming into blossom early—May or June. Herbaceous. This splendid class contains the largest, most showy and attractive flowers in cultivation, almost rivaling the rose in color and blossom, and it is to be regretted that they have been so much neglected. They are of stately growth, very hardy and delightful when in blossom. At the present time the public is beginning to appreciate the many fine varieties of recent introduction, ranging from pure white through the different shades of pink, rose, variegated, purple, white, etc. They increase in

PAEONIA, continued

beauty with age and may be planted in almost any situation. We recommend fall planting. They succeed best in rich soil and will be benefited by a mulch of rotten manure during the winter, which may be lightly spaded into the soil in the spring. Many of them are very double and have a delicate and refreshing fragrance. They are easily cultivated and require but little protection. Blossoms from 4 to 8 inches in diameter. Foliage rich, glossy, deep green color.

Adolph Rousseau. Very large; deep, brilliant nk. One of the best red varieties and is a free bloomer.

Delicatissima. A late flowering variety of rare beauty. Full, double immense blossoms, delicate, clear pink, passing to blush white center. Very fragrant, blooms freely.

Edulis superba. Bright violet-rose, silvery reflex. Fragrant and early.

Festiva maxima. Extra large, in clusters, fragrant, the finest early white. It is pure white, except for a few flakes of crimson on some of the center petals. Full double flower, as near a perfect paeony as one could desire.

Felix Crousse. Very bright red; large ballshaped flower.

Marie Lemoine (Calot). Large, sulphur white, creamy center; double, massive flowers; strong stems; one of the finest, very late.

Deep cherry rose, bright, Modeste Guerin. showy; very large, distinct and fine shaped; fragrant, one of the best.

Rubra triumphans (Delache). Bright carmine. Also other choice named varieties.

AMARYLLIS

A beautiful class of plants with large, drooping, bell-shaped, lily-like flowers, varying in color from the richest crimson to pure white striped with crimson or scarlet.

CANNA

Stately and highly orna-Indian Shot Plant. mental plants, for both flowers and foliage. They attain a height of 2 to 5 feet and may be grown singly or in masses. Leaves green or brownish red; flowers scarlet, crimson, yellow, cream, etc., variously marked.

New Large-flowering French and American. Not so tall as the old-fashioned sorts, but with flowers of great beauty; everywhere popular. These sendlings vary in color, ranging through all shades of yellow and orange to richest crimson, scarlet and vermilion. Some are plain and some spotted.

CROCUS

A universal favorite and one of the earliest garden ornaments. Should be planted about 2 inches deep. Colors blue, white, yellow and striped.

DAHLIAS

Through interest aroused by Dahlia Shows and Dahlia Societies and by the introduction of a number of new varieties, both elegant and ex-quisite, the cultivation of the Dahlia is again being given the attention it deserves. There is nothing that, with the same amount of money invested, will give more show of stately and williant outurn flowers than the Dahlia. It is especially fine for borders, and makes fine beds. No flowering plant produces a finer display for a continuous period. Early in the eighties the introduction of the original Cactus Dahlia Juarezi founded a new race known as the Cactus varie-

Within a few years the new Paeony flowered Dahlia has made its appearance. Its immense flowers and graceful forms are a great improvement over the old single varieties. They are valuable for cut flowers, and make a splendid show for decorative work in the garden. We have the following:

Cactus Dahlias Paeonia Flowered Dahlias Decorative Dahlias Show Dahlias Pompon Dahlias

GLADIOLUS

The Gladiolus is the most attractive of all the summer flowering bulbs and deserves a place in every garden, as it is sure to flower and do well with little care. They are the easiest thing to grow imaginable, but they do appreciate full sunshine.

Set bulbs about four to six inches deep when early garden is made, and additional plantings two weeks apart will give a long period of bloom,

from July to November.

Cut when first flowers on the spikes are opening, and then place in water indoors, buds open to the end of the spike, affording beautifully decorative bouquet for ten days. No other flower is more lasting, or more satisfy in its rich color-We list the following Oregon grown:

America. Exquisite soft pink with lavender tints. Robust grower and splendid spike of flowers. We specially recommend this.

Attraction. Presents a most charming contrast with its deep crimson flowers and white throat.

Augusta. Pure white, throat delicately shaded

with lavendar. Splendid as a cut-flower.

Baron Hulot. A rich velvety blue, greatly admired, and a decided novelty.

Glory. Unique in having flowers with daintily ruffled petals. The color a rich cream with mingled apricot and red markings in throat. Absolutely distinct. A vigorous grower.

Klondyke. Primrose yellow, set off by a striking maroon blotch.

Madam Monneret. Fine spikes of a delicate rose. Valuable as a late bloomer.

Mrs. Francis King. A beautiful light scarlet, with pencillings of a deeper shade. Flowers unusually large—individual blooms, sometimes six inches in diameter. We recommend this one.

Pink Augusta. New but already tremendously popular. Clear pink, early blooming in the garden and excellent for florists' forcing.

Princeps. Brilliant crimson with white blotches on lower petals. An open flower of immense size. No finer gladiolus grown.

We also carry a good line of imported Gladiolus both named and in general assortment.

HYACINTHS

The most beautiful and fragrant of early spring-flowering bulbs, much used for winter forcing. Too well known to need description. Large assortment of colors and varieties.

IRIS

Germanica (German Iris). The true "Fleur de Lis," the national flower of France. They are perfectly hardy, thrive anywhere, grow and blossom luxuriantly, particularly if plentifully supplied with water or if planted in moist situations, as on banks of ponds, etc. Plants well established produce from 50 to 100 spikes of bloom, deliciously fragrant and fine for cutting. In beauty the flowers rival the finest orchids, colors ranging through richest yellows, intense purples, delicate blues, soft mauves, beautiful claret-reds, white, primrose and bronzes of every imaginable shade.

Kaempferi (Japan Iris). Finest of all the Iris family. The flowers are of immense size, from 6 to 8 inches in diameter, and of the most beautiful and delicate shades. They are perfectly hardy, and flower in great profusion during June and July. A well-established plant gives a dozen or more flower-stalks 2 to 3 feet high, each stalk producing 2 to 4 enormous blooms. The Iris thrives best if planted in a moist soil; if this cannot be had, should be plentifully supplied with water while growing and flowering.

JONQUILS. Narcissi

Pretty varieties of the Narcissus, having a very agreeable fragrance; adapted to either pots or out-door culture. The bulbs being small, six or eight may be put in a 6-inch pot.

LILLY-OF-THE-VALLEY

(Convallaria majalis)

The Lily-of-the-Valley is as hardy as any plant can possibly be, and when planted in the open ground will increase rapidly. For the house we have what are called "pips"—young roots with flowering stems, that will bloom in a few weeks after planting, and will flower well in baskets of damp moss, or potted. For the garden we can ship either in the spring or autumn.

LILIES. Lilium

No class of plants capable of being cultivated out-of-doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance, they stand prominently out from all other hardy plants. They thrive best in a dry, rich, well-drained soil where water will not stand in winter. After planting they require very little care, and should not be disturbed for several years; established plants blossom more freely than if taken up annually.

Auratum (Gold-banded Lily of Japan). Flowers very large, of a delicate ivory-white color, thickly dotted with rich chocolate-crimson spots, with a bright golden band through the center of each petal. The finest of all Lilies.

Elegans atrosanguineum. Dark blood-red, Erect.

Harrisii (the Bermuda Easter Lily). Flowers large, trumpet-shaped, pure waxy white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular as a winter flower. Tens of thousands of it are grown every year for church decorations at Easter.

Longiflorum. A well-known beautiful variety, with snow-white trumpet-shaped flowers that are very fragrant. It is quite hardy and blossoms freely in the open ground in June or July. Is also used largely for forcing for the Easter holidays; the flowers having more substance and lasting longer than the Bermuda Lily.

Tigrinum fl. pl. (Double Tiger Lily). Bright orange-scarlet, with dark spots; a strong-growing showy variety, and entirely hardy. Succeeds well everywhere.

Speciosum rubrum. White, beautifully spotted red; flowers in August. This is one of the most useful of the Lily family, perfectly hardy, and flowering well under all circumstances.

Speciosum album. Very fragrant, large flowers; pure white, with a green band running through the center of each petal. One of the best.

NARCISSI

We have a choice collection of these fragrant winter-blooming plants.

TIGRIDIA

One of the most showy of all summer bulbs, and blooms from midsummer until frost, growing 3 feet high, with large wide-open triangular blooms, 4 to 6 inches across. The colors and markings are very brilliant and peculiarly odd and attractive, and clumps of them in the border have a most gorgeous effect. It is difficult to name a flower of such unique and exquisite beauty as a Tigridia, the superb spotting being so distinctive and handsome. They are easily grown and always more than satisfactory.

TUBEROSE

(Polyanthus tuberosa)

These deliciously fragrant, white, wax-like plants should be in every garden. This valley is particularly adapted to their successful culture.

TULIPS

Owing to the late spring frosts in the colder sections, bedding plants cannot be safely planted in such localities before the early spring-flowering bulbs are through blossoming. Without these bulbs, for one or two months of beautiful spring weather, our garden would present a bare appearance. We know of nothing that for the money invested will give a more gorgeous show during early spring, and there is nothing more easily grown than the Tulip. They thrive well in almost any soil. Should be planted in October and November.



Roses are the most beautiful of flowers, and are among the easiest to raise to perfection. Even from earliest history it has been the favorite of all cultivated plants and still holds its undisputed sway as Queen of Flowers. We have given great care and attention to their culture, and are constantly adding new varieties, after thoroughly testing them, and dropping old ones that for any reason do not give satisfaction, our idea being to keep down the list of varieties to the fewest number possible, and still have those that will do well in every section. Not all varieties listed will do well in every district, as we cover every part of the country West of the Rocky Mountains and many parts east of these Mountains each year in our business. We try to keep up to date, but before placing them on the market, we always test them, as many varieties are not worthy of general distribution. For this reason if you do not find in our list what is wanted write us direct as we may have it in our experimental grounds in small numbers.

