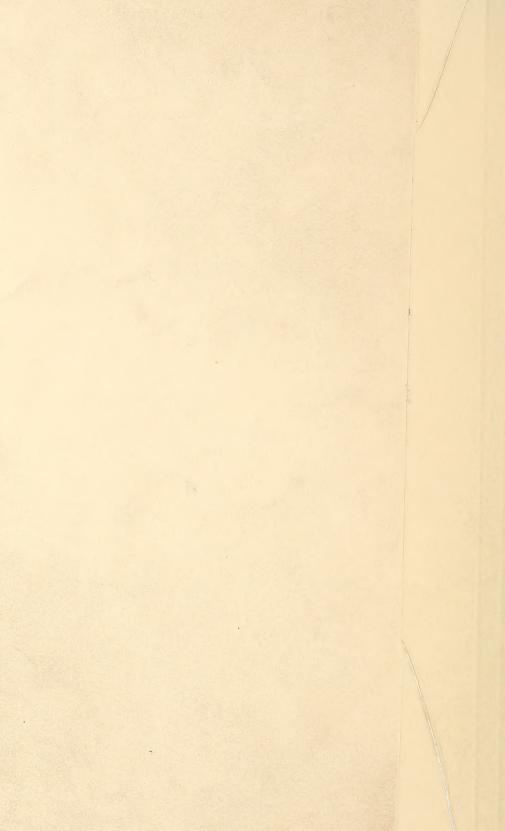
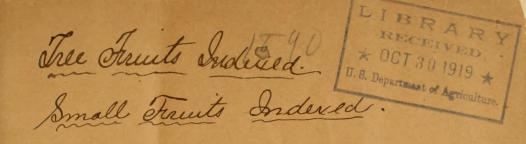
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## DESCRIPTIVE CATALOGUE

OF THE

# JEWELL NURSERY CO.

LAKE CITY, MINNESOTA.



# NEW AND HARDY VARIETIES ADAPTED TO THE GREAT NORTHWEST, OUR SPECIALTY.

WELL GROWN STOCK IN GOOD CONDITION OUR PRIDE.

The grounds of THE JEWELL NURSERY CO. occupy more than 1,200 acres in Wabasha County, Minnesota, devoted to growing nursery stock, orchards, and purebred Holstein-Freisian cattle.

You are cordially invited to call and inspect our nursery and live stock.

Visitors who notify us of their arrival, will be met at the railroad station with conveyance.

## REMARKS TO CUSTOMERS.

THE JEWELL NURSERY COMPANY is a regularly incorporated institution, authorized under the general laws of the State of Minnesota, to transact the business of growing and selling nursery stock and pure-bred Holstein-Freisian cattle. Its capital is one hundred thousand dollars (\$100,000), and its managers have a business experience of a quarter of a century to devote to the work of supplying goods suitable to your needs.

The grounds of the Company are located in and adjacent to Lake City, Wabasha Co., Minnesota, and from the character of the soil, nursery stock of the finest quality is produced. The fact that we are THE MOST NORTHERLY COMMERCIAL NURSERY in the United States or Canada, guarantees the hardiness of the stock here grown. The Chicago, Milwaukee & St. Paul Railway traverses our grounds. The Burlington & Northern Railway station is distant two miles from our packing houses, on the east side of Lake Pepin; these, with the different lines of steamboats plying on the Mississippi river, offer unusual advantages for prompt, speedy and economical delivery of stock.

In presenting our descriptive catalogue, we are pleased to announce that our stock of trees and plants is of unusually good quality, more extensive than in former years, and the new varieties offer strong inducements to our patrons. The utmost care and best attention will be given to all orders.

We have very commodious and convenient packing houses, grounds, and cellars for storing and handling nursery stock. Our complete facilities in these matters enable us to handle stock with the best of care and attention.

Regularly authorized agents carry our printed certificates of agency, bearing the imprint of our corporate seal.

Terms cash, unless by special agreement. Packing done in the most careful manner.

We furnish by express, C. O. D., if 25 per cent. of the money is sent with the order.

Packages will be delivered at R. R. station, after which they are at the risk and expense of the purchaser, and in the case of loss or delay the purchaser must look to the forwarding companies alone.

No claims will be allowed unless made within ten days after receipt of goods. We exercise care that all our stock shall be genuine, unmixed and true to name, and quality represented, and accept your order with the understanding and agreement that should any prove untrue to name, we will replace them with the genuine, but are not liable for damages other than herein named.

Remittances can be made by money order, express order, registered letter, or bank draft.

Correspondence solicited. LIVE AGENTS DESIRED.

Respectfully,

THE JEWELL NURSERY CO.,

Lake City, Wabasha Co.,

Minnesota.

## RUSSIAN APPLES.

The severity of the winters of the last decade has compelled the propagation of the very hardiest varieties of apples. Believing that the old world offers similar conditions of climate and soil, Prof. of Horticulture J. L. Budd, of Ames, Iowa, accompanied by Charles Gibb, of Abbottsford, Canada, visited the interior of Russia, and procured cions of many of the deservedly promising sorts; from Prof. Budd we procured cions and are cultivating a large and extensive line of these apples, from which we offer a select list, as follows:—

Yellow Transparent—A very early apple of good quality, and decided merit, size medium; color, when ripe, pale yellow; sprightly, sub-acid, great

bearer.

