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No. 1.

DESCRIPTIVE CATALOGUE

—OF—

FRUIT AND ORNAMENTAL

Trees, Shrubs,

VINES, ROSES; Etc.,

CULTIVATED AND FOR SALE AT

HILL HOME NURSERIES,

TADMOR, OHIO.

N. H. ALBAUGH & SON, PROPRIETORS.

DAYTON, OHIO:

JOURNAL BOOK AND JOB PRINTING ESTABLISHMENT.

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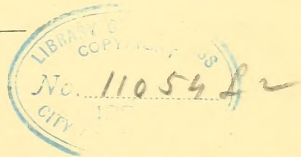
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NOTICE.

IN presenting this new edition of our Catalogue to the public, we are enabled, through its continued and increased patronage, to report a creditable enlargement and improvement in our establishment.

It is a principle with us to preserve a limited number of varieties, embracing only the best among the old, and the most deserving and promising among the new.

Our stock of the leading articles of nursery productions is large and well-grown, and nurserymen, dealers and planters, whether buying in large or small quantities, will be dealt with in a liberal spirit and in a cheerful, business manner.

Correspondents are particularly requested to write their names, post office, county and State, plainly, and to give plain directions as to the route they wish their goods shipped. Should no directions be given, we will mark as we think best, without assuming the responsibility.

Transportation is at the expense of purchasers. The responsibility for safe carriage is wholly with the forwarders. No charges will be made for delivery to the express office or railroad depot.

Trees and plants will be carefully packed and labeled. Every precaution is taken to preserve a correct nomenclature. Persons unacquainted with the different varieties will do well to leave the selection to us, as we aim to grow an assortment suited to the public need, and assortments will always be made profitable to patrons.

TERMS CASH. Remittances should be made by drafts, postal orders, or by express. If money is sent by express the charges should be prepaid.

Agents operating from this establishment are provided with certificates, showing that they have made arrangements with us for their supplies. Such certificates are never given for a longer period than one season. Unprincipled dealers have sometimes represented themselves as operating from these Nurseries when they procured their stock elsewhere, furnishing refuse and worthless articles. The frequency of this manner of operating has brought much odium, undeserved, upon nurserymen and dealers as a class. We aim to authorize no one to deal in our products unless reliable.

SELECTION OF TREES AND PLANTS.

In making a selection of trees and plants for the orchard or garden, the primary object is good and sufficient roots to insure safety in transplanting. To encourage the growth and perpetuate varieties, is the province of the nursery—the province of the garden and orchard is to shape the tree and to produce the fruit. Our observations of the best ages and sizes of trees and plants intended for transplanting, leads us, as a rule, to choose those as young as possible, consistent with well developed roots. The tree should also be of sufficient height when transplanted for the formation of a top. In transplanting a tree of this age and size, all branches which may have appeared should be pruned away, and the top cut back to the height desired for the formation of a new head. It is a prevalent desire to procure trees from the nurseries with heads already formed; a desire in the main unreasonable and impossible to realize. Once having determined to plant, an impatience for fruit often takes the place of the better judgment in the selection. The tree must first be formed and fostered until it has reached a mature growth or age before it can be expected to yield its fruit, and it should be encouraged to reach this maturity without stint or shock to its healthy growth. To transplant a fruit tree at the age of four or five years, we necessarily impair its vigor and vitality.

APPLE TREES

Are usually propagated by grafting, and at two or three years' growth from the graft are in the best condition to transplant, if the growth has been ordinarily vigorous. At this age, the roots are undoubtedly in a better condition to transplant than at any other period—they are less liable to mutilation in removal, and accommodate themselves to new situations with more alacrity than when they become older and firmer.

PEARS, PLUMS AND CHERRIES

Are usually propagated by budding in the nursery rows. If they have made sufficient growth at one year for the formation of a top, we would recommend that age for their removal; but in order to meet partly the popular notion for older trees, two year olds are usually advised.

PEACHES

Are propagated by budding, and the only proper age for transplanting them is at one year from bud. These, with ordinary culture and care, make a growth tall enough to accommodate the advocates of both low and high heads.

QUINCES

Are propagated from cuttings or layers, and require from two to three years to bring them to suitable size for the convenience of the orchardist.

GRAPES

Are usually cultivated from cuttings or layers. These are in best condition to transplant at one year old if well furnished with roots.

RASPBERRIES AND BLACKBERRIES

Are propagated by suckers, from tips of the branches or pieces of roots. The last two methods produce the best plants, which should always be transplanted at one year old.

CURRANTS AND GOOSEBERRIES

Are propagated by cuttings, and at one year old, if properly treated, are in good condition to transplant.

STRAWBERRIES

Propagate themselves by runners, and should always be transplanted at one year.

For ornamental trees and shrubs, and all other plants, the earliest period at which their roots become sufficiently developed to promise safety in transplanting decides the proper and timely condition.

HINTS ON TRANSPLANTING, ETC.

THE SOIL.

Let the soil be in the condition, and prepared in the manner necessary to produce a good crop of potatoes or other hoed crops.

PRUNING.

The object of pruning is to regulate the shape of the tree, and the proper time to commence is at the planting. If small trees are bought, as recommended, all the branches should be cut off, and the tree then cut back to the height at which the head is desired. If larger trees are chosen, upon which the top is already formed, the planter must content himself to cut back the branches only in proportion to the loss of roots in taking them up. All bruised and broken roots should have their ends trimmed smoothly with a sharp knife.

PLANTING.

If the soil has been well prepared, a hole should be dug out only large enough to admit the roots in their natural position, and at a depth not greater than they formerly grew in the nursery. The earth to fill in and about the roots should be well pulverized, that it may be worked thoroughly among the roots with the hands; when nearly filled up, enough water should be poured in to settle the earth firmly about the roots; when the water has sunk away, the work of filling up the hole is completed with dry soil, to prevent baking. This system obviates the vicious plan of tramping in trees with the feet. If planted in the Fall, a mound from six to eight inches high should be thrown up about the tree to add to its security against frost and surplus water. In the Spring the mound should be removed. No manure should be placed near the roots of a tree or plant in planting.

MULCHING.

Newly planted trees are much benefitted by mulching, if they do not have careful cultivation. Mulching consists in covering the ground about the tree beyond the extension of the roots with tan-bark, coarse manure or litter, to the depth of six or eight inches. This preserves an even temperature, and a uniform supply of moisture about the roots.

AFTER CULTURE.

Corn is believed to be the most appropriate crop in which to cultivate newly planted orchards. Beside the advantage of the frequent stirring of the soil, the additional one of shade, in the most trying parts of summer, is supplied. After the first season, any of the hoed crops are recommended.

FROZEN TREES, &c.

If trees come to hand in freezing weather, place the packages *unopened* in a cellar, away from heat and frost, until thawed, when they may be unpacked. If the roots are dry from too long exposure, place them in water for twelve to twenty-four hours, or cover the trees entirely in loose, mellow soil, for two or three days, taking care that they are not left so long as to start growth too much.

COMBINATION OF DIFFERENT KINDS.

It is a very desirable plan to combine in this way the apple with other fruits. Alternate rows and alternate trees are planted with peaches, pears, plums and cherries, and this can be carried still further by the introduction of raspberries, currants, gooseberries, and strawberries, in alternate rows, so that the whole ground is devoted to fruit. By this combination the land is made to yield a succession of paying fruit crops, from the second year of planting.

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PLAN OF ORCHARDS.

A-Apple. SP-Standard Pear. D-Dwarf Pear, Plum, Peach, etc.

One acre will contain, at 30 feet apart, 48 Apple trees, 35 Standard Pears, 82 Dwarf Pear, Peach, etc.

The advantage of planting fruit trees on the above plan will be readily seen. By setting the Apple trees 30 feet apart, and filling in with smaller growing trees, the Standard Pear occupying the space between the four Apple trees, and being an upright pyramidal grower, and they do not interfere with each other.

As an instance, we refer to an orchard planted in this way, the apple trees were set 40 feet apart each way; then a row of early Richmond Cherry trees each way between them, requiring three times as many Cherry as Apple trees; then a row of Blackberries, being 10 feet apart; then a row of Strawberries between them, leaving 5 feet space for cultivation. The next year, the Strawberries produced the only crop gathered; they yielded \$200 per acre. The next year, the Strawberries yielded about half as much, and after picking the fruit, the vines were plowed under, and turnips planted in July, which produced a good fall crop. That same year, the Blackberries commenced to bear a little and sent up a vigorous growth of canes, which gave a full crop the next year, and continued to do so for five years, yielding over \$200 per acre annually.

Last year they done poorly, and have been removed, to give more room to the trees, which now sufficiently occupy the ground.

The Cherry trees commenced bearing the third year, and have borne full crops every year since, the quantity increasing each year with the size of the trees. For several years the fruit has been worth from \$200 to \$300 per acre, and sometimes more.

The Apple trees have made a fine growth, and commenced bearing fruit. The Cherry trees in the Apple rows begin to crowd them, and will soon be removed, while those standing in the center of four Apple trees will have plenty of room for many years, and can remain, leaving as many rows of Cherry trees 40 feet apart, as of Apples on the same ground. By pursuing the above plan, there may be taken from \$200 to \$300 worth of fruit annually, before the Apple trees acquire size enough to bear much fruit; and thus avoid the usual objection urged against the planting of Apple orchards, viz.: that it requires so long a time before any profit can be derived from the land thus occupied. The same principal will apply to any distance between 30 to 40 feet, and each planter can decide for himself according to the ground to be devoted to fruit. As the heaviest draught upon the soil is when the fruit is ripening, if all matured at once they might exhaust it of nourishment, but as they ripen gradually, following in succession, the intervening showers supply each crop as well as if there were no other. By this plan, we get 165 trees to the acre, and it is much easier and cheaper to fertilize and cultivate 165 trees on one acre, than to have them spread over five or six acres, to say nothing of the land saved for other crops. Every farmer should have at least one acre of orchard on the above plan, which should yield \$10 per tree. But at half that sum they will give \$825 per acre, with less labor than other crops that yield but small returns.

To those who desire to follow up this subject further, we would recommend the following horticultural works of merit: "American Pomology," vol. 1, by Dr. John A. Warder; Charles Downing's revised edition of "Downing's Fruits, and Fruit Trees;" A. S. Fuller's "Grape Culturist" and "Small Fruit Culturist;" "Gardening for Pleasure," by Peter Henderson; and "Scott's Suburban Home Grounds."

Among the most valuable periodicals are "The Gardener's Monthly," Philadelphia; "Prairie Farmer," Chicago; "Western Rural," Chicago; "Coleman's Rural World," St. Louis; "American Agriculturist," New York City; "Moore's Rural New Yorker," New York City.

RULE FOR ASCERTAINING THE NUMBER OF PLANTS

REQUIRED FOR ONE ACRE OF LAND WHICH CONTAINS 43,560 SQUARE FEET.

Multiply the distance in feet between the rows by the distance the plants are apart in the row, 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, will show how many plants or hills the acre will contain, thus:

Blackberries.....	8 feet by 3 = 24)	43,560 (1,815 Plants,
Raspberries.....	7 " 3 = 21)	43,560 (2,074 "
Strawberries.....	5 " 1 = 5)	" (8,712 "
Strawberries.....	3 " 16 in 4)	" (10,890 "
Dwarf Pears.....	10 " 10 = 100)	" (435 Trees.
Peaches.....	18 " 18 = 324)	" (134 "
Standard Pears and Cherries.	20 " 20 = 400)	" (108 "
Apples.....	30 " 30 = 900)	" (48 "

And so on for any distance which may be desirable to plant.

APPLES.

The Apple is undoubtedly the most valuable as well as the most widely known of the whole family of fruits. It will flourish in a great variety of soils, not too wet, if occasionally supplied with lime. Plant 30 feet apart each way, requiring 48 trees per acre. Fill in the rows and between them with small fruits, so that the ground shall yield a profit while the trees are growing to a suitable size for bearing fruit.

DWARF TREES are budded on the Paradise and Doucin Stocks, and may be planted at one or two years from the bud or graft, and will generally come into bearing the second year after planting.

SUMMER VARIETIES.

Benoni—Below medium; striped and shaded with crimson; juicy, tender pleasant, sub-acid. Tree vigorous and upright. August.

Chenango Strawberry—Medium size; oblong, strawberry color, mottled with yellow; tree vigorous and productive. August and September.

Duchess of Oldenburg—A large, beautiful Russian Apple; roundish, streaked red and yellow; tender, juicy and pleasant. A kitchen apple of best quality, and esteemed by many for dessert. Tree a vigorous, fine grower, and young and abundant bearer. September. Succeeds well in the north-west, where most varieties fail.

- Early Harvest**, (Yellow Harvest)—Medium to large; pale yellow; tender, with a mild 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 Red Margaret**—Below medium; greenish yellow, with dark red stripes; rich and agreeable. Tree slender. Middle of July.
- Early Strawberry**—Medium; striped crimson, sub-acid, good; dessert and market; handsome grower. July and August.
- Fourth of July**—Medium, light yellow, striped, splashed with red. Early bearer, very hardy; upright, strong grower. July.
- High Top Sweet**—Medium, greenish yellow, sweet, very good; immensely productive and hardy, superb grower. July.
- Keswick Codling**—Above medium; greenish yellow, with a faint blush; juicy, with a pleasant acid flavor, fine for cooking, and a good bearer. Tree a good grower and hardy.
- Red Astrachan**—Large, roundish; nearly covered with deep crimson, with a pale, white bloom, very beautiful; flesh white, crisp, rather juicy, acid and good. Tree vigorous, erect and productive. August.
- Sops of Wine** (Homony)—Medium size, oblong; dark crimson, flesh stained with red; juicy, sub-acid. Tree a fine grower, distinct and quite productive. August and September.
- Summer Rambo** (Western Beauty, Large Rambo, &c.)—Large to very large; skin pale yellow, covered with red; flesh light yellow, tender, juicy; flavor first rate; tree a strong grower, productive. August.
- Tetofsky**—A Russian summer apple sometimes called "Russian Crab," a name doubtless given it on account of its hardness and early bearing qualities. It withstands the most rigorous climate, and produces annual crops of handsome fruit, frequently bearing in the nursery rows at the age of two and three years. The flesh is white and juicy, sprightly, sub-acid, fragrant and agreeable. Ripens in August.
- White Juneating** (June, May of Virginia, Early May, &c.)—Small yellow, sometimes with a faint blush; crisp, pleasant flavor. Tree a moderate grower. June and July.

AUTUMN VARIETIES.

- Autumn Strawberry**—Medium; brightly striped, sub-acid; hardy, handsome tree; productive. September and October.
- Bailey Sweet**—Large; yellowish, mostly striped with red; tender, with a honeyed, sweet flavor. Tree hardy, vigorous and productive. November to March.

- Fall Queen** (Buckingham)—Large; pale purplish red, striped, sub-acid; dessert and kitchen. Tree vigorous and upright. October and December.
- Fameuse**—Medium; striped and blotched with red; flesh remarkably white, very tender, juicy, with a slight perfume. Tree moderately vigorous. October and November.
- Gravenstein**—Large; yellow, partially covered with scarlet; sub-acid, aromatic; dessert and kitchen.
- Haas** (Gros Pommier)—Medium to large, slightly conical and somewhat ribbed; pale greenish yellow, shaded and striped with red; flesh fine, white, sometimes stained, tender, juicy, sub-acid, good. Tree vigorous and hardy: upright grower, with well-formed head; bears early and abundantly. Originated near St. Louis, Mo., and very popular in the west and north-west. September to November.
- Holland Pippin**—Very large, greenish yellow; flesh tender, juicy, and of excellent flavor, somewhat similar to Fall Pippin, but is quite superior to it in point of productiveness; handsome, and one of our best cooking apples; tree a fine grower, hardy, and immensely productive. October and November.
- Maiden's Blush**—Large; beautiful, pale waxen yellow, blushed with brilliant crimson; acid, aromatic; an early regular bearer, very productive. Tree vigorous and hardy; very popular. August to October.
- Ohio Nonpareil**—Large to very large; covered with bright red; sub-acid, juicy and rich; best quality, popular. September to December.
- Rambo**—Medium size; streaked and mottled yellow and red; tender, juicy, mild flavored. Tree a good grower and bearer. A widely cultivated and esteemed old variety. October to December.
- Red Winter Pearmain**, (Lady Finger, Buncombe)—Medium size; yellowish white, mostly shaded with maroon; tender, juicy, mild, sub-acid. Tree a good grower and regular bearer; very popular. Late Fall and early Winter.
- St. Lawrence**—Large; yellowish, striped and splashed with carmine; flesh white, lightly stained, crisp, tender, vinous. Tree vigorous, upright. September, October.
- Wealthy**—Minnesota; medium; very handsome stripe, good, very hardy, productive, Fall and early Winter.

WINTER APPLES.

- American Golden Russet**. (Bullock's Pippin, Sheep Nose)—Medium or small, roundish ovate; clear golden russet; very tender, juicy, rich; more resembles in texture a buttery pear than an apple. A thrifty, upright grower; good bearer. November to December.

- Ben Davis**, (New York Pippin, Kentucky Streak, &c.)—Large, smooth, often polished, nearly covered with red; sub-acid; one of the most profitable market fruits. Tree remarkably healthy and vigorous, productive and bears early. December to February.
- Baldwin**—Large; nearly covered with deep red, flesh yellow; juicy, sub-acid, rich. One of the leading popular market fruits. October to February.
- Clyde Beauty**—Fruit large; greenish, mottled with dull red, and bright red in the sun; flesh white, tender, juicy, brisk, sub-acid. Tree vigorous and upright. Very productive.
- Canada Reinette**—Largest size; greenish yellow, slightly washed with brown on the sunny side; juicy, with a rich, lively sub-acid flavor. Tree vigorous and productive. December to April.
- Clayton**—Large, conical, flattened, regular, red with darker stripes, flesh yellow, breaking, sub-acid, good, a very valuable market sort. Tree a strong grower, long-lived, good bearer. December to April.
- Clermont**—Origin Clermont Co., O. Fruit medium to large; flesh firm till fully ripe; fine grained, rich yellow with russety dots, sufficiently juicy, mild, sub-acid, very good, form globular, oblate, somewhat irregular. March and April.
- Dominie**, (Wells)—Medium; greenish yellow, with splashes of bright red; sprightly, pleasant flavor. December to April.
- Flory**, (Flory's Bellflower)—Medium to large; rich yellow; tender, sub-acid, Tree a remarkable fine grower, hardy, and an abundant bearer. November to December.
- Fallwater**, (Fornwalder, Tulpehoeken)—Very large, globular; yellowish green, dull red cheek; juicy, crisp, pleasant, sub-acid flavor. Tree a strong grower, very productive even while young. November to March.
- Grimes' Golden**—Medium; yellow; flavor sub-acid, aromatic and rich; quality best. Tree is a handsome grower and bears early. January to March.
- King of Tompkins County**—Large; handsome yellow, covered with deep red; flavor sub-acid, aromatic. Tree vigorous, spreading and healthy. December to February.
- Large Striped Pearman**, (McAfee's Nonesuch, Missouri Keeper, Parks' Keeper, &c.)—Large; yellow, striped, splashed and shaded with red; flavor mild, rich and pleasant, scarcely sub-acid, very good. A valuable market apple. Tree hardy, vigorous and productive. December to February.
- Lawver**—This beautiful apple promises to become one of the most profitable sorts for market. Its large size and great beauty at once attracts attention. Tree vigorous and hardy; color brilliant red; flavor moderate; keeps well till April.

London Sweet, (Heikes' Winter Sweet)—Large; always fair, pale yellow; flavor very sweet. Tree vigorous, upright and very productive. December to February.

Milam—Small; covered with marbled red, indistinct stripes; flavor mild sub-acid. Tree hardy, handsome and very productive. December and January.

Mann Apple—Medium to large; conical, greenish yellow; flesh crisp, tender, mild; tree a strong, upright grower; productive. Keeps till July.

Missouri Pippin—Large, oblong, bright red, with numerous grey dots, very handsome and of fair quality; an early and very abundant bearer, and very profitable orchard fruit. December to April.

Nickajack—Large; striped, shaded and splashed with two shades of red; compact, moderately tender and juicy, mild sub-acid. Tree vigorous, upright, spreading. Valuable for its hardihood and productiveness. December to April.

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, sub-acid, rich and delicious flavor; in perfection in January and keeps till June. The tree is a strong, upright grower, and forms a very compact; should be kept open by pruning, so as to admit the air and light freely.

Park Spice—Fruit medium, roundish; shaded with red, slightly sprinkled with light brown dots, mild sub-acid, slightly aromatic. Core medium. Tree thrifty, spreading and productive. December to March.

Paradise Winter Sweet—Large; yellowish white, blushing in the sun; flavor very sweet; quality excellent. Tree vigorous, upright and productive. December.

Plumb's Cider—Very hardy, vigorous and productive; large, oval, striped; tender, juicy, sub-tart. October to January. This variety proves of most value in the extreme north.

Pewaukee—A seedling from Duchess of Oldenburg. Fruit medium to large; round, obvate, waved; surface bright yellow, partially covered with dark red, striped and splashed, covered with a grey 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; flavor sub-acid, rich, aromatic, spicy, something like Jonathan; quality good to best. Tree strong grower and very hardy. January to June. New.

- Rawle's Janet** (Jeniton)—Medium; mixed and striped crimson on yellow and green; flavor sub-acid, vinous and refreshing. Popular as a market fruit on account of its regular and abundant yield. The blossoms appear later than any other sorts, and thus they sometimes escape spring frosts. February to April.
- Rome Beauty** (Gillett's Seedling)—Fruit large, roundish; skin yellow, nearly covered with stripes and shades of bright red; flesh yellow, juicy, crisp, sub-acid. Tree moderate grower. October to December.
- Roxbury Russet**—Large; surface overspread with heavy brown russet; flesh greenish yellow; flavor acid. Popular for market. Tree robust and spreading. December to February.
- Shockley**—Medium; marbled and blushed with scarlet and crimson; flavor mildly sub-acid, agreeable. A good keeper. Tree vigorous and productive. March to June.
- Stark**—Large; nearly covered with red; flavor mild, sub-acid. Valued as a long keeper. Tree vigorous and upright, January to May.
- Surprise**—To any one unacquainted with this fruit, it is a complete surprise in cutting it open to find a flesh deeply stained with crimson; hence its appropriate name. The tree is hardy, handsome, an upright grower, and bears early. It comes into use in December and keeps through February. The flavor is sprightly, sub-acid and good. It is valuable as a market fruit, being sought after on account of its singularity to embellish the tables at parties prevalent during the Winter.
- Smith's Cider**—Large, handsome, red and yellow; juicy, acid; quality medium; a fine grower and bearer; succeeds well in the south and west. November to February.
- Smith's**—A long-keeping winter apple, fine grower and beautiful, of medium size, similar to Smith's Cider.
- Talman's Sweet**—Above medium; whitish yellow, with a soft blush on one side; rather firm, fine grained, with a rich, sweet flavor. Tree an upright, spreading grower, hardy and productive. November to April.
- Twenty Ounce** (Cayuga Red Streak)—Very large, greenish yellow, boldly splashed and marbled with stripes of purplish red; brisk sub-acid. A handsome, showy fruit. December and January.
- Vandavere Pippin**—Large; flaked all over with red; flavor brisk sub-acid. Valuable for cooking, drying and market. September to February.
- Wagener**—Fruit medium size, flattened; skin light yellow, shaded with red; flesh firm, sub-acid, with an excellent flavor. Tree thrifty, very upright, and an early bearer. November to February.

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.

Wine Sap—Medium; fine dark red; flesh yellow, crisp, with a rich, high flavor. Tree hardy, and one of the most profitable market fruits. November to May.

White Pippin—Large; greenish white, pale yellow at maturity; tender, juicy, crisp and rich flavored. Tree thrifty, upright, a regular good bearer. January to March.

VARIETIES RECOMMENDED AS DWARFS.

Summer—Red Astrachan, Red June, Early Harvest, Sops of Wine, Duchess of Oldenburg.

Autumn—Buckingham, Gravenstein, Maiden's Blush.

Winter—Baldwin, King of Tompkins County, Lady Apple, Northern Spy, Esopus Spitzenburg, Wine Sap, Wagener.

HARDY AND IMPROVED SIBERIAN APPLES.

The varieties of Siberian Crab Apples (*Pyrus Baccata*) have heretofore been mainly valued for their handsome flowers and the beautiful appearance of the tree when loaded with fruit.

Within the past few years, however, considerable attention has been given to their cultivation by fruit growers in our western and northwestern States, because of the superior hardihood of the trees. Large numbers of seedlings have been grown, some bearing full evidence of the paternity of the *Pyrus Baccata*, others possessing more or less of the *Pyrus Malus*, apparent more in the face and improved quality of the fruit, than in the habit of the trees. They are all valuable for cider, preserves and cooking, and some of the improved varieties, more truly, perhaps, Siberian Apples, are quite pleasant, and rich for dessert. The great hardihood of the trees, and their productiveness, make them highly valuable for sections where the better varieties of the *Pyrus Malus* do not succeed. In the description of these varieties the terms "medium, large or small," must be considered as applied in comparison with the Siberian Crab.—From *Downing's Fruit and Fruit Trees of America*.

They are the most profitable apples that can be grown for market, coming into bearing very early—frequently in two years from bud—bearing every year, and the fruit meeting with ready sale at from \$10 to \$16 per barrel. Some of the varieties are not only good for culinary purposes, but are especially desirable for table use on account of their beautiful appearance, their delicate texture, and their delicious flavor.

They combine two qualities which have never before been met with together, viz: Extreme hardiness (being able to resist severe cold as well as the forest trees), and fruit of such superior quality, that even in the markets of large cities, where fruits of all kinds are in abundance, they sell at high prices with a brisk demand.

The cost of an orchard of sufficient size to supply the wants of a family, is often exceeded by the amount spent annually to obtain a supply of fruit for home consumption. The early age at which they bear good crops enables them to repay their whole cost before the standard varieties of apples come into bearing.

There are several points to which we wish to call particular attention, and on which we base our recommendation of these hardy fruits for general cultivation:

1st. They can be planted on any kind of soil, and in the most exposed situations with perfect safety.

2d. They will stand the severity of the changes of the coldest weather.