PLANTING—Roses thrive best when they have plenty of warmth and free air circulation. For this reason give them a sunny situation, and if possible well removed from buildings. It is inadvisable to plant them in even partial shade as this induces mildew in dull spring weather. However, they will endure severe exposure, and one need not hesitate to plant even if the situation is less favorable. Almost any good garden soil is suitable, but one with a good loamy subsoil is the best. Spade the ground to a depth of eighteen inches, at least, and pulverize well, mixing in plenty of well rotted manure. Spread the roots out carefully and place fine soil among and over them, treading it around them firmly; do not allow the manure to some into contact with the roots, fill in balance of the dirt, leaving the top soil loose and fine so as to form a dust mulch.

MANURE—Roses require plenty of manure and good cultivation. Cow manure is the best fertilizer for Roses and after they are established they are great feeders. One of the best plans is to drench the roots occasionally with liquid manure and in the fall when the ground is dry apply a heavy surface dressing of manure, which should remain during the winter and be spaded under in the spring. In dry climates spade under in winter.

PRUNING-Old and decayed branches, and about one half the previous season's growth, should be cut away early in the spring, while they are still dormant, and a little cutting back after the first bloom, usually about the middle of September will insure late flowers. As a rule prune close for size and quality, or what is known as exhibition flowers. For quantity or garden decoration follow same course with weak, old or unripe wood but do not cut back the strong thrifty shoots so severely. In shortening always prune to an "eye" pointing away from the center of the plant.

When planting prune all roses severely. In Fall planting prune the following spring, and when

planted in the spring prune at time of planting.

PESTS AND DISEASES

Roses are not badly afflicted with diseases and pests in most sections, the two giving most trouble being green aphis and mildew. For the aphis use a strong solution of tobacco water or Phytophiline, on a quiet evening with a spray pump. For mildew one of the best remedies is flour of sulphur dusted over the affected parts as soon as it makes its appearance. A weak solution of Bordeaux sprayed over the bushes early in the winter and early spring will often prevent these ills to which the rose is subject. Another effective remedy is to take two ounces of slacked lime, mix with one pound of sulphur, place in a pot, add two gallons of water, boil for three or four minutes, until the sulphur, which is insoluble in water, enters into solution through action of the lime, forming a lime sulphur solution. When cold, dilute one part of this solution to five parts water and spray affected parts thoroughly.

For the convenience of our customers we have arranged most of our roses in alphabetical or-

der, designating the class to which they belong by abbreviations.

ABBREVIATIONS

H. P.—Hybrid Perpetual or Remontant Roses.

H. T.—Hybrid Tea Roses.

T.-Tea Roses.

N.—Noisette Roses.

H. N.−Hybrid Noisette Roses.

Cl. - Climbing Roses.

B.—Bourbon Roses.

Poly—Polyanthus.

H. P .- Hybrid Perpetual or Remontant Roses. The May and June Roses, so admirably suited for garden culture, the formation of rose hedges, and permanent plantings, where hardy roses are desired. Although called perpetual, they are not so much so as the Teas, but bloom only at special times during the summer and fall. the exception of the Teas and Hybrid Teas, no class of rose is so popular and widely known as the Hybrid Perpetual. In May and June these hardy Roses are brilliant with large, perfumed flowers of richest colors, far excelling the Ever-blooming class in size and effects. They em-brace some of the most beautiful, and delight-fully fragrant and richly colored varieties. Many of those offered in this list give occasional flowers during the summer, and again in the fall perfect and even finer flowers than those which were the glory of the garden in June—the month of

H. T.-Hybrid Tea Roses. These differ but little in general characteristics from the Hybrid Perpetuals. They are a beautiful class of halfhardy roses, combining to some extent the hardiness of the Hybrid Perpetuals and the free blooming qualities of the Teas and Noisettes. Hybrid Teas or Hybrid Noisettes should be in every collection. The Hybrid Teas originated every collection. The Hybrid Teas originated from crosses of the Teas or Noisettes with the Hybrid Perpetuals and many have the fragrance of the former with the hardiness of the latter.

Most of these are hardy, and free bloomers and are becoming more popular each year.

TEAS, CHINA, NOISETTE and BOURBON **VARIETIES**

The Hardiest Everblooming Roses

These are the roses that really bloom constantly. They begin early in the season, or almost as soon as planted and continue all through the summer and autumn months, until stopped by cold weather or freezing. They flourish luxuriantly from Canada to Mexico. The flowers are beau-tiful in form and fullness, and embrace all the lovely shades and colors that the rose assumes. Being natives of a more genial climate, they require protection in the North, and must not be expected to survive in the open ground where the temperature falls much below zero. By cutting off all the un-ripened wood and removing the leaves, and covering the bushes with 2 to 4 inches of dirt, and over this placing 4 to 6 inches of leaves after the cold weather sets in and bushes are well ripened, they will usually go through unharmed even in the colder sections. These coverings must be carefully removed in the Spring. In sections west of the Cascade and Sierra Mountains this protection is usually unnecessary as the temperature seldom falls low enough to damage them.

ROSES-Teas, China, Noisette and Bourbon Varieties, continued

T.—Tea Roses. These are easily distinguished by their foliage, delicate fragrance and exquisite shades of color. They are continuous bloomers.

N.—Noisette Roses—or Champney Rose. Of American origin from seed of the White Musk Rose fertilized by the blush China (Bengal). John Champney of Charlston, S. C., raised a variety called Champney's Pink Cluster. A few years later Phillipe Noisette, a florist also of Charlston, raised from seed of this variety a blush variety which he sent to his brother in Paris, France, under name of Noisette, without giving Champney credit. Many fine roses are found among the Tea-Noisettes. Noisettes are mostly vigorous climbers; bright green foilage; delicate-tinted flowers, which have a tendency to grow in clusters.

Cl.—Ciimbing Roses

H. N.-Hybrid Noisette Roses.

B.—Bourbon Roses. This original type was introduced from the Isle of Bourbon about 1825 and said to be a cross between a China and Damask rose. Very fine autumn bloomers.

Moss.—Strong, vigorous growers, much admired for their moss-covered buds; hardy. Most varieties bloom but once in a season, but remain for a long time and are very handsome.

NEWEST ROSES

George Dickson (H. T.) Alex Dickson & Sons, 1912. Messrs. Dickson says: "We, with no little pride, issue it as the best Exhibition Rose ever raised by us; a statement the responsibility of which we gladly accept. The rose is named after the senior member of our firm, who is now approaching his 80th birthday, and hope he will have attained it when we begin to send this rose over the world. It is a rose that is always there, let the weather be what it may. Its vigorous growth, its thick, leathery beech-green cordate foliage, bespeak rare constitution; produces huge blooms, quite five inches across, that give an exhibitor invariably a top-row-corner bloom. It never blues, browns or seals, and its huge leathery shell-shaped lemon-white-based petals have wonderfully lasting qualities. The color is velvety black scarlet crimson with brilliant scarlet reflexed tips. This description is in no way overdrawn, the facts are beyond question."

RECENT INTRODUCTIONS

Duchess of Wellington (H. T.) Alex Dickson & Sons, 1909. "Color saffron yellow, stained with rich crimson, a shade of color hitherto unknown among roses, free flowering, vigorous."

Edward Mawley (H. T.) (Gold Medal N. R. S.) McGredy, 1911. "A remarkably distinctive and effective rose." "Among the many good new roses we have to offer our customers for this season, this variety stands out pre-eminently as one of the very best. It outdistances any other dark velvety crimson rose in our collection from any point of view from which one might wish to take. It is a great big bloom composed of immense cupped petals, and is by all odds the richest and darkest color yet produced in the hybrid tea section. The plants are of vigorous growth and almost constantly in bloom. We feel no hesitancy in recommending it as the best rose of its color in cultivation today."

Jonkheer J. L. Mock (H. T) Leenders, 1909. A mixture of bright red and salmon pink, sweet scented and vigorous. Was awarded a gold medal at the Jardin Bagatelle, Paris, in 1911. We have found it a satisfactory and beautiful

variety, somewhat like Farbenkonigin.

Juliet (H. B.) Wm. Paul & Sons, 1910. "A distinct and very attractive novelty." "Of all the sensational novelties in roses which have appeared during recent years, particularly as applied to roses of hitherto unknown colors, we believe this new variety will easily head the list. To give an adequate color description is a most difficult thing to do, the coloring being absolutely unique. The outside of the petals over their entire surface are a deep old gold, while the reverse or interior is an exquisite shade of deep rosy red or scarlet in the opening bud, which gradually changes to orange pink as the blossoms mature. While we are telling you the good points of this rose we also desire to tell you some of its faults. The only one it possesses is the fact that it is a cropper, it flowers in masses principally during the spring and late autumn, and is usually devoid of bloom during the summer, but even with this fault admitted if it only threw one flower to a plant during the year, it ought to find a place in the finest rose gardens, for there is nothing in existence to equal its glorious color. The foliage is mildew proof in most sections and the plants are of unusually vigorous growth; buds and blooms very large, beautifully formed and intensely fragrant."

Lady Hillingdon (H. T.) Lowe & Sawyer, 1909. (Gold Medal) An ideal yellow tea rose with a splendid long bud. It blooms continuously throughout a long season and is unsurpassed as a cut flower. Its deep apricot yellow is of an especially rich tone. This new variety hails from England, where it received numerous first prizes. The open bloom is only fairly full but cut in the bud state is of superlative beauty.

Sunburst (H. T.) J. Pernet-Ducher, 1912. "A grand new orange yellow rose which may well be regarded as the acme perfection in roses of this color. The plant is of strong vigorous growth, sending up strong stout canes heavily clothed with handsome foliage. Another good feature of this rose is the fact that the blooms are usually formed singly at the ends of the shoots. This allows a full sap flow to individual blooms and accounts for their large size."