Titovka—Large beautiful yellow, nicely blushed or painted, dark red, with large or small stripes, tender and very good; late fall and early winter.

Antonovka—The king apple of the Russian Steppes; sub-acid, firm and

juicy, ripens in October, keeps until July; a delicate dessert fruit.

V Ukrainskoe—An apple of large size, in form and color like the Northern Spy, plaited or ribbed at the blossom end, very showy, flavor sub-acid, tree hardy, strong and upright; September and October.

W Borsdorf-One of the best in quality, of the Russian apples, and one of

the best keepers; a good bearer.

**Red Anis**—A medium sized flattish apple, dark carmine, yellow on shaded side, flesh greenish white, very juicy, sour; September to January; a good cooking apple.

Ostrekoff's Glass-A small, dark green apple, with dull red side, hardy;

a good dessert apple; keeps till summer.

Lowland Raspberry—A medium sized apple of good quality, of a dull yellow green, with dashes and spots of red, the flesh white, fine and juicy, but little acidity; an excellent autumn table apple; September to January.

## HYBRID APPLES.

These originated near Hesper, Iowa. Their origin is supposed to have been seeds of the Siberian crab fertilized by standard sorts. They possess the merits of extreme hardiness, superior quality of fruit and of fair size, considering their ancestry.

Early Strawberry—Tree a good grower, symmetrical, hardy, fruit size Transcendent, red striped, crisp, juicy; excellent for eating; season August.

Whitney—One of the best growers, straight, symmetrical, abundantly supplied with fibrous roots. Fair specimens of the fruit measure 7¾ inches; a delicious eating apple, color bright carmine, very showy, flesh firm, juicy and rich; season September. Said to be of superior value for drying and canning, probably the best of the hybrids.

Blushing Maid—A fine, strong, upright grower; the fruit compares in size with the Whitney; an abundant bearer; quality good; season September.

Orange—Crispy, juicy and pleasant, a deep orange in color; a slow grower as a nursery tree; quality number one; season October.

Orion—A fine growing tree, very hardy and productive, fruit medium size, yellowish green, splashed with carmine, quality mild, sub-acid, crisp; pleasant for eating; excellent for cooking; season October to December.

✓ Minnesota—Hardy, a medium grower, fruit larger than Golden Russet, light color with blush on sunny side; quality excellent; December to February.

In size, beauty and keeping qualities the best of the winter varieties.

Dartt- A seedling hybrid, introduced by Prof. E. H. S. Dartt, Supt. of the Experimental Fruit Farm, Owatonna, Minn., and named by him. The tree is a fine grower, very hardy, quality of fruit good, size that of a Transcendent, a deep crimson when ripe; season mid-winter.

Hyslop-An old and popular crab, a good grower and very hardy; fruit larger than Transcendent, deep crimson in color, flesh white tinged with red, an

abundant bearer and a good keeper; season December to February.

Mathilda-Originated by Peter M. Gideon. A superior grower as a nursery and orchard tree; erect and symmetrical, fruit is a good size, a beautiful yellowish green with a pink blush, fruit crisp, tart, pleasant-tasted, one of the very best for cider; season October to December.

Gibb Crab-Originated by G. P. Peffer, Pewaukee, Wis. Fruit color of the orange, quality said to be of the very best, and for eating out of hand

fully as good as the best peach; a valuable acquisition.

President Hayes-A choice grower, vigorous and upright, fruit over

medium, and of excellent quality; season September to October.

Transcendent-The well known and superior hardiness of this tree has by common consent made it the standard for hardiness; a vigorous and rapid grower, bears abundantly and the fruit is highly esteemed for jelly, preserves, etc. Its only fault is a tendency to blight. Should be planted away from general orchard; undoubtedly the most desirable crab for the new Northwest.

Beach's Sweet-The tree is a strong grower and an abundant bearer, fruit large, measuring 71/2 inches in circumference; a bright rich carmine when ripened in the sun, unexcelled in quality, and superior as an eating or baking apple to the Tallman Sweet.

Looker's Winter-Originated at Ash Ridge, Wis. Hardy, a rapid and upright grower, quality good, and keeps until April.

Virginia-A fine grower and a desirable stock for topworking; in quality resembles the Transcendent, but not so subject to blight.

Conical-A vigorous grower, handsome, productive, deep crimson, and a

delightful eating apple; season October.

Pickett's-Very hardy and a handsome growing tree; fruit large, bright red, sub-acid, pleasant; an early and abundant bearer, free from blight; season October.

## HARDY APPLES.

Wealthy-A seedling originated thirty-five years ago on Lake Minnetonka, Minn. A fine nursery tree, very hardy, and an early and abundant bearer. fruit large, deep crimson in color, flesh crisp, sub-acid, white, tinged with red, quality second to none, and one of the finest stand apples; season November to February. This tree is deservedly making a first-class record wherever planted especially in Iowa, and will stand at the head of all old varieties as it becomes well known.