3d. They come into bearing very early, often in the second year from planting, and bear every year.

4th. They are very productive, bearing large crops of beautiful fruit.

5th. They give larger returns than any other kind of apple, selling from \$10 to \$16 per barrel in market.

6th. They are unequalled for cider or vinegar.

7th. Some of them are pre-eminently dessert fruits, being of superior quality and strikingly handsome.

8th. They can be dried, cooked, canned or preserved with the skin on, saving a great amount of trouble.

9th. The size of the fruit varies from one and one half to two and one half inches in diameter, being large enough to quarter and core for drying, etc.

The following are the most valuable varieties:

Lake Winter—(So named from its home near a lake). Fruit medium to large size; round, very smooth; pale yellow, mostly covered with bright blush or stripes; stem slender; cavity small; calyx closed in shallow basin; core and seeds small; flesh fine grained, firm, juicy, sub-acid, becoming nearly sweet in Spring; entirely free from astringency or "crab taste;" excellent cooking or eating from October to March, keeping well through Winter. It is an early bearer, free from blight, beautiful, free grower.

Lady Elgin—This is similar in fruit to the above, but ripening in October. The two varieties planted together will give a supply of fruit lasting from October to May.

Marengo—Large size; deep red, with a rich bloom on a yellow ground; flesh yellowish white, crisp, juicy, with a pleasant sub-acid flavor; tree equally hardy with other crabs; chiefly valuable on account of its keeping qualities. In season from early Winter to late Spring; a good grower, and a young and abundant bearer.

- Montreal Beauty**—Fruit large; bright yellow, mostly covered and shaded with rich red; one of the most beautiful of all crabs in appearance. Flesh yellowish, rich, firm and acid. Very good. October and November.
- Magog Red Streak**—This apple is exceedingly thrifty, perfectly hardy, a free and early bearer of large yellow apples with red streaks on the sunny side. Mild, rich, sub-acid in flavor. Keeps through-March.
- Meador's Winter**—which, though small, and called a crab, is in quality equal to the best apples known. Tree vigorous, and a great bearer; fruit 1½ inches in diameter, bright red, with a mild rich flavor, something like Esopus Spitzenburgh; entirely free from crabbiness. Makes most magnificent cider, but you won't want to use it for that after tasting it at the right season. Comes into eating during January, sometimes earlier. It has been re-named "TOM THUMB'S CHRISTMAS APPLE," by one of its admirers, being just the thing to decorate a Christmas tree with.
- Scott's Winter**—medium size, yellow, heavily striped and often covered with bright red. Tree a thrifty grower, comes early into bearing, and bears large crops every year. Fruit keeps till June. Quality very good. One of the most profitable Winter apple.

NEW AND RARE APPLES.

- Lady Henniker**—An English variety of recent introduction, described as follows; Fruit very large, roundish, with blunt angles on the sides; skin yellow on the shaded side, with faint blush of red on the side next the sun; flesh tender, well flavored, and with a pleasant perfume. Valuable for cooking, also as a dessert apple.
- Menagere**—Origin France. Fruit very large, regularly formed, flattened; skin pale yellow with sometimes a little red in the sun; flesh juicy, good. This variety will undoubtedly prove to be one of the most valuable market varieties, on account of its great size and handsome appearance. September to January.
- Red Bietigheimer**—A rare and valuable German variety. Fruit large to very large; roundish inclining to conical; stalk short, stout, in deep cavity, calyx closed in large deep basin; skin pale green colored ground, mostly covered with purplish crimson; flesh white, firm, sub-acid, with a brisk, pleasant flavor. Tree a strong grower and abundant bearer. This is one of the largest and handsomest apples, and worthy of cultivation. Early Fall. October to February.
- Stump**—A very handsome and valuable variety which originated near Rochester. Fruit medium size, conical, skin yellow striped and shaded with light red, resembles Sherwood's Favorite; flesh firm, crisp, juicy, tender, sprightly, sub-acid. A *decided acquisition* to the list of profitable market and good garden varieties. September and October.

Sutton Beauty—Fruit medium to large, roundish; skin waxen yellow striped with crimson; flesh whitish, tender, juicy, sub-acid; quality very good. Tree thrifty and productive. It is proving the peer of the Hubbardston Nonsuch, in some respects, even better; has more character, flesh more tender and juicy, better color and keeps later.

Tuft's Baldwin—Originated in Cambridge, Mass. Fruit large, roundish, oblate, yellowish striped with red; flesh crisp, juicy, good. Tree vigorous and bears annually. September and October.

CRAB APPLES.

Accubifolia—Large, yellow, with a nice red cheek. This is one of the largest and finest of our new varieties of Crabs. Sub-acid; good for eating.

Brier's Sweet—Tree strong, irregular grower; dark wood; fruit large, round, pale yellow with stripes; showy; very rich sweet. September 1st.

Dartmouth Crab—Origin, Hanover, N. H. This tree is peculiar in its growth, quite upright and distinct; a full, regular head when in bearing. Fruit one and a half inches in diameter; is a great bearer; fine for cooking and preserves; will make the best of cider; keeps late in Fall or early Winter. Color very handsome, dark crimson and orange, with bloom.

Hyslop—Almost as large as early Strawberry Apple. Deep crimson. Very popular on account of its large size, beauty and hardness. Keeps well into the winter.

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

Quaker Beauty—Large; golden yellow, with a rich crimson red cheek in the sun, covered with a delicate white bloom; sub-acid. Early Autumn.

Soulard—The largest of this class of apples; very valuable as a cooking apple; sour and astringent as an eating apple, but has, when cooked, a fine quince-like flavor; color green, becoming yellow in the spring; keeps well until June. Tree rather a slow grower, but productive.

Transcendent—All things considered, this is, perhaps, the most valuable variety of crab apple 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 produces good

crops by the fourth year. Fruit very large, from one and one half to two inches in diameter, being large 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 and October.

Van Wyck Sweet—A new and exceedingly valuable variety; originated on the Van Wyck farm, near Fishkill, N. Y. Fruit very large; skin yellowish white, colored light red, and covered with bloom; flesh yellowish white; very sweet and tender; core small. October.

Whitney's No. 20—Resembles Transcendent in quality, but may be a week earlier.

CIDER CRABS.

Hewe's Virginia Crab—Small, striped red, flesh firm, very austere, valuable only for cider, which is the most generally esteemed of any made; the cider invariably sells at Cincinnati at from \$15 to \$20 per barrel.

PEARS.

Standard Pears should be planted twenty feet apart each way, requiring one hundred and eight trees per acre, and Dwarf Pears may be planted one row each way between the Standards, and the same acre will hold three hundred and twenty-seven Dwarfs, in addition to the one hundred and eight Standards, and yield a better profit per acre than if each occupied a separate piece of ground. Pears should be gathered before quite ripe; they carry better to market, and are better in quality than if permitted to ripen on the tree. Nine or ten varieties, ripening in succession through the season, is enough for any one orchard.

We have found that we can rely upon a crop of Pears even when Apples fail, and the demand for the fruit constantly increases. It succeeds on most soils, but does best on a rather heavy loam. Budded on its own stock it makes a Standard tree; and on the French or Angers Quince, a Dwarf, the former being best adapted to large, permanent orchards; the latter (requiring garden culture and severe pruning every year) to smaller orchards, fruit yards and gardens.

Dwarfs must always be planted sufficiently deep to cover the junction of the Pear and Quince two or three inches—the soil made rich and well tilled, and about half the previous Summer's growth cut off each Spring. Under



THE CLAPP FAVORITE PEAR.

this treatment Dwarfs are everywhere successful. The side branches should not be removed higher than one foot from the ground in Dwarfs, while Standards may be trimmed to the height of three or four feet if desired. Train in pyramidal form. Ripen the fruit in the house. Gather when, on gently lifting the fruit, the stem will readily separate from the limb. Place in a dark room until fully matured. Winter Pears may hang on the trees until there is danger from frost, then place in a dry cellar for maturing.

The letters "D. and S.," appended to the descriptions of varieties, indicate favorable growth either as "Dwarf" or "Standard," or both.

SUMMER.

Admiral Farragut—A very large new Pear; color green, with dots, and reddish in the sun. Texture melting and juicy; fine flavor. Ripens late in September. S.

Bartlett—Large size with often a beautiful blush next the sun; buttery, very juicy and highly flavored. Tree a strong grower, bearing early and abundantly; very popular. S.

Bloodgood—Medium; yellow, touched with russet; melting, rich and delicious; fair grower, first quality. August. Dwarf and Standard.

Beurre Giffard—An excellent variety; medium, greenish yellow, red in the sun, very early. Tree slender but healthy; hardy, a free grower, very productive. August. Dwarf and Standard.

Beurre Goubalt—Medium, greenish yellow; half melting, vigorous and productive. September. Dwarf.

Brandywine—Above medium; yellowish green; melting sweet; vigorous and productive. Last of August. Dwarf and Standard.

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 rich, sweet, delicate, vinous flavor. Tree hardy and very productive. A promising fruit of great excellence. August and September. D. and S.

Dearborn's Seedling—Rather small; pale yellow; melting and delicious. Tree vigorous, rapid grower; bears young and abundantly. August. Dwarf and Standard.

Doyenne D'Ete—Small; melting, sweet; yellow. Tree vigorous and productive. August. Standard.

Madeleine—Medium; yellowish green; very juicy, melting, sweet; a fair grower and productive. August. Dwarf and Standard.

Manning's Elizabeth—Small to medium; bears in clusters; crimson and gold color, very beautiful; melting, rich, sugary, sprightly, perfumed flavor, excellent. Tree a good grower and very productive. One of the very best early Pears. August. Standard.

- Osband's Summer**—Medium; yellow with red cheek; half melting, mild and pleasant, fine flavor and excellent; a fair grower and productive. August. Dwarf and Standard.
- Pemberton**—A new American Pear. Fruit medium size, roundish, nearly smooth; yellowish green with a shade of red in the sun; flesh yellowish white, fine, melting, juicy, with a rich bergamot aroma. Early in September. Standard.
- Rostiezer**—Fruit medium size, rather long; skin dull yellowish green, reddish brown on the sunny side; flesh juicy, melting, very sugary, and of fine flavor; tree vigorous, but with few branches, requiring severe pruning. Last of August. Dwarf and Standard.
- Tyson**—Fruit medium size, pyriform; skin yellow, slightly russeted, with a fine red cheek; flesh juicy, melting, very sugary and perfumed. Tree vigorous, upright, not an early but a good bearer. One of the finest Pears. Ripe early in September. Dwarf and Standard.

AUTUMN.

- Belle Lucrative** (Fondante d'Automne)—Large; melting and delicious. A fair, upright grower, and bears early and abundantly; first quality in all respects. September and October. Dwarf and Standard.
- Beurre Bose**—Fruit large, long, tapering into the stalk; skin dark yellow, nearly covered with cinnamon russet; flesh white, melting, very buttery, with a rich and excellent vinous flavor. Tree moderately vigorous but crooked, and bears well. October. Standard.
- Beurre Diel** (Beurre Royal, Beurre Incomparable)—This is a splendid fruit in all respects. Fruit very large, obtuse, pyriform; skin orange yellow; marbled with russet; flesh a little coarse-grained, but sweet, rich and delicious. Tree strong and productive. October and November. Dwarf and Standard.
- Beurre Hardy**—Fruit large, obovate; skin greenish yellow, overspread with russet; flesh buttery, juicy, crisp, and highly perfumed. Tree vigorous and stout; very productive, makes a fine dwarf. September and October.
- Beurre Superfin**—Fruit large, oblate; skin greenish yellow, partially covered with russet; flesh very juicy and melting, with a crisp, sub-acid flavor. Tree very hardy, vigorous, and productive. October. Standard.
- Brockworth** (Brockworth Park)—A new English variety. Fruit large, oblong, pyriform; skin smooth, pale yellow, flushed and streaked with red on the sunny side; flesh white, buttery, melting, very juicy, vinous and rich. September. Standard and Dwarf.

Buffum—A variety remarkable for its vigorous growth, beautiful, upright habit, and great hardiness. Fruit medium size, obovate; skin fair, yellow, with a bright red cheek; flesh white, buttery, sweet, and generally very good. Last of September. Standard and Dwarf.

Duchesse d'Angouleme—A magnificent Pear when well grown upon Quince stock. Fruit of the largest size, with an irregular, uneven surface; skin greenish yellow, spotted with russet; flesh white, very juicy, with a rich and excellent flavor. Tree vigorous, upright, with yellowish shoots. October. Dwarf.

FREDERICK CLAPP, OR CLAPP'S No. 22.

We are indebted to Hon. Marshall P. Wilder for the following description: "Form generally obovate, but somewhat variable; size above medium; skin thin, smooth and fair, clear lemon yellow; flesh fine grained, very juicy and melting; flavor sprightly, acidulous, rich and aromatic; season October 15th to November 1st, remaining sound at core to the last: quality *very good to best*, and will be highly esteemed by those who like acidulous Pears. It has been exhibited for many years by the originators, Messrs. F. & L. Clapp, of Dorchester, Mass." Of this Pear the committee of the Massachusetts Horticultural Society have reported favorably for years. Of its quality they state in 1873: "It was pronounced decidedly superior to Beurre Superfin, and is regarded by all who have seen it as the highest bred and most refined of all the many seedlings shown by Messrs. Clapp. It is probably a cross between Beurre Superfin and Urbaniste, the tree resembling in habit the latter variety, and may safely be commended as worthy of trial by all cultivators of the Pear." Tree a vigorous or free grower and somewhat spiny.

KIEFFER'S HYBRID PEAR.

This new variety is unquestionably a great acquisition to the list of choice fruits. It is the best of two hundred seedlings, raised from the Chinese Sand Pear, crossed with a cultivated variety, supposed to be the Bartlett, which was growing near by the original Sand Pear tree, from which the seed was obtained in or about the year 1868. This seedling tree commenced fruiting in 1873, when about five years of age, and has yielded well every year since—several bushels have been gathered of a season. The Chinese Sand Pear, as is well-known, is *absolutely blight proof*, remaining green and vigorous in situations where other varieties blight and die.

The Kieffer Hybrid, like its parent, resists the blight and all other diseases, and has the same healthy luxuriant foliage, making a strong growth under circumstances where ordinary varieties fail to grow. It is an early bearer, commencing to produce fruit when three or four years of age, and enormously productive within a few years. The fruit is large, measuring from 10½ to 11 inches around, weighing from 10 to 12 ounces each, and very uniform in size.

Double turbinate shape, pointed at each end; skin, greenish yellow, some russet; stalk short and stout; flesh white, buttery and juicy; quality good. It ripens in October, when Pears are scarce and high. It colors up beautifully, giving a rich yellow appearance. It does not rot until very ripe, and remains firm at the core to the last.

Possessing, as it does, so many good qualities, this variety is destined to work a revolution in Pear culture, and will occupy the same position among Pears that the Concord does among Grapes, and the Wilson's Albany has heretofore among Strawberries. It is the Pear for the million, and can be grown as easily, cheaply and abundantly as Apples, and brought the past Fall, 1878, in market, \$4.00 per bushel.

Flemish Beauty—Large; pale yellow, russety, brownish cheek, beautiful; melting, sugary and delicious; requires to be picked early. Tree vigorous, bears young and abundantly. One of the most hardy of all the Pear trees; a very popular Pear. September and October. Standard.

Howell—Large; light waxen yellow, with a fine red cheek; handsome, rich, sweet, melting, perfumed, aromatic flavor. Tree an upright, free grower, an early and profuse bearer. Very hardy and valuable for the west. September and October. Dwarf and Standard.

Louise Bonne de Jersey—Large; smooth, greenish yellow, with a warm, red cheek; melting, juicy, vinous and rich. Tree upright, vigorous and very productive; very desirable on the Quince. October. Standard and Dwarf.

Onondaga (Swan's Orange)—Very large; fine rich yellow; melting, juicy, vinous, rich and fine, though sometimes variable. Tree very vigorous, and an early and abundant bearer. October and November. Standard.

Seckel—Medium to small; yellowish brown, with a red cheek; melting, sweet, spicy, very rich and most delicious. The standard of excellence. Tree a slow but stout, erect grower, hardy and productive. Standard and Dwarf.

Sheldon—A Pear of the very first quality, from Wayne County New York; large, round; russet and red; melting, rich and delicious. Tree erect and handsome, and bears well. October and November. Standard.

WINTER.

Beurre d'Anjou—Large, obovate, pyriform; greenish russet, sometimes shaded with crimson; melting, juicy, vinous, perfumed, rich and delicious. Tree very vigorous, hardy and productive. One of the most valuable late Pears for the table or market; commencing to ripen in October, and keeping, with care, until January, or even later. Dwarf and Standard.

- Beurre Clairgeau**—Very large, pyriform; yellow and red; texture of Beurre Bosc. Flesh yellowish; nearly melting. Tree a good grower, and an early, abundant bearer; a magnificent market fruit; one of the finest acquisitions. Standard.
- Duchesse de Bordeaux**—Medium to large; moderately juicy; sweet and pleasant; a vigorous grower. December to February. Standard.
- Easter Beurre** (Doyenne d'Hiver)—A very celebrated, long-keeping Pear. Fruit large, roundish, obovate; skin yellowish green, russeted, with a handsome red cheek. Tree vigorous and upright, and productive if grown on Quince; not valuable as a Standard. January to April. Dwarf.
- Josephine de Malines**—A new variety of some merit. Fruit medium size, roundish; skin yellowish, sprinkled with russet; flesh juicy, sweet and perfumed. Dwarf and Standard.
- Lawrence**—Medium size; fine golden yellow; melting, juicy, sugary, with a rich, aromatic flavor. An American Pear of great excellence. Tree a moderate grower, very handsome, hardy, and good bearer. The most valuable of early Winter Pears. December. Standard.
- Mount Vernon**—A new American Pear and the best of its season. Fruit medium to large, somewhat roundish or obtuse pyriform; color light russet on a yellow ground, brownish red in the sun. Flesh yellowish, juicy, melting, slightly vinous and aromatic. Tree a vigorous grower and an early bearer. A most valuable variety. November and January. Standard.
- Vicar of Winkfield** (Le Cure)—Fruit large, long pyriform; skin fair, smooth, pale yellow, occasionally with a flush; flesh juicy, and in good specimens of excellent flavor; variable as a table Pear, but fine for cooking. Tree exceedingly vigorous, beautiful and productive; splendid grower on Quince. December. Dwarf and Standard.

PLUMS.

The Plum tree will thrive upon almost every soil not absolutely *wet*, but produces its finest fruits and most certain crops on heavy or clayey soils.

The great enemy of this, as well as of other smooth-skinned stone fruits, is the *cureulio*; and as a knowledge of a practical remedy for this pest is essential to the raising of good crops, we give a description of the only sure method for its destruction yet known:

Shortly after the blossoms fall, and as soon as the presence of the insect is ascertained—by his crescent-shaped mark upon the young fruit—procure a sheet large enough to spread over the whole surface of the ground covered by the branches of the tree; slit in the middle part way through, to allow the sheet to pass on each side of the trunk of the tree; now jar the tree thoroughly, either by striking with a heavy mallet upon the stump, or by shaking suddenly all the larger branches. The insects—which closely resemble a pea-bug, or dried bud—will fall upon the sheet and remain dormant for some minutes; gather them up with the thumb and finger and destroy them. This operation repeated every morning for two or three weeks will save the crop. All the stung fruit must also be carefully destroyed, to prevent their increase, and thus render the work of the season comparatively easy. This remedy is *sure*, and far more feasible than is sometimes supposed.

Bleeker's Gage—Medium; yellow, with a thin white bloom; flavor sweet, luscious. Tree hardy and a good and regular bearer. Last of August.

Bradshaw—Large; reddish purple, with a light blue bloom; flesh yellowish, coarse, pleasant. Tree an upright and vigorous grower. Valuable as a market variety. August.

Coe's Golden Drop—Very large; light yellow; flavor rich, sweet and delicious. Tree moderately vigorous, productive. Last of September.

Copper—Nearly of medium size, oval; dark copper; rather acid, good for culinary purposes; being nearly exempt from attack of the curculio, it is a pretty certain bearer. Considerably grown in some localities on the Hudson River, where it is esteemed for its productiveness, and found valuable as a market variety. Last of September.

Damson (Common Blue)—A valuable market sort. It bears enormous crops. Thousands of bushels are annually sold in our markets. It is but little affected by the curculio; hence is growing steadily in favor with the orchardists. September to October.

Duane's Purple—Very large; yellow, dotted with red in the sun, with a slight bloom; flesh yellow, juicy, sweet, with somewhat of a melon flavor. Separates from the stone. Tree vigorous, very productive and hardy. Middle of August.

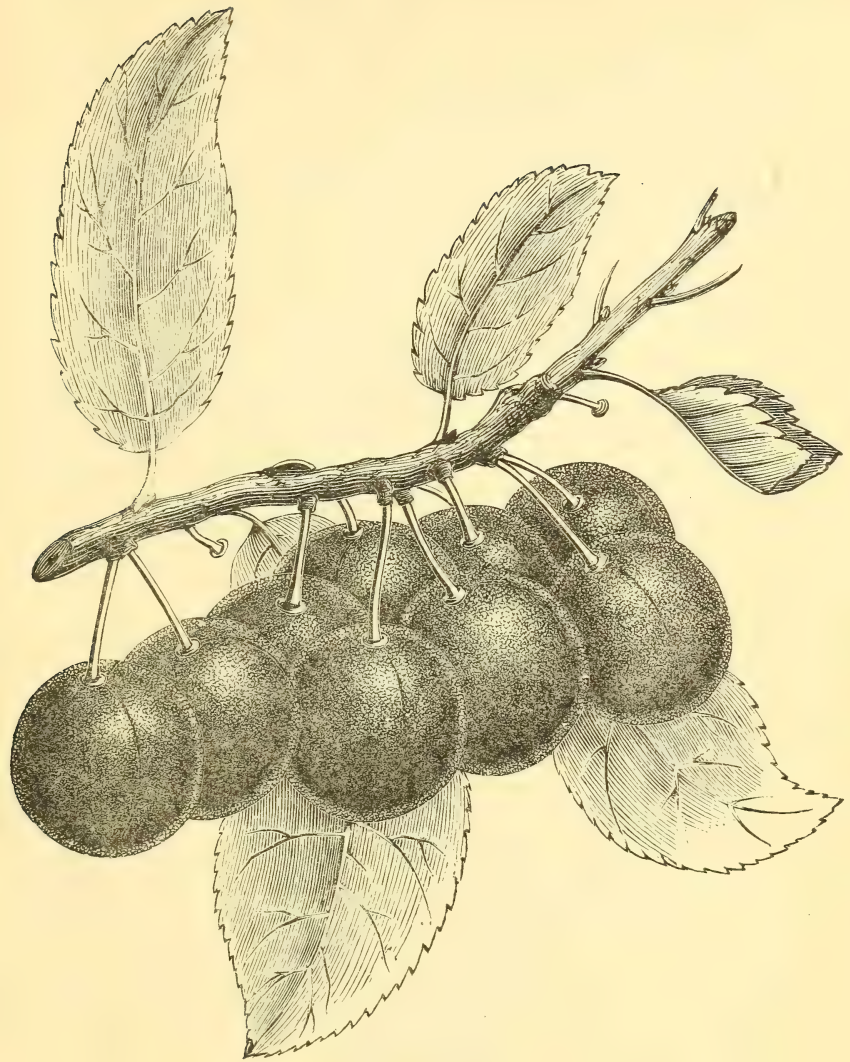
Early Yellow Prune—Large; yellow, dotted with red in the sun, with a slight bloom; flesh yellow, juicy, sweet, with somewhat of a melon flavor. Separates from the stone. Tree vigorous, very productive and hardy. Middle of August.

General Hand—Very large; deep golden yellow; moderately sweet; juicy and good. Separates from the stone. Tree very vigorous. September.

- Huling's Superb**—Very large ; greenish yellow, thinly covered with pale bloom ; flavor rich, brisk and sprightly. Tree very vigorous and upright. Middle of August.
- Jefferson**—Large ; golden yellow ; with a beautiful purplish red cheek ; thin, white bloom ; very rich, juicy, luscious and high flavored. Tree a moderate grower and regular bearer. Last of August.
- Lombard**—Medium ; delicate violet red, paler in the shade, thin bloom ; flavor pleasant but not rich. Tree very vigorous, hardy, very productive and popular as a market sort. Last of August.
- Peach Plum**—Very large ; shaped more like a Peach than a Plum, light brownish red, covered with a pale bloom ; pleasant and sprightly. Tree upright, vigorous, and a moderate bearer. Last of July.
- Pond's Seedling** (English)—Very large ; yellowish, nearly covered with bright carmine, with a thin whitish bloom ; juicy and sugary, but not rich. A beautiful fruit. Tree very vigorous and productive. Middle of September.
- Reine Claude de Bavay**—Large, greenish yellow, spotted with red ; firm, juicy, sugary, and of fine quality ; very productive. September.
- Smith's Orleans**—Large ; reddish purple, covered with a deep blue bloom ; flavor rich and vinous. Tree very rich and productive. Last of August.
- Washington**—Very large ; deep yellow, with a pale crimson blush ; flavor very sweet and luscious. Middle of August.

IMPROVED NATIVE PLUMS.

The ravages of the *curculio* have of late years increased to such an extent as to cause the almost total failure of the crops of the finer varieties of Plums. Notwithstanding all the leading remedies advocated to prevent the *curculio* from destroying the fruit, this insect has proven too strong in numbers, and excepting in a few insolated cases where unusual pains have been taken to guard against this pest, the labor required to grow a few Plums is worth more than the result. Our native varieties, such as the Chickasaw and others, being less liable to be injured by the *curculio*, have induced several horticulturists to experiment with them, in order to produce improved varieties, which would at least possess one great advantage over European varieties, in being *curculio* proof. The *Chickasaw* type has furnished the best material to experiment with ; its offsprings are all very vigorous growers and abundant bearers. We name a few of the most meritorious :



BASSETT PLUM.

Bassett (*Prunus Maritima*)—A remarkably prolific variety. While it is not of first quality, it is good and bears abundant crops, and is practically proof against the curculio. Among Plums it is what the Concord Grape is among the Grapes, and Wilson among Strawberries. Fruit small; deep crimson with a heavy bloom; sweet, rich and pleasant. Ripens last of September, and will bear shipment, in perfect condition, almost any distance.