NEW OR SCARCE VARIETIES

Betty (H. T.) Dickson & Sons, 1905. (Gold Medal) "A rose of great merit; decidedly good as a long-stemmed rose for house decoration."—Gardeners' Chronicle. A superb variety, with

blooms of the most exquisite coloring imagineable; copper rose of lively tint, shaded with golden yellow at the base. The growth is strong and vigorous and well furnished with thick

ROSES-New or Scarce Varieties, continued

leathery foliage. Buds long and pointed.

Counters of Gosford (H. T.) McGredy, 1905. (Gold Medal.) Clear salmon-pink; base of petals suffused with saffron yellow, large, full and free; a delightful garden and bedding rose; free and very perpetual. It is a splendid rose of comparatively recent introduction, with long pointed buds and fairly full expanded blooms. A grand variety for cutting, with color which appeals to every one.

Dean Hole (H. T.) (Gold Medal) Dickson, 1904. A superb rose for any purpose; blooms very large, of great substance, of fine elongated form with high center; color silvery carmine, shaded salmon; absolutely distinct.

Dorothy Page Roberts (H. T.) Alex Dickson & Sons, 1907. A grand novelty in every sense of the word, and one of the most vigorous growers in the entire section of Hybrid Tea Roses. It is distinctly a cut flower Rose, for it is at its best in the bud state. The buds are of magnificent size and form. Color, an entrancing shade of deep coppery pink.

Harry Kirk (H. T.) (Gold Medal) Alex Dickson & Sons, 1907. A magnificent addition to the none-too-long list of yellow roses. The flower is of much the same form as the well known Killarney, but of lovely deep sulphur yellow, becoming lighter at the edges of the petals. The buds are simply perfection in form. Petals very broad, smooth and rounded.

Hugh Dickson. (H. P.) Hugh Dickson, 1904. This magnificent rose received the Gold Medal of the National Rose Society of England, a much coveted but difficult award to obtain. Awarded the Nickerson prize as the best red rose in ex-

istence for general garden purposes. Brilliant crimson, shaded with scarlet; good size and form, petals slightly cupped and reflexed, very fragrant.

J. B. Clark (H. T.) (Gold Medal.) Hugh Dickson, 1905. One of the most vigorous growing of all red hybrid Tea Roses, often throwing out canes six feet high. Color deep blackish crimson, with scarlet shadings. It is a specially fine fall bloomer; blooms very large, beautifully formed, having a high pointed center. Foliage dark green, with thick leathery leaves, which on the young growth it is a beautiful rich bronze.

Jean Note (H. T.) Pernet-Ducher, 1908. A splendid addition to the list of yellows. It reminds one of Franz Deegan, but is several shades deeper in color; center of bloom chrome yellow, passing to creamy yellow in the outer petals. Fiowers full and globular; constantly in bloom.

Joseph Hill (H. T.) Pernet-Ducher, 1904. A rose which is as yet but little known, and one of simply indescribable beauty. The interior of the bloom is an exquisite shade of golden copper, merging at the edges of the petals to salmon pink. It is a strong, vigorous grower, throwing heavy canes and an abundance of flowers, and buds of uniformly fine quality. In the young growth the foliage is a rich bronze; during the cooler autumn months the blooms often come pure copper. Deliciously scented, and of unsurpassed effect as a cut flower.

Lyon Rose (H. T.) Pernet Ducher, 1907. Has been awarded prizes and honors wherever exhibited. "Without any question the grandest introduction in roses for many years; an entirely new color, and combining all the good qualities to be sought for in a rose. It is a strong, vigorous grower, with every shoot crowned with



CLIMBING ROSES

ROSES—New or Scarce Varieties, continued

magnificent blooms. In general form the bloom might be likened to a highly perfected Madame Caroline Testout, with a more double make up of flower. The color is simply superb, being a delightful shrimp pink shaded with coral pink, and gradually merging to deep golden yellow at the base of the petals. Stock of this rose is exceedingly scarce, but we predict when it becomes well known it will be accorded first place in rose gardens where hybrid teas are grown."

Mad. Abel Chatenay (H. T.) Pernet-Ducher, 1895. Produces a mass of salmon pink blooms and is especially useful as a winter bloomer. Fine either in the bud or open state, and lasts a long time after being cut. A favorite with cut

flower buyers.

Mad. Constant Soupert (T) Soupert & Notting, 1906. Deep rich yellow in the interior of the bloom, edged and shaded with peach pink in the outer portion of the petals; very double, with

long handsome buds.

Mad. Leon Pain (H. T.) Guillot, 1906. Lovely silvery pink, shaded with salmon. Buds much after the appearance of Prince Bulgarie, but showing a much more delicate color arrange-Growth exceedingly vigorous. It produces lavish quantities of flowers throughout the entire season. We consider it an indispensable variety to any collection of roses.

Mad. Melaine Soupert (H. T.) J. Pernet-Duchr, 1905. One of the most highly prized points in a good rose is a long pointed bud. We believe it would be difficult to find one which surpassed this exquisite variety. It is not only of the highest quality in this respect, but also in its lovely color, deep yellow toned with salmon. The open bloom has much the appearance of a semi-double paeony. When fully expanded it loses the deeper bud tints and becomes quite light.

Mad. Ravary (H. T.) Pernet-Ducher, 1900. Deep yellow, often golden orange; free and continuous bloomer. A fine rose.

Mrs. Arthur Robert Waddell (H. T.) Pernet-Ducher, 1908. A lovely new color; deep reddish apricot toned with salmon. This rose is not a perfectly double form, being rather after the style of Papa Gontier, but with much longer buds. It should be cut in the bud where used for cut flowers. It is a vigorous grower and a constant bloomer, and incidently a wonderful advance in roses approaching this color.

Mrs. Aaron Ward (H. T.) Pernet-Ducher, 07. Deep rich Indian Yellow, occasionally tinted with salmon. A splendid novelty in every sense of the word. It is a constant bloomer, with buds and open bloom of most refined form and finish. For cut flowers it will fill a long felt want, as good yellows are scarce.

My Maryland (H. T.) John Cook, 1909. A grand American raised seedling from that veteran rose grower, Mr. John Cook, Maryland, and representing one of the lovliest shades of intense pink to be found among roses. Its tone of color is so clean and decided that it catches the eye at once. Its beautiful color, coupled with its vigorous growth and elegant form, mark it as a rose of lasting popularity.

Pharisaer (T) Hinner, 1901. An introduction from Europe a few seasons ago, and a rose which, although as yet but little known, is going to find a place in all first class collections. Aside from its magnificent salmon pink color, it has one of the lovliest bud forms to be found amongst roses. Its exquisite shape, delicious odor and unsurpassed color will appeal to everyone capable of appreciating the beauty of a highly perfected modern type of the rose.

Prince de Bulgarie (H. T.) Pernet-Ducher. 1901. A recent introduction which has grown in favor, as it has many good points to recommend it. Petals very broad and heavy. In color a superb rosy flesh shaded with salmon. Free blooming and a strong grower.

Reine Karola de Saxe (H. T.) Lovely soft pink well displayed in the full rounded blooms. It is a strong grower, with handsome leathery foliage; a grand rose for cutting purposes. The pearly pink tones of the flower are of exquisite effect.

Rhea Reid (H. T.) Hill & Co., 1908. This rose bids fair to be one of our finest crimson scarlet garden roses. It was at first supposed to be principally a greenhouse forcing variety, but whatever its values may be in this respect it certainly is a superb variety planted outside. It is a constant sheet of magnificent blooms, sending up fine, strong canes in great profusion. It is many shades darker than Gen. MacArthur, and has a far more beautiful bud.

GENERAL ASSORTMENT

Aglaia. (See Yellow Rambler.)

Alfred Colomb (H.P.) Brilliant carmine-crimson; very large, full, and of fine globular form. Extremely fragrant, and in all respects a fine sort.

American Beauty (H.P.) Flowers very large, of beautiful form and very double; color a deep rich rose. The fragrance is delightful, resembling La France or the old-fashioned Damask Rose; it is truly an everbloomer, each shoot producing a bud.

Augustine Guinoiseau. (See White La France.)

Baby Rambler (Poly.) A dwarf perpetual Crimson Rambler. Everblooming from June until late frosts. One hundred and twenty individual flowers have been counted on a single panicle. Originated at Orleans, France, and is a hybrid produced by the crossing of Crimson Rambles and Gloire des Polyanthus. It preserves the prolific flowering quality of the latter, but is clear brilliant ruby-rose.

The foliage is of a fine, dark green, and is never attacked by insects or fungus. It blooms in clusters and very continuously. The period of blooming is not interrupted until after severe frosts. Cluster formation is similar to that of the Crimon Popular manufactured in the Crimson Rambler, more particularly because the bush is covered with flowers the whole summer. Especially valuable for culture in pots. During the most severe winter experienced in many years, the plants stood outside without any protection whatever, and spring found the

bushes alive to the tips of their branches. We have no hesitation in saying that the bushes of the Dwarf Perpetual Crimson Rambler are perfectly hardy. The plants grow 24 to 30 inches high.

Balduin. (See Helen Gould.)

Baltimore Belle (Cl.-Prairie). Pale blush, nearly white; double. The best white climbing rose.

Banksia. (See White Banksia.)

Beaute Inconstante (T.) (the rose of many colors.) A single plant bears flowers ranging in color from coppery yellow, bluish pink, carmine and apricot to light crimson. The bud is especially fine, being a coppery orange-scarlet, all the variations of coloring appearing in the open flower. A strong healthy grower, and a prolific bloomer.

Beauty of Glazenwood (Cl.-Banksia) (Fortune's Double Yellow). Hardy. Bronzed yellow or

copper and fawn-color.

Blue Rambler (Veilchenblau) (Cl.-Poly.) "This superb creation, a genuine cornflower-blue, is a seedling of the Crimson Rambler. The massed blossoms are semi-double, and the color, on first unfolding, is a reddish or purplish pink, turning to amethyst, and finally to a steel-blue, or the color of a certain class of violets, the yellow stamens appearing in sharp contrast to the blue petals. Plant vigorous; shining foliage; few thorns, and considered perfectly hardy."