Duchess of Oldenburg—Tree a moderate grower, upright in habit, bark dark in color and very smooth, of German origin, fruit extra size, pale green shading to white, beautifully striped with pink, tender, juicy, tart, highly esteemed for market or domestic use; an immense bearer. This tree is the standard apple for hardiness and is more universally doing well throughout the Northwest than any of the old varieties.

**Tetofski**—A moderate but handsome grower, extra hardy, a late bearer, but fruits abundantly when in bearing; medium size, very pale green, faintly striped with pink, oblong and very firm, quality good; season August.

Allen's Choice—Tree hardy, strong and symmetrical grower, making double the growth of any other tree in the nursery; fruit medium, flesh white, fine grained, tender, juicy, sub-acid, highly esteemed for dessert and cooking. A fine market apple; season December to May.

**McMahon's White**—Originated in Richland Co., Wis. Fruit very large, nearly white, a good culinary and dessert apple; has proven nearly as hardy and productive as the Duchess.

Walbridge—Tree vigorous, handsome and productive; fruit medium size, striped with red, quality good; season March to June.

Haas—A vigorous grower, fruit medium to large, shaded and striped with red, tender, juicy, sub-acid, good. October to December.

Scott's Winter—A Vermont seedling, profuse bearer, fruit medium size, thickly striped with bright red; will keep until June in a cool cellar; quality most excellent.

Wolf River—Originated near Waupaca, Wis. Tree a moderate grower, of medium hardiness, fruit resembles the Alexander, large, deep crimson, quality good; season January to March.

**Pewaukee**—Originated by G. P. Peffer, Pewaukee, Wis. Seedling from Duchess, fruit medium to large, surface bright yellow, partially covered with dull red, flesh yellowish white, juicy, sub-acid, with a rich aromatic flavor, a strong grower, hardy; December to March.

## SPECIALTIES.

Appreciating the fact that we must depend upon our native resources for the best flavored, the hardiest and most desirable fruit, it has been our constant aim to investigate and procure promising varieties, and having tested to our entire satisfaction the following apples, we procured, propagated, and now offer trees of the Okabena and Thompson's Seedlings, under the following condition: 'All stock is grown at Lake City, Minnesota, and each tree sent out will bear as an evidence of its genuineness, a metal tag on which will be indelibly stamped the name of the tree, and our registered trade-mark. This tag will be so affixed that it will remain until the tree is in fruiting. The price is \$1.00 each, \$5.00 for six, \$10.00 for twelve. No trees sold to the trade for Spring, 1890. Nurserymen can procure a stock for Fall, 1890, on the invariable terms of \$100 for 100 trees.

The Okabena—Originated on the banks of Lake Okabena, near Worthington, Nobles Co., Minn. A seedling of the Duchess fertilized by the Wealthy.

The parent tree is twenty-five years old, and perfectly sound and thrifty; has borne annual and enormous crops for the past fifteen years. The tree is the finest grower in nursery we have ever seen, straight, symmetrical, and finely rooted. The bark is a deep, rich wine color, not subject to bark bursting or blight. Grows equally well from grafts or buds, and is an iron clad in the fullest sense of the term. The fruit is over medium size, flattish, highly colored when exposed to the sun, invariably has a solid band of crimson extending from stem to blossom end, this varying in width from a sixteenth to a quarter of an inch in width, and is as infallible a mark as the hair-line of the Tallman Sweet. The fruit combines the good qualities of both the Duchess and Wealthy, fine grained, choice flavor, and a good keeping apple. Season December to March.

As an indication of our opinion of the value of this wonderful seedling we paid \$1,000 cash for the complete control of the tree, and have made 46,000

grafts to be set spring of 1890.

Thompson's Seedling Apples—Our attention was called to this remarkable orchard, located in Grundy County, Iowa, in 1884, and in 1885 we consummated the purchase, and absolute right to propagate, and sell trees from this wonderful orchard.

The amateur student of Horticulture can find much of interest in investigating the workings of nature in this case. The history is as follows:

J. S. B. Thompson and wife, Phœbe, were residents of New York State, and came to the young State of Iowain 1859, and located on the farm in which the orchard now stands. In 1861, obedient to the call of his country, he went to the front, remaining there until the close of the war. In the fall of 1861, Mrs. Thompson returned to New York to visit the old homestead, and while there, with native thrift, endeavored to temporarily supply the lack of fruit in the new western home by drying a supply of apples. Her father owned a famous seedling orchard, and made it a practice daily to cull the choicest specimens for her use, and knowing her preference for sweet apples, these kinds were invariably chosen, and as the work progressed, suggested to his daughter that the seeds be saved and planted in Iowa, upon her return; this was done the following spring, and they started fairly well, and from a pint of seeds about 400 trees grew and remained in the nursery row, fighting for life with the weeds, the ravages of the cattle, and the unfavorable conditions of the crowded nursery row. In 1866 about 300 were transplanted to the orchard site where they now stand, many of them now being fifteen inches in diameter, their tops twenty to forty feet in height. Fully half of the original planting still stands, in spite of the very unfavorable location, the soil being black prairie, sloping to the south and east, and hemmed in to the east, north and west by dense groves of willow and maple, the southern line of the orchard being a quaking bog.