The great value of this Plum is for culinary purposes—it has no equal for dessert—for which it is superior to the Cranberry, as it requires very little sugar; needs only a small amount of stewing to prepare it for use, and it can be grown for twenty-five cents per bushel. We can see no reason why it will not ere long be used more extensively for dessert and table use, than any other of the popular fruits. Now, with these merits, it is surely worthy, at least, a place in every garden and orchard in the land.

Blackburn Plum—“This is an improvement on the Wild Goose Plum. It is as certain to bear abundant crops every season, and has all its freedom from attacks of the curculio. The fruit is larger and sweeter, not quite so deep red in color, but otherwise quite similar in appearance. It is an improvement in that the tree is not so thorny, and is a thrifty grower, with open top, so that the fruit can be more easily gathered.”

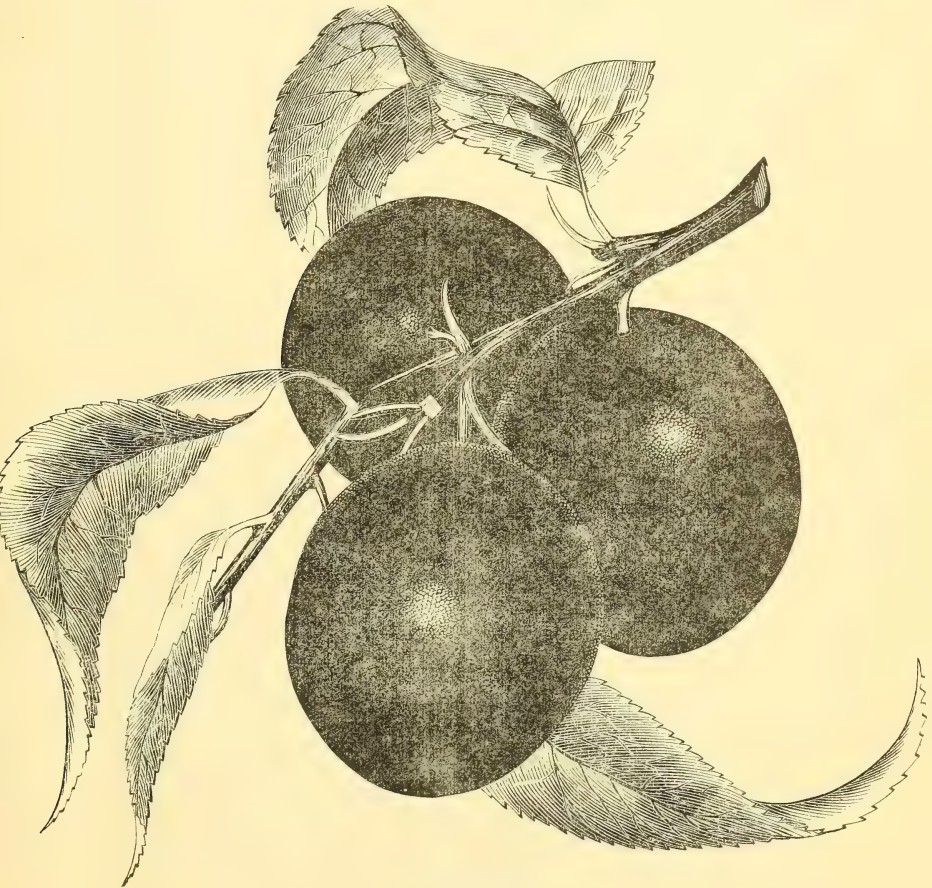
DeCaradeuc—Originated by A. DeCaradeuc, Esq., S. C., some seventeen years since. Fruit round, a little flattened. Skin yellow, nearly covered with brown red, which turns to dark red at full maturity, mottled; suture marked by a crimson vein. Flesh melting, sweet and vinous, slightly adhering to the stone. Stalk very slender and short; readily parting from the fruit when fully ripe. Quality good. A very meritorious fruit. Tree very thrifty grower, foliage dense; leaves deep green, broad, entirely distinct from any native type. Maturity, end of June and beginning of July. Doubtless a hybrid variety as it shows foreign characteristics; free from curculio.

Langsdon—Identical with the Cherry Plum, except that it is more than a month later in ripening; the Cherry Plum ripening the last of July, while the Langsdon ripens in September. It differs from the Miner in being more globular, with a longer stem and having a deeper suture, which gives it the appearance of a very large Cherry. The thick, tough skin common to this species renders it nearly curculio-proof. There are one or more orchards of the Langsdon near Louisville which are very profitable; all plums being out of season they sell for eight to ten dollars per bushel in that market, and will bear shipping to the most distant markets.

Miner—This is also an improved variety of the Chickasaw, claiming the same advantages, in being exempt from the attacks of the curculio as the above varieties. Medium in size; dark, purplish red, with a fine bloom. In quality is similar to the foregoing. September.

Mooreman Plum—A valuable acquisition ; good bearer ; fine grower, and shipping qualities unequaled for the most distant markets, a matter of vital importance to the fruit culturist.

Newman's—Another offspring of the Chickasaw. Fruit medium, oblong ; smaller than the foregoing. Color bright vermillion. Flesh rather coarse, juicy, and with a pleasant vinous flavor. Adheres to the stone. Tree vigorous. Foliage smaller than the Wild Goose. In fertility it is truly astonishing, and its fruit ripens about July 10th, lasting until the middle of August. It can not compare in point of quality with the best foreign varieties, but it is sufficiently good to merit extensive cultivation. Besides it is perfectly free from insects and ripens at a period unusual for this class of fruit.



WILD GOOSE PLUM.

Richland—A remarkably prolific variety, belonging to the Damson class. Color blue; size $1\frac{1}{2}$ inches in diameter. It is perfectly free from the stone, and when fully ripe we consider these varieties profitable orchard fruits, and will supply the market from 20th of June until the middle of September with fruit that meets with a steady sale and at good prices. Of good flavor. Very valuable for market.

Wild Goose—Originated in Davidson County, Tennessee. Its name is claimed to be derived from the fact that a pit of a Plum was found in the crop of a wild goose, and being planted produced this variety. Other stories, equally unfounded, give it a different origin. The fruit is large, $1\frac{1}{2}$ to $1\frac{3}{4}$ inches long, $1\frac{1}{4}$ broad; color, bright vermilion red, with numerous minute white dots towards the apex; stalk very slender, short; flesh rather coarse, juicy, vinous and pleasant. Compared with the finer foreign varieties can be classed as second rate in quality. Tree very vigorous; leaves light green. Very productive; maturity, beginning of August. As a market fruit it is very desirable, combining fine size, beautiful color and good quality.

Weaver Plum—This new and favorable variety, always sought after, is a native of Iowa, and hardy in the northern sections of this country. The fruit is large, purple with a blue bloom; very prolific and regular bearer; quality good. It is said to be entirely free from insects, which renders it very valuable. Ripens in August.

C H E R R I E S .

The Cherry is one of the finest and most delicate dessert fruits. The acid varieties are also highly esteemed for preserving and cooking purposes. Although a very perishable fruit, the period of its use may be prolonged to three months by a proper selection of varieties.

The tree thrives well in any soil which is sufficiently well drained, but will not succeed a long time where the sub-soil is wet.

The varieties called Heart Cherries were formerly recognized by their heart-shape, and by having tender and melting flesh, while those called Bigarreus had firm, hard flesh; but there is no longer any clear division between them, as by frequent crossing and re-crossing, newer varieties have been produced combining the characteristics of both divisions. In a similar manner the distinction which formerly existed between the Dukes and the Morellos has appeared. The Hearts and Bigarreus are rapid growing trees, with large leaves and generally upright shoots and branches, and producing sweet fruit; the Dukes and Morellos, on the contrary, have smaller

foliage, smaller and more spreading shoots, makes less rapid growth, and generally have acid fruit. The trees of the latter class are also hardier and less subject to bursting of the bark than the former; they are particularly well adapted to growing as dwarfs.

We now employ the Mahaleb stock exclusively, as we find the trees on it are more hardy, and adapted to a greater variety of soils.

Varieties specially recommended are marked thus *.

HEART AND BIGARREAU CHERRIES.

Black Eagle—Above medium; purple or nearly black; flesh deep purple tender, with a rich, high flavored juice. First of July.

* **Black Tartarian**—Very large; bright purplish black; flesh purplish, very rich and delicious; stone quite small. Remarkable for its vigorous growth and erect habit. A general favorite. Middle of June.

Bigarreau (Yellow Spanish)—Very large, of a beautiful waxen appearance; pale, whitish yellow, bordered with minute carmine dots, and deepening into bright red, finely marbled on the sunny side.

Cleveland Bigarreau—Large; bright red on yellowish ground; rich, sweet and fine flavor. Ripe a few days before Black Tartarian.

Coe's Transparent—Medium; delicate pale amber, nearly covered with pale cornelian red in the sun; delicate, sweet and excellent flavor. 10th of June.

Downer's Late—Medium; lively red, mottled with a little amber in the shade; sweet and luscious. 4th to 10th of July.

* **Early Purple Guigne**—Medium; dark red, becoming purple at maturity; flesh purple, with a rich and sweet flavor. The tree is not a handsome grower in the nursery, but is one of the hardiest of the sweet varieties. Last of May.

Elton—Large; pale yellow, but with a cheek next the sun delicately mottled and streaked with bright red; flavor very rich and luscious. Middle of June.

Florence—Large; pale amber, mottled or mostly covered with bright red; flavor rich, sweet and fine. Middle of July.

* **Governor Wood**—Large; light yellow, shaded and marbled with bright red; flavor rich, sweet and delicious. Deserves a place in every collection. Middle of June.

Napoleon Bigarreau—Large; pale yellow, becoming amber with a fine dark crimson cheek; flavor excellent. An abundant and constant bearer. First of July.

Ohio Beauty—Large; light ground, mostly covered with red; flesh tender, brisk, juicy, very good. Middle of June.

* **Rockport**—Large; beautiful bright red, shaded with pale amber; sweet, rich, with an excellent flavor. Early in June.

DUKE AND MORELLO CHERRIES.

The hardiest Cherries are the Dukes and the Morellos. These succeed well at the farthest limits, both north and south, in which the Cherry can be raised; and when all other varieties fail, they may be depended upon for regular crops.

Arch Duke—Large; bright red, becoming very dark when mature; flavor rich, sub-acid.

Belle de Choisy—Medium; pale amber in the shade, finely mottled with red in the sun; flesh very tender and melting, of a delicate flavor. Unsurpassed for the dessert. Middle of June.

Belle Magnifique—Large; skin a fine bright red; sprightly, sub-acid, one of the best of its class. Middle of July to middle of August.

* **Early Richmond**—Medium; fine bright red, growing somewhat dark when fully ripe; flesh melting, juicy, and at maturity of a sprightly, rather rich, acid flavor. Twentieth of May to the last of June. The Early Richmond is the hardiest, most productive and regular bearer of all Cherries. While it is not first rate in flavor, its other unrivaled qualities make it the most popular variety in cultivation.

English Morello—Large; dark red, becoming nearly black when fully ripe; pleasant sub-acid flavor. A valuable hardy variety. Twentieth of July.

Empress Engine—A splendid Cherry for cooking or preserving, as well as for the table; of large size, beautiful appearance and excellent quality. It bears early and continuously.

Late Duke—Large; rich dark red when fully ripe; tender, juicy, with a sprightly sub-acid flavor. Middle of July till the 10th of August.

Louis Philippe—Large; skin rich dark, almost purplish black red; flesh red, tender, sprightly, mild acid; stone small. Tree vigorous and very productive. Middle to the last of July.

Large Montmorency—This variety belongs to the same class as the Early Richmond, but it is larger and bears better. It is very hardy and extraordinarily prolific, and can be recommended as a variety of great value.

* **May Duke**—This is one of the most popular sorts, and among all the new varieties none has been found to supplant the May Duke; skin at first a lively red, but when fully ripe of a rich dark red; flavor rich, sub-acid and excellent. First of June.

Olivet—Large, globular; very shining deep red sort. The flesh is red, with a rose-colored juice, tender, rich and vinous, with a very sweet sub-acidous flavor. It ripens in the beginning of June, and continues until July without losing its quality. It possesses the fertility of the best of the Duke tribe, and is, perhaps, the largest of that class which we can recommend as excellent, feeling sure that it will give satisfaction to those that give it a trial.

Reine Hortense—Very large; bright, lively red; very slightly sub-acid, and delicious. Middle to last of July.

PEACHES.

This is the most desirable fruit during its season, now, happily, lengthened by the introduction of several new varieties. Its easy culture, early bearing, and the variety of uses to which it is adapted, make it one of the most indispensable of fruits, especially to our friends residing in the Middle and Southern States, by whom it can be more successfully grown than by those living in colder sections.

To produce the fruit in its greatest perfection the orchard should never be seeded down, but keep clean and mellow by cultivation; the first three years after planting, hoed crops, such as beans or potatoes, may be raised; after that time, and while the trees are in a bearing state no crops should be taken off except the fruit.

The trees should be carefully examined in June and September, and all the borers removed with a knife, and about a peck of air-slacked lime piled about the trunk of a tree to keep them away.

Amsden—This, the earliest variety of peach in the world, showed its first fruit in 1872, and has created a greater interest and more excitement among fruit growers and nurserymen than the advent of any new variety for many years. It ripens in this latitude in the first week of July, three weeks before the Hale's Early, and ten days before the Early Beatrice. The tree is hardy, vigorous and very productive, and the fruit has remarkable keeping and carrying qualities. Fruit rather larger than Hale's Early; roundish, a little flattened, with a slight suture. Color red, beautifully shaded and mottled with a very dark red, nearly covering the greenish white ground. Flesh white, with a delicious flavor.

Alexander—This variety is also claimed to be the earliest Peach, and it may be as early or nearly as early as the Amsden. It is some larger than the Amsden, measuring about eight inches in circumference. Color deep maroon, covered with the richest tint of crimson, beautifully dark striped, changing towards the light side to a rich orange.

Bower's Early—A new extra early Peach; very large; flesh white, and fine flavor. Ripening in June.

Bigg's Red May—New origin—California, probably—the earliest Peach under cultivation; large, round, seven to eight inches in circumference; skin white with red cheek; flesh greenish white, juicy and refreshing.

Crawford's Early—This very beautiful and best of yellow Peaches is highly esteemed for market purposes. Fruit very large, oblong; skin yellow, with a fine red cheek; flesh yellow, juicy, sweet and excellent. Tree very vigorous, wonderfully productive, and hardy; leaves with globose glands. First of September.

Crawford's Late—Fruit of the largest size; skin yellow, or greenish yellow, with a dull red cheek; flesh yellow, but red at the stone. Tree vigorous, moderately productive; leaves with globose glands. Last of September.

Chinese Cling—Large; creamy white, shaded and marbled with fine red; flesh white red at the stone (which is adherent), very juicy, with a rich flavor.

Downing, Saunders and Wilder—Mr. Engle describes them as follows: "Are seedlings originated by H. M. Engle, from an attempt to cross Peach with Apricot. They are, however, all Peach, without any characteristics of the Apricot. In size, appearance and quality, they resemble Early York, Early Rarripe and Hale's Early, and are of that class. They have fruited three successive years, and have, invariably, been ten to fifteen days earlier than Hale's, grown side by side."

Downing is the earliest, being fully two weeks ahead of Hale's.

Saunders is from ten to twelve days in advance of the latter, and **Wilder** is from eight to ten days before Hale's.

Wilder is one of the most vigorous growers among more than twenty varieties, beautifully colored and of No. 1 quality. In size, quality and appearance, there is not much difference between the three varieties, except that **Saunders** is a little more oblong than the others.

Early Beatrice—A new English variety, which has now been sufficiently tested to rank among the first in ripening; size medium; skin mottled, deep red and darker cheek; flesh juicy and vinous, of very good quality. Ripens evenly and within a period of ten days, and has so far proved entirely free from rot; maturity from July 15th to 25th, according to season; a very valuable market variety.

- Early Louise**—Nearly similar to Early Beatrice, a little larger, and color not so bright; quality good, equal to Early Beatrice, and maturing three to five days later.
- Early Canada**—As its name denotes it has its origin in Canada and is regarded as the hardiest early Peach under cultivation; fine color, almost a perfect freestone, while nearly all of the very early Peaches have more or less clingstone tendency. Ripens a few days later than Amsden and Alexander.
- Early Rivers**—Large, greenish white, washed pale carmine, very juicy vinous and highly flavored, quality best. Ripens from six to eight days after Early Beatrice, to which it is much superior in quality; skin very thin and easily bruised.
- Early York** (Serrate)—Fruit medium size; skin very thin, thickly dotted in the shade, but a bright red in the sun; flesh greenish white, remarkably tender and melting, rich and sprightly juice. Freestone.
- Early Barnard** (of Michigan)—Large; yellow, with red in the sun; flesh yellow, and very good; tree vigorous and good bearer.
- Foster**—This remarkably handsome variety is the largest of all early peaches, and ripening as it does, just before the Early Crawford, it takes its place as a special valuable market fruit. It is a yellow-fleshed variety, similar in appearance to the Early Crawford, but larger and handsomer.
- Governor Garland**—Origin, near Bentonville, Ark. Quality very fine, and several days earlier than Alexander. Clingstone.
- George the Fourth**—Fruit large, round; skin pale yellowish white, fine dotted bright red; dark and red cheek on one side; flesh pale, marked with red at the stone (which is small); melting, very juicy, with a remarkably rich luscious flavor. Freestone.
- Heath Cling**—Fruit very large; skin downy, cream colored white, with a faint blush or tinge of red in the sun; flesh greenish white, very tender and melting, exceedingly juicy, with the richest, highest and most luscious flavor, surpassed by no other variety. It frequently keeps for a month after gathering. A standard market sort. October.
- Hale's Early**—Medium; pale white, nearly covered with red; flesh white, melting and rich. Tree is hardy and productive, and in sections where it does not rot on the tree is very profitable as a market sort for its earliness.
- Honest John**—Fruit large; skin pale yellowish white, dark red cheek on one side; flesh pale, marked with red at stone. Freestone.
- Hill Home Chief**—New; fruit extremely large (measured thirteen inches in circumference), of fine flavor, and a good bearer; white flesh, red cheek; very desirable. September. Freestone.

Hill's Chili—(Jenny Lind, Stanley's Late)—A very popular market variety along the east shore of Lake Michigan, on account of its hardiness and sure bearing qualities. Medium size; dull yellow.

Heath Free—A large, late Peach, of medium quality. Succeeds well in some places.

Jacques Rareripe—A superb yellow Peach, full as large and as good as Crawford's Early, and ripening a week or ten days later.

Jarrell's Early—New; origin, Delaware. One of the best early Peaches, fully up to the Mountain Rose or large Early York in quality, and several days ahead of Alexander.



THE POPLAR PEACH.

Late Red Rareripe—Fruit large; skin fine pale-greenish white, with a lively red cheek; flesh pale-greenish white, quite red at the stone, with a sweet and rich flavor. Freestone.

Lemon Cling—Large; skin fine yellow, with a dark-brownish red cheek; flesh yellow, with a rich, sprightly, sub-acid flavor. One of the largest and most beautiful of all the yellow fleshed clings.

La Grange—Large; greenish white, with occasionally some red in the sun; flesh sweet, high flavored and delicious. Popular as a market fruit. Freestone.

Mountain Rose—Large, bright red; very handsome, and good; one among the best early Peaches; free. July and August.

Old Mixon Free—Fruit large; skin pale-yellowish white, marbled with red, the cheek a deep red; flesh white, but quite red at the stone; tender, with an excellent, rich, sugary and vinous flavor. One of the leading orchard varieties. First of September.

Old Mixon Cling—Fruit large; skin yellowish white, with a red cheek; flesh pale white, very melting, juicy and rich, high flavor. Middle of September. Clingstone.

Poplar—Grows to a height of twenty feet in a compact form, like the Lombardy Poplar.

Red Cheek Melocoton—Fruit large; skin yellow, with a deep red cheek; flesh deep yellow; red at the stone, melting, with a good, rich, vinous flavor. A valuable orchard variety. Freestone.

Smock, Beer's—A seedling of Smock Free, similar in character but much improved. The tree a vigorous grower, and considered one of the most profitable disseminated. Well calculated for distant market shipments, and is also very desirable for canning and drying purposes, a branch of business that is yearly becoming more important.

Steady—This new variety has the qualities to make it the most profitable late Peach grown. It is hardy, having stood the severe cold where other sorts have been destroyed, it blooms and bears freely when others fail. The fruit is very large, often measuring four inches in diameter, round, of a greenish-white color; flesh white to the stone, with a delicious flavor; freestone.

Stump the World—Fruit very large; skin creamy white, with a bright-red cheek; flesh white, juicy and highly flavored; very productive. A fine market variety. Freestone. Last of September.

Salway—This handsome late variety originated in England, and recently disseminated in this country by the late Isaac Pullen. Fruit large, oval and highly covered. Yellowish flesh.

Snow Peach—A beautiful fruit, medium size; skin and flesh creamy white throughout. Tree hardy and productive; blossoms white and shoots greenish, very distinct, and one of the most desirable of white Peaches for preserving.

Waterloo—New; origin, New York. Medium to large. A remarkably fine and very early large Peach.

Yellow Alberge—Fruit medium size; skin yellow, with a purplish-red cheek. Ripe first of August.

NEW PEACHES NOTED FOR THEIR LATE RIPENING.

Bilyeu's Late October—An accidental seedling; found in Caroline Co., Md., by S. G. Bilyeu, and introduced by him. Fruit large; flesh white, with bright-red cheek; in size and appearance much like Old Mixon; free; ripening ten days after Smock, one week after Late Heath Cling. It has been fruited largely in Maryland and Delaware, and has proven valuable in all cases.

Cannon Cling—Is a seedling of the Old English Cling; very large, often weighing 11 to 12 ounces. Ripens late, with Heath Cling; color white, with beautiful bright blush on the sunny side. A very excellent variety.

Gary's Hold On—Large; yellow freestone. Ripens after Smock. One of the most valuable Peaches under cultivation.

Rawlett—A very large, yellow freestone; ripening after Crawford's Late.

Washington—Large, yellow; ripens with the Old Smock, but larger and better. Freestone.

NECTARINES.

A most delicious smooth skinned fruit, which thrives wherever Peaches will grow, but is liable to be stung by the curculio, and requires the same treatment as Plums. Ripens in August.

Boston—Fruit large; skin pale yellow, with a deep red cheek. First of September.

Downton—Fruit large; skin pale green, with a deep violet red cheek. August.

Early Newington—Fruit large; skin pale green, mottled with dark red; coated with a thin bloom. September.

Elruge—Fruit medium; skin pale green, deep violet, or blood red, dotted with brownish specks. August.

Hunt's Tawny—Fruit medium; skin pale orange, with a dark red cheek. First of August.

APRICOTS.

A delicious fruit of the Plum species, valuable for its earliness. It is liable to be attacked by curculio, and requires the same treatment as the Plum; it bears immense crops, ripening in July and August.

Breda—Fruit small; skin orange, becoming dark orange in the sun. August.

Moorpark—Fruit large; skin orange in the shade; deep orange or brownish red in the sun, marked with numerous dark specks and dots. August.

Peach—Fruit large; skin yellow in the shade, but deep orange, mottled with dark brown on the sunny side; rich, high flavored. August.

QUINCES.

The Quince is of late attracting a great deal of attention as a market fruit. Scarcely any fruit will pay better in the orchard. The tree is hardy and compact in growth, requiring but little space, productive, gives regular crops, and comes early into bearing. The fruit is much sought after for canning for Winter use. When put up in the proportion of about one quart of Quinces to four of other fruit, it imparts to them a most delicious flavor.

It flourishes in any good garden soil, which should be kept mellow and well enriched. Prune off all dead and surplus branches, and thin out the fruit if bearing too freely.

Apple, or Orange—Large, roundish; bright-golden yellow; cooks quite tender and is of very excellent flavor. Valuable for preserves or flavoring. Very productive. The most popular and extensively cultivated variety. October.

Angers—A rapid growing sort, used chiefly for stocks for Dwarf Pears. Fruit large; turbinate, greenish yellow.

Champion—Fruit large to very large, smooth, some specimens weighing two pounds; color, golden yellow; excellent for cooking; a good grower, hardy and productive. Ripens a little after the Orange.

Rea's Mammoth—A seedling of the Orange Quince, one third larger, of the same form and color, fair, handsome, and equally as good and productive. Tree healthy, thrifty grower.

GRAPES.

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.

It is stated by some of the most eminent physiologists, that among all the fruits conducive to regularity, health and vigor in the human system, the Grape ranks number one. We hope soon to see the day when every family shall have an abundant supply of this most excellent fruit for at least six months of the year.

We are giving our attention to the growing of vines of all the valuable hardy varieties. Those who have been disappointed by the late and imperfect ripening of the Isabella and Catawba, can now obtain Grapes that are better in quality and far earlier in ripening than they.

While vineyards, if allowed, will sometimes produce four tons to the acre, it is not best for the health of the vine and uniformity of yearly crops, to suffer more than half this amount to grow, or two tons per acre. Basing our estimate upon this safe average, and calling the market value of the new early kinds as low as fifteen cents per pound, we have \$600 per acre for the fruit. The yearly expense of caring for a fruiting vineyard, including picking, is estimated in the Lake Shore Growers' Association for 1868-1869, at \$5 per acre. From five to six hundred vines can be planted on an acre, eight or ten feet apart, according as the kinds are comparatively strong or moderate growers. We might multiply instances had we room. Disap-

pointment only follows those who persist in planting the old, late ripening varieties.

The soil for Grapes should be dry; when not naturally so, should be thoroughly drained. It should be deeply worked and well manured, always bearing in mind that it is an essential point to secure a warm sunny exposure.

To secure the best results, annual and careful pruning are essential. The following is regarded as the best method: Commencing with a good strong vine, such as we furnish, permit it to grow the first season without pruning. In November or December following, cut back the growth, allowing but three or four buds to remain. The following Spring allow but two of the strongest buds to throw out shoots. These, in the Fall, will be from seven to ten feet long, and should be cut back to within four or five feet of the root. The next Spring the vine should be fastened to the lower part of the trellis. When growth commences pinch the buds so that the shoots will be from ten to twelve inches apart. As these grow, train them perpendicularly to the second, third, and fourth bars of the trellis. No fruit should be allowed to set above second bar of the trellis.