Bon Silene (T.) Rose-carmine, shaded with salmon; fragrant and very free-flowering. Valu-

able for the buds.

Bride. (T) An ever-blooming pure white Tea Rose of large size and most perfect form, The buds are pointed and the ends of the petals are slightly curved back. It is a very free-blooming variety, and has the most delicious tea fragrance.

Bridesmaid (T.) In this exquisite Tea Rose we have an improved Catherine Mermet, from which it is a sport. Mermet, on account of its exquisite shape, large, solid, firm buds, with long, stiff stems, has long been considered one of the best cut-flower varieties; its only defect has been that in dark, cloudy weather it becomes a washy dull color. Bridesmaid, at all seasons, is a clear, delicate pink, in all respects a counterpart of Mermet, with large, handsome, pointed buds on long, stiff stems.

Burbank (a perfectly hardy, new everblooming Bourbon Rose.) This lovely rose was raised by Mr. Luther Burbank, of California, known the world over as the "Wizard of Horticulture," who says: "The color is cherry-crimson—it is, in other words, the very deepest and brightest pink rose in cultivation. It is peculiarly adapted for both outdoor planting and for blooming in pots in the house during the winter. It is a strong, vigorous grower, making well-rounded bushy plants. The Burbank rose is perfectly hardy, and will stand our most severe weather. The Burbank is, without doubt, the freest-flowering Hybrid Perpetual Rose in cultivation. It commences to bloom when only a few inches high, and blooms throughout the season until stopped by freezing weather. The flowers are double, 3 inches across. The whole flower is

most pleasing in its rich beauty, and is delightfully fragrant."

Carolina Goodrich, or Running General Jacqueminot (Cl.-H. T.) This rose is finely formed, very double flowers, fragrance most delicious. A hardy climbing Tea and should not be classed with the hardy climbers that bloom but once a year. Color the same as that of General Jacqueminot.

Catherine Mermet (T.) Bright flesh-color, with the same peculiar luster possessed by La France Large, full and beautiful. One of the finest Tea Roses.

Cherokee, Single. (Cl.) A distinct and beautiful climbing rose of rare merit. A most vigorous and clean grower, entirely free from disease. Flowers large, clear white and single, full of bright yellow stamens in the center, making a very attractive appearance; foliage distinct, very rich, dark, glossy green, and one of the most valuable features of the plant; surface smooth, always bright and shining and free from dust. Will cover a porch quickly. Valuable for screens, fences, arbors, etc.

Chromatella (Cloth of Gold) (Cl.-N.) Clear, bright yellow, very full and double; beautifully formed buds and flowers; very fragraat.

Clio. The finest flesh-colored Hybrid Perpetual. The flowers are simply perfection in form, with fine, broad petals, and are beautiful at all stages of development, from the small bud to the full, open flower; color delicate satin-blush, with a light shading of rosy pink at the center. Very free-blooming, and strong healthy grower.

Cloth of Gold. (See Chromatella.)

Coquette des Alpes (H.N.) White, tinged with carmine; very fine; a free bloomer.

Crested Moss (Moss.) Deep pink buds, surroundedwith mossy fringe. Very beautiful; free from mildew.

Crimson Rambler (Cl.-Poly.) Introduced from Japan, the land of wonders. Another season's trial fully justifies all the praise that has been given it in the past. During nearly the entire summer it has a mass of rich, glowing crimson, and every one who has it is delighted with it. Perfectly hardy; wonderfully free-flowering; intensely bright and vivid in color. The plant is a strong, rampant grower, making shoots 10 to 12 feet long in a season when well established. The flowers are produced in long trusses and panicles, often measuring 8 or 9 inches long and 6 or 8 inches across, pyramidal in shape, often 35 to 40 in a cluster, fairly covering the plant from the ground to the top with a mass of bright glowing crimson. The color is simply superb and is retained unfaded or without showing any of the purplish tinge so often seen in dark roses, for an unusual length of time. For walls, pillars and porches, or any other place where a hardy climbing rose is wanted, nothing can be more desirable or beautiful. If grown in beds and pegged down, it makes a brilliant display with its profusion of bloom, large clusters shooting out from each joint. As many as 300 blooms have been counted on a single branch; subject to mildew.

Dorothy Perkins (Cl.-Wich.) New. "This is a splendid new shell-pink climbing rose. It attracted much at tention at the Pan-

American Exposition, where a bed of 14-month-old plants produced a show of bloom unequaled by any other variety, unless it was the famous Crimson Rambler. The new rose is of the same strong habit of grow.h as Crimson Rambler, and the flowers are borne in clusters of 30 or 40, and sometimes even 50 to 60. The flowers are large for a rose of this class, very double, sweet-scented and of a beautiful shell-pink, a color that is almost impossible to accurately represent by lithography. Raised from seed of Rosa Wichuraiana, crossed with that grand old Rose Mme. Gabriel Luizet. Absolutely hardy. Mr. Wm. Scott, the Assistant Superintendent of Horticulture at the Pan-American, says regarding Dorothy Perkins: "This has exactly the habit of well-known Crimson Rambler. It has flowered splendidly and been very brilliant. This seems to me to be a great acquisition, and I believe it to be a good forcing rose. The individual flower is larger than the Crimson Rambler, but it is a beautiful shell-pink in color."

Duchess de Brabant (T.) Soft, rosy flesh, changing to deep rose, edged with silver; beautiful in bud and highly fragrant.

Earl of Dufferin (H.P.) A strong, healthy growing sort and a splendid autumn bloomer. Flowers



MADAME CAROLINE TESTOUT

large, very full and finely formed. Color deep velvety crimson, shaded with maroon.

Empress of China (Cl.-H. P.) A very hardy, free-flowering, climbing rose, of good size, blooming in clusters; bright pink flowers; very attractive. It is practically everblooming, for on good-sized plants, when well established in the ground, flowers may be expected the whole season.

Etoile de Lyon (T.) This is considered one of the finest yellow bedding rose for outside planting. It is, moreover, one of the hardiest in the Tea section. It blooms freely, and every flower is a gem. It equals Marechal Niel in size; strong bushes. Very sweet-scented; the color is a rich golden yellow.

Fisher Holmes (H.P.) Shaded crimson-scarlet; large, globular, with pointed center; vigorous and free-flowering.

Fortunes Yellow (See Beauty of Glazenwood, Climb.)

Francisca Kruger (T.) This rose has taken a foremost position as a rose for general culture; and its striking color and free growth give it popularity wherever grown. It is a beautiful coppery yellow with large flowers. Unlike any other rose in our list.

Franz Deegan (H. T.) Welter, 1903. One of the best yellow roses. A seedling of the K. A. Victoria. Superb in form and beautiful in color. Deep orange-yellow center, merging to a cream outer petals. Throws out very strong well foliaged canes, surmounted by flowers of glorious size.

Frau Karl Druschki (H.P.) Has been well named White American Beauty. A wonderful rose, such as our people have long been waiting for—fine, large, free-flowering, hardy, white. Extraordinarily strong-growing, branching freely, and has the vigor and hardiness of an oak. Foliage large, of heavy texture, but the glory is in its flowers, which are immense, and produced with great freedom, during the whole season—hundreds of magnificent blooms, full, very deep, and double, and of splendid substance; petals broad, long and saucer-shaped. Buds egg-shaped long and pointed. Pure, snow-white, without a tinge of yellow, pink or any other color. This great rose has won more prizes in Europe than any other variety sent out in years.

General Jacqueminot (H.P.) Brilliant velvety crimson; large, showy and a fine grower. A magnificent variety.

Gen. Jacqueminot (Cl.) See Caroline Goodrich. Gen. MacArthur (H. T.) Hill, 1905. Dark velvety scarlet, large, full and free bloomer; very fragrant.

General Washington (H. P.) Scarlet-crimson; very large and fine; not quite so vigorous as General Jacqueminot.

Giant of Battles (H.P.) This is still esteemed as a very fine rich, red rose. Very large, double, full and sweet.

Gloire de Dijon (Cl. H.T). A combination of salmon, orange and buff; flowers large and of good globular form. Hardy.

Glore de Lyonnaise (H. P.) This is the nearest approach to a yellow in this class. A pale shade of salmon-yellow, with deeper center, changing to creamy white.

Glore de Margottin (H.P.) A most valuable hardy rose; of splendid, symmetrical, upright growth, liberal dark green foliage. One of the best bloomers in the Hybrid family; color extremely brilliant scarlet—live and lasting; flowers large, reasonably full, globular, of good shape; pretty in bud, extremely beautiful, distinct and attractive when open; borne on very long stems.

Glory of Mosses. (Moss) A moderate grower. Flowers very large, appearing to best advantage when full; color pale rose.

Gold of Ophir (Ophire). (Cl.-N) Salmon-yellow, shaded with coppery red. One of the most beautiful of the climbing roses.

Golden Sun. (See Soliel d'Or.)

Gruss an Teplitz (H. T.) "As a bedding rose this is one of the finest and most useful varieties ever sent out. It will take rank with Hermosa or Soupert. The color is brightest scarlet, shading to deep, rich, velvety crimson. It is very fragrant, the freest grower and most profuse bloomer of any ever-bloomer. The mass of color produced is wonderful, and the foliage is extremely beautiful, all the younger growth being a bronzy plum-color. A queen among scarlet bedders. It is a perfect sheet of richest crimson-scarlet all summer. It will undoubtedly supersede Agrippina, Queen's Scarlet and others of this class."

Harrison's Yellow (Austrian). Golden yellow; medium size, semi-double. A freer bloomer than

Persian. Very hardy.