In proof of the trying nature of the location, and the superior hardiness of the seedlings, will state that every known so-called iron-clad apple and crab has been set in same orchard and all are dead or are living wrecks, while on the contrary many of the seedlings are perfect in wood, bark and growth.

There are among them wonderful developments in size, color, quality and season. For obvious reasons the separate varieties have not yet been named, and we are introducing them under their respective numbers by which they are known to us; each tree will bear a metal tag as stated.

Mr. Thompson has exhibited specimens of these new seedling apples at many county fairs, at the state fairs of Iowa and Minnesota, also at the an-

nual, state and district horticultural meetings, held in Iowa and Minnesota. He has been universally successful in being awarded premiums, and their superior excellence of flavor and superb keeping qualities have attracted general attention wherever shown.

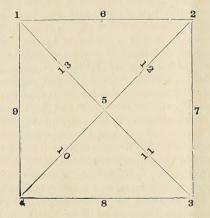
We claim superior merit, from the derivation of the trees: being SEEDLINGS FROM SEEDLINGS, and by far the strongest and most vigorous nursery-growers we have ever propagated.

Interested purchasers are requested to address Hon. J. S. B. Thompson, Grundy Centre, Iowa, for more complete information.

We believe firmly that the above specialties offer the solution to the question, "what shall we set in orchards in the northern fruit belt?"

## PLUMS.

Naturally, Plums that produce fine fruit abundantly, are found in groups or clumps. Single trees removed from such groups have been found to be unfruitful, until fertilized by neighboring trees. For this reason we advise to plant in groups or clusters. To form a group of trees, mark out a plat of ground forty feet square; at each corner set a tree and one in the centre; between each space between each corner tree set a tree on outside line, then on a straight line diagonally through the plat, plant four other trees, twelve feet from the center tree.



According to this diagram a tree will be set at each number, and will be in close proximity to its neighbor. The pollen will be conveyed from tree to tree and fertilization ensue.

Forest Garden—Hardy, bears profusely, ripens from the 1st to the 25th of August; one of the earliest plums, large, being one to one and one-half inches in diameter, oblong, color mottled red and yellow, skin thin, juicy, sweet and rich.

**Desoto**—Perfectly hardy, a splendid bearer, fruit very large, 1½ to 1¾ inches in diameter; meat sweet, firm and juicy; ripens about September 1st; dappled red and yellow.

Weaver—The tree is very hardy under all circumstances, and is wonderfully prolific, and an early bearer; the fruit large, oblong of a beautiful color and exquisite quality; flesh firm, a free stone and a good keeper. As a canning plum, or to be peeled and eaten with sugar and cream, fully equal to the best peach.

Pottawattamie—The Pottawattamie is supposed to be a cross between the Chickasaw plum and the Swedish sloe, but it is very distinct and different from all varieties of plums. Its origin is not definitely known, but the parent tree sprang from a minor plum orchard. The tree is perfectly hardy, and is an immense, early, annual bearer. Twelve years without missing a crop, and generally overloaded. Four-year-old trees have borne a crop of two bushels to the tree. It is a strong and vigorous grower up to its fourth year, and from that on, the immense crops of fruit give it a dwarfish habit and pendulous form of growth. The fruit is about the same size of the Wild Goose plum, but the quality is much superior, while the taste is so peculiarly its own that we cannot definitely describe it. Those who eat the fruit for the first time frequently remark: "It has a peach taste." The color is a yellow ground overspread with a bright pink and prominent white dots, which give it a transparent hue. Of all plums it is the plum for canning, as it has no acrid taste, and, when scalded, the skin which is very thin-scarcely more than that of the cherrypeels off in exactly the same manner as the tomato, leaving the plum whole and complete, and of a beautiful golden vellow color, as luscious from the can as if fresh from the tree. It begins to ripen about the 10th of August, and the season lasts three or four weeks, which is another fact in its favor, of vast importance, making the Pottawattamie invaluable to the home as well as to the extensive fruit grower. The fruit sells readily at \$4 per bushel. It adheres very firmly to the tree by a long, slender, thread-like stem, which does not fasten onto the plum, but goes into the plum and fastens to the pit. The sting of the curculio does not make the fruit drop, nor does it effect more than to leave the mark of the puncture, every plum ripening evenly and perfectly.

Hawkeye—Very hardy and thrifty, a strong grower, unusually heavy foliage, an annual and abundant bearer, fruit is not troubled with curculio; large, light mottled red color, attractive and of superior quality, both for eating out of hand and cooking; for canning is unexcelled. The flesh is very firm, bears shipping well, and will be the standard plum for marketing and home use.

## CHERRIES.

Empress Eugenie-Fruit large, dark red, very rich, tender and sub-acid; a superior variety; season July.

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

Early Richmond—Sometimes known as Kentish. Medium size, dark red, melting juicy, sprightly acid flavor; one of the most valuable and is unsurpassed for cooking purposes, and is exceedingly productive; season June.