During the season when the shoots shall have reached the upper bar of the trellis, they may be pinched to prevent further growth.

The canes should be cut back to two buds. In later Winter or very early Spring but only one bud should be allowed to throw out a shoot, then treat as in the previous year. This system of pruning should be followed each year. Grape Vines should be top dressed in the Spring. Our cut of the Brighton Grapes gives a very good illustration of this system of training.

The best Grape Vine trellis is probably the wire trellis. This is constructed by planting posts as far apart as you choose to have the length of of your trellis, stretch the wires, four in number, about eighteen inches apart, letting them pass through stakes at proper distances from each other to support the wire. As the wires are contracted by cold, and are likely to break or sway the posts from their place, they shall be loosened as cold weather approaches.

When, however, it is not convenient to make a wire or other trellis, very good results are had with the old vineyard system of training to stakes. The vines are planted six feet apart, in a place exposed to the sun and protected from cold winds, and are trained to an upright stake. This method is as simple as the cultivation of Indian Corn. Often a large and uncomely rock may be converted to usefulness and beauty by planting a Grape Vine on its sunny side, and making use of the rock as a trellis.

BLACK GRAPES.

Barry—Bunch rather large, short, broad, compact, often shouldered; berry large, roundish, black; flesh tender, nearly free from the pulp, juicy, sweet, pleasant. Ripens about the time of the Concord.

Cynthiana—Bunch of medium size, moderately compact, shouldered; berry below medium, round, black, with blue bloom, sweet, spicy, moderately juicy. Juice very dark red, weighs very heavy on the must scale, even higher than Norton's Virginia, and makes, so far, our best red wine. It has as much body as Norton's Virginia, is of exquisite flavor, much more delicate than Norton's, and can safely enter the lists with the choicest Burgundy wines.

Champion—A vine of great vigor and hardiness, surpassing the Concord in this respect. It is of large size and the earliest Grape known, which must make it peculiarly valuable as a market variety. Color, black; quality medium.

Clinton—Bunches medium size, compact, shouldered; berries round, rather small; skin covered with a thick bloom; flesh quite acid, with a brisk, vinous flavor. Vines exceedingly hardy, vigorous and very productive. Ripens about the first of October, but improves by hanging on the vine. Makes a good wine.

Concord—Bunches large; berries large, round; skin thick and covered with bloom; flesh juicy, sweet, with somewhat more of the native pungency in its flavor than the Isabella. Vines very hardy, vigorous and productive; ripens ten days or more before the Isabella; at present the most popular of all our native sorts.

Hartford Prolific—A variety of great value in northern localities. Bunches large, compact, shouldered; berry large, round; skin thick; flesh sweet, juicy, perfumed, good. Vines vigorous and exceedingly productive. Ripens two weeks before the Isabella.

Ive's Seedling—A Grape extensively cultivated at the west, and valued for its wine. Bunch medium size, compact, shouldered; black, roundish, oval; flesh pulpy, juicy and sweet, but too hard for table use.

Merrimack (Rogers' No. 19)—Bunches good size; berry large, round and with a slight bloom; flesh tender nearly to the center, juicy and sweet, and ripens at the time of the Concord.

Norton's Virginia—The bunch of the Norton is small, compact and shouldered; berry small, black, with dark-bluish red juice, almost without pulp when fully ripe; sweet and brisk. Ripens late in October. Vine vigorous, healthy, hardy and productive when well established, but very impatient of transplanting, and exceedingly difficult to propagate. Wherever the season will admit of a thorough and perfect ripening of its fruit, the Norton will succeed in almost any soil. In rich bottom it comes early into bearing, and is enormously productive--on high hills with rather poor soil and southern aspects it is tardy in coming into bearing, but produces there the richest wine, of great body, and superior medical qualities. It has quite a peculiar coffee flavor which at first seems unpleasant to many, but which, like coffee, endears itself to our taste.

Wilder (Rogers' No. 4)—Bunches and berries large; flesh tender and sweet; excellent. Ripens with the Concord.

RED GRAPES.

Agawam (Rogers' No. 15)—Bunches large; berries large, round, dark red, tender and good; one of the best. Ripens soon after the Concord.

Brighton—It has seldom been our good fortune to be able to offer the public a new fruit in which we have felt so much confidence as we do in this splendid Grape. We have watched it with great care, to discover if possible what the defects were; determined that it should not obtain our indorsement if it had serious faults, nor until we had ample evidence that our customers would approve our dissemination of it.

The disseminators of this Grape, Messrs. H. E. Hooker & Brother, Rochester, New York, than whom there are none more reliable or better able to judge of the character of a fruit, says of it:

“We have fruited the original vine for three years, and it has given us unqualified satisfaction. Its origin is as follows: Mr. Jacob Moore, of Brighton, N. Y., (well known for his enthusiastic devotion to the business of artificial crossing of fruits, in order to produce improved varieties,) raised this among other cross-bred seedling Grapes; it being a cross between Concord and Diana Hamburg. The infusion of a strain of the Hamburg blood, has doubtless given to it some of its wonderful excellence of quality, while the preponderance of the native element preserves to it remarkable vigor and hardiness of plant and foliage. We know of *no one* variety which combines so many excellent traits, as we find in this, as it has proved with us. We claim the following recommendations, and confidently believe a general trial of it will bear us out.

“1st—*Excellence of quality.* It is equal to or better than the Delaware in flavor, and richness, with even less pulp, very sweet, pure and delicate in character; an excellent table fruit.

“2d—*Vigor and Hardiness of Vine.* The vine grows with great rapidity, ripens its wood early, and proves fully as well able to stand severe cold as the Concord.

“3d—*Early Ripening.* The Brighton ripens along with the earliest good sorts, the Delaware, the Eumelan, and the Hartford. This is a peculiarity of especial value at the north and in Middle States, in many localities.

“4th—*Beauty and Size of Fruit.* It is as large, and beautiful as the Catawba, which it resembles in color, and form of bunch and berry.”

Catawba—Bunches large, rather loose; berries large, round, or slightly oval; skin thick, pale red; flesh juicy, sweet, and highly aromatic. Vine vigorous, hardy and productive. Ripens here from the first to the middle of October, in favorable locations.

THE BRIGITON GRAPE.



Delaware—This is the finest highest flavored and most delicious of all the native Grapes, and should be in every collection. Bunches small, compact, shouldered; berries rather small, round; skin thin, light red, translucent; flesh very juicy without any hard pulp, with an excellently sweet, spicy and delicious flavor. Vines moderately vigorous, very hardy and productive. Ripe two weeks before the Isabella.

Iona—Bunches large, shouldered; berries round, dark red when ripe; flesh tender, little pulp, and a rich, vinous flavor; quality excellent. Ripens about with the Concord.

Lindley (Rogers' No. 9)—Bunches of medium size, rather long, compact; berry medium size, roundish; flesh tender, juicy, sweet and good. Ripens a little before the Concord.

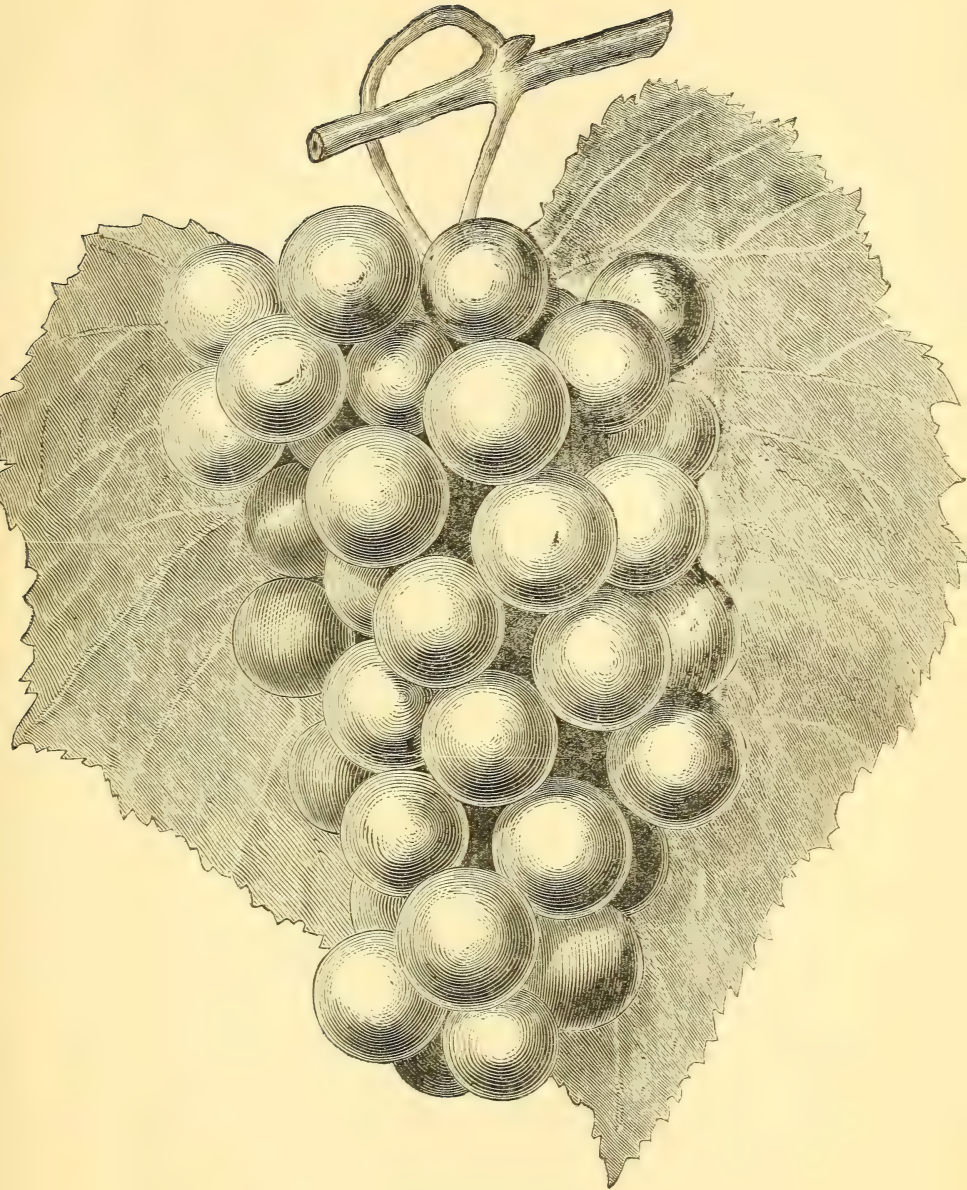
Massasoit—Bunch medium size, shouldered; berry large, round claret red; flesh tender and juicy. Ripens with the earliest sorts. Vine a good grower and quite hardy, and one of the best varieties for a cold climate.

Salem (No. 53)—This is regarded as the best of Mr. Rogers' Hybrids. Bunch large and compact, berry large, of a light chestnut or Catawba color, thick skinned, perfectly free from hard pulp, very sweet and sprightly, with a most excellent aromatic flavor; as early as the Delaware or Hartford; having never failed to ripen in the most unfavorable season for the past six years; keeps well.

Walter—A new variety, originating in Poughkeepsie, New York. A cross between Diana and Delaware, and partaking of the characteristics of each; vine a free grower; leaves very large and thick; an over-abundant bearer; cluster very much larger than Delaware; berry nearly round, nearly as large as Catawba, of a deeper red than Delaware. As a raising Grape the Walter has a distinctive character of its own. In this field it is without a rival among American Grapes, and from this peculiarity, if not from other good qualities, it should have a place in every garden.

WHITE GRAPES.

Etvira—A seedling from Taylor, raised by Jacob Rummel, of Missouri, considered the most promising new white-wine Grape we now have. Bunch medium, shouldered, very compact; berry medium, considerably larger than Taylor, its parent, round, pale green with white bloom, sometimes tinged with red streaks when fully ripe; skin very thin, transparent; it sets so very closely and the skin is so thin as to cause some of the berries to crack; pulp sweet, very tender and juicy, fine flavor. Ripens about ten days later than Concord. Vine a most vigorous, stocky grower, eminently productive, exceedingly healthy and hardy, having stood the hard Winters of 1872 and 1873 without protection. Promises to be the leading white-wine Grape of the Middle States.



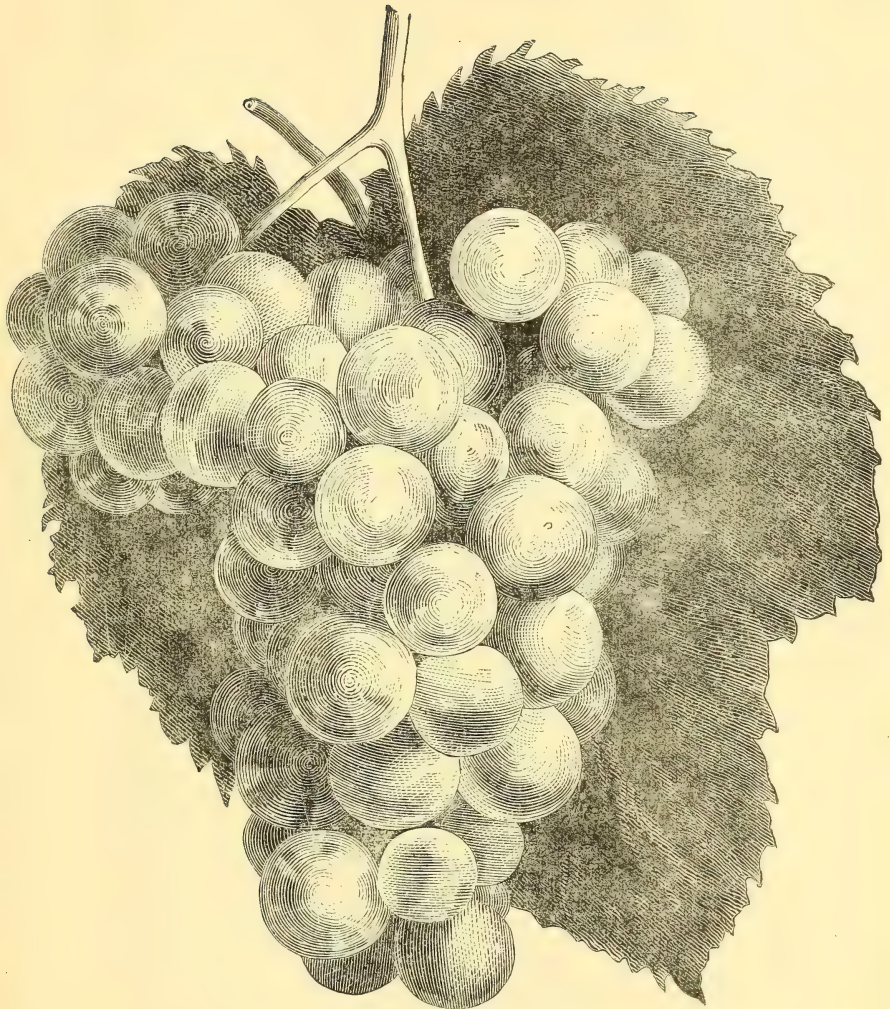
THE LADY GRAPE.

Gothe (Rogers' Hybrid No. 1)—One of the hardiest, healthiest, and most productive sorts we have. Late in ripening for northern localities, it does not always mature there; but here with us it produces and perfectly ripens a large crop of beautiful clusters and berries, free from rot or imperfections of any kind, provided it has a good rich soil, and has not been permitted to overbear. The vine is a most vigorous grower, making stout and long canes, with well-developed laterals. The bunches are medium to large, not quite compact, occasionally shouldered; berries very large, oblong, of a yellowish green, sometimes blotched, with a pale red toward the sun; skin thin, translucent; flesh tender and melting throughout, a few seeds, sweet, vinous and juicy, with a peculiar delicious aroma; excellent for the table and for wine.

Lady—Mr. George W. Campbell, who has given it the fairest test, says of it: "Since the appearance of the Concord Grape, which has become so universally popular, no new variety has appeared so promising in all the qualities and characteristics necessary to render a Grape valuable for the most universal and extensive cultivation, as the Lady. It has now been tested carefully for eight years, and has fruited continuously for that length of time without a single failure, and has endured all the vicissitudes of our variable and uncertain climate without suffering either from winter-killing, rot, or mildew. When to this is added its fine size, attractive appearance, and really excellent quality, together with very early ripening, we have a combination of merits enjoyed by no other Grape yet introduced to the American people. A really good, extra-early white Grape, has long been wanted by Grape growers; for we have had, up to the present time, no popular Grape of even fair quality that was very early in ripening. The Hartford Prolific, Ives, and one or two others of less note, have been tolerated as early market Grapes, simply because they *were* early; and because nothing better was to be had in their season. The Lady Grape just meets this want, and supplies a variety suited alike to the requirements of the market gardener, the amateur, the vineyardist, and indeed for every lover of the Grape who desires the *best* and *earliest* Grape, healthy, hardy and productive, and adapted to a larger section of country than any variety yet known. Being a pure, native Concord seedling, and possessing all the best characteristics of its parent, in the way of perfect health and hardiness; ripening from two to three weeks earlier than Concord, it is especially adapted to more northern regions where Concord does not ripen."

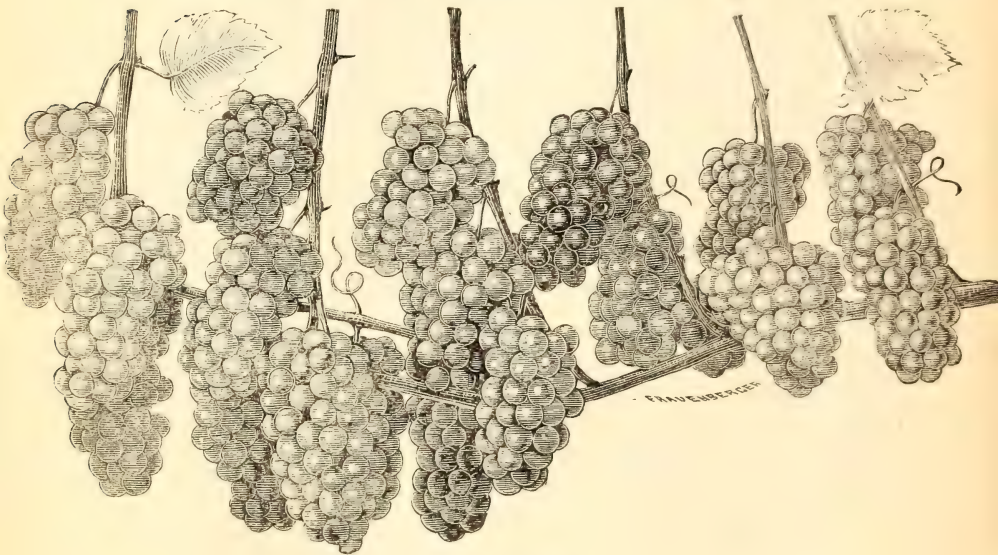
Martha—A new variety comparatively, being a seedling of the Concord, which it resembles in vigor of growth and hardiness. Bunch of good size and berry large; of pale green or light color; buttery, sweet, juicy and sprightly. As a hardy, light-colored Grape it stands unrivaled.

Noah—Origin Nauvoo, Illinois, a seedling of Taylor. Bunch medium and compact, berry medium, yellowish green, resembles Elvira, but hardly equal in quality. It gives great promise as a very valuable wine Grape.



MARTHA— WHITE CONCORD.

Perkins—Valuable, very early market Grape, as it is showy, which is more important for our markets than fine quality; besides, tastes differ, and, to many tastes, its strong fox or musk flavor is not disagreeable; bunch medium to large, shouldered; berries medium, oblong, often flattened by their compactness, greenish white at first, then of a fine, pale-lilac color when fully ripe, with a thin, white bloom; flesh rather pulpy, sweet, juicy; skin thick; ripens a few days after Hartford Prolific and before Delaware; vine a vigorous grower, healthy and productive.



THE PRENTISS.

The Prentiss—Originated with J. W. Prentiss, of Pultney, Steuben Co., N. Y., on Crooked Lake, near Hammondsport. It is a seedling of Isabella. Bunch large, not often shouldered, compact. Berry medium to large, yellowish green, sometimes with a rosy tint on side next to sun; skin thick but very firm. Flesh tender, sweet, melting, juicy, with a very pleasant and musky aroma; free from foxiness; little if any pulp; seeds few and small; very similar to Rebecca in quality but vine a vigorous grower, and foliage very distinct from Rebecca. Foliage healthy, thick, resembling Diana or Isabella, showing its native origin. Vine a good grower, and very productive, inclined to overbear, and clusters should be thinned unless pruned close; vine hardy, and buds uninjured with thermometer 15 to 20° below zero. The grape is an excellent keeper, and was exhibited at the Western New York Horticultural Society, at Rochester, January 22d, 1879, in perfect condition. Ripens about with Concord.

MULBERRIES.

Black English—Fruit large and fine; delicious flavor; slow grower.

Downing's Everbearing—Fruit large, rich, juicy, high, vinous flavor.
Tree very vigorous and productive.

White—Fruit small, sweet and good.



FIGS.

REMARKS.—Figs may be grown as bushes in the garden, in the Northern States, if they are taken up annually, the first week in November, with a ball of earth attached to the roots, and placed in the cellar till about the middle of May, when they should be taken out and replanted. Most of them ripen in August.

Angelique or Early Lemon—Small, greenish yellow; early.

Brunswick or Madonna—Very large, violet, good and productive.

Black Ischia—Medium, blue black, good.

Blue Genoa—Medium, bluish black.

Brown Turkey—Medium, brown, very sweet and excellent, very prolific and hardy. The most reliable for open field culture.

Celestial—Small, pale violet with bloom, very sweet, prolific and hardy.

Green Ischia—Green, with crimson pulp; very good and prolific.

Lemon—Large, yellow, sweet.

Madeleine—Small, white.

White Marseilles—White.

MISCELLANEOUS FRUITS.

Almonds—Sweet and hard shell.

Berberry, Common Red—Fruit small; crimson; is too acid to eat, but it makes an agreeable dessert and jelly, and an ornamental pickle for garnishing some dishes.

Berberry, Purple—Fruit similar to above, except that the fruit and leaves are purple.

Chestnut (American Sweet)—Among our large collection of native forest trees, the Chestnut is unrivaled for its beauty. When grown in the open ground, it assumes an elegant, symmetrical form; the foliage is rich, glossy and healthy, and the whole tree is covered in early Summer with long, pendant, tassel-like blossoms, than which there are none more graceful and beautiful. It is especially desirable for its nuts, which it bears profusely a few years after transplanting. The Chestnut thrives well on any soil except a wet one. When nursery-grown, bears transplanting well, and when once established is a rapid grower, and soon comes into bearing.

Chestnut, Spanish—An European variety. The nuts are of larger size than the American variety, but not as sweet.

Juneberry, Dwarf (Service Berry)—This variety of the Juneberry attains the height of from six to eight feet. Bush is hardy and extremely productive. The color of the fruit is a bright crimson, overspread with purple. The fruit is prized in culinary preparations and for the dessert. One of the most beautiful fruits in cultivation.

Japanese Persimmon—This is a fruit comparatively new in this country; recently introduced from Japan. It comes highly recommended, but has not proven sufficiently hardy for extensive cultivation in northern States.

Filberts—In variety.

Walnuts—American Black; Butternut; English.



LEAF AND BLOSSOM OF THE AMERICAN CHESTNUT.

STRAWBERRIES.

The Strawberry is one of our most reliable crops, and extensively grown here. The system adopted here of covering the fruiting beds all over with stable manures at the approach of cold weather, has the most salutary effects; it protects the crown of the plants from the bleak winds; prevents the roots from being thrown out by alternate freezing and thawing. The strength of the manure penetrates the ground, and supplies the roots with nourishment to produce an abundance of large berries.

The principal objection urged against the practice, that the covering retards ripening the fruit is now considered a gain, as it allows the earlier berries to disappear, and there is an increased demand for fine large Strawberries something later. We have a large and very fine stock of pure plants, propagated expressly for transplanting.

Crescent Seedling—Medium, conical, very uniform, bright scarlet, beautiful, and moderately firm; commences to ripen with Wilson's Albany, and continues in fruit longer; the plant is a most vigorous grower, taking entire possession of the ground, preventing weeds or grass to grow and requiring very little cultivation.

Charles Downing—Fruit very large; deep scarlet; flesh quite firm, pink, juicy, sweet, rich. Plant very vigorous and productive. This is one of the most desirable varieties in cultivation. Flowers perfect.

Champion—Fruit irregular, globe shape, of dark crimson color; large size and good quality. Plant a most vigorous grower, hardy and very productive.

Cumberland Triumph—A new and distinct variety, disseminated by Mr. Amos Miller, of Carlisle, Pa. It stands without a rival for heavy clay soil; large size, perfect form, fine flavor, vigorous grower, and unexcelled productiveness, and always brings the highest price in market. Blossom perfect.

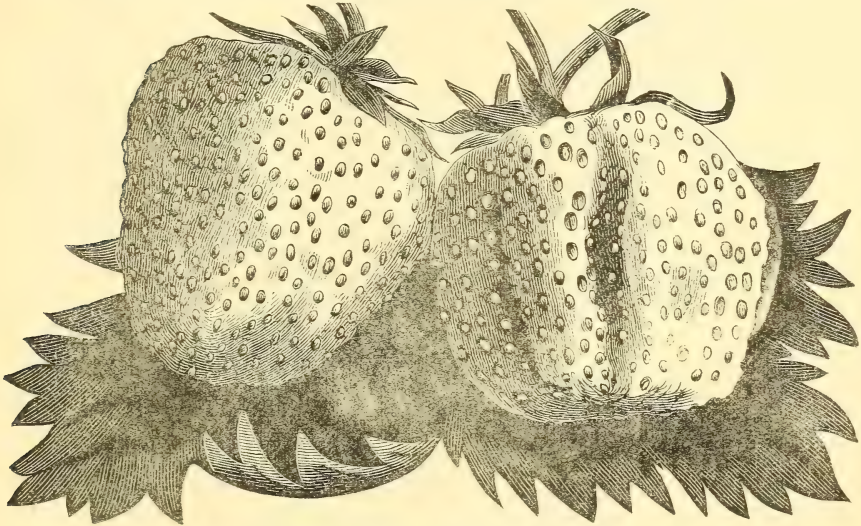
Centennial (H.)—A fine high-flavored, large berry, for which the award was given, and pronounced the highest and finest flavored by the judges of the Centennial Exhibition. It is very regular in form, of a rich scarlet color, continuing long in bearing and retaining its fine flavor to the last. May be considered one of the finest amateur berries known.