Helen Gould or Balduin (H. T.) Claimed by the introducers of Helen Gould to be a different rose from Balduin. "While the identity of this rose is in dispute, it has proved so satisfactory that we have planted it largely. This is probably one of the most beautiful and satisfactory rose for general planting ever introduced in America. It has proved itself to be the strongest-growing, free-blooming, largest-flowering and hardiest rose in existence. It is a better rose for general planting than American Beauty—the dream and hope of every rose-grower for years past. The flowers are full and perfectly double, the buds beautifully made, long and pointed. The color is a warm, rosy crimson, like the color of a ripe red watermelon. It is as hardy as La France, and one of the best, if not the very best, roses for winter blooming."

Hermosa (Bengal-Bourbon). Always in bloom and always beautiful. The flower is cupped, finely formed and full; color the most pleasing shade of pink, very fragrant. A favorite with every one.

Her Majesty (H.P.) This hybrid rose is of immense size, perfect symmetry and exquisite color, being a delicate pink, and as large as Paul Neyron.

Jubilee (H. P.) In this rose we have a grand addition to the list of dark-colored Hybrid Perpetuals. It has been thoroughly tested and found to possess most excellent qualities. Of vigorous growth, yet short jointed and compact, it takes a place in the front rank of hardy garden roses. Color pure red, shading to crimson and maroon at the base of petal, forming a coloring equaled to that of no other rose. The buds are long,

held up by long, stout flower-stems, making it valuable for cut-flowers.

Kaiserin (Cl.) See Mrs. Robert Perry.

Kaiserin Augusta Victoria (H. T.) A beautiful rose, with elegant, large-pointed buds and very large, full double flowers; color delicate creamy white, deliciously fragrant. The plant is a strong, healthy grower and a constant bloomer. The flowers are on strong, stiff stems, with rich, glossy foliage, making it one of the finest roses for corsage wear or any other use to which cutflowers can be put.

Killarney (H. T.) Dickson, 1898. A vigorous growing hybrid Tea of recent introduction, with so many good points in its favor that it has become a standard variety. Its long pointed buds excellent substance and delicious odor recommend it to every lover of the rose. Color flesh pink, shaded with white and suffused pale pink.

Killarney, White. (See under White Killarney.)

La France. (H. T.) Delicate silvery rose; very large, full; an almost constant bloomer, equal in delicacy to a Tea Rose; the most pleasing fragrance of all roses. Only a moderate grower. A very popular variety.

La Marque (Cl.-N.) Pure white buds, open flower, tinged light canary-yellow; large and full.

Liberty (H.T.) This rose marks the limit of glorious deep, yet bright coloration in a family by no means deficient in warm, rich hues of crimson red. Most nearly approached by Meteor in color, this newcomer surpasses that standard variety in purity, being without the tendency to blacken that Meteor exhibits; and the blue cast sometimes seen on the fully expanded petals of Meteor, has not been detected in any degree whatever, upon a single one of of many critically examined blossoms of Liberty. This novelty does not exact a temperature in excess of that generally accorded to other roses when grown under glass Liberty is destined to become one of the best dark-flowered rose for both commercial and private use.

Louis Van Houtte (H. P.) Bright rose-carmine; full; very large; fine globular form; deliciously perfumed.

Mabel Morrison (H.P.) Pure white petals, thick and waxy; a hybrid of Baroness Rothschild; habit good.

Mad. Alfred Carriere (Cl.-H. N.) Flesh white, white salmon-yellow at the base of petals; full and well formed; vigorous grower.

Madame Caroline Testout (H. T.) Clear pink in color—there is nothing in the rose line that can approach it in color—and the flower is as large as Baroness Rothschild, and as free as La France. If our judgment is not mistaken, it will make a sensation in the cut-flower market when brought in in good shape, and will command such prices that it will be a most profitable rose to grow.

Mad. de Watteville (T.) A strong, vigorou, grower, with handsome foliage. Color whites shaded with salmon; outer petals feathered with bright rose; very fragrant; flowers large and of beautiful shape.

Mad. Hoste (T.) Ivory-white, changing during the heat of midsummer to canary-yellow, with amber center; a strong, healthy grower

and very free bloomer. Flowers and buds of large size, and can always be cut with long stems. Highly prized for cut-flowers on account of its superb buds and long stems. One of the finest for bedding out or for forcing for winter flowers.

Magna Charta. A general favorite, prized on account of its strong, upright growth and bright healty foliage, as well as for its magnificent bloom. The color is a beautiful bright pink, suffused with carmine.

Maman Cochet (T.) In bud it resembles the Mermet family, being long and shapely, borne on long, stiff stems. It is of the largest size, and the flower is built up or rounded, and very double. The color is a deep rose-pink, the inner sides of the petals being a silvery-rose, shaded and touched with golden yellow. We pronounce this one of the finest roses that has been introduced from France in the past few years. We can with full confidence recommend this rose.

Maman Cochet, White, or Priscilla (T.) The charming new white Tea Rose. Another new American Rose. It belongs to the Tea class, being a child of that grandest of bedding or outdoor roses, Maman Cochet. Its habit is exceedingly strong and upright, like its parents, and it possesses the same large beautiful, healthy foliage, and is a most profuse and constant bloomer. The flowers are of enormous size, remarkably round and full, pure, clear, snowy white throughout, and are delightfully tea-scented. It is by far the finest and most reliable white bedding rose yet produced. Any one can have the very finest roses for cutting all summer and autumn by planting a few bushes of it. It is one of the largest white roses, both in bud and flower.

Marchioness of Londonderry. A new white Hybrid Perpetual, and one of the best flowers; of great size, often measuring 7 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. One of the finest roses. Awarded the gold medal of the National Rose Society of England. We have had this variety in flower for several seasons, and regard it as a decided acquisition to the list of hardy white roses. Requires some protection in winter in cold climates.

Marechal Niel (Cl.-N.) Beautiful deep yellow; large, full and of globular form. Very sweet.

Marechal Niel White. (See White Marechal Niel.)

Margaret Dickson (H. P.) Of magnificent form; white with pale flesh center; petal very large, shell-shaped and of great substance; fragrant. Foliage very large, dark green. A very promising variety.

Marie Van Houtte (T.) White, slightly tinged with yellow. One of the handsomest Tea Roses. Free grower and fine bloomer.

Marshall P. Wilder. (H. P.) Color bright cherrycarmine; fragrant; of good growth, with fine foliage. One of the freest of the Hybrid Perpetuals to bloom. We can recommend this rose without hesitation.

Meteor (H. T.) As a dark crimson perpetualblooming rose, this ranks as one of the best yet introduced of any class. It is especially valuable for summer and fall, blooming either in the greenhouse or in open ground, and, where there is a demand for fine roses in summer, will become a great favorite.

Meteor (Cl.-H. T.) One of the finest crimson ever-blooming climbing rose in cultivation. It is a rich, velvety crimson, much like the forcing Rose Meteor, of which it is a sport. An extremely strong-growing variety, making shoots 12 to 15 feet long in a single season, under favorable circumstances.

Mrs. John Laing (H. P.) New. As a bedding rose this is undoubtedly one of the best varieties yet introduced, being hardly ever out of bloom during the summer. Color a beautiful shade of delicate pink; of large size and very fragrant. It is also a good forcer from January.

Mrs. Robert Garrett (H. T.) A beautiful large rose of exquisite shape, finish and blending of colors, It was raised by Mr. John Cook, of Baltimore, Md., the result of a cross between Sombreuil and Madame Caroline Testout. It partakes largely of the latter variety in habit of growth, in foliage, spines and stems, and in shape of flowers show a complete blending of both parents. The flowers are very large, on strong stems, clothed with clean, heavy foliage and strong spines. The buds are long and pointed in shape, and open up beautifully into a full, rounded flower. In shape of bud and half-open flower it very much resembles Souvenir du President Carnot, but is very much larger; color a glowing shell-pink, very deep in the center; the fragrance is delicate and pleasing. A correspondent of the "American Florist," in commenting on the rose in 1898, says:

"The exhibit of Mr. Cook was a departure from the rest, as it was a vase of roses. But such roses! They towered above the carnations, on strong stems clothed with heavy foliage, and were as large as American Beauties, but of a beautiful clear pink, almost light enough to be called a shell-pink."

Mrs. Robert Perry (H. T.) (Cl. Kaiserin Augusta Victoria). A sport from that grand hardy everblooming rose, Kaiserin Augusta Victoria. It has the same beautiful creamy white flowers and splendidly shaped buds and, in addition, has a remarkably strong climbing habit of growth, sending up shoots 10 to 12 feet high.

Niphetos (T.) Pale yellowish white; often snowy wnite. Long, large buds. Very beauti-

tiful.

Ophire. (See Gold of Ophir.)

Papa Gontier (T.) A grand red Tea, of fine, crimson shade and silken texture (as distinct from velvety texture.) The bud is of fine size and graceful form, on good-length stem. Desirable for cut flowers.

Paul Neyron. (H. P.) Deep rose-color; splendid foliage and habit; with very large flower.

Perle des Jardins (T.) Fine straw-yellow, sometimes deep canary-yellow; very large and full, and of the most perfect form. One of the finest roses grown. Steps at once into fame as one of the finest dwarf yellow roses we have. Distinct from all other Tea Roses and probably one of the best known yellow roses.

Perle des Jardins (Cl.-T.) Identical with Perles des Jardins, except that it is a vigorous climber. A grand addition to our roses. It will rank with the very best.

Perpetual White Moss (Moss). Pure white. Produces very few flowers.

Persian Yellow (Austrian.) Bright yellow; small; nearly full. It is desirable to grow more than one plant, and by pruning one this year in the usual way, and the other plant the next year, annual crops of flowers may be had. Very hardy.

Philadelphia Rambler (Poly.-Climb). Walsh, 1903. Very vigorous, glowing crimson, flowers in large clusters, which do not fade quickly.

Pink Rambler (Euphrosyne) (Cl.-Poly.) What is said of White Rambler applies equally to this except the color of the flower is pure shiny rose, the partially open buds being bright light carmine, thus producing a strong and pleasing contrast. The flowers often change to creamy white when fully matured. The numerous yellow stamens lend an additional charm to the flower. In hardiness, freedom of bloom, form and color of flowers, and vigorous climbing habit, this variety is fully the equal of the Crimson Rambler.