Late Duke-Large, light red, late and fine; season July.

Montmorency—A large red cherry, larger than Early Richmond and ten days later; season July.

Ostheim—A Russian cherry, hardy, fruit large, roundish, ovate, skin dark red at maturity, stalk long, flesh liver colored, tender, juicy, almost sweet, yery good; season July.

Wragg—Origin unknown, supposed to be German; a good grower, an immense bearer, quite late and a valuable cherry.

## PEARS.

The experience of the orchardist has not been such as to justify extensive planting. The ravages of the fire blight has been more destructive than the severity of our climate, and the introduction of varieties comparatively free from the blight, and the phenomenal hardiness of the New Russian Pears and American seedlings warrant us in further efforts to secure an abundance of this luscious fruit.

**Kieffer's Hybrid**—Raised from seed of the Chinese Sand Pear crossed with Bartlett. An early bearer; fruit of good quality, very showy, valuable for market, blight proof; season October.

Clapp's Favorite—Very large, yellowish green, full yellow when ripe, marbled with dull red in the sun, covered with small dots, juicy, melting and fine; an abundant bearer; season September.

**Bessemianka**—A famous seedling pear from Russia imported by Prof. Budd. Fruit medium in size, bergamotte shaped, green with some russet and often blushed on sunny side. Flesh tender, juicy, seedless. The tree is an upright grower, dark green leaves, free from rust or mildew.

Sapieganka—A fine nursery tree, adapted to the latitude of the southern half of Iowa.

Idaho Pear—A choice seedling originated at Lewiston, Idaho. In size, general appearance and aroma it resembles the crosses of the Chinese Sand pear, but its eating quality is far superior to that of any of this class known in cultivation. It is very large and handsome, irregular, globular, somewhat depressed. The cavity of the fruit is very irregular, basin shallow and pointed calyx very small and closed, core very small, skin golden yellow with many russety spots. Flesh melting, juicy with a sprightly vinous, delicious flavor; season September and October. So far it has not fruited outside of its native locality, but there it has withstood a temperature of 30 degrees below zero. Price, yearling trees, each, \$2.50.

Wilder Early—A new and valuable seedling pear, very strong grower, fruit small to medium, bell-shaped, irregular, surface smooth, pale yellow ground with deep shading of brownish carmine, stem short, core very small, seeds small, flesh very pale whitish yellow, fine grained, tender flavor, sub-acid, sprightly, quality very good; season August. Price, yearling trees, each, \$2.50.

## GRAPES.

No stock that was ever grown in the nursery has given such universal satisfaction and met the general demand for something really good as grapes. The general impression is that it is difficult to grow them in perfection and that the pruning and training is beyond the ability of any, except experts. On the contrary the system is very simple, and can be briefly described: Plant in rows north and south eight feet apart each way, in soil that is well drained, and that will produce good average grain crops; cultivate clean, and the second spring from planting, set posts six feet high, twenty-four feet apart in the rows, and on these posts stretch tightly three strands fencing wire eighteen inches apart. Select two of the strongest canes the vine has made, cut to a length of four feet, tie to the lower wire in opposite directions, thus occupying the whole length of the lower wire. From these canes will start shoots. Allow these to grow on upper side of canes. Rub off all on under side. Tie the remaining shoots or upright canes to the second and third wires, using soft twine, and tving loosely. Do not allow canes to grow above third wire. These upright canes are the fruit bearers. In pruning remember these points: Remove all suckers from the root; keep the main canes four feet in length, and in November prune the upright canes (that are trained to the second and third wires) to the first bud above the main cane. Each succeeding year follow this plan, leaving of the year's growth of wood only a simple eye or bud. The upright canes will permanently grow a single joint in length each year. After pruning, lay the vines upon the ground and cover with six inches of earth.

Vines thus treated are certain to yield abundantly. They can be left covered in spring until all danger of frost is past. If birds trouble when ripening, the bunches can be covered with paper sacks, and if premature frosts threaten in the fall, a few blankets thrown over the trellis insures perfect protection. A single grape vine in Lake City produces annually more than 300 pounds of the choicest of fruit.

Janesville—A very desirable grape on account of hardiness, quality and early ripening. Color black, bunch solid, very good flavor; when fully ripe quite sweet. Ripens from the 15th to 20th of August.

Concord—A vigorous, hardy vine; large bunch with shoulder. Berries large and black; skin thin. Flesh juicy and sweet season 10th to 20th of September—the leading market variety.

Moore's Early—Bunch large, berry round, color black with heavy blue bloom. Quality better than Concord, exceedingly hardy. Exempt from mildew or blight. Matures twenty days before Concord.

**Delaware**—Rather slow grower. Bunch medium, compact. Berries me dium, skin thin dark red color. Flesh tender and juicy, exceedingly sweet. Ripens in September, and as a rule commands in market from one-third to one-half higher price than the ordinary varieties.

Agawam (Rogers No. 15)—Vigorous grower. Bunch good size shouldered, rather loose. Berries large and round; color darker than Delaware; skin thin with juicy pulp, very sweet and rich aromatic flavor; season ten days earlier than Concord.