Forest Rose—A very large berry, rich crimson, luscious and firm with exceedingly strong, vigorous plant, and productive. This is one of the most promising of our collection, rivaling the Great American.

Green Prolific—Fruit orange scarlet; surface soft, center of flesh firm, rather acid. Plant hardy, very vigorous, very productive, and highly valued by some as a market berry. Flowers pistillate.

Kentucky—Fruit large to very large; bright scarlet; flesh white, firm, juicy, rich, sweet, and of excellent quality. Plant strong, vigorous, very productive, with long fruit stalks bearing the berries well up from the ground, and the foliage standing the heat of Summer and the cold of Winter, and is a week later than most varieties. Flowers perfect.

Lennig's White—Fruit large; color whitish, tinged with red; flesh soft, tender, juicy, sweet, rich, delicious pine-apple flavor. Plants vigorous, moderately productive. One of the finest flavored varieties in cultivation; well suited to amateurs. Flowers perfect.



MONARCH OF THE WEST STRAWBERRY.

Monarch of the West—The largest and best market Strawberry grown. It is well adapted to light sandy land, and will succeed well generally on a great variety of soils, being a strong, vigorous grower, with large, tall foliage. The fruit sells for double the price of Wilson's.

Sharpless Seedling (H.)—Among the new kinds, we think nothing can compare with this. The fruit is large to very large, an average specimen measuring one and one half inches in diameter. A large berry, exhibited at the Nurserymen's Convention in Rochester, weighed one ounce, and measured seven inches in circumference. In form it is generally oblong, narrowing to the apex, and irregular and flattened. Color, clear-bright red, with a shining surface; flesh firm, sweet, with a delicate aroma. In quality it ranks with the *Triomphe de Gand*. The plant is very vigorous, excelling even the *Monarch of the West*. After growing it side by side with the best new sorts now in cultivation, we consider it superior to them all. Mr. James Vick, of Rochester, N. Y., says: "The Sharpless is the largest and best Strawberry we know anything about."

Seth Boyden (Boyden's No. 30)—Very large; bright crimson; flesh quite firm, juicy, rich sub-acid. Plant vigorous and very productive.

Triomphe de Gand—A Belgian variety which seems to stand our climate and produce more crops than any other foreign sort. The vines are vigorous and healthy, hardy, moderately productive and well suited to strong clayey soils. Requires high cultivation and to be grown in hills. Fruit large; bright rich red near the calyx, almost greenish white at the point; glossy as if varnished; flesh firm, white, juicy, with a peculiar rich and agreeable flavor. Flowers perfect.

Wilson's Albany—Although not of high quality, yet no variety has become so generally cultivated as the Wilson's Albany. The vine is very hardy, vigorous and productive, commencing to ripen its fruit early and continuing to the latest. The most profitable market berry for general cultivation.

RASPBERRIES.

Raspberries ripen soon after Strawberries, when there is not much other fruit in market, hence they are eagerly sought after and sell at high figures, and the same crates and baskets being used for both, there is no additional outlay for packages.

The management of hardy Raspberries is very simple; plow and prepare the ground as for potatoes or other crops; mark the rows six feet apart, and set the plants three feet distant in the rows, using 2,500 plants per acre.

The tops should be cut down to within a few inches of the ground, that the roots may become well established before they are required to supply nourishment for long tops of green foliage.

Potatoes or other vegetable may with advantage be grown between the rows of the first year, after which the Raspberries will require the whole space. The old roots which have borne fruit should be removed before the following Spring, and the young canes shortened in about one third of their length, so they will stand firm and erect, bearing heavy crops without stakes, trellises, or protection of any kind.

RED VARIETIES.

Brandywine—A large, bright, scarlet berry, firm and beautiful. Bears carriage well, and commands a ready sale in market, brought from 50 to 60 cents per quart, wholesale, the past Summer. The foliage and general appearance much resembles the Pearl, from which it is probably a seedling, though the leaves are of lighter green color, put out a week earlier

in Spring and make a better growth; are broad and crimped, and when they first appear at the top of the canes are shaded with red, which disappears as the leaves attain more size and age. The young stems are generally green while growing, though occasionally a shade of reddish brown next to the sun, but none of the white bloom so abundant on other kinds. Origin unknown, though it found a congenial soil in Brandywine Hundred, and along the Brandywine Creek, near Wilmington, Delaware, where it succeeded so well as to attract much attention by the high price and ready sale of the fruit in market. It was formerly called *Susqueco*, which is the Indian name for Brandywine. It is the most valuable Raspberry yet introduced for transporting a long distance to market.

Conover (Queen of the Market, Cuthbert)—This new red sort is looming up as the most valuable red Raspberry grown, especially for market. A reliable fruit grower near New York writes: "The Conover is a new, large, rank grower—branches and roots nearly as large as a Blackberry bush. Fruit nearly as abundant as the Brandywine, but much larger; better flavor, and *much firmer*—making it the *finest market* red Raspberry I ever saw." He also writes: "I am satisfied that it is the same as the Cuthbert," and gives us good evidence of this.

Highland Hardy—This variety has excited the attention of fruit growers, the past two or three years, to its great merits as a profitable market sort, and has grown into favor beyond the famous Hudson Antwerp, in the section where that variety succeeds best. It has paid from \$400 to \$1,000 per acre. Plants perfectly hardy, fruit ripens *early*, with the last of Strawberries, and the most of the crop is ripened in two weeks, while prices are good. Flavor good; color bright red; size medium to small, according, to culture; succeeds on any soil, and carries well to market.

Henrietta—Very large, handsome berry, of a purplish cast; flavor excellent.

Philadelphia—Fruit medium; dark crimson or purplish red; flesh moderately soft, mild sub-acid; good. The canes are hardy, vigorous and very productive. The most profitable red market sort.

Reliance—Originated by Oscar Felton, New Jersey, who describes it as follows: "Fruit large, many of them $2\frac{1}{2}$ inches in circumference, roundish, with large fleshy seed-beds, adhering slightly to the germ. Color, dark red, with a rich, sprightly acid flavor; entirely free from the insipid sweet, characteristic of so many varieties; and will remain in good condition three or four days on the bushes after they are ripe, and can be shipped in perfect order hundreds of miles to market. The Reliance is of very stocky habit, very short jointed, with prominent buds and dark, ^{heavy} foliage, ^{great} vigor of growth and perfectly hardy; showing perfectly healthy, ^{uninjured} buds on the very tips of the canes. Never known to winter-kill."

Turner, or Southern Thornless—Stands very high at the west because of its extreme hardiness, great productiveness, large size and beautiful color. Has withstood the most severe Winters. Fruit firm and bears carriage splendidly. One of the most valuable market sorts.

Thwack—A fine large berry; a cross between Brandywine and Herstine. Bears shipping better than any other red berry known.

BLACK CAP VARIETIES.

Gregg Raspberry (New)—The largest, best, and most productive black Raspberry ever introduced; berries averaging one half larger and producing one half more bushels per acre than the Mammoth Cluster; berries remain on the bushes until gathered, never dropping off, a point vital to every fruit grower; shipping qualities unexcelled. Ripens with Mammoth Cluster.

Mammoth Cluster (McCormick)—A variety of the American Black Cap, with stronger and more vigorous canes, having fewer spines, and more productive. Fruit similar in form to American Black Cap, but of much larger size, of deeper color, more bloom, juice and sweetness.

Sweet Home—The Sweet Home canes grow upright and stocky; but few thorns; increased from tips; never has winter-killed; ripens two weeks later than Doolittle, and continues till Blackberries ripen; the fruit continues to hold its large size till the last picking. It bears such immense crops that the canes must be cut thoroughly back or tied up.

RED CAP VARIETIES.

Ganargua—A fine red Raspberry that grows like the black cap from tips, equally as hardy, strong and vigorous as the Mammoth Cluster, and fruit as large and productive, commencing earlier than Doolittle, and continues to yield abundantly through the season.

New Rochelle—A seedling of the Catawissa, and very much like it in color, or a little darker than the Philadelphia; very firm, juicy, sprightly, good; bears shipping well, and commands a good price in market. It is very large, said to be twice as large as the Philadelphia, and will produce twice the quantity of fruit. Comes of strong, robust growth, attaining a height of five to six feet, nearly an inch in diameter near the ground, and hardy; lateral shoots also strong. Of all prolific Raspberries this is perhaps the greatest—having produced six to eight quarts of berries to a stool.



Photographed natural size
from a cluster brought me by
N. OHMER, DAYTON, OHIO.

CHAS. H. MILLER,
26 S. Main St., **DAYTON, O.**

Gregg Raspberry

BLACKBERRIES.

The land should be manured with some fertilizing materials, as for wheat or other crops, plowed deeply and well harrowed, then with a horse and plow draw small furrows eight feet apart one way by three feet apart the other, at right angles with those first made. Then set out the plants, planting one at each cross furrow, which will require 1,815 plants to the acre.

At the proper season for planting other crops, a furrow may be drawn between the rows, the eight feet way, whereby one half the ground may be planted with corn, potatoes or melons, which, owing to the additional space allowed, will yield proportionately more than the same number of rows planted in the usual manner. The hills made by the two crops will stand three by four feet apart, and may be cultivated both ways to keep the ground mellow and free from weeds.

After a plantation is thus fully established, the cultivation is of the easiest kind, only keep the ground mellow and clear of weeds and surplus canes or sprouts that come up thicker than are needed for bearing fruit. Occasionally shorten in the most rampant canes to about four or five feet, which will strengthen the side shoots and more fully develop the fruit buds; give a dressing of manure as often as any other crop that yields as many bushels per acre would require it, and an abundance of large fruit is certain.

For Fall planting, October and November are most favorable. Spring planting should be done as early as practicable after the frost leaves the ground.

Crystal White—Fruit medium; light-creamy white; translucent, sweet, good. Only valuable as a curiosity.

Kittatinnny—Fruit large to very large; rich-glossy black; moderately firm, juicy, sweet and excellent. It has within a few years become widely disseminated, and everywhere proves of the highest value. Canes quite hardy and very productive; ripening early and continuing a long time. The most profitable market sort.

Lawton (New Rochelle)—Fruit very large; intensely black when fully ripe. When mature the fruit is very juicy, rather soft and tender, with a sweet, excellent flavor. It is of a very vigorous growth, hardy and exceedingly productive. Ripens about the first of August and continues in bearing a long time.

Snyder—A marvel for productiveness; fruit medium size, sweet and melting to the core. Because of its smaller size it does not sell as well as the Dorchester, Kittatinnny or Lawton, but its value, of course, is its extreme hardiness, standing the Winters in those sections where the Kittatinnny, Lawton, and Dorchester kill down.



THE KITTATINNY BLACKBERRY.

Taylor's Prolific—A large fruit, melting, without core, and very productive, and equally as hardy and productive as the Snyder, wherever tried; and being much larger, will make it a great favorite in sections where a large hardy kind is wanted.

Western Triumph—A new seedling, originating in Illinois. The best of testimony goes to show that it is perfectly hardy, withstanding the most severe Winter without any protection, alongside of the Kittatiny and other sorts that have killed down. Medium sized, glossy black, productive and very excellent.

Wilson's Early—From New Jersey. Very large, productive, good flavor, and one or two weeks earlier than Lawton. Requires protection here.

C U R R A N T S .

Having grown many kinds, we consider the very best to be the Cherry and La Versailles, among the red, and the White Grape among the light colored, of which three we now cultivate the most largely

Currants may be used in so many ways, for making tarts, jellies and jams, wine and other wholesome and refreshing drinks so very palatable in warm, sultry weather, that every family should have from one dozen to one hundred bushes to furnish a supply for the year.

Set the plants three feet from each other in rows, five feet apart, requiring about three thousand plants per acre. Manure freely; keep the ground mellow and free from grass and weeds, and a beautiful crop of fruit will amply repay you for the cost and labor.

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

Cherry—Fruit of the very largest size; berries deep red. Not any more productive than other Currants, but a valuable one for market on account of its size.

La Versailles (Fertile d'Angers)—Fruit of the largest size, and red; bunches resembling the Cherry Currant, but occasionally longer.

Red Dutch—Fruit large; deep red; thrifty, upright growth; very productive. An old, well known sort.

Victoria—Berries as large as Red Dutch; bunches longer; of a bright red; growth more slow, spreading and very productive. Will hang on the bushes some two or three weeks longer than most Currants.

White Dutch—This is precisely similar to Red Dutch in habit, but the fruit is larger, with rather shorter bunches; of a fine yellowish white color, with a very transparent skin; less acid than the Red Dutch, and also a few days earlier.

White Grape—Berries very large; whitish yellow; sweet and good; very productive. Branches more horizontal than White Dutch, and less vigorous.

GOOSEBERRIES.

The Gooseberry is a very valuable crop for market, easily grown, yielding one hundred and fifty bushels per acre, is rapidly gathered with gloves on, and by running through a grain fan the leaves and light materials are blown out, when the berries can be put in barrels and shipped to the best market, as they bear transportation well for a long distance. A plantation lasts for many years with ordinary cultivation. Set the plants three feet distance in rows, five feet apart, requiring about three thousand plants per acre. Great improvements have of late been made in the American varieties, constituting a new era in the culture of this indispensable fruit.

AMERICAN VARIETIES.

Downing—Fruit somewhat larger than Houghton; whitish green, with the rib veins distinct; skin smooth; flesh rather soft; juicy, very good. Excellent for family use. Very productive.

Houghton's Seedling—Fruit medium; skin smooth, pale red; flesh tender, sweet, and very good. Very productive, and generally free from mildew.

Mountain Seedling—Large, roundish oval; pale red; skin thick; quality medium. Plant a rapid grower, spreading habit; very productive. Originated with the Shakers, at Lebanon, State of New York.

Smith's Improved—Raised by Dr. Smith, of Vermont. This variety has the habit of growth, slender shoots, and medium vigor of the Houghton, with a much larger fruit, of a pale yellow or greenish yellow color; skin thin; excellent flavor; not surpassed by any other sort for eating and cooking quality. It ripens early, and is in use before other varieties. This sort is so extremely productive of fruit that it requires good soil and manuring, with some annual pruning to sustain its vigorous growth; but with good culture the results are admirable.

Transparent—Origin, Ohio. New, large, and handsome; almost transparent; flesh tender and inviting; plant moderately vigorous; growth varying; very productive.

ENGLISH SORTS.

The English varieties are generally imported at one or two years growth, transplanted, and grown one year in this country before offered for sale.

This class is much more liable to mildew than our native varieties, but their large size and their peculiar flavor still commands a place in the garden of the amateur.

The following varieties are best adapted to our climate:

Crown Bob—Fruit large, oblong, hairy; flavor first rate; best red.

Whitesmith—Fruit large, roundish oblong, downy; flavor first rate; best white.

TWO NEW SEEDLING GOOSEBERRIES.

Roe's Ruby Seedling—This variety has surpassed our expectations. Many berries measured, last season, three and one quarter to three and a half inches in circumference, and the plant bears enormously. Fruit bright green until it begins to ripen, then turning pale red in the shade, and a deep red in the sun.

Roe's Late Emerald Gooseberry—This is another seedling, quite distinct from the above, being equally large and vigorous in its growth, fully as productive, and free from mildew, but much later, and of a beautiful green color when ripe. We think it will prove quite as valuable as the other, and will greatly extend the season.

ESCULENT ROOTS.

Asparagus—Giant.

Asparagus—Conover's Colossal.

Rhubarb—Myatt's Linnæus.



SMITH'S IMPROVED GOOSEBERRY.

ORNAMENTAL DEPARTMENT.

TREES, SHRUBS, ETC., FOR ORNAMENT.

We are just beginning to appreciate the value and importance of planting Ornamental Trees, Shrubs and Plants, Evergreens and Deciduous Hedges, for lawns and yards, and screens for the protection of our orchards and gardens; and yet we have scarcely begun to realize the commercial value of such an investment to our homes. We know a keen, sagacious business man in one of our large cities, who has operated for years past in the following manner: He buys a tract of land in the suburbs of the city, cuts it up into liberal sized lots, drives stakes for a house, and immediately plants the ground with fruit and ornamental trees, shrubs and hedges. He then employs a good man to care for them, and does not offer the lots for sale for two or three years, well knowing that the increasing value of the property, will pay him good interest on the investment. When a purchaser goes to look at the property, he finds that when his house is built he has, instead of a naked house on a bare lot, a neat and beautiful home, with its growing trees and plants, which it would have taken him years to get around him. Many of our most active business men are also men of taste, and would be glad to improve and beautify their grounds, but they are so occupied with business that they have neither the time nor disposition to find out what they want or to lay out their grounds. Some competent man can generally be found to aid in this matter.

A detailed description of desirable trees and shrubs would be little less than a recapitulation of list contained in our Catalogue of Ornaments, to which the readers are referred. A grouping together according to the time of flowering, or size of growth, will be found very desirable.

There is now a very fine collection of Weeping trees which during the past few years has attracted much attention. Among the most striking and beautiful are the Weeping Mountain Ash, very drooping, with beautiful red berries. Cut-Leaved Weeping Birch, very fine, slender drooping branches and delicately cut-leaved. Kilmarnock Willow, one of the very best, beautiful, with large glossy leaves, and the Gold-Barked Weeping Ash, pretty and desirable; very showy in Winter.

The Norway Spruce and American Arbor Vitæ are the best known of Evergreens. Either as single trees or in hedges they are indispensable. The Black and White Spruce vary in shades of color as their names indicate. The White Pine, light and graceful in its foliage; the Scotch, angular, spreading, irregular, but finely colored; and the Austrian, erect, regular in growth, and bearing upright cones; are well known and desirable. The Balsam Fir is handsome, but loses its lower foliage, a fatal defect in an Evergreen. The Siberian and Hovey's Arbor Vitæ are improvements on the common American; the first for its strong, thick leaved foliage, and the other for its fine color and regular form. The Golden Arbor Vitæ may also be added. The Irish and Swedish Junipers are compact cones of foliage (the latter lighter in color) and contrast finely with the round topped trees.

The idea of planting hedges for use and ornament, and screens for the protection of orchards, farms and gardens, is a practical one, and rapidly becoming appreciated. In a recent trip among some very intelligent farmers and fruit growers of Genessee County, New York, we noticed that many of them had planted belts of Norway Spruce trees along their entire north and west lines. They were at once beautiful and perfect as wind breaks. The owners told us that they considered their farms worth ten dollars per acre more in consequence.

Nothing can be more beautiful than ornamental hedges of Evergreens or Shrubs well kept and pruned to serve as boundary lines between neighbors, or as divisions between the lawn and garden, or to hide unsightly places. By using medium sized plants, a hedge can be made as cheaply as a good board fence can be built, and then with a very little care it is becoming every year more and more "a thing of beauty." We all know that such hedges constitute a principal attraction in our best kept places.

DECIDUOUS TREES.

Abele (*Populus*).

SNOWY MAPLE-LEAVED (*alba acerifolia*). A tree of wonderfully rapid growth; leaves large, lobed, glossy green above and white as snow beneath; prefers a moist soil, but flourishes anywhere.

Acacia (*Robinia*).

HISPIDA (*Rose, or Moss*). A shrub-like tree with many beautiful pendant rose-colored flowers.

PSEUDO-ACACIA. The yellow Locust.

DECAISNIANA. A variety of the preceding, with delicate pink flowers; very fine.

PYRAMIDAL (*pyramidalis*). An upright variety with very dark foliage.

Ash (*Fraxinus*).

EUROPEAN (*excelsior*). A lofty tree with pinnate foliage and spreading head.

FLOWERING (*ornus Europæus*). A very ornamental, small tree; flowers fringe-like, greenish white, produced early in June in large clusters on the end of the branches.

GOLD-BARKED (*aurea*). A fine conspicuous tree in Winter. Growth irregular.

WILLOW-LEAVED (*salicifolia*). A remarkable and beautiful variety with narrow, wavy leaves. A robust, rapid grower.

Alder (*Alnus*).

IMPERIAL CUT-LEAVED (*laciniata imperialis*). A new and beautiful tree; foliage large and deeply cut; quite distinct; perfectly hardy and vigorous; one of the finest cut-leaved trees in cultivation.

Apple (*Pyrus Malus*).

CHINESE DOUBLE-FLOWERING (*spectabilis*). Has beautiful, double, rose-colored flowers in clusters; blossoms with other apples.

DOUBLE WHITE FLOWERING.

RIVERS' SEMI-DOUBLE.

CARNEA PLENA. A beautiful variety, with delicate flesh-colored double flowers.

Beech (*Fagus*).

PURPLE-LEAVED (*purpurea*). A remarkable tree with dark purplish-red foliage. Contrasts finely with the green of other trees.

Birch (*Betula*).

DOWNY-LEAVED (*Pubescens*). Resembles the American White Birch; but more vigorous. Branches slightly pendulous.

Bird Cherry (*Prunus Padus*). A rapid grower, beautiful tree, with glossy foliage; has long bunches of white flowers in May, succeeded by clusters of fruit-like black currants.

Catalpa.

SYRINGA-LEAVED (*syringifolia*). A showy, rapid growing, beautiful tree, with very large, heart-shaped leaves, and large pyramidal clusters a foot long, of white and purple flowers. Blooms latter end of July, when few trees are in blossom.


Elm (*Ulmus*).

ENGLISH (*Campestris*). An erect, lofty tree, with rather small leaves.

PURPLE-LEAVED (*stricta purpurea*). A striking variety of the English, with erect branches and small purplish leaves.

SCOTCH, or WYCH (*montana*). A fine spreading tree of rapid growth; foliage large.

AMERICAN WHITE, or WEEPING (*Americana alba*). The noble, spreading and drooping tree of our own forests.

 For Weeping Elms see "Weeping Trees."



THE CUT-LEAVED WEEPING BIRCH.

Horse Chestnut (*Æsculus*).

WHITE-FLOWERING. The common, well-known species; a hardy, healthy tree, free from all diseases; covered in June with magnificent erect spikes or panicles of flowers, white, lightly marked with red.

RED-FLOWERING (*Rubicunda*). A splendid tree, with showy red flowers; blooms a little later than the white, and the leaves are of a deeper green.

Honey Locust.

THREE-THORNED ACACIA (*Gleditschia Triacanthos*). A rapid growing tree, with delicate foliage of a beautiful, fresh, lively green, and strong thorns. Makes an exceedingly handsome impenetrable and valuable hedge.

Judas Tree, or Red Bud (*Cercis canadensis*). Red flowering, covered with fine, delicate, purple flowers before the leaves appear. Leaves very large, roundish dark; very ornamental.

EUROPEAN JUDAS TREE (*cercis siliquastrum*). A beautiful tree, much like the preceding; foliage deeper green, and flowers darker red.

Kentucky Coffee Tree (*Gymnocladus canadensis*). A fine tree, with long, feathery foliage; stiff, blunt shoots; grows rapidly.

Kolreuteria (*Paniculata*). A small tree, with fine lobed leaves and large panicles of showy, yellow flowers, in the latter end of July; leaves change in Autumn to a fine yellow. Deserves much more attention than it receives.

Larch (*Larix*).

EUROPEAN (*Europæus*). An elegant, rapid growing, pyramidal tree; valuable for timber. Small branches, drooping.

Laburnum (*Cytisus*).

ENGLISH (*Laburnum*). A beautiful tree, with long pendant racemes or clear yellow blossoms in June, and smooth, shining foliage.

Linden (*Tilia*).

EUROPEAN (*Europæa*). A very fine pyramidal tree, with large leaves and fragrant flowers.

AMERICAN OR BASSWOOD (*Americana*). A rapid growing, beautiful native tree, with very large leaves and fragrant flowers.

Mognolia.

CUCUMBER TREE (*acuminata*). A noble, beautiful tree, with very large leaves and yellow flowers, tinted with bluish purple.

UMBRELLA TREE (*tripetala*). A small-sized tree, with immense leaves, and large, white flowers, four to six inches in diameter. June.

CHANDELER, OR YULAN (*conspicua*). A beautiful Chinese variety, with large, white flowers that appear before the leaves. Tree of small size. April and May.



THE OAK-LEAVED MOUNTAIN ASH.

Speciosa—In habit of growth and color of flowers, this variety somewhat resembles *Soulangeana*, but surpasses it in the beautiful symmetry of the tree and the wonderful profusion of its blossoms.

SOULANGES (*Soulangeana*). A variety of the preceding, with white and purple flowers; very fine. April and May.

GLAUCCOUS, OR SWAMP LAUREL (*glauca*). A small tree indigenous to New Jersey; leaves shining above, glaucous or whitish beneath. Flowers white, with a very sweet and pleasant odor. May and June.

Grandiflora—The finest of all broad-leaved Evergreen trees.

Maple (*Acer*).

SUGAR (*saccharinum*). A well-known native tree, valuable both for the production of sugar and for its wood; its stately growth, fine form and foliage make it desirable as an ornamental and shade tree.

SILVER-LEAVED (*dasycarpum*). Leaves white underneath. Growth very rapid; a valuable street and park tree.

PURPLE-LEAVED (*purpurea*). A beautiful variety of the European Sycamore; leaves purplish red underneath.

NORWAY (*platanoides*). A fine European species, with broad foliage.

Wier's Cut-Leaved Silver Maple—Introduced in 1873. It is a variety of the Silver-Leaved, and one of the most remarkable and beautiful trees with cut or dissected foliage. 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. The leaf stalks are long and tinted with red on the upper surface. We believe it will rank at once among the most interesting and attractive lawn trees, and may be easily adapted to small places by an occasional cutting back, which it will bear to any degree necessary, as well as a willow.

Mountain Ash (*Pyrus Sorbus*).

EUROPEAN (*aucuparia*). A fine, hardy tree; head dense and regular, covered from July to Winter with great clusters of bright scarlet berries.

AMERICAN (*Americana*). A tree of coarser growth and foliage, and larger and lighter colored berries.