Prince Camille de Rohan. (H. P.) One of the darkest colored roses; very dark velvety crimson, changing to intense maroon. There is no rose in all this collection that attracts more favorable comment. A very prolific bloomer and the blooms are of excellent form and size.

Priscilla. (See Maman Cochet White.)

Queen of the Prairie (Cl.-Prairie.) Bright rosy red, frequently striped with white; large, compact and globular.

Rainbow (T.) An elegant new striped Tea Rose, of strong, healthy growth and exceedingly free-flowering habit. The buds are large, on strong, stiff stems. Color a beautiful shade of deep pink, distinctly striped and mottled with bright crimson, elegantly shaded and toned with rich amber. It makes beautiful buds and flowers of large size, with thick, heavy petals; very fragrant. A useful variety for cut-flowers.

Reine Marie Henriette (Cl.-T.) A strong-growing red climbing rose. It is a grand pillar rose in the South. Flowers full and well formed.

Reve d'Or (Cl.-N.) One of the grandest climbing roses. A splendid robust climber, with the very best of foliage. A good plant will soon go to the top of a two-story house and cover space proportionately large the other way. Such a plant in full bloom, with its graceful flowers of delicate coloring, is a charming sight. Color apricot-yellow, with orange and fawn tints; petals of superb and delicate texture; flowers moderately full, always pretty and graceful, whether in bud or full open; a very profuse bloomer.

Richmond (H. T.) E. G. Hill, 1905. A pure red, fragrant, a good grower, continuous bloomer and altogether one of the best reds for tha garden ever introduced, Long pointed buds, on good stem. Keeps its color even in hot weather.

Safrano (T.) Bright apricot-yellow, changing to orange and fawn, sometimes tinted with rose. Valued highly for its beautiful buds; fragrant.

Salet. (Moss) A vigorous grower and free bloomer. Light rose, large, full. The best of all the mosses.

Soleil d'Or (H. P.) New hardy yellow rose. "The goal for which many of the world's greatest rose hybridizers have been striving has at last been reached, and we have double-flowered yellow rose, hardy enough to withstand the winters of our northern states. Has blossomed all summer on the coast. Soleil d'Or is the result of a cross between Persian Yellow and Antoine Ducher, retaining many characteristics of Persian Yellow, the bark being much the same and foliage resembling that of its parent, but produced more plentifully, while in growth it is more branching and more vigorous. The flower is perfection in form with conical buds, expanding into a large and full globular flower, with incurved inner petals. The buds are a marvelous shade of rich chrome-yellow, with just a tinting of coppery rose in the center. The fully expanded coppery rose in the center. The fully expanded flower is beautiful in its blendings of orangeyellow, reddish gold and nasturtium-red, forming a coloring impossible to satisfactorily describe. This grand seedling has been shown at all the lorge rose exhibitions in Europe, and has received the highest awards possible to grant at every display.

Souv. du President Carnot (H. T.) An excellent rose of recent introduction that has already become a great favorite. The flower is of large size and exquisite shape, with heavy, thick, shell-like petals; buds long and pointed, similar to Niphetos, but very much larger and borne on stiff, erect stems; color delicate rosy flesh.

Sunset (T.) The flowers are of large size, fine, full form, very double and deliciously perfumed. Color a remarkable shade of rich golden

amber, elegantly tinged and shaded with deep ruddy copper.

Thalia. (See White Rambler.)

Ulrich Brunner (H. P.) Splendid upright grower, with bright, healthy foliage. The flowers are good sized and of fine form, with shell-shaped petals. One of the most abundant bloomers; color cherry red.

Veilchenblau. (See White Rambler.)

White Banksia (Cl.-Banksia) White and yellow; thornless.

White Killarney (H. T.) Waban Rose Co. "A white sport from Killarney, that well known variety; should prove a great acquisition for general culture." Is identical in every respect to Killarney save in color, which is creamy white.

White La France (Augustine Guinoiseau) (H. T.) This beautiful variety, with flowers of pure white, shading to a center of light rose, is a great favorite on account of its great freedom of bloom, fragrance and large flowers. A vigorous grower, producing a great number of buds and flowers; excellent for planting in cemeteries.

White Maman Cochet. (See Maman Cochet White.)

White Marechal Niel (T.) This rose is an exact counterpart of Marechal Niel in every respect except the color of flowers. Identical in growth, foliage, climbing habits, etc. The flowers are white.

White Rambler (Thalia) (Cl.-Poly.) A worthy

companion for the Crimson Rambler. In habit of growth, foliage, manner of blooming and shape of flower, this is identical with Crimson Rambler, differing only in color, which in Thalia is pure, clear white. Flowers quite fragrant and lasts for a long time after cutting.

Wm. Allen Richardson (Cl.-N.) Orange-yellow, center coppery yellow. Very rich.

Wootton (Cl.-H.T.) A fine double flower, bright cherry-crimson. A beautiful free-flowering rose that is completely covered with bloom the entire season. Will make shoots 10 to 15 feet long in one year.

Yellow Rambler (Aglaia) (Cl.-Poly.) The only yellow, hardy climbing rose. It has been thoroughly tested and found to successfully withstand, without protection, a continued temperature of zero and below. It is similar to Crimson Rambler in manner of blooming, the flowers being in immense clusters, and having the same lasting qualities, remaining in bloom three to four weeks. The plant is even freer in growth than Crimson Rambler, and soon makes a fine, showy specimen.

TREE ROSES

The Tree Roses are grafted on hardy rose stalks 4 to 5 feet high, are tree shaped and when in full bloom are objects of beauty, making handsome plants for the lawn or rose border. In this shape we offer only the Hybrid Perpetual or hardy class. We have them in white, the different shades of pink, red and crimson.

VARIETIES NOT LISTED

If you do not find in this catalogue the variety wanted write us stating what you want and we will quote prices if in stock. We have many varieties in lots of from 25 to 50, too small a number to list in the catalogue. Some of these are old well-known varieties, others are newer ones which we are testing before cataloguing.

SHASTA DAISIES

(Chrysanthemum leucanthemum hybridum)

Originated by Luther Burbank, from whom we secured our supply. Too well advertised by this time to need any long description. A marvelous combination of size, grace, abundance and general effectiveness of flowers, which are borne on long, clean, strong stems; flowers snowy white or cream-colored, 4 to 5 inches across.

Alaska. (New). The whole plant, roots, stems, leaves, buds and flowers are gigantic, but compact and graceful in every respect. The marvelous combinations of size, grace, glistening whiteness, abundance and general effectiveness of the flowers, which are borne on long, clean strong stems, will glace it at once far ahead of all others of its class.

Under the ordinary field cultivation given Chrysanthemums, the flowers average $4\frac{1}{2}$ to 5 inches across on stems 2 or 3 feet long; with 38 to 42 wide petals and a very small disk; with proper disbudding are produced perpetually, though more abundantly at the usual blooming season.

California (New). Another giant in growth, and in most respects similar to Alaska, but the buds and half-opened flowers are of a most pleasing clear, pale lemon-yellow, with two rows of

petals. When a day or two old these gradually change to pure white. The combination is exceedingly pleasing. The flowers average 4 to 5 inches across, and, with ordinary care, are produced perpetually. The common varieties of Chrysanthemum maximum are as weeds when compared with these.

Westralia (New). This is distinguished by its branching habit, which is a strong characteristic in one of the parents of the whole Shasta Daisy Family—the Japanese Field Daisy (Chrysanthemum leucanthemum Nipponicum.)

Well-grown plants are 3 to 4 feet high and nearly as much through; buds and nearly opened flowers are of a pleasing cream-color, semi-double, 3 to 4 inches across and are produced on fairly long stems on bewildering profusion.

INDEX OF ROSES

HP, Hybrid Perpetual or Hybrid Remontant. HT, Hybrid Tea and Hybrid China. T, Tea. N, Noisette. Cl, Climbing. Poly, Polyanthus.