**Lindley** (Rogers No. 9)—Bunch large and compact. Flesh sweet. Ripens with Delaware. One of the best and earliest of the Rogers Hybrids.

**Wilder** (Rogers No. 4)—Large and black bunches, generally shouldered. Berry round and large. Flesh buttery, with a somewhat fibrous center, sweet, rather sprightly.

**Brighton**—Of recent introduction, and truly a superb grape. In color, form of bunch and berry, it resembles the Catawba, combining the sprightliness of that variety with the richness and sweetness of the Delaware. Vines vigorous, hardy, productive, and quite free from mildew.

Moyer—Originated in Canada, a cross from the Delaware. In habit of growth, hardiness, quality and size of cluster, it resembles the Delaware very much, but it ripens with the very earliest (claimed by some to be ten days earlier than Delaware) has larger berries; free from rot or mildew. Has stood 35° below zero unprotected without injury. Very sweet as soon as colored; skin tough, but thin. Pulp tender, juicy, of delicious flavor. The best red grape for the whole country. As an early market grape can be marketed before others are colored.

## WHITE GRAPES.

Lady—This variety as yet has not developed a weak point. It ripens in advance of the Concord; is hardy, vigorous, productive, and has no superior in resisting mildew. In color it is yellowish green; pulp tender, sweet, rich and sprightly. It is a seedling of the Concord, and is a very good and reliable white grape for all localities and climates.

**Prentiss**—A seedling originated with G. W. Prentiss, Pultney, New York. Bunch large, compact, berry medium to large, yellowish green, flesh tender, sweet, melting, juicy, few seeds; vine vigorous grower; hardy, uninjured with thermometer 20° below zero, an excellent keeper, the most desirable of new varieties.

Martha—Bunches medium, shouldered, berry large roundish. Flesh similar to Concord. Vine vigorous and hardy, deservedly popular.

**Pocklington**—Vine very vigorous, hardy and productive. Bunch and berry of good size; color a light lemon yellow, flesh moderately tender, sweet with a peculiarly aromatic flavor.

Niagara—The originators say: "This new white grape originated in Lockport, N. Y., in 1868, and is a cross between the Concord and Cassidy, first fruiting in 1872. It has regularly borne large crops of fine fruit. The vine is a remarkably strong grower and very hardy; the leaves are thick and leathery and dark glossy green; bunches very large and uniform and very compact; berries as large or larger than Concord and skin thin but tough, which insures their shipping qualities; quantity good, very little pulp, melting and sweet to the center; ripens with the Concord.

Empire State—The Empire State is a seedling of the Hartford Prolific, fertilized with the Clinton; fruited the first time in 1879, and its first crop was thirty-eight bunches, which it carried through in fine order. Its crop in 1880 was forty-eight bunches, of most magnificent fruit. Grafts inserted in two-year-old Clinton and Champion vines in 1880, produced, in 1881, from twenty to thirty bunches per vine, ripening with Hartford Prolific and Moore's Early. Nearly all of the bunches shouldered, and the finest shade of white ever seen in fruit. A good grower and fruiter in every respect. Bunches large, from six to

to ten inches long, shouldered; berry medium to large, roundish, oval; color white with very light tinge of yellow, covered with a thick, white bloom; leaf thick, smooth underside; flesh tender, juicy, rich, sweet and sprightly, with a slight trace of native aroma, continuing a long time in use; vine very hardy. Its great productiveness, beautiful color, fine quality, extreme hardiness and vigor and healthfulness of vine and foliage, size and compactness of cluster and good shipping qualities, make it the best grape, all things considered, yet produced.

## GOOSEBERRIES.

A deservedly popular fruit, making, as it does, the richest of canned fruit for winter consumption, and for jelly, and also, as is the case with the improved varieties, being excellent for eating out of hand. Set in rows six feet apart, four feet apart in row; cultivate clean. In November, for protection from late spring frosts, it is advisable to cover with coarse litter, or still better, bend gently to the ground and cover with earth; thus treated, abundant annual crops will be obtained. This fruit is so useful for cooking when green or ripe, and it may be canned with such facility that it should be cultivated very extensively, for both home and market. The American varieties, though not so large as the English sorts, are of fine quality and are not subject to mildew. The expense of cultivation is light, and the returns most satisfactory, as high as \$900 worth of fruit having been sold from one and one-half acres.

**Downing**—Fruit larger than Houghton; roundish, light green with distinct veins; skin smooth, flesh rather soft, juicy and very good. Vigorous and productive.

Houghton's Seedling—A medium sized American variety, which bears abundant and regular crops, and never mildews; fruit smooth, red, tender and very good; very valuable.

American—Very hardy. The bush is a slow grower; fruit medium red, very productive.

**Smith's Improved**—Large yellow; excellent quality. Bushes of spreading growth; vigorous and so exceedingly prolific, as to require a frequent and liberal use of fertilizers to enable it to maintain its vigorous growth.

**Transparent**—New, very hardy. Bushes of strong, vigorous growth; maturing and fruiting early; bears abundantly. Berries almost as large as Downing. Pale greenish color; quality good.