OAK-LEAVED (*quercifolia*). A variety with large, hoary, lobed leaves, distinct and fine.

LARGE-LEAVED (*hybrida*). A variety of the preceding, with larger leaves of a downy white; very distinct.

TRUE SORB (*domestica*). Foliage like the American, but more serrated large, brown fruit.

Oak (*Quercus*).

PYRAMIDAL (*fastigiata*) (*Fordii*). A variety of the European Evergreen Oak of very upright growth. A beautiful tree.

Peach (*Amygdalus*).

DOUBLE-FLOWERING (*persica plena*). A highly ornamental tree, flowers double, rose colored, like small roses.

DOUBLE-WHITE (*alba plena*). Very ornamental; flowers pure white and double; perfectly hardy.

DOUBLE-CRIMSON (*sanguinea plena*). Flowers semi-double, not quite as hardy as the preceding.

CARNATION-FLOWERING. Beautifully striped like a carnation.

VARIOUS COLORED (*versi color fl. pl.*). The most singular of all our flowering trees; flowers variously white and red or variegated on the tree at the same time; flowers early and perfectly hardy.

PURPLE, OR BLOOD-LEAVED. Resembling in growth the common peach, but very distinct in foliage, which is a bright-crimson red, glossy, like burnished copper, and producing fruit of good quality; very beautiful and desirable.

Paulownia.

IMPERIAL JAPAN (*Imperialis*). A magnificent tropical-looking tree, surpassing all others in the size of its leaves; twelve to fourteen inches in diameter; quite hardy here, but the flower buds are killed during severe Winters; growth extremely rapid.

Poplar (*Populus*).

LOMBARDY, OR ITALIAN (*fastigiata*). Well known, and remarkable for its erect, rapid growth and spiry form.

BALSAM (*balsamifera*). A remarkably rapid growing, luxuriant tree, with large, glossy foliage.

Carolina—Is very desirable for planting along the road side or street, or around buildings, where a thick growing tree is wanted for shade or protection, or along the sea shore where less vigorous trees will not succeed. It is easy to live when transplanted, makes an upright, straight, rapid growth, with a moderately spreading head; is perfectly hardy and healthy, not troubled with insects; does not sucker nor lift up the pavement; will stand the effects of gas without injury. The leaves are of a dark, glossy green, and of good size, affording an ample shade. It is the tree for the million, and when properly planted success is certain.

Salisbury, or Maiden Hair Tree (*Adiantifolia*). A rare, beautiful tree, with remarkable fan-like foliage.

Sweet Gum (*Liquidambar styraciflua*). A fine, native, ornamental tree, with foliage resembling the Maple, which changes to a bright red in Autumn.

Tulip Tree (*Liriodendron tulipifera*). A magnificent native tree, with broad, glossy, fiddle-shaped leaves, and beautiful tulip-like flowers; allied to the Magnolias, and like them, difficult to transplant, unless of small size.

Virgilia, or Yellow Wood (*lutea*). One of the finest American trees, resembling the Robinias, with long, graceful racemes of white, sweet-scented flowers in June.

Willow (*Salix*).

ROSEMARY-LEAVED (*rosmarina folia*). Makes a striking and pretty small tree, when worked standard high. Branches feathery, with silver foliage.

WEeping OR DROOPING DECIDUOUS TREES.

Ash (*Fraxinus*).

GOLD-BARKED WEEPING (*aurea pendula*). A singular variety; bark in Winter yellow as gold.

GOLD-STRIPED BARK WEEPING. A novel variety, with distinctly variegated foliage and weeping habit.

EUROPEAN WEEPING (*excelsior pendula*). The common, well-known sort, one of the finest lawn and arbor trees; covers a great space and grows rapidly.

Beech (*fagus*).

WEEPING (*pendula*). A variety of the European Beech, with a decided drooping habit; a very graceful tree.

Birch (*Betula*).

EUROPEAN WEEPING (*pendula*). A charming, drooping tree, after four or five years' growth. Erect when young.

CUT-LEAVED WEEPING (*laciniata pendula*). An elegant, erect tree, with slender, drooping branches and delicately cut leaves.

ELEGANT WEEPING—A variety as drooping as the Kilmarnock Willow. One of the greatest acquisitions in many years.

Cherry (*Cerasus*).

DWARF WEEPING (*pumila*). Grafted standard high; this makes a curious and beautiful little round headed, drooping tree, difficult to work and always scarce.



THE WEEPING MOUNTAIN ASH.

Elm (*Ulmus*).

SCOTCH WEEPING (*montana pendula*). A vigorous growing tree, with graceful, drooping branches, very distinct.

CAMPERDOWN. The most graceful weeper of all the elms; foliage large, of a deep green; very ornamental.

Linden, or Lime Tree (*Tilia*).

WHITE-LEAVED WEEPING (*alba pendula*). A very beautiful tree, with large foliage and slender, drooping shoots.

Mountain Ash (*Sorbus*).

WEEPING (*aucuparia pendula*). A beautiful French variety, of rapid growth and decidedly pendulous.

Poplar (*Populus*).

GRANDIDENTATA PENDULA. A variety with long slender branches drooping to the ground; foliage large and deeply serrated.

Willow (*Salix*).

WEEPING (*Babylonica*). Our common and well-known Weeping Willow.

AMERICAN WEEPING (*Americana pendula*). An American dwarf, slender branched species, grafted five or six feet high; it makes one of the most ornamental of small weeping trees; more hardy than the Babylonica.

KILMARNOCK WEEPING (*caprea pendula*). An exceedingly graceful tree, with large glossy leaves; one of the finest of this class of trees; very hardy.

EVERGREEN TREES.**Arbor Vitæ** (*Thuja*.)

AMERICAN (*Occidentalis*). The common White Cedar; excellent for screens and hedges.

SIBERIAN (*Siberica*). The best of all the gems for the country—exceedingly hardy, keeping color well in Winter; growth compact and pyramidal, makes an elegant lawn tree, of great value for ornamental screens and hedges.

ERICOIDES. A new dwarf variety with heath-like foliage; forms a dense little shrub.

GLOBOSA. A new variety of the American; originated at Philadelphia; forms a dense round shrub.

TOM THUMB. A new dwarf variety of the American Arbor Vitæ, remarkable for its slow growth and compact symmetrical habit.



THE KILMARNOCK WEEPING WILLOW.

CHINESE, OR ORIENTAL (*orientalis*). A small, elegant tree, with erect branches, and dense flat, light green foliage; becomes brown in Winter.

GOLDEN (*aurea*). A variety of the preceding, with a yellowish hue, very beautiful and hardy.

COMPACTA. A variety of the Chinese, but more dwarf and compact, with a conical head of a bright green color; perfectly hardy; native of Japan.

Cypress (*Cupressus*).

LAWSON'S (*Lawsoniana*). From California; one of the most beautiful of all.

Juniper (*Juniperus*).

VIRGINIAN (*Virginiana*). The Red Cedar. A well-known American tree, varies much in habit and color of foliage, some being quite stiff, regular and conical, and others loose and irregular. It makes a fine ornamental hedge plant.

VIRGINIANA PYRAMIDALIS. An upright growing variety of the preceding, very compact; distinct and fine.

IRISH (*Hibernica*). A tapering, pretty little tree.

SWEDISH (*suecica*). A small sized handsome pyramidal tree, with bluish green foliage.

SAVIN (*sabina*). A low spreading, dark green shrub; thrives in the poorest soil.

Pines (*Pinus*).

AUSTRIAN OR BLACK (*Austriaca*). A remarkably robust, hardy spreading tree, leaves long, stiff, and dark green; growth rapid; valuable for this country.

DWARF OR MOUNTAIN (*pumilis*). A low, spreading, curious species, attaining only the size of a bush, foliage similar to that of the Scotch.

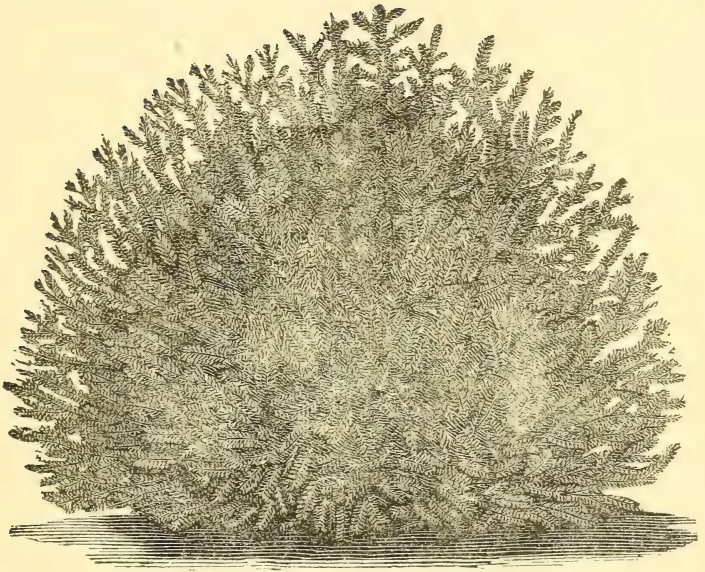
SCOTCH PINE (*sylvestris*). A fine, robust, rapid growing tree, with stout, erect shoots, and silvery green foliage.

WHITE PINE (*strobus*). The most ornamental of all our native pines; foliage light, delicate or silvery green; flourishes in the poorest soils.

Silver Firs (*Picea*).

BALSAM FIR (*balsamea*). A very erect, regular, pyramidal tree, with dark green sombre foliage; grows rapidly.

PINSAPO SILVER FIR (*pinsapo*). An elegant tree, with singular, roundish, sharp pointed leaves all around the branches and shoots; quite distinct and hardy.



DWARF ARBOR VITÆ.

The Spruce Firs (*Abies*).

NORWAY (*excelsa*). A lofty, elegant tree, branches droop when the trees attain the height of fifteen or twenty feet; some varieties are more drooping than others.

HEMLOCK, or WEEPING (*canadensis*). An elegant pyramidal tree, with drooping branches and delicate dark foliage, like that of the Yew, distinct from all other trees. It is a beautiful lawn tree, and makes a highly ornamental hedge.

- WHITE AMERICAN (*Alba*). A tall tree, with loose, spreading branches and light green foliage.

BLACK (*nigra*). A pyramidal compact tree, with smooth, blackish bark and bluish leaves.

The Yew (*Taxus*).

ELEGANTISSIMA. Silver variegated Yew. A very handsome variety, having silvery white striped leaves, sometimes changing to straw color.

IRISH (*Hibernica*). A well-known upright variety; foliage deep green; very distinct.

DECIDUOUS SHRUBS.

Acacia (*Robinia*).

ROSE, or MOSS LOCUST (*hispida*). A spreading, irregular shrub, with long, elegant clusters of rose-colored flowers in July, and at intervals all the season.

Althea Frutex (*Hibiscus syriacus*).

SINGLE PURPLE.

SINGLE VARIEGATED, or PAINTED LADY.

DOUBLE BLUE.

DOUBLE RED.

DOUBLE PURPLE.

ELEGANTISSIMA.

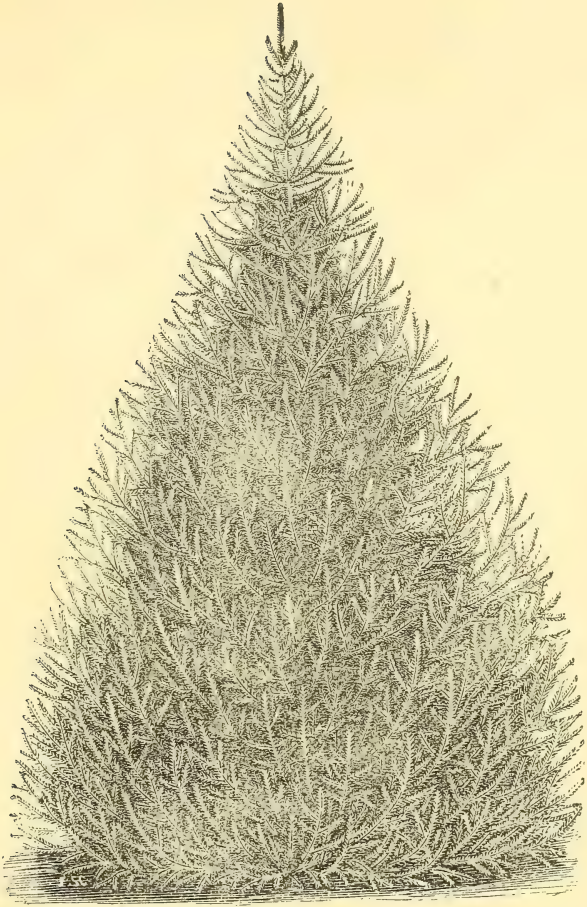
VARIEGATED-LEAVED. A conspicuous variety, with foliage finely marked with light yellow and double-purple flowers.

The Altheas are fine, free growing, flowering shrubs, of the easiest cultivation. Very desirable on account of blooming in the Autumn months, when scarcely any other tree or shrub is in blossom. August and September.

Almond (*Amygdalus*).

DWARF DOUBLE FLOWERING (*pumila*). A beautiful shrub, with small double-rosy blossoms.

DWARF DOUBLE WHITE FLOWERING (*pumila alba*).



THE NORWAY SPRUCE.

Azalea, HONEYSUCKLE OR SWAMP PINK.

PINK FLOWERING AMERICAN (*nudi flora*).

Amorpha, or BASTARD INDIGO.

SHRUBBY (*frutidosa*).

FRAGRANT (*fragrans*).

Fine large shrubs, with long spikes of violet purple flowers in July.

Amelanchier.

ALPINE (*vulgaris*). A medium sized shrub, five or six feet high, with glossy leaves, flowers white, blossoms in May, succeeded by a small purple fruit.

Berberry (*Berberis*).

AMERICAN (*canadensis*). Red fruited.

PURPLE-LEAVED (*purpurea*). An interesting and beautiful variety, with violet purple leaves and fruit.

Calycanthus, SWEET-SCENTED SHRUBS, OR ALLSPICE. Very desirable. The wood is fragrant, foliage rich, flowers of a rare, chocolate color, and have a peculiar agreeable odor. They blossom in June, and at intervals afterwards.

Cornus, or DOGWOOD.

RED BRANCHED (*sanguinea*). Very conspicuous and ornamental in Winter, when the bark is blood red.

VARIEGATED-LEAVED (*variegata*). Desirable for its distinctly variegated foliage. This and the preceding have white flowers in June, and make large, spreading shrubs.

Currant (*Ribes*).

GORDONS. A variety between the crimson and yellow flowering, with beautiful pendant bunches of crimson and yellow flowers in May. Hardy and a most profuse bloomer.

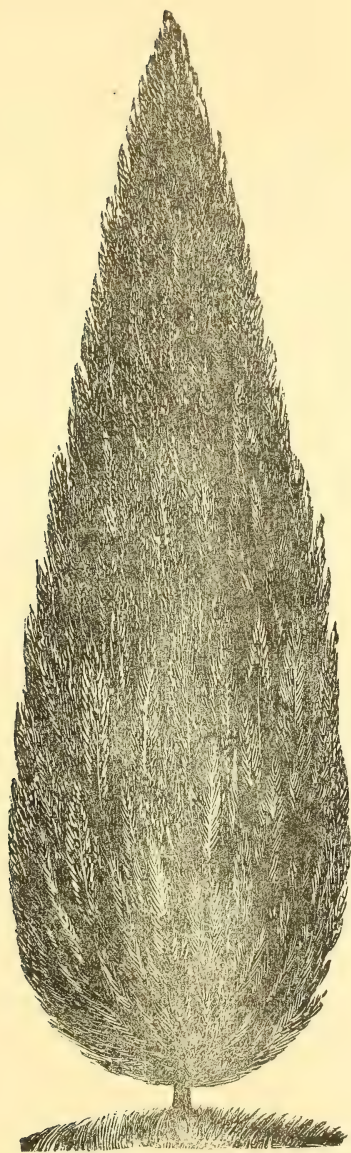
Daphne.

MEZERON PINK (*Mezereum Rubrum*). Flowers appear very early before the leaves, and are very beautiful.

TRAILING (*Cneorum*). A very low evergreen shrub, blooming at intervals from May to November; flowers rose color.

Deutzia.

ROUGH-LEAVED (*scabra*). One of the most beautiful, profuse white flowering shrubs. June.



THE IRISH JUNIPER.

SLENDER-BRANCHED (*gracilis*). A charming species, introduced from Japan by Dr. Siebold; flowers pure white. Fine for out pot culture, as it flowers freely in a low temperature in the Winter.

CRENATE-LEAVED (*crenata*). A fine shrub, nearly as strong as the scabra, and profuse flowering as the gracilis.

CRENATA, (*fl., pl.*). Similar in growth and habit to the above; flowers double; white; tinged with rose. The finest flowering shrub in cultivation.

Enonymus, STRAWBERRY, or SPINDLE TREE.

AMERICAN (*Americanus*). A very ornamental large shrub, or small tree, covered with glowing crimson fruit from August to November.

EUROPEAN (*Europæus*). Fruit rose colored.

Filbert (*Corylus*).

PURPLE-LEAVED (*purpurea*). A very conspicuous shrub, with large, dark purple leaves; distinct and fine.

CUT-LEAVED (*laciniata*). A very ornamental shrub, with deeply cut foliage.

Forsythia.

VIRIDISSIMA. Leaves deep green; flowers bright yellow, very early in Spring. A fine, hardy shrub, introduced by Mr. Fortune, from China.

SUSPENSIVA. A straggling shrub, resembling the preceding, but much more slender and delicate grower. Native of Japan.

FORTUNEI. A new variety; growth more upright than the preceding; foliage deep green; flowers bright yellow.

Halesia, or SILVER BELL.

FOUR WINGED FRUITED (*tetraptera*). A beautiful, large shrub, with pretty, white, bell-shaped flowers in May.

Honeysuckles, Upright (*Lonicera*).

RED TARTARIAN (*Tartarica rubra*). A well-known shrub; flowers bright pink, which appear in May.

WHITE TARTARIAN (*Tartarica alba*). Like the preceding, but has dull white flowers.

Hydrangea *Paniculata Grandiflora*. A fine shrub, growing from eight to ten feet high; flowers white, in great pyramidal panicles a foot long; decidedly the finest flowering shrub of recent introduction. Perfectly hardy.



THE AUSTRIAN PINE.

Lilac (*Syringa*).

COMMON PURPLE (*vulgaris*).

COMMON WHITE (*vulgaris alba*).

CHARLES THE X. A strong, rapid growing variety, with large, shining leaves; flowers reddish purple.

CHIONANTHUS-LEAVED (*josikea*). A fine, distinct species, with dark, shining leaves and purple flowers.

PERSIAN PURPLE (*percica*). Foliage very small; flowers bright purple.

PERSIAN WHITE (*percica alba*.) A variety of the preceding, with delicate white flowers, shaded with crimson.

Prunus Trilobata. A highly interesting and desirable addition to hardy shrubs; flowers semi-double, of a delicate pink, upwards of an inch in diameter, thickly set on the long slender branches; hardy. Native of China.

Privet, or Prim (*Ligustrum*).

COMMON (*vulgare*). Has pretty spikes of white flowers, succeeded by bunches of black berries, like currants; makes beautiful hedges.

WHITE BERRIED. A variety with white berries.

Purple Fringe Tree, or VENETIAN SUMACH (*Rhus continus*). A much admired shrub, for its curious fringe or hair-like flowers that cover the whole surface of the plant in midsummer. It grows ten to twelve feet high, and spreads so as to require considerable space.

Quince (*Cydonia*).

SCARLET JAPAN (*japonica*). Has bright scarlet crimson flowers in great profusion in the early Spring; one of the best hardy shrubs in the catalogue.

DARK CRIMSON (*atrosanguinea*). A vigorous variety, with large, glossy foliage and dark crimson flowers.

Spiræa.

DOUBLE-FLOWERING PLUM-LEAVED (*prunifolia fl. pl*). Very beautiful; its flowers are like daisies; blossoms in May. From Japan.

CALLOSA ALBA. A new white flowering variety, of dwarf habit; very fine.

LANCE-LEAVED (*lanccolata* or *Reevesii*). Narrow, pointed leaves and large round clusters of white flowers that cover the whole plant; a charming shrub; blooms in May.

DOUGLAS (*Douglassii*). Has spikes of beautiful deep rose-colored flowers in July and August.

LANCE-LEAVED DOUBLE (*lanceolata*, or *Reevesii fl. pl.*). A beautiful double flowering variety.

FORTUNES (*Fortunii*, or *callosa*). Has large panicles of deep rosy blossoms; grows freely and blossoms nearly all Summer; fine.

BILLARDII. Rose-colored; blooms nearly all Summer.

AUREA (*opulifolia aurea*). An interesting variety, with golden-yellow tinted foliage; very conspicuous.

The Spiræes are all elegant, low shrubs, of the easiest culture, and their blooming extends over a period of three months.

Sloe (*Prunus spinosa*).

DOUBLE-FLOWERING. A small tree or large shrub, covered in Spring with small, double, daisy-like white flowers, succeeded by small, dark purple fruit.

Syringa or Mock Orange (*Philadelphus*).

GARLAND (*coronarius*). A well-known shrub, with pure, sweet-scented flowers.

HEART-LEAVED (*cordatus*). Has large heart-shaped leaves and large flowers.

LARGE FLOWERED (*Grandiflorus*). Has very showy, large flowers, slightly fragrant; branches somewhat straggling.

Tamarix.

AFRICAN (*Africana*.)

GERMAN (*Germanica*.)

ROSEMARY-LIKE (*libanotica*.)

NORBONNE.

These are very beautiful shrubs with small leaves somewhat like the Juniper, and delicate small flowers in spikes. The African and Rosemary-Like blossom in May, the others towards Autumn.

Viburnum.

SNOW BALL (*opulous var. sterilis*). A well-known favorite shrub of large size, with globular clusters of white flowers in June.

HIGH, or BUSH CRANBERRY. Both ornamental and useful. Its fruit is esteemed by many; resembles the preceding in wood and foliage.

EARLY WHITE LANTANA-LEAVED (*lantanoïdes*). A large, robust shrub, with soft, hoary leaves, and large clusters of white flowers in May; retains its foliage very late; quite ornamental in all respects.

Weigela.

ROSE-COLORED (*rosea*). An elegant shrub, with fine rose-colored flowers, introduced from China by Mr. Fortune, and considered one of the finest plants he has discovered. Quite hardy; blossoms in May.

AMABILIS, OR SPLENDENS. Of much more robust habit larger foliage and flowers, and blossoms freely in Autumn; a great acquisition.

VARIEGATED-LEAVED LOVELY WEIGELA. A desirable hardy shrub, leaves bordered with yellowish white; flowers bright pink; very fine.

HORTENSIS NIVEA. Flowers white, retaining their purity the whole time of flowering; foliage large; habit vigorous; a very profuse bloomer.

ALBA. Flowers white, changing to a light, delicate blush; foliage light green; very distinct.

ISOLINE. Flowers clear white when first open, changing to a blush; habit like Alba; a beautiful shrub.

White Fringe (*Chionanthus virginica*). A fine shrub, or small tree, with large foliage and racemes of delicate greenish white flowers, resembling cut paper.

EVERGREEN SHRUBS.**Aucuba.**

JAPAN GOLD DUST TREE (*japonica*). A beautiful shrub, with large shining gold blotched foliage; requires protection in Winter.

Ashberry (*Mahonia*).

HOLLY-LEAVED (*aquifolia*). A distinct and beautiful shrub, with purplish, prickly leaves, and showy, bright yellow flowers in May.

CLUSTER-FLOWERED (*fascicularis*). Very little different from the preceding.

CREEPING-ROOTED (*repens*). A dwarf species, similar in foliage and flowers to the preceding.

These are, without any exception, the finest Evergreen shrubs which resist our Winters. They bloom profusely very early in Spring.

Berberry (*Berberis*).

DARWINI. A beautiful dwarf shrub, with a profusion of yellow flowers; very early in Spring.

Box (*Bucus*).

DWARF (*suffruticosa*). The well known sort used for edging.

Tree Box (*Buxus arborescens*).

COMMON.

GOLD-STRIPED LEAVED.

SILVER-STRIPED LEAVED.

BROAD-LEAVED.

MYRTLE-LEAVED.

The species and varieties of the Tree Box are beautiful lawn shrubs or small trees, well adapted to small places. They flourish best when partially shaded.

Cotoneaster.BOX-LEAVED (*buxifolia*).ROUND-LEAVED (*rotundifolia*).

Beautiful, low spreading shrubs, with small foliage, white flowers and red berries.

Daphne.

CNEORUM. A beautiful evergreen shrub of dwarf habit, with bright pink flowers in June and August.

Holly (*Ilex*).AMERICAN (*opaca*). Our well-known native tree.**Laurel** (*Laurus*).

ENGLISH (*laurocerasus*). One of the finest Evergreen trees, with broad, shining leaves; too tender for our Winters.

Pyracantha, EVERGREEN THORN, OR BURNING BUSH (*Cotoneaster pyracantha*).

A low, bushy plant, retaining its foliage all Winter; bears orange scarlet berries; makes a very ornamental hedge.

Rhododendron, or Rosebay.CATAWBA (*catawbiense*). Varieties.

The Rhododendrons are the most magnificent flowering Evergreen shrubs we possess. All prefer a peaty soil and somewhat shaded situation. The Catawbiense varieties are the most hardy, and succeed in our climate better than any other.

CLIMBING AND TRAILING SHRUBS.

Akebia Quinata. A singular Japanese climbing shrub, with fine foliage and ornamental fruit.

Ampelopsis.

AMERICAN IVY, OR VIRGINIA CREEPER (*hederacea*). Has beautiful digitate leaves, that become rich crimson in Autumn; a very rapid grower; like the Bignonia and Ivy, it throws out roots at the joints by which it fastens itself to anything it touches.

Birthwort, or Dutchman's Pipe (*Aristolochia*).

TRUE-FLOWERED (*Sipho*). A very rapid climber, with magnificent dark green foliage, ten to twelve inches in diameter, and curious pipe-shaped yellowish brown flowers.

Bignonia, or Trumpet Flower.

RADICANS. A splendid, hardy, climbing plant, with large, trumpet-shaped, scarlet flowers in August.