· ·			
Class P	age	Class I	Page
Aglaia (Yellow Rambler)Cl-Poly	86	Jonkheer J. L. Mock. Bright red-	
Alfred Colomb. Carmine-Crimson_HP	80	salmon-pinkHT	78
		Taranh Hill Colmon nink	
American Beauty. Red HP	80	Joseph Hill. Salmon-pinkHT	79
Augustine Guinoiseau. (White LaFrance) HT	80	Jubilee. RedHP	83
Baby Rambler. RedPoly	80	Jubilee. Red HP Juliet. Rosy-red HB Kaiserin Augusta Victoria. White HT	78
Balduin (Helen Gould). RedHT	81	Kaiserin Augusta Victoria. White HT	83
	81	Kaiserin Augusta Victoria. Cl.; white HT	83
Baltimore Belle. White; ClPrairie		Kaiserin Augusta victoria. Ci., winte Hi	
Banksia. White; ClBanksia	81	Killarney. Pink HT Killarney. White HT	83
Beaute Inconstante. VariegatedT	81	Killarney. WhiteHT	83
Beauty of Glazenwood. Cl. bronze-red N	81	Lady Hillingdon. Deep apricot yel-	
Potty Connery rose HT	78	low HT	78
Betty. Coppery-rose HT		low HT	
Blue Rambler. (Veilchenblau)Cl-Poly	81	La France. PinkHT	83
Bon Silene. Salmon-roseT	81	La Marque. White; ClN	83
Bride. WhiteT	81	Liberty. Red	83
Drid amoid Dink	81	Louis Van Houtto Dogo comming HD	83
Bridesmaid. PinkT		Louis Van Houtte. Rose-carmine_HP	00
	81	Lyon rose. Red-salmon-chrome yel-	
Caroline Goodrich. Red; (Cl. Gen. Jacq) HT	81	low HT Mabel Morrison. White HP	79
Catherine Mermet. PinkT	81	Mahel Morrison White HP	83
Observation White Ol III		Mad Abal Chatanan Calana in III	
Cherokee. White; ClHT	81	Mad. Abel Chatenay. Salmon-pink_HT	80
Chromatella (Cloth of Gold). Yellow Cl-N	81	Mad. Alfred Carriere. White; ClHN	83
Cl. Kaiserin Augusta Victoria. White HT	83	Mad. Caroline Testout. PinkHT	83
	85		
Cl. Perle des Jardins. YellowT		Mad. Constant Soupert. Deep yellow	00
Cl. Wootton. RedHT	86	pinkT Mad. de Watteville. WhiteT	80
Clio. Flesh-pinkHP	81	Mad. de Watteville. White T	83
Cloth of Gold (Chromatella.) Yellow_Cl-N	81	Mad. Hoste. WhiteT	83
Coquette des Alpes. WhiteHN	81	Mad. Leon Pain. Silvery pink-salmonHT	80
Countries of Conford Column winds HT		Mad Danson D 11	
Countess of Gosford. Salmon-pink_HT	79	Mad. Ravary. Deep yellowHT	80
Crested Moss. Pink Moss	81	Mad. Melanie Soupert. Saffron-yel-	
Crimson Rambler. ClPoly	81	low-carmine pinkHT	80
Dean Hole. Silvery-carmineHT	79	Magna Charta Pink HT	84
		Magna Charta. Tilk	
Dorothy Page Roberts. Cop-pink_HT	78	Magna Charta. Pink HT Maman Cochet. Pink T	84
Dorothy Perkins. Pink; ClPoly	81	Maman Cochet (Priscilla.) White_T	84
Duchess de Brabant. PinkT	82	Marchioness of Londonderry. WhiteHP	84
Duchoss of Wollington Connery		Marcabal Niel Valley Cl	84
Duchess of Wellington. Coppery-	F O	Marechal Niel. Yellow; ClN	
saffron - yellowHT	78	Margaret Dickson. White HP Marie Van Houtte. White T	84
Earl of Dufferin, CrimsonHP	82	Marie Van Houtte. WhiteT	84
Ed. Mawley. Deep velvety crimson_HT	78	Marshall P. Wilder. RedHT	84
Empress of China. Pink; Cl HP	82	Meteor. Dark redHT	84
Etaile de Laser Wellson			
Etoile de Lyon. YellowT	82	Meteor. Cl.; Dark redHT	84
Euphrosne (Pink Rambler)	85	Mrs. Aaron Ward. Yellow-salmon_HT	80
Fisher Holmes. RedHP	82	Mrs. Arthur Robt. Waddell. Reddish-	
Fortune's Yellow (Beauty of Glazen-		galmon HT	80
runed) Propre and Cl M	00	salmon HT Mrs. John Laing. Pink HP	
wood.) Bronze-redCl-N	82	Mrs. John Laing. PinkHP	84
Franciska Kruger. Coppery-yellow_T_	82	Mrs. Robert Garrett. PinkHT	84
Franz Deegan. YellowHT	82	Mrs. Robt. Perry. (Kaiserin Augusta	
Frau Karl Druschki. WhiteHP	82	Victoria). WhiteHT	85
Con Inaguaminot Pod IID	82	Mr. Mourland Internal III	
Gen. Jacqueminot. RedHP	04	My Maryland. Intense-pinkHT	80
Gen. Jacqueminot (Caroline Good-		Niphetos. Yellowish-whiteT	85
rich) Cl. HT Gen. MacArthur. Velvety scarlet HT Gen. Washington. Red HP	82	Ophire. (Gold of Ophir).Salmon-yel-	
Gen. MacArthur. Velvety scarlet HT	82	low Cl	85
Con Washington Rod UD	82	low Cl. N Papa Gontier. Red. T	
Claire de Differ Coll		rapa Gontier. RedT	85
Gloire de Dijon. Salmon-orange; Cl. HT	82	Paul Neyron. RedHP	85
Gloire de Lyonnaise. YellowHP	82	Perle des Jardins. YellowT	85
Gloire de Margottin. RedHP	83	Perle des Jardins. Yellow; ClT	85
Glory of Mosses. PinkMoss		Downstral White Man	
Cold of Online Colors	83	Perpetual White MossMoss	85
Gold of Ophir. Salmon-yellow; Cl. N	83	Persian Yellow Austrian	1. 85
Golden Sun (Soliel d'Or)	83	Pharisaer. Rosy fleshT	80
Gruss en Teplitz. Red HT	83	Philadelphia Rambler. Red. ClPoly	85
Harrison's YellowAustrian	83	Pink Pambler (Funbrasses) Cl. D. L.	
Harry Kirk Doop gel-less 11 Tro		Pink Rambler. (Euphrosyne). ClPoly	85
Harry Kirk. Deep sulphur yellow_HT	79	Prince Camille de Rohan. Dark-red_HP	85
Helen Gould (Balduin.) RedHT	83	Prince de Bulgarie. Rosy-fleshHT	80
Her Majesty. Pink HP	83	Priscilla. (White Maman Cochet)_T	85
Hermosa. Pink Bourbon	83	Queen of the Prairie. Rosy-red. Cl. Prairie	85
Hugh Dickson. Brilliant crimson HP		Dainham Chialle. Rosy-red. Of Prairie	
I D Clark Combat Crimson _ HP	79	Rainbow. StripedT	85
J. B. Clark. Scarlet-maroon HT	79	Rambler Blue. (Veilchenblau). Pur-	
Jean Note. Chrome yellowHT	79	plish-red. ClPoly	81

INDEX OF ROSES, continued Class Page Sunset. Yellow T 85
Rambler Red at CL Local Poly 1 885 Thalia. (White Rambler) Class Poly 1 86
Rambler White. Cl. Poly 86 Tree Roses 86
Rambler Yellow. Cl. Poly Reine Karola de Saxe. Pearly-pink HT 86 Verlchenblau. (Blue Rambler) Purple-
Reine Marie Henrietta. Red Cl. T vol. 85 red C. Poly 86
Reve d'Or. Apricot-yellow. Cl. N 6500 85 White Banksia. Cl. Banksia 86
Rhea Reid. Red. HT 80 White Killarney. HT 86
Richmond. Red HT White La France (Aug. Guinoiseau) HT 86
Safrano. Apricot-yellow T 85 White Mamam Cochet 86
Salet. Pink Marechal Neiland Moss 85 White Marechal Neiland T 86
Soliel d'Or. Orange-yellow; Reddish-White Rambler. (Thelai) Cl. 2. Poly 86
gold HP 85 Wm. Allen Richardson, Coppery-yel, Cl-N 86
Souvenir du President Carnot. Flesh HT Wootton. Red Cl. HT 86
Sunburst. Cadmium-yellow; Orange-HT Yellow Rambler. (Aglaia) Claring Poly 86 Rambler Pink. Cl. 85
tenter Time. Of the state of th

GENERAL INDEX

For Table of Contents, see second cover.

PAGE	PICE	PAGE	PAGE
Abies62	Buckeye 11111153	Cupressus62	Gum Trees59
Acacia 52, 55	Bulbs, Tubers_73-75	Currants45	Grapes34-36
Acer56	Burning Bush69	Currant, Flowering 64	Gynerium73
Actinidia71	Buttonwood53	Cydonia34, 64	Halesia67
Adam's Needle70	Buxus69	Cypress	Hedera 73
Ailanthus53		Cypress Longo 62 62	Hedge Plants 70
Akebia64	Calico Bush69	Cypress, Japan 62, 63	
	California Big Tree 62	Cytisus55	Hedge, Defensive 70
Almond 48	Calycanthus64	Dahlias 74	Hedysarum65
Flowering 48, 64	Camellia64	Daisy, Shasta 86	Hercules Club54
Alder 63	Canna 74	Decidu's Shrubs 64-68	Hibiscus 64 Hicoria 48 Hickory 48
Alnus53	Carolina Allspice 64	Deciduous Trees 53-59	Hicoria48
Althæa64	Carya48	Dewberries44	Hickory48
Amaryllis75	Caryopteris68	Deutzia	High Bush Cran-
Amelanchier66	Castanea48	Diervilla68	berry67
Ampelopsis71	Castanea 48 Catalpa 53	Dioscorea72	Holly60
Amygdalus48	Cedar, Red62	Distances for Plant-	Honey Locust54
Angelica Tree53	Cedar, Himalayan 62	ing6	Honeysuckle72
Apples11-20	Cedar, Japan 62	Directions for Plant	Honeysuckle, Up-
Apricots33	Cedrus62	ing6 Dogwood54, 65	right65
Aralia53	Cercis 23-25, 54, 69, 64	Dogwood54, 65	Horse Chestnut 54
Araucaria 61	Chamæcyparis62	Drooping Trees60	Hyacinths75
Arborvitæ61	Cherries23-25	Dutchman's Pipe_172	Hydrangea65, 66
Aristolochia71	Cherries, Weeping_60	Elder65	Hypericum66
Ash53	Cherry, Flowering 54	Eleagnus65	Rex 69
Ash, Mountain60	Cherry, Rocky Mt.	Elm54	Indian Current67
Ashberry69	Dwarf64	Elm, Weeping60	Indian Shot Plant 74
Asparagus46	Chestnut48	Empress Tree54	Iris75
Aucuba69	Chinese Matrimony	Eulalia72	Insect Pests and
Azalea64	Vine72	Euonymous69	Sprays8, 9
Balm of Gilead 53	Chionanthus 54	Evergreens61-63	Ivv73
Barberry64	Chrysanthemum _86	Evergreen Shrubs 69	Ivy, American73
Basswood55	Cinnamon Vine72	Exochorda 165	Ivy, Boston73
Beech53	Clematis72	Fagus53, 60	Ivy, Japan73
Beech, Weeping60	Climbing Vines_71-73	Filberts48, 65	Japan Cedar62
Berberis64	Coniferæ61-63	Fir 62	Japan Quince67
Betula53, 60	Convallaria75	Forsythia65	Jap. Silver Thorn 65
Bignonia71	Coral Berry 64, 67	Fragaria37	Jasmine73
Big Trees62	Corchorus64	Frazisus53	Jasminum73
Bilsted53	Cornus54, 65	Fringe 54	Jonquils75
Dista 69			Judas Tree55
Biota62 Birch53	Corylus 48, 65	Fruit Dept11-50	Judas Tree
	Crab Apple20	Genista67	Juglans48-50
Birch, Weeping60 Blackberries40-44	Crab, Flowering 54	Gingko	Juneberry66
Plackberries40-44	Cranberry, High	Gladiolus74	Juniper62
Blackberry - Rasp-	Bush67	Gleditschia 54	Juniperus 62
berry Hybrids 43, 44	Cratægus59	Golden Chain54	Kalmia69
Blue Spirea64	Crocus74	Golden Bell65	Kerria64
Box69	Croyptomeria62	Gold Dust Tree66	Laburnum55
Box Elder53	Cucumber Tree55	Gooseberries46	Larch55