Industry—Vigorous, upright growth; a larger cropper than any other known variety; and one of the best for market purposes, owing to the properties it possesses of flowering late and afterwards swelling so quickly as to reach a suitable size for pulling green sooner than any other variety. If left to attain maturity it is a dark red color, hairy, with a pleasant, rich flavor, hardy, and proving to be one of the best.

## CURRANTS.

Use the same care in preparation of the soil and planting that is advised for trees. Good, rich soil is the best for them, and they are not so liable to injury from the elements, as the larger fruits. It is advised not to plant them in the kitchen garden, but set them where they can be cultivated by the means of a horse. Currants should have manure in abundance. Plantin rows, north and south, six feet apart and four feet apart in the rows. In the spring prune off the old wood close to the ground, and as the fruit is borne on the last year's growth of wood, they can be kept thrifty and healthy by this means. During the fruit season, hoe freely, keeping down all grass and weeds. The currant is a fruit that has been too much neglected. No fruit can take its place, the delicate acidity, being the natural corrective for many minor complaints, and the natural adaptability to the manufacture of jelly and domestic wines, make it a necessity in every well-regulated household; ripening as it does, as the strawberry and raspberry pass out of their best conditions, and lasting for nearly a month, the current ably fills the gap between these choice fruits and the blackberry. It has been our hope to secure a variety that with the hardiness and vigor of the improved red Dutch would be combined the conditions of quality. size and productiveness of fruit, as to warrant its propagation for market. All are familiar with the old type currant—small berries, short clusters of fruit mixed with the leaf stems, and an impossibility to afford to gather them We have met these requirements in a new economically for home use, even. seedling currant, to which the household name of our magnificent state has been given—The North Star Currant. We quote from the "Farm and Home" of Springfield, Mass., July, 1886: "Last summer a branch of a new currant was sent to us, which, in several important requisites to a first-class fruit, so far excelled other varieties that we had a photograph taken and an engraving made which is given herewith. The originator, a skillful fruit grower, selected this currant from a very large number of seedlings on account of its wonderful vigor and growth. Subsequent trial showed it to the same advantage when grown from cuttings, and its prolific habits appeared to be as wonderful as it will ever be possible for a current to be. The size of the fruit is about the same as the Cherry currant. Our engraving shows the berries as one-half inch in diameter. We have proposed to give the actual size, contrary to the rather too prevalent custom of exaggerating new fruits. The color is bright red and the flavor is superior to the Red Dutch or Cherry currants. Its most remarkable trait is the length of the bunches. We selected several that were five and six inches in length, and four inches long was the most common dimension on the best branches.

The owner of this new fruit has not yet given it a name, but has changed his first intention of keeping his entire stock and growing only the fruit for market. In due time, when a sufficient stock shall have been propagated to allow it to be offered for sale, it will be named and our readers will be kept informed of its merits on further trial. At present the appearance of the plant is all that could be expected. The entire stock as fast as it can be grown has been purchased by an enterprising nursery, who prefer to have their intentions and name withheld from the public until they shall have time and plants to respond to the numerous inquiries that are sure to follow such an announcement in our columns."

The North Star Currant—The points of excellence are, its hardiness, vigorous growth of wood (the average growth for 1889, an extremely dry season, on light gravelly soil, having been from thirty to thirty-six inches), early fruiting and great productiveness, size of berry averaging more than one-half an inch in diameter, and the length of fruit cluster frequently being five and six inches, and averaging over four and one-half inches, a naked stem attaching to wood and allowing the fruit to be readily picked; superior quality and richness of fruit, being much less acid than the old sorts.

V Fay's Seedling—A seedling from the Cherry and Victoria; color red; equal in size to the Cherry current, better in flavor, less acid, very prolific and easy to pick.

• Improved Red Dutch-Very prolific and regular bearer; a profitable market variety.

Cherry-Strong growing; fruit of large size; bunches short; dark red and rather acid.

White Grape—The best white variety, very large, beautiful and delicious; not as acid as the red; very productive.

La Versaillaise—A French variety; vigorous grower; very productive. Fruit of large size, dark red, long bunches.

Victoria—The best very late variety. Abundant bearer; bunches extremely long; berries of medium size; brilliant red and of the highest quality, owing to its lateness; fine shipping quality and of great productiveness. It commands a higher price than other kinds.

Black Naples- A reliable, good black currant; berries very large, sometimes half an inch in diameter; hardy and productive; excellent for sauce, pies and jellies, the plant is a very strong grower and abundant fruiter.

Crandall—A new black currant, originated in Kansas; berries very large, from one-half to three-fourths inch in diameter; very productive; proof against the currant worm; excellent for pies, jellies or jam; very hardy; a strong grower; ripens about July 25th; does not fall from bushes when ripe; bears shipping well, and is entirely distinct from the cultivated black currant, lacking the strong, musky flavor as found in the English black currant, and which is so much disliked by many. This evidently is a hybrid currant.