Celastrus, or Staff Tree.

SCANDENS. A native climbing or twining plant, with fine, large leaves, yellow flowers, and cluster of orange capsuled fruits. It grows ten or twelve feet in a season.

CLEMATIS, or VIRGINIA'S BOWER.

The Clematis are elegant slender-branched shrubs, of rapid growth, beautiful, large flowers of different colors, white, blue, purple, and two colored, and some are quite fragrant, especially the flammula and varieties. They are well adapted for training on trellis work, and grow from ten to fifteen feet high. They stand the severest Winters if the roots are slightly covered.

Auradiani. Rich porcelain-blue; sepals large, thick and velvety, similar to *C. lanuginosa*.

Flammula. The old fragrant species, producing large clusters of small, pure white flowers.

Fortunii. Large, double, greenish-white, rosette-formed, sweet-scented. Valuable.

Gloire de St. Julien. Flowers exceedingly large, often eight inches in diameter, clear white, with a slight bluish tinge in the center.

Grahami. A very early species of rampant growth; flowers numerous, small, bell-shaped, white.

Helene. One of the oldest of the improved kinds, with handsome, large, pure white flowers.

Henryi (*Anderson-Henry*). A splendid hybrid between *C. lanuginosa* and *C. Fortunei*. It is of robust habit, very free bloomer, flowers large and finely formed, and of a beautiful creamy-white.

Hybrida splendida. Flowers of large size, clear blue in color; a profuse bloomer.

Imperatrice Eugenie. A superb French variety of recent introduction. Flowers of the largest size, pure white, with thick, broad sepals.

- Jackmanii.** This variety bears a profusion of large sized, intense violet-purple flowers (six inches across), richly veined, and shaded with reddish purple. It is a rapid grower, an early and abundant bloomer; perfectly hardy and adapted to all kinds of culture, it is equally fine either as a climbing or a trailing plant, and is well adapted for covering up all unsightly objects. Planted out in a border or flower bed it will produce the finest effect and give a continuous bloom through a long season, year after year. For training on poles or pillars in the flower garden, they become the most resplendant objects of Summer floral beauty and monuments of flowers. To insure all this, it is only necessary to remember that it must have good culture, liberal dressings of well rotted manure, and in the Summer season, during dry weather, plenty of moisture; with this simple treatment as a trailer or climber it will be found to present a surpassing beauty.
- Jeanne de Arc** A vigorous and very beautiful French Clematis, with large, broad, pure white sepals, with a pale blue bar in the center of each.
- John Gould Veitch.** This superb variety has received a number of the highest prizes for excellence. Very large, bright, clear blue, perfectly double, with thick, broad sepals.
- Lady Bovill.** Flowers of large size, with incurved sepals, pale blue, and of good substance.
- Lawsoniana** (*Anderson-Henry*). This magnificent hybrid is of the same parentage as the above. Flowers immense in size, having measured $9\frac{1}{2}$ inches in diameter; color, beautiful rosy purple, slightly marked with darker veins. Lawson & Son's introduction.
- Lady Londesborough.** A very handsome kind, comparatively new. Silver gray, with pale bar in center of each sepal. Extra fine.
- Lucie Lemoine** (*Lemoine*). A hybrid between *C. patens* and *C. Fortunei*. This is without doubt the nearest approach that has yet been made to a double Clematis. Flowers from $4\frac{1}{2}$ to 5 inches across, very symmetrical in form and snow white in color.
- Monstrosa.** Large, crimped sepals, semi-double, of a greenish white color. Unique.
- Perfecta.** Beautiful tinted white flowers of large size; the wooley-leaved type.
- Sieboldi** (*Bicolor*). A beautiful old kind with greenish white sepals, with a mass of purple petal-like leaves in the center.
- Sophia.** Another valuable old variety, with very large, pale blue flowers. Very free bloomer.

- Sophia fl. pl.** A form of the preceding, with semi-double flowers; also blooms freely.
- Standishi.** Of the *C. Florida* type, with large, dark purplish blue flowers, blooming quite early.
- Star of India.** A new variety, with reddish plum-colored sepals, marked with red bars on each.
- Symesiana** (*Anderson-Henry*). Also sent out by Lawson & Son, and raised from *C. lanuginosa* and *C. Fortunei*. Flowers very large, from 7 to 8 inches in diameter, and of a beautiful shade of pale mauve or lavender color. A very profuse bloomer.
- Vitalba** (*Traveler's Joy*). Native European species, of rampant growth. Flowers in large clusters, white.
- Viticella.** An old and valuable species, growing vigorously, with nodding blue flowers on single stems.

JASMINUM—Jessamine.

- Fruticans**—SHRUBBY JESSAMINE. Not properly a vine, but a shrub with long, slender branches, producing early in the season small yellow flowers.
- Nudiflorum**—NAKED-FLOWERING JESSAMINE. Blooms very early in the season; a few warm days being sufficient to open its golden yellow flowers.
- Officinale**—COMMON WHITE JESSAMINE. An old, but still popular climber, with exceedingly fragrant white flowers. Foliage graceful and pretty.
- Var. variegatum**—GOLDEN VARIEGATED JESSAMINE. A variety that has given entire satisfaction. The bright markings are pure white, golden yellow and pink, never scorching in the least; in fact, the colors become more vivid during the heat of Summer. Flowers white and deliciously fragrant. Excellent for pot culture.

LONICERA—Honeysuckle.

- Brachypoda**—NEW JAPAN EVERGREEN HONEYSUCKLE. Especially valuable for its remarkable vigorous growth, and numerous white and yellow fragrant flowers.
- Var. Aurea Reticulata**—GOLDEN-VEINED HONEYSUCKLE. A newer form, with elegantly veined and netted foliage. Succeeds well in every situation here.
- Halliana**—HALL'S NEW JAPAN HONEYSUCKLE. A new kind, and probably a mere form of *L. brachypoda*, with pure white, exceedingly fragrant flowers. It is undoubtedly a great acquisition.

Japonica—EVERGREEN HONEYSUCKLE. An old favorite, holding its leaves mainly through the Winter. Flowers red, yellow and white, variegated; sweet scented.

Magneville—MAGNEVILLE'S HONEYSUCKLE. A beautiful Evergreen species, with pale yellowish-white fragrant flowers.

Parviflora var. Douglasi—DOUGLAS' HONEYSUCKLE. Leaves large, downy; flowers deep crimson, or purplish red, and very conspicuous.

Periclymenum var. Belgicum—MONTHLY DUTCH HONEYSUCKLE. Blooms throughout the season; flowers exceedingly fragrant; red and yellow color.

Scarlet Trumpet Monthly (*sempervirens*). A strong, rapid grower; blooms all Summer; very showy.

Yellow Trumpet (*aurea*). A well-known variety with yellow trumpet flowers.

Ivy (*hedera*).

BROAD-LEAVED VARIEGATED (*latimaculata*). Leaves distinctly variegated.

IRISH (*canariensis*). The well-known old sort.

Moonseed (*Menispermum*).

CANADIAN (*canadense*). A pretty, native, twining, slender-branched shrub, with small yellow flowers and black berries.

Periploca.

VIRGINIA SILK (*græca*). A rapid growing, beautiful climber; will twine around a tree or other support to the height of thirty to forty feet; foliage glossy; flowers curious; brown.

Wisteria, or Glycine.

CHINESE WHITE (*sinensis alba*). Recently introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions.

MAGNIFICA. Flowers in dense, drooping racemes of a pale lilac, of the same size as the Chinese, with the graceful foliage of the American; vigorous and perfectly hardy.

CHINESE (*sinensis*). One of the most elegant and rapid growing of all climbing plants; attains an immense size, growing at the rate of fifteen or twenty feet in a season; has long, pendulous clusters of pale blue flowers in Spring and Autumn.

ROSES.

Varieties especially recommended are mark thus *.

HARDY SUMMER ROSES.

HYBRID CHINA ROSES.

These are free, rapid growers, with long, flexible shoots, generally well adapted for Pillar Roses; they usually attain the height of five or six feet the first or second season after planting. The tallest growers and best for pillars are designated by a P.

Aureti, (P.) Blackish purple; globular and double.

Blairii. Rosy crimson; large, full and double.

Charles Duval. Deep rose; large and finely formed.

Chenedolle, (P.) Very large, double and fragrant; light crimson, of dazzling brightness.

***Charles Lawson**. Bright rose; large and fine form.

Elizabeth. Light blush; double and fine.

***George IV**, (P.) Dark velvety crimson, shaded with purple; very late and fine.

***Great Western**, (P.) Purplish red; large, and blooms in clusters; showy.

King of Prussia, (P.) Large and double; purplish red.

***Lady Stuart**. Delicate blush, globular and large.

London Pride, (P.) Bright pink, changing to purple.

***Madam Plantier**. Pure white; blooms in great clusters; very fine.

Paul Ricaut. Bright rosy crimson.

Triomphe d'Abbeville, (P.) Full and double, rosy purple, very bright and fine.

Violet Blue. Fine violet purple.

Victor Hugo. Rosy lilac, globular; large and double.

PROVENCE, DAMASK, AND FRENCH ROSES,

WITH THEIR HYBRIDS.

The Provence Roses, of which the old "Cabbage" is the type, are the most fragrant of any in the catalogue, and also large and globular. The Damask Roses are also beautiful, mostly of pure white or light colors.

Madame Hardy is a good example of this class. The foliage is rough and hard, and of a remarkable light green compared with others. The Gallica, or French Roses, so designated, are remarkable for their stiff, erect growth. Their flowers are large, of regular and erect outline, and of various and brilliant colors.

Blanche Fleur—Pure white; blooms in large clusters.

Common Provence--Rose-color; large, double and very sweet.

Centifolia Crestata—Light blush; very large; a superb rose.

Double Margined Hep—A creamy white, edged with purplish red; a magnificent rose.

Duke of Orleans—Bright rose, spotted with white; large.

Duchess of Cumberland—Deep rose; large, expanded and double.

Favarius—Deep rose-color; very perfect form; large and beautiful.

Globe White—A beautiful globular rose; white, tinged with lemon.

George Vibert—Striped red and white.

* **Madame Hardy**—A beautiful, large, full and double white rose.

Margined Hep—A very beautiful semi-double rose; white, delicately edged with pink.

* **Princess Clementine**—Pure white.

Triomphe de Jaussens—Rosy crimson, shaded with purple; very double; one of the finest of this class.

Unique, or White Provence—Pure white; very large and double.

MOSS ROSES.

Great acquisitions have recently been made in this most popular class of roses. The following selection comprises the most beautiful, distinct and valuable, of both new and old, that are in cultivation.

Alice Leroy—Rosy lilac; large and double.

Celina—Red, changing to violet; very fine.

* **Countess of Murinais**—Pure white, large and double; blooms in clusters.

Common Blush—Large, full and double; grows freely and blossoms profusely.

Crimson—New; semi-double; very bright and showy.

Crimson—Double; bright crimson; very mossy.

* **Crested**—Rose; beautiful and curious mossy fringed calyx.

Duchesse D'Ystra—Color of the common moss; very large; cupped and imbricated; very vigorous.

Etna—Crimson, becoming carmine; bright and beautiful.

Eclatante—Deep pink; large and double; vigorous grower.

***Glory of Mosses**—Pale rose; very large, full and beautiful.

Luxembourg—Large cupped, fine purplish crimson; a luxuriant grower and free bloomer.

Marie de Blois—Clear satiny lilac; large and fine.

Madame Albani—Clear bright pink, changing to blush; very mossy; superb.

Mrs. Wood—Bright rose; very mossy; vigorous.

Princess Alice—Rosy carmine; free grower and bloomer.

Princess Adelaide—Blush, becoming very pale; very double and well formed; the most vigorous grower of all the mosses.

Reine Blanche—Pure white; very large; vigorous.

Unique—Pure white; large and full.

White Bath—Pure white, very beautiful; plant rather delicate.

Wm. Lobb—Light crimson purple; large and double.

NOTE—The Moss Roses should have the richest soil that can be given them; and every way a liberal treatment. The more delicate sorts should be closely pruned every year.

CLIMBING ROSES.

These are admirably adapted for covering walls, trellises, old trees, unsightly buildings, etc. Among them the Prairie Roses take the first rank. Their rapid growth, perfect hardiness, luxuriant foliage, immense clusters of beautiful flowers, and their late blooming, commend them at once to every one who wants a splendid Climbing Rose.

The Ayrshires, from their slender growth, are, properly speaking, running roses, and are best for covering banks, buildings, or unsightly objects; they are also remarkable for growing and flourishing in the poorest soil. They run twenty feet in a single season.

Ayrshire Roses.

BENNET'S SEEDLING. Pure white.

PINK.

QUEEN OF THE BELGIANS. Pure white.

SPLENDENS. Creamy-white; fine.

QUEEN OF AYRSHIRES. Dark purplish crimson.

Boursalt Roses.

CRIMSON. Bright purplish crimson; showy.

Evergreen Roses (*Sempervirens*).

FELICITE PERPETUELLE. Creamy-white, small and double as a Ranunculus; requires slight protection here.

Multiflora Roses.

DE LA GRIFFERAIE. Purple and carmine, changing to rose; large and fine; very vigorous.

EUGENE GREVILLE, or SEVEN SISTERS. Clusters large; flowers of various colors, from blush to crimson.

The Multifloras are fine, profuse flowering roses; they are somewhat tender, and require slight protection here.

Prairie Roses (*Rubifolia*).

ANNA MARIA. Blush, tinged with flesh in the center; well formed; clusters large.

*BEAUTY, or QUEEN OF THE PRAIRIES. Bright rosy red, frequently with a white stripe; large, compact and globular.

*BALTIMORE BELLE. Pale blush, becoming nearly white; very compact and double; the finest of the class.

GEM OF THE PRAIRIES. Carmine crimson, occasionally blotched with white; flowers in June; similar in habit to the Queen of the Prairies. A cross hybrid between that variety and Madam Laffay.

MRS. HOVEY. Pale delicate blush, becoming almost white; resembles Baltimore Belle.

PERPETUAL PINK. Rosy pink, changing to purple.

For Climbing Roses, not hardy, see Noisettes, Banksias, etc.

AUSTRIAN OR YELLOW ROSES.**Austrian.**

YELLOW. Single; bright yellow; early.

COPPER. Single; orange and red.

HARRISON'S. Double yellow; very showy and fine.

*PERSIAN. Double; deep golden yellow, and much the finest of all hardy yellow roses; blooms early.

All the Austrian Roses are very desirable, being distinct, hardy, and blooming quite early. The Harrison and Persian are the two best.

PERPETUAL OR AUTUMNAL ROSES.

[Blooming at intervals from June to November].

PERPETUAL MOSS ROSES.

No class of roses at this time attracts more attention than the Perpetual Moss. It now contains more fine varieties. The following are the best yet introduced:

Alfred de Dalmas—Blush with rosy center; blooms freely.

Madam Platz—Rosy purple; very mossy.

***Madam Edward Ory**—Bright rosy carmine; large and fine; one of the best.

Pompone—Dark crimson; blooms freely in Autumn.

***Perpetual White**—Pure white, with often a pink stripe; large clusters of buds and flowers; blooms freely.

***Salet**—Bright rosy red; a free, vigorous grower and abundant bloomer.

HYBRID PERPETUAL ROSES.

***Auguste Mie**—Clear rosy pink; very large and finely cupped; vigorous; fine.

***Anna die Diesbach**—Bright rosy carmine; beautiful form, very large and double.

Beauty of Waltham—Bright rosy crimson; very large; free bloomer; very distinct; one of the best.

***Baronne Prevost**—Deep rose; very large and full; a vigorous grower and abundant bloomer; one of the oldest and finest of this class.

Blanche de Beaulieu—Pale silvery blush.

Blanche Vibert—Pure white.

Comtesse de Chabillant—Bright pink, beautifully cupped, large and full; very fragrant.

***Caroline de Sansal**—Clear, delicate flesh color, becoming blush: a magnificent variety; the best rose of its color in the catalogue, surpassing even the Victoria, which is very similar in color; growth vigorous and foliage luxuriant.

Cardinal Patrizzi—Dark velvety crimson; a striking and beautiful variety.

Doctor Arnal—Bright crimson; large, double, and finely formed; vigorous grower and free bloomer; one of the best.

- Dr. Marx**—Rosy carmine; full and large; superb.
- Duchesse de Nemours**—Pale, delicate rose; very full and double; a vigorous grower.
- Duke of Wellington**—Rich crimson: perfect form; blooms in clusters; fragrant.
- Edward Jesse**—Lilac rose; large and beautiful; very vigorous.
- Edward Ory**—Beautiful vermilion red; globular.
- Eugene Appert**—Rich velvety crimson; double and compact; one of the best.
- General Washington**—Brilliant rosy carmine, approaching to scarlet; very large and fine form; free bloomer; one of the finest.
- ***General Jacqueminot**—Brilliant crimson scarlet; superior to Geant des Batailles in brilliancy, and retains its color; free bloomer; one of the best.
- Geant des Batailles** (*Giant of Battle*)—The most popular of all this class of roses; brilliant, fiery crimson, fading to a purple; habit dwarf, but vigorous and free blooming; unsurpassed by any of the new roses.
- Imperatrice Eugenie**—White, slightly tinged with blush; medium size; full and fine form.
- ***John Hopper**—Deep rose, with crimson center; large and fine form; a splendid rose.
- Jules Margottin**—Carmine purple; very large, full and beautiful.
- Joasine Hanet**—Purplish red; very full and double; blooms in clusters.
- L'enfant du Mont Carmel**—Deep purplish red; very large and full; vigorous grower.
- La France**—See list of specialties.
- ***La Reine**—Deep rosy lilac; very large, full, double and sweet; superb.
- Lord Raglan**—Fiery crimson, with purple shade; finely formed; a free bloomer and every way first rate.
- Lion des Combats**—Reddish scarlet; brilliant and showy.
- Louise Darzens**—Pure white; medium size; fine form; blooms in clusters.
- Mad. Charles Wood**—Brilliant red, changing to bright rose; vigorous; a superb rose.
- Mad. Laffay**—Rosy crimson; large and full; one of the oldest and best.
- Marshal Vaillant**—Deep red, with purple shade; blooms in clusters; very fine.
- Mrs. Elliott**—Rosy purple; very large, full and sweet; fine grower and abundant bloomer.
- Mrs. Standish**—Deep crimson, clouded with purple; fine form; very fragrant, distinct and fine.

- Pæonia**—Clear cherry red; brilliant; good grower and free bloomer.
- Portland Blanche**—Pure white; flowers like Blanche Vibert, said to bloom freely in the Fall.
- Panache d'Orleans**—Blush, striped with rose and purple; large and showy; free bloomer; a sport from Baronne Prevost.
- Pius the Ninth**—Bright, purplish red, changing to violet; very large and full; robust and a profuse bloomer.
- Prince Albert**—Deep rose, changing to violet; large and full.
- Professor Koch**—Rosy crimson; large and full; beautifully cupped and very fragrant.
- * **Senateur Vaisse**—Bright red; beautiful shape and free bloomer; superb.
- Sydonie**—Light pink, very large and full; one of the finest roses in the Fall.
- Souvenir de Levison Gower**—Bright shaded crimson; very large and double; superb.
- Triomphe de l'Exposition**—Rich, deep red; shaded with crimson flowers in large clusters; vigorous; one of the best of this class.
- * **Victor Verdier**—Clear rose; globular; fine form and free bloomer; superb.
- William Griffith**—Rosy lilac; large and beautifully formed; vigorous and profuse bloomer; one of the best.
- William Jesse**—Rosy crimson; very large and full; vigorous and free bloomer.
- Yolande D'Aragon**—Rosy blush; full and double; blooms in large clusters.

BOURBON ROSES.

These are not quite so hardy as the preceding class, requiring slight protection in the north. They are continual bloomers, of vigorous, rapid growth, with rich, luxuriant foliage.

The flowers are produced in large clusters; are well shaped, bright and varied in colors; fragrant, and, from the peculiar thickness of petals, quite lasting.

The Autumn, say from August to November, or until frosts cut them off, is the season of their greatest perfection. No class of roses taken together, gives greater satisfaction to cultivators than this.

- Bella Isadore**—Rosy crimson; showy and fine.
- Bella Nova**—Clear rose; very double; fine form; a vigorous grower.
- Blanche Lafitte**—Pale flesh color; full; a beautiful rose.
- Charles Martel**—Violet red.
- Camille de Chateaubourg**—Clear rose, shaded with violet; very double and fine.

- Decandolle**—Velvety purplish red; beautifully imbricated; vigorous grower and free bloomer.
- * **Duchesse de Thuringe**—White, lightly shaded with lilac.
- Edouard Desfosses**—Deep rosy pink; large, full and fine.
- Emile Courtier**—Bright rose, shaded with crimson; very double and distinct; superb.
- George Peabody**—Rich, dark velvety crimson, with a scarlet shade; one of the best Bourbons that has been raised in America.
- * **Hermosa**—Light blush or flesh color; large, full and double, grows freely and blooms profusely; fine.
- Louise Odier**—Clear rose; full and fine.
- Leveson Gower**—Deep rose; very large and full.
- Monsieur Jard**—Clear cherry red; large and full.
- Mrs. Bosanquet**—Pale flesh color; large, double; perfect form; beautiful.
- Marshal Villars**—Deep purplish crimson; showy and fine.
- Marquise de Balbiano**—Bright rose; large, and one of the best shaped roses in the collection; blooms in large clusters, and is quite fragrant.
- Paul et Virgine**—Shaded; incarnate rose.
- * **Phœnix**—Bright rosy purple; large and fine.
- Pierre de St. Cyr**—Pale rose; large and double.
- Proserpine**—Rich, dark crimson; very full; decidedly the best of its color.
- * **Queen of the Bourbons**—Fawn-colored rose; beautiful and profuse bloomer.
- * **Souvenir de la Malmaison**—Pale flesh, with a fawn shade; very large, full and beautiful.
- * **Souvenir de l'Exposition**—Dark crimson, very fine; free bloomer.
- Toussaint l'Overture**—Dark purplish red; very large, with rich foliage.

NOISETTE ROSES.

This is one of the finest classes of Autumnal blooming roses. The growth is rapid and vigorous, and the flowers are produced in large clusters.

Some of them, the true Noisettes, are so hardy as to require very little protection here, but those like the Chromatella, produced by crossing with the Tea Rose, are more tender, and ought to be laid down and covered with leaves or straw.

Aimee Vibert—Pure white; blooms in large clusters; beautiful, and one of the hardiest of the class.

Caroline Marinesse—White, tinged with flesh; small, double and perfect, and a most profuse and constant bloomer.

- Celine Forestier**—Pale yellow, deeper towards the center; free bloomer; extra fine.
- Cornelia**—Pink, with purple shade; flowers in large clusters; very fine.
- Cloth of Gold** (*Chromatella*)—Deep yellow; very sweet, large and beautiful; growth vigorous and robust.
- Cinderella, or the Fairy Noisette**—A salmon pink, deepening towards the center; blooms freely; is as fragrant as the *Devonienses* Tea; foliage small and shoots very slender.
- Desprez**—Rosy buff; very sweet.
- Dr. Kane**—Sulphur yellow; fragrant and fine bloomer; one of the best.
- Isabella Gray**—Clear golden yellow; very sweet; the deepest yellow of all this class; originated in South Carolina.
- Jennie d'Arc**—White, center flesh color; beautiful.
- Jane Hardy**—Bright golden yellow; very double, beautiful rich foliage; free bloomer; tea-scented. One of the best of this class.
- * **Lamarque**—Pale lemon yellow; very large and beautiful.
- Miss Clegg**—Pure white, blush center; blooms in large clusters.
- Pumila**—Salmon, changing to white; free bloomer.
- Solfaterre**—Saffron yellow; fragrant and fine.
- Triomphe de Bollwyller**—Creamy white, tinged with purple; fine.
- Woodland Marguerite**—Pure white; free bloomer; one of the best white Noisettes.
- Washington**—White, tinged with blush; blooms in very large clusters; vigorous.

CHINA, OR BENGAL ROSES.

These are of dwarf habit, and very appropriate for beds on a lawn, and for pot culture in the house. They bloom all Summer and Autumn in the open ground. They may be protected with a covering of leaves, or be put in a cold frame.

- * **Agrippe, or Cramoise Superior**—Rich velvety crimson.
- Arch Duke Charles**—Rose, changing to crimson.
- * **Beaubarnais**—Bright amaranth; distinct and beautiful.
- Camelia**—Pure white; fine.
- Daily, or Common**—Bright rose; a most profuse and constant bloomer.
- Eugene Pirolle**—Delicate pink.
- Imperatrice Eugenie**—Clear rose, shaded with salmon; large and very sweet.
- Louis Phillipe**—Rich, dark crimson.

Lawrenceana—Very small, rosy pink; very dwarf habit; belongs to a class called "Miniature Roses."

Monthly Cabbage—Bright rose; very large.

Napolean—Deep red, with purple shade. Very fine.

Prince Eugene—Rich crimson; fine.

Purple Crown—Deep purplish crimson: free bloomer.

Sanguinea—Deep crimson; a most profuse and constant bloomer and free grower.

Triumphant—Rosy red; profuse bloomer.

Viridiscens—Deep green flowers; a great curiosity.

White Daily—Creamy white; pretty, but a slender grower.

TEA ROSES.

The perfume of these roses is most delicate and agreeable; indeed they may be called the sweetest of all roses. The flowers are also large and very delicate in their colors, such as white, straw, and flesh color, and various tints of rose combined with these. They are more tender than any other roses in the catalogue, requiring a house or pit in Winter. They are the most desirable for pot culture.

Arch Duchesse Therese—Creamy white, with yellow center.

Archimide—Pale blush, shaded with salmon; fine form; very fragrant.

Canary—Bright yellow; very fine; free bloomer.

Caroline—Rosy flesh; large and beautiful.

Clara Sylvain—Pure white, changing to blush; large and perfect.

Devoniensis—Creamy white, center yellow; large and fine.

***Glory of Dijon**—Yellow, shaded with salmon and rose; large, full and distinct.

Isabella—Pure white, with creamy center.

***Isabella Sprunt**—A sport from Safrano, an exceedingly vigorous grower.

Jaune d'Or—Fine golden yellow; globular and full; free bloomer; very very fragrant.