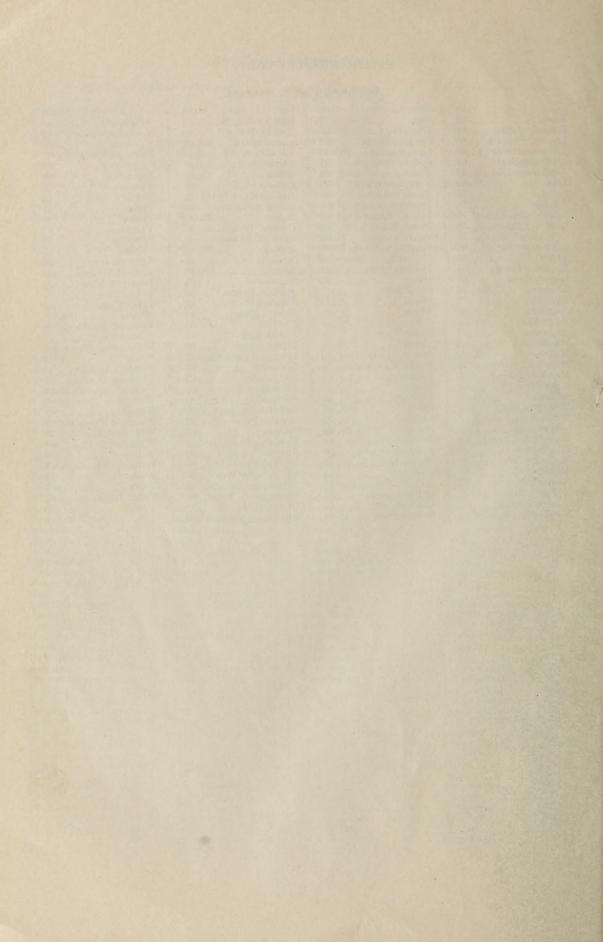
GENERAL INDEX, continued

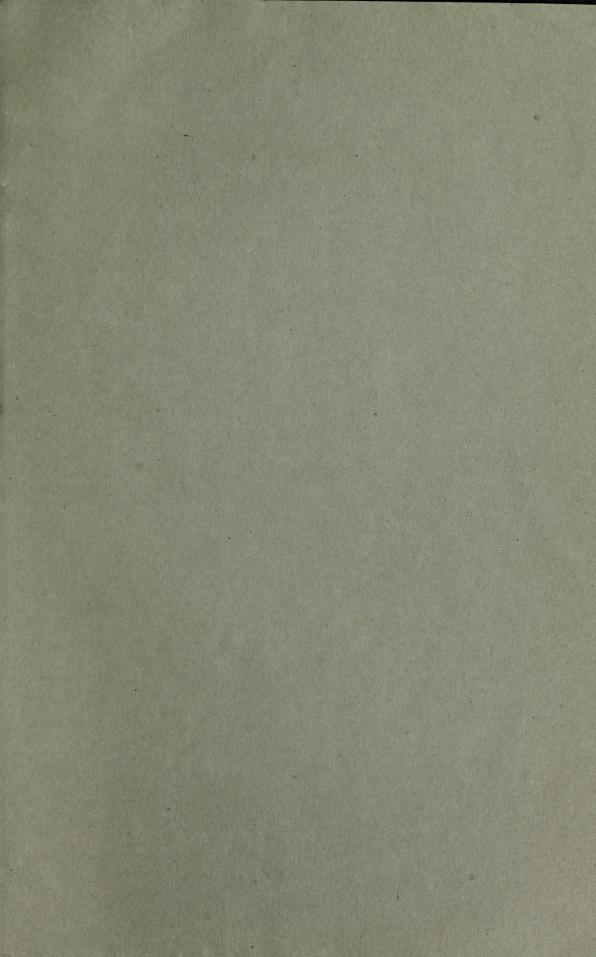
PAGE
Larix
Laurel, Japan69
Laurel, English 69
Lauro-cerasus69
Laurustinus 69
Laurustinus69 Ligistrum66, 67
Lilac66
Lilies75
Lilles
Lilium 75 Lily-of-the-Valley 75
Lily-of-the-Valley 15
Linden55 Liquidambar59
Liquidambar59
Liriodendron59
Locust 55
Locust, Honey 55
Logan Berry 43
Logan Berry 43 <i>Lonicera</i> 65, 72
Lycium 72
Lycium 72 Maclura 57 Magnolia 55, 56
Magnolia 55, 56
Walnowald 69
Maidenhair 56
Maidenhair 56 Maples 56, 57 Matrimony Vine 72
Matrimony Vine 72
Meadow Sweet67
Mock Orange66
Momia 47 CO
Morus47, 60 Mountain Ash57
Mountain Ash5/
Mountain Ash,
Weeping60 Mountain Laurel69
Mountain Laurel69
Mulberries47
Mulberry, Weeping 60
Narcissi75 Nectarines33
Nectarines33
No. of Trees per
Acre 6
Acre 6 Nut Trees 48, 50

PAGE	
Oak57	7
Oleaster66	,
Oregon Grane 69)
Ornamentals 50-86	,
Osage Orange 57	,
Pæonia 73, 64	
Osage Orange57 Pæonia73, 64 Pampas Grass73	
Paulownia 58	
Paulownia58 Peaches30-33 Peach, Blood Leaf 58	
Peach Blood Leaf 58	
Pearl Rush 65	
Pearl Bush 65 Pears 21-23 Pendulous Trees 60,61	
Pendulous Trees 60 61	,
Phenomenal Berry 43	
Philadelphus 68	
Piana 69)
Picea63 Pie Plant47	,
Ding Co	,
Pine62	
Pinus	,
Plana mana 56	9
Plane Tree 58 Plums 25-28 Plums, Flowering 52	5
Plums 25-28	,
Plums, Flowering 52	,
Plum, Purple-leaf_58	5
Podocarpus68	
Populus 58	
Populus58	5
Privet66, 67	
Prunes28, 29	
Prunus_28-29, 58, 64	
Prunes28, 29 Prunus28-29, 58, 64 Prunus Pissardi58	
Frunus truova58	
Pyrus 11-20, 54, 57, 67	
Quince 34 Quince, Flowering 67 Quince, Japan 67	
Quince, Flowering_67	7
Quince, Japan67	7
Quercus01	
Rashberries 12_11	

PAGE
Red Bud 58
Red Bud58 Red Cedar58 Retinospora62, 63
Detimognoma 62 C2
Retthospora02, 63
Rhododendron 70
Rhubarb47
Ribes45, 64
Robina 55
Rhubarb47 Ribes45, 64 Robina55 Rocky Mt. Cherry_67
Deschor
Rosebay70
Rosebay70 Roses76-86 Roses, Tree86
Roses, Tree86
Rose of Sharon 67
Rubus38, 44
Saliehamia 59
Salin 50 C1
Salisburia 58 Salix 59, 61 Sambucus 65
Samoucusb5
Scotch Broom 67
Sequoia63
Sequoia 63 Shasta Daisy 86
Shrubs 64-70 Silver Bell 67
Silver Rell 67
Silver Thorn65 Silvery Sweet Vine 73
Cilyona Caract Via 79
Slivery Sweet vine 13
Snowball67
Snowberry67
Snowball 67 Snowberry 67 Snowdrop Tree 67
Sorbus 60 Spanish Bayonet 70
Spanish Bayonet 70
Spindle Tree77
Spinare 11cc
Spiræa 67 SprayingFormulas7 9
Spraying Formulas 7 9
Spruce 63
St. John's Wort68
Spruce 63 St. John's Wort 68 St. Peter's Work 68
Strawberries37, 38
Strawberries37, 38 Strawberry Tree69 Sweet Gum59 Sweetscented shrub68
Sweet Cum 50
Cyrect Guil99
Sweetscented shrub68

P	AGE
Sycamore Symphoricarpus Syringa Syringa, or Phila	59
Symphoricarpus _	67
Syringa	-66
Syringa, or Phila	_
delphus	-68
delphus Tamarisk	68
Tamarix	68
Taxus	
Tecoma	71
Thorn	59
Thorn Thuya	61
Tigridia	75
Tulia	55
Tulia Tree Box	64
Tree of Heaven	59
Trumpet Vine	
Tuherose	75
Tuberose	50
Illmus 54	60
Ulmus 54. Verbena Shrub	68
Vihamana	67
Viburnum Tinus	60
Vinos 71	72
Vines 71 Virgin's Bower	79
Virginia Creeper	71
Virginia Creeper	96
Vitis 34 Walnut 48	50
Washawas	-50
Waxberry Weeping Trees 60,	61
Whiteward	0.1
Whitewood	00
Weigeia	.00
Weigela Willow Willow, Weeping	- 09
willow, Weeping_	-01
wisteria	13
Yew, Japan	-63
Yew, Japan	-63
Yucca	.70





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