## RASPBERRIES.

For this popular berry our moist, deep soil seems admirably adapted, and coming just after strawberries, it is most welcome to fill out the berry season before blackberries ripen. The only trouble with many of the firmer sorts is, that the tops winter-kill more or less. To remedy this, lay down the canes in autumn and cover with a few inches of earth—the eastern market garden system. Keep in hills four or five feet apart, properly thinned out and supported by staking and tying up, the ground well mulched and stirred, the raspberry almost surpasses itself. But if left to "sucker" and run together, especially the upright sorts, they do next to nothing. When well treated raspberries are a most profitable crop, either for a near market or to ship—varieties should be selected with reference to this point. When a surplus of fruit accumulates, it can be disposed of to advantage by evaporating, appliances for which are now brought to a high state of efficiency and low cost. The evaporator can also be used to dispose of other surplus fruit on the farm.

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## RED RASPBERRIES.

Cuthbert-A variety of the greatest excellence, and one of the few kinds that may be pronounced perfectly hardy. The canes are tall and vigorous, and enormously productive. Berries very large, conical, rich crimson; very handsome, and so firm that they can be shipped hundreds of miles by railway without injury; flavor rich, luscious, best; commences to ripen moderately early and holds on until all others are gone.

Hansell-One of the very earliest and desirable of red raspberries; color bright scarlet; quality excellent; very productive, and a fine shipper. Its great

earliness causes it to bring the highest price in the market.

Philadelphia—This is undoubtedly one of the most profitable red raspberries for marketing now under cultivation. It is a stout, healthy grower, very hardy, and immensely productive. The fruit is of the largest size, and presents a fine appearence, even after it has been transported a long distance to market.

Turner-Grown by Prof. Turner, Jacksonville, Ill. Almost thornless, vigorous, productive; (a large fruit-grower near Cincinnati, who has thirty-five acres planted to Turner, raises 125 to 150 bushels of fruit to the acre, and claims it to be very profitable); hardy; berries red; luscious, melting, with a delicate aroma and of fair size; long in bearing; a very satisfactory fruiter.

Clark-Large, conical, bright crimson; juicy, sweet and excellent; highly flavored; a strong grower; productive and hardy; one of the very best.

## BLACK CAPS.

Doolittle's Improved-Superior in size and productiveness; very valuable.

Mammoth Cluster—One or two weeks later than Doolittle; very large, and immensly productive, very hardy.

Early Ohio-This is a very productive Black Cap, and for canning or evaporating it is claimed to be one of the most profitable sorts. Berry not quite as large as Gregg, but of finer quality; has been grown very extensively with great profit, and is highly recommended.

Gregg-This is a most remarkable hardy Black Cap, and is undoubtedly one of the best market raspberries grown, being very productive, and from onethird to one-half larger than any other Black Cap; the yield under good cultivation is simply enormous. The berries are of very large size and fine quality, and covered with a whitish bloom; the quality is very good and they are firm in shipping. At the Centennial Exposition it was awarded the very highest premium for raspberries.

Shaffer's Colossal-Colossal both in bush and berry. Carries to market fairly; excellent to dry and unsurpassed for canning; makes delicious preserves. having a peculiar and very fine flavor. Berry, dark purple in color, and excellent in quality; a very valuable variety. Does not sucker, but roots from tips like

Black Caps.

Davison's Thornless-Five or six days earlier than Doolittle; moder ately productive, and entirely without thorns.

Adu-A new distinct variety, vigorous, upright growth; few thorns; very hardy; prolific; latest of all in blooming and ripening; fruit black; as large as the largest variety of black raspberries known; contains very few and small seeds.

## EVERBEARING RASPBERRIES.

These, bearing fruit as they do from the first of July until killing, freezing weather in the fall, lengthens the season of this delicious fruit from three weeks to as many months.

Earheart—Originated in Illinois thirteen years ago. The plant is an extremely strong, stocky grower. Never has been known to winter-kill, and withstands heat and drouth in a remarkable manner. Fruit of large size, jet black, of good quality. The first or main crop ripening early in July. At the same time the first of the new canes of the same season's growth begin to bloom, ripening their first fruit soon after the main crop is gone, and continuing to bloom and produce fruit until stopped by freezing in the fall. The fruit produced on the new canes in August, September and October being about twice as much as that of the first crop. It can truly be said to bear three crops each season. Good, strong plants set early in the spring, will begin to fruit in August of the same year, and produce quite a crop in September. Should the canes be injured by intense cold, cut to the ground and new canes will be produced that will bear the same season.

Excelsior—An ever-bearing red raspberry. It bears a fair crop on the wood of last year's growth, from the middle of June until August, and the young wood of the present year's growth comes in bloom in June and July, bears a large crop of delicious berries during August and September, and until frost kills vegetation. From June 10th to 15th, until the theirmometer shows 25° or 27° below freezing, you can see on them a profusion of buds, blossoms, small green to dead ripe berries. In the year 1887 a patch twenty-seven by seventy-nine feet yielded 378 quarts of berries, from the latter days of July until early October, picking every other day. The patch was divided into seven spaces, making six rows, each about seventy-one feet long, yielding nearly fifty quarts to the square rod.

"We, the undersigned, do hereby certify that we have witnessed