La Pactole—Lemon yellow; beautiful.

Leveson Gower—Pale yellow: large and double.

Madam Bravy—Creamy white; large and fine.

Madam Damazin—Pale yellow, tinged with pink: large, double; very fine.

Madam de Vatry—Deep rose: shaded with crimson: the darkest Tea Rose.

***Marechal Niel**—The finest yellow Tea Rose in existence. A vigorous grower and most abundant bloomer.

Nina—Creamy white, tipped with rose; fragrant.

Pauline Plantier—White, tinged with yellow.

Princess Maria—Creamy white, tinged with rose.

Royal Tea—White, slightly tinged with yellow.

***Safrano**—Fawn, shaded with rose.

Sombreuil—Creamy white, with a rosy tint.

Souvenir d'un Ami—Rose and salmon shaded; beautiful.

Triomphe de Luxembourg—Salmon buff, shaded with deep rose; distinct and fine.

White Tea—Pure white; free bloomer.

Yellow Tea—An old and general favorite; pale yellow or straw color; very sweet.

BANKSIA ROSES.

Fortune's Double Yellow—Bronzed yellow, or copper and fawn color; a free blooming climber, but not more hardy than the *Banksias*.

Grandiflora—White; larger flowers than the others.

White—Pure white; very double and pretty.

Yellow—Clear yellow; small and very double.

MYCROPHYLLA ROSES.

Mycrophylla Alba—Pure white; very sweet; plants require age before they bloom freely.

STANDARD OR TREE ROSES.

These are roses budded on straight stems, about three and a half to four feet from the ground, where they form a head. If properly pruned they are very effective. We offer only those varieties belonging to the Hybrid Perpetual class, as other varieties are not well adapted to standards.

PÆONIES.

TREE PÆONIES (*Pæonies Arborea*).

Banksia Rosea.

Chinese Double Blush (*Banksii*). Rosy blush; center purplish; very large; sweet.

Poppy-Flowered (*Papavaracea*). Pale blush, center purple; very large, single, showy.

HERBACEOUS PÆONIES.

These are showy, beautiful, and easy cultivated plants, that recommend themselves to every one who has a garden. We place them in three divisions; the first, the *Officinalis* and its hybrids; the second, *Paradoxa*;—these are European, and bloom from the middle to the end of May;—the third is Chinese, and blooms through June and July. A selection from the three divisions will give a fine display of flowers during three months.

PÆONIA OFFICINALIS.

Andersoni—Single; rosy blush; very early and showy; dwarf.

Albicans Plena—Double rosy pink, changing to white or blush; blooms early and late.

L'Oriflamme—Beautiful cherry red; center petals very small and compact.

Rubra—Double crimson; of monstrous size.

Tenuifolia Flora Plena—Double fennel-leaved; flowers of a bright scarlet and quite double and globular; rare and fine.

PARADOX PÆONIES.

Erigone—Dark crimson; center petals delicately cut; very fine.

Etoile de Pluton—Dark crimson; center petals very small and curled, and striped with yellow.

Fimbriata Plena—Light crimson, beautifully imbricated.

Pompadoura—Dark crimson; center delicately cut; compact and fine.

Rubra Striati—Very dark purplish crimson; compact; fine.

Sanguinea Plena—Dark purplish crimson; distinct and superb.

CHINESE PÆONIES.

Anemoneflora Striata—Outer petals large, rosy violet; inside ones small, rose and salmon; very large and fine.

Amabilis—Outer petals rose; inner, smaller and creamy white or straw color; delicate.

Bicolor—Deep rose, yellow in the center and marked red.

Buyckii—Rose, shaded in the center; large and regularly formed.

Beaute Francaise—Outside deep rose; center shaded with salmon; short and delicately cut; superb.

Charles Morel—Dark purplish red; center petals fringed; very fine.

Claptoniana—Creamy white; inside petals straw color.

Globosa—Pure white; full, globular and large. Beautiful.

Humel—Purplish rose; very full and double; has no stigma and never produces seed; very large and showy, and one of the latest in bloom; as much as three weeks later than the earliest of the Pæonies.

Louis Van Houtte—Dark crimson; very compact.

Mrs. Dagge—Pure white, center beautifully marked with red; very compact of dwarf habit, and one of the earliest bloomers.

Queen Victoria—Immense size; outside petals rose; inside, flesh nearly white; superb and sweet.

PHLOXES.

The Phlox is one of the most interesting of all our herbaceous perennial plants, and recommends itself to every one by, 1st, its variety and beauty; 2d, its hardiness and easiness of culture; and 3d, its cheapness—placing it within the reach of the humblest lover of flowers. They are divided into two classes—1st, *Decussata*, with strong and erect flower stems which vary from one to four feet in height; 2d, *Suffruticosa*, with slender stems, and smooth and glossy foliage, from one to two feet in height. We can furnish a good assortment of the best varieties representing the different colors.

Baron d'Avesne—Rosy lilac, with dark crimson center.

Belle (*E. & B.*)—White, with distinct purplish crimson star.

Brilliant—Purplish rose; deep center.

Charles Meig—Rosy purple and white stripes.

Charles Rouillard—Fine rose, slightly tinged with purple; deep center.

Dumont de Courset—Rosy purple, with deep center.

Eliza Fontaine—Rosy purple, penciled with white rosy center.

Emperor of the Russians—Bright rosy lilac, with a deep center.

Exquisite (*E. & B.*)—Rosy lilac, with deep center; well imbricated.

Gloire de Puteaux—Rosy lilac; distinct white center.

Gustave Wassa—White, slightly tinged with purple; deep center.

Ji-em-je—Rosy lilac, white star center; fine; late.

La Candeur—A beautiful white.

La Comete—Shaded rose, white star center; large and showy.

Laurente de St. Cyr—Rosy lilac, light center.

Leon Corbay—Purplish rose, lilac center.

Macrantha—White and violet center; late.

Madam Arguilliere—White, touched with rose; star center; distinct and beautiful.

Madam Aubin—Beautiful lilac rose, with white center.

Madam Aubry—Rosy crimson, deep scarlet center.

- Madam Basseville**—Pure white, deep rosy center; unique; showy.
- Madam Bernian**—Rosy scarlet, penciled with lilac.
- Madam Clerget**—White, with purple center; late.
- Madam Corbay**—White, with a bright rosy center.
- Madam de Vatry**—White, tinged with purple; deep center; distinct foliage; very remarkable.
- Madam Flandre**—Rosy salmon and creamy white; center striped; late.
- Madam Fontaine**—White, tinged with rose; distinct rosy center.
- Madam Guldenschuck**—White, clouded with rose and deep crimson, distinct center.
- Madam Henricq**—Vermilion rose, with deep center.
- Madam Marsaux**—White, with distinct rosy-scarlet center.
- Madam Moisson**—White, with distinct rosy-crimson center.
- Madam Wendell**—White, with large purple center.
- Mignonette Blush**—Striped and mottled with purple.
- Minerva**—Rosy lilac, superb crimson center; large and pretty.
- Monsieur Cambaceres**—Rosy lilac, mottled with white; crimson center; late.
- Monsieur Chauviere**—Purplish rose, with crimson center.
- Monsieur Lefebvre**—Clear rosy lilac.
- Morgenstern**—Rosy crimson, touched with lilac.
- Pascatore**—White, shaded with rose, purple star center.
- President McCarrol**—Rosy lilac; compact.
- President Payen**—Vermilion, touched with lilac; deep and scarlet center.
- Rendatler**—White, distinct, purple center.
- Selliere**—Deep purplish rose, large and compact.
- Souvenir d'em Loth**—White, penciled with purple.
- Souvenir d'un Ami**—Vermilion, touched with lilac.
- Spectabilis**—Lilac, veined with purple; white star center; distinct foliage.

CARNATIONS AND PICOTEES.

Next to the Rose, the Carnation stands pre-eminently at the head of the flowers. It is universally admired, and for brilliancy and beauty of color, and delicacy of fragrance, is unsurpassed by any other plant. A new class called Perpetual or Tea Carnation, has recently been introduced. These are particularly suitable for house culture, or forcing in Winter, as they exhibit a constant succession of bloom. They will also flower freely during the entire Summer months when turned out in the border. They flourish in any ordinary garden soil, made rich and deep by a general application of well-rotted manure. Our assortment represents the most desirable in cultivation.

DOUBLE DAHLIAS.

A collection of upwards of *one hundred varieties*, the newest and best that can be procured in Europe or America.

New varieties are sent out every Spring about the first of May, in pots. We make regular annual importations of new sorts from England and France, so that our collection will not be wanting in any desirable novelty.

CHRYSANTHEMUMS.

These are among the most handsome of Autumnal flowers, and of easy cultivation; they are almost hardy, but succeed best cultivated in pots. The period of flowering is from October to Christmas. They are now divided into two classes: 1st, the tall-growing, large-flowered varieties; 2d, the Pom-pone, or Daisy sorts, attaining a height of from eighteen to twenty-four inches. In good assortment of the best varieties.

HARDY HERBACEOUS FLOWERING PLANTS.

The following collection embraces the most desirable species and varieties. They are all showy and beautiful plants, of easy cultivation, and of various seasons of flowering, from May to November. By a judicious selection, a continuous display of flowers may be obtained from early Spring to the end of Autumn.

Anemone.

JAPONICA. Purplish rose; large. Two feet. September.

VIVICELLA INCISA. One foot. May, June.

HONOME JOUBERT. White.

Aquilegia (*The Columbine*).

CÆRULEA. Delicate blue, with distinct white center.

Clematis.

BICOLOR SIEBOLDII. Azure blue and purple. Two feet. June.

INTEGRIFOLIA. Fine blue, bordered with white. Two feet. June.

SERRATIFOLIA ERRECTA. White; large clusters. Three to four feet. June.

Donvallaria.

MAJALIS (*Lily of the Valley*). With large, luxuriant foliage, and much esteemed for its perfume. Three inches. May.

Dicentra.

SPECTABILIS. A handsome; most curiously formed rosy crimson flower, with white and blue tinged producing stamen, one of the finest border plants; is quite hardy and of a bibulous nature; well adapted for blooming in the Winter. One to two feet. May to June.

SPECIOSA. Rosy purple. Six inches. May and June.

Hybiscus.

GRANDIFLORUS.

Irish Germanica (*German Iris, or Fleur de Lis*).

APOLLON. Golden yellow, striped with plum color. Eighteen inches. June.

ARLEQUIN MILLANAIS. White, with blue rose. Eighteen inches. June.

BOUGERE. Lilac and velvety purple. Eighteen inches. June.

EUGENE SUE. Creamy-white, with purple spots and stripes; eighteen inches. June.

FLORENTINA. White, tinged with blue and yellow. Eighteen inches. May.

JACQUESIANO. Deep maroon velvet, tinged with bronze and crimson; a rare and remarkable color. Two feet. June.

Spiræa (*Meadow Sweet*).

FILIPENDULA PLENO. White; double; a fine foliage. One to two feet. June.

LOBATA. Red; of a robust habit. Two feet. June.

ULMARIA. White; elm-leaved. Two feet. June.

VENUSTA PLENO. Double white. Two feet. June.

Tritoma Uvaria.

GLAUCESCENS.

SEROTINA.

Splendid late blooming plants; flower stems three to five feet in height, with racemes of rich pendant orange red and scarlet tubulous flowers, a foot or more in length. Require a slight covering in Winter.

Trillium.

GRANDIFLORUM. White.

ERECTUM. Maroon.

Verbena.

MONTANA. Blooms all the Summer.

Veronica (*Speedwell*).

ALBA. White. Two feet. July and August.

GENTIANOIDES. Pale blue, with azure. One foot. May and June.

SPICATA. Deep blue spikes. One foot. July and August.

Viola Odorata (*Sweet Violet*).

CERULEA. Blue double. April and May.

STRIATA CERULEA AND ALBA. Striped blue and white; single. April and May.

ALBA PLENO. Double white.

Viola Tricolor (*Heartsease, or Pansy*).

A collection of the most approved varieties.

Vinca (*Periwinkle*).

CERULEA MINOR. Blue flowering, climbing or trailing Evergreen.

PURPUREA PLENO. Double purple-flowering.

ELEGANTISSIMA ALBA. White flowers and glossy-green oval foliage.

Yucca (*Adam's Needle*).

TOMENTOSA. Creamy-white. July.

FILAMENTOSA. Thread-leaved; creamy-white. Three to four feet. July.

These have a grand appearance; the stem is two feet above the ground, covered with large bell-shaped flowers on laterals, forming a perfect pyramid.

SUMMER AND AUTUMN FLOWERING BULBS.

These require to be taken up in Autumn, and kept from freezing in a dry cellar.

Amaryllis.

FORMOSISSIMA (*Jacobeen Lily*). Flowers large and deep red.

LONGIFLORA ALBA. White, of medium size, in clusters.

Bouissingaultia.

BASELLOIDES (*Madeira Vine*). A rapid climber, suitable for screens, arbors, etc., with white flowers; blooms profusely; fragrant.

Tigridia. PAYONIA. Blooms from July to September.

Tritonia. AUREA.

Tuberose. DOUBLE.

BULBOUS FLOWERING ROOTS—HARDY.

The following should be planted in the Fall.

L I L I U M .

Atrosanguineum—Deep orange, with dark red blotches.

Aurantiacum—Orange red.

Auratum.

Brownii—Large, white, with brown exterior.

Bulbiferum—(*Tiger, or Orange Lilly*).

Candidum—Common white.

- Gigantem**—Spikes of white flowers, two to three feet high.
Lancifolium Album—From Japan.
Lancifolium Roseum—From Japan.
Lancifolium Rubrum—From Japan.
Superbum—Vivid orange, with distinct dark dots; medium size.

GLADIOLUS.

A full collection of the finest hybrid varieties. The following varieties are perfectly hardy.

- Bizantinus**—Purplish crimson.
Communis Rubra—Crimson.
Communis Alba—White.

MISCELLANEOUS PLANTS.

Catananche.

- ALBA PLENO. Pure double white; fine.
 BICOLOR. White, with violet center; two feet.
 CÆRULEA. Pale blue; six inches. July and August.

Centaurea—Very showy border plants.

- ARGENTEA. Silvery foliage.
 ATROPURPUREA. Purplish crimson.
 DEALBATA. Clear lilac.
 MACROCARPA. Large, bright yellow flowers.

Chelone—Very handsome perennials, producing Pentstemon-like flowers.

- BARBATA. Scarlet.
 BARBATA COCCINEA. Fiery scarlet; three feet. July and August.
 GLABRA. Scarlet flowers, surrounding a long stem; three feet. July and August.

Convallaria—Lily of the Valley.

- MAJALIS (*Lily of the Valley*.) Large, luxuriant foliage; flowers small, bell-shaped in pretty racemes, and very fragrant. One of the best border plants.
 VAR. FOLIIS STRIATIS. Beautifully striped foliage.

Coreopsis.

- LANCEOLATA. Large golden-yellow-flowers; profuse bloomer.
 TENUIFOLIA. Small golden-yellow flowers; dwarf; cut-leaved.

Corydalis.

NOBILIS. Fine yellow clusters, with dark-red blotches.

Cynoglossum.

LONGIFLORUM. Fine blue clusters; free bloomer.

Delphinium—Larkspur. A remarkably showy class of plants; some produce magnificent spikes of flowers, others are of dwarf habit.

FORMOSUM. Deep azure, with a distinct, white center, somewhat veined with purple; one of the very best of its class; two to three feet. July and August.

HIRSUTUM. Pale blue, with buff center; five feet. June and July.

HYACINTHIFLORUM. Blue Hyacinth flowered.

HYBRIDUM. Fine blue, with a distinct, white center; two to three feet. June and July.

HYBRIDUM PLENUM.

LE MASTODONTE. New.

MESSOLEUCUM. Blue, with pale-yellow center; four to five feet. July.

MOREII. Deep blue, with violet center, spotted with yellow; four to five feet. July.

Galega—Goat's Rue.

BILOBA. Pea-shaped blossoms.

Galium.

BOREALE. Flowers white; low bushy habit.

Geranium. (Not *Pelargonium*, or *Scarlet Geraniums*).

IBERICUM. Bluish purple; one foot. July and August.

LANCASTRIENSE. Flowers, pink; foliage, cut; dwarf habit. June and July.

PRÆTENSE. Lilac purple; crow-foot leaved; one foot. July and August.

PRÆTENSE PLENO. Crow-foot leaved; double flowering; one foot. July and August.

SANGUINEUM. Purplish red; spreading; six inches. June.

Genista—Whin.

TINCTORIA FLORE PLENO—(*Double-flowered Green-weed*).

Gilleneea—Indian Physic.

TRIFOLIATA—(*Bowman's Root*). White, rosy tinged; one foot. July and August.

Glaucium.

PICNICUM. Flowers yellow, penciled with orange; foliage large, narrow, woolly, and of fine grayish texture; one foot. July and August.

Glechoma.

HEREDACEA—(*Ground Ivy*). Fine creeper; adapted to rockwork.

Hedysarum.

CANADENSE, or DESMODIUM. Spikes of bluish-purple flowers; one foot.
June to September.

Helianthus—Sunflower.

MULTIFLORA PLENO. Double-yellow flowers, like a Dahlia; three feet.
June to September.

ORIGINALIS.

Helleborus—Hellebore. The following are all evergreens, and bloom in March or April.

NIGER—(*Christmas Rose*). Flowers blush; three inches.

OLYMPICUS.

VIRIDIS. Green; three inches.

Hemerocallis—Day Lily. Fine, tall growing plants, with large lily-shaped, sweet-scented flowers.

FULVA. Orange flowers in large clusters; two feet. July.

FULVA FL. PL. Double flowers.

KWANZO FL. PL.

Hepatica—Liver-leaf. Very effective and charming Spring flowering perennials.

TRILOBA—(*Round lobed Hepatica*). Flowers blue purple, or almost white.

Heracleum—Cow Parsnip.

AMPLEXICAULIS.

Hesperis.

MATRONALIS FL. ALBO PLENO—(*Double-flowering Rocket*). One of the finest hardy herbaceous plants, with spikes of clear white flowers, from ten to eighteen inches long; very fragrant.

Allium.

MOLY. Fine yellow; flowers in large clusters. Six inches. June.

MOLY ALBA. Fine white flowers; large and conspicuous truss.

Colchicum Autumnales.

ROSEUM. Rose flowers.

VARIEGATUM. Variegated flowers.

Crocus—Named varieties.

Frittilaria.

IMPERIALIS—(*Crown Imperial*). Eight fine varieties.

Galanthus.

NIVALIS SIMPLEX. Single Snow Drop.

NIVALIS FL. PL. Double Snow Drop.

Hyacinths. Finest named sorts; double and single.

Iris, or Fleur de Lis.

SPANISH. Various colors.

PERSIAN. Various colors; mixed. Bloom very early in Spring.

ENGLISH. Named varieties.

Jonquils. Double.

Narcissus. Double and single; named in nine varieties.

Ornithogalum.

UMBELLATEM—(*Star of Bethlehem*).

Polyanthus.

NARCISSUS. In variety.

Tulips.

DOUBLE. Early flowering; named varieties.

DOUBLE. Late flowering; named varieties.

SINGLE. Early flowering; named varieties.

PARROTS. Named varieties.

BYBLOEMS. Named varieties.

BIZARRES. Named varieties.

TOURNESOL. Orange and red; double; early.

DUC VAN THOL. Yellow and red; double; early.

DUC VAN THOL. Semi-double; the very earliest.



H E D G E S .

The idea of planting hedges for use and ornament, and screens for the protection of orchards, farms and gardens, is a practical one, and rapidly becoming appreciated. They serve not only as a protection against the fierce winds, but there is much less trouble from the blowing off of fruit. Some writers tell us that temperature is warmer in the vicinity of Evergreens. However this may be, we know that our gardens are earlier, and that our fruits ripen better when protected by such screens. Nothing can be more beautiful than ornamental hedges of Evergreens or Shrubs, well kept and pruned, to serve as boundary lines between neighbors, or as divisions between the lawn and garden, or to hide unsightly places. By using medium sized plants, a hedge can be made as cheaply as a good board fence can be built, and then with a very little care it is becoming every year more and more "a thing of beauty." We all know that such hedges constitute a principle attraction in our best kept places.

In the present and constantly increasing scarcity of timber for fences, we must have some plant of universal adaptation for hedges. Many plants have been tried, and although some of them have proved partially successful in certain localities, nothing has been found recently that seemed to be adapted to general planting. We believe that the HONEY LOCUST combines all the required qualities. It is perfectly hardy, of strong growth, and will grow in almost any soil. It also readily submits to the necessary pruning, so that it can easily be made to assume any desired shape, and being covered with long, hard, and very sharp thorns, makes a close, firm, and almost impenetrable barrier that will turn any ordinary farm stock. The Osage Orange is also very useful where hardy. Among the plants adapted to ornamental hedges, the American Arbor Vitæ and the Norway Spruce take the first place. We would also recommend, for more variety, the Hemlock, Siberian Arbor Vitæ, Japan Quince, Althea, Berberry, Buckthorn, Privet, Box, Red Cedar, Mahonia, Tamarix, and a few other plants.

Evergreen hedges should be pruned in Spring, just before they begin to grow.

THE WESTERN CATALPA.

CATALPA SPECIOSA, (Warder)—Described by Dr. Geo. Engelmann, of St. Louis, in *Botanical Gazette* for January, 1880.

In one sense Dayton and the Miami Valley may be considered the home of this tree—at least its adopted home,—in a manner its birthplace.

In some unknown way it was very early introduced into this region; here its merits were appreciated: here it was planted: here it first attracted attention by its beauty: here it was first recognized and described as different from the *Catalpa bignonioides*—here it was named: and, in these latter years, it has here found an advocate so earnest and so liberal, that its praises have been sounded and published, and its seeds distributed to the most distant portions of the globe, wherever it was thought the climates could be adapted to its growth. And this has been done by a private individual, without thought of profit or reward. All honor to the name of E. E. BARNEY, Esq., of Dayton, Ohio, who with unsparing hand has done so much to inform his countrymen respecting this remarkable plant.

The Western Catalpa is now established as a distinct species—the *Catalpa speciosa*—by one of our most distinguished botanists, Dr. George Englemann, of St. Louis, Missouri.

Now, then, it is manifestly proper that the intelligent nurserymen of this valley should desire to follow the example of so worthy a leader, and to put this valuable tree prominently upon the record. For reasons of their own, he who, already in 1853, gave this tree its first printed notice, as "A NEW CATALPA," and who afterwards gave it a name that is now universally accepted, and is rapidly becoming familiar to tree-planters throughout the civilized world, has been requested briefly to introduce to his fellow-citizens of this region, through the publications of the Miami Valley Nurserymen's Association.

BRIEF HISTORY.

During the first half of the current century, a resident of Dayton somewhat interested in tree culture, observed two Catalpa trees on a farm near the Miami River, which presented peculiar characters, different from those of the Catalpas he and others were cultivating. With rare good sense, the observer, Dr. Job Haines, gathered seeds and produced new trees, which he persuaded the citizens of Dayton to plant in their lawns and streets.

Within a few years some enterprising nurserymen of Indiana were attracted by the beautiful inflorescence of these plantings, and the more extensive propagation and wider distribution of the plants was undertaken by them, until it was soon disseminated in several States. The senior of the firm informed the editor of the *Western Horticultural Review* of the existence of these trees in the hope of ascertaining some more authentic account of the plant, and it was noticed in August, 1853, under the caption of *A New Catalpa*.

The name *Speciosa* was given an account of its very showy inflorescence, and to avoid the introduction of the latinized personal patronymic of any of the men who had been connected with the new tree. This name, however, was first applied merely to designate the plant as a supposed *variety*, though it has since been found to possess distinct specific characters.

The source from whence the original Miami trees were procured has never been traced; it is well known, however, that Wm. Henry Harrison, when Governor of the Indiana Territory, had learned and fully appreciated the value of this very tree, native of the lower Wabash, and extending northwardly to Vincennes; when retiring from office and leaving the governor's mansion, which is still adorned by these beautiful Catalpas, he brought some plants home with him to his residence near the mouth of the Miami, where he planted them, and recommended their cultivation by his neighbors, to whom he made liberal distribution. From these early plantings the tree is now naturalized in that region. It is quite possible that the Dayton stocks owe their introduction to the same source.

Mr. E. E. BARNEY, of Dayton, has for years taken a deep interest in this tree, and has frequently brought it before the public eye in various papers, more especially on account of the great value, beauty, and durability of its timber, so that it has again been presented as a Dayton tree, though not found in nature within a compass of one hundred miles.

The natural habitat of the western Catalpa is the region lying around the mouth of the Ohio, and extending along the tributaries of that and the Mississippi rivers. It ascends the Wabash and White rivers to its furthest northern limit, in lat. 38.43, about Vincennes.

To the great efforts of the Indiana nurserymen, and perhaps some others, we are indebted for the wider distribution of the tree into many parts of our country, and this introduction into the prairie States of Iowa, Kansas, and Nebraska, has taught us that this particular Catalpa is able to withstand the trying winter climate of the prairie regions, which had, to a great or less extent, injured and even destroyed the eastern species that had first been introduced. Very naturally our tree became known as the *hardy* kind, and was the only one which could be recommended for planting in all that region of our country.

Besides its greater hardiness, the *Speciosa* Catalpa is greatly superior in its habit, being more upright it is greatly to be preferred; indeed for economical planting this is the only kind that should be extensively used. So

fully convinced of this are our railroad friends of the western plains, and Catalpa regions, that they have already contracted for the setting out of many hundreds of acres of the trees as rapidly as they can be furnished. Its very easy propagation, its rapid growth, and quick returns, with the great durability of its timber when used as posts and cross-ties, especially adapt the Catalpa for railroad purposes.

While to Dayton and to the Miami Valley belongs whatever credit may attach to the introduction of this plant, and to the humble, but freely given efforts of your reporter, it should ever be remembered, and put upon record, that the addition of so valuable a tree to the list of those worthy of high rank for economic planting in a wide extent of our country, is no small honor. Let us not forget that the meed of praise for this noble work should be awarded to our fellow-citizen, BARNEY, who more than any other has contributed to the happy result.

Let the *Catalpa* be his monument!

DR. JOHN A. WARDER,
North Bend, Ohio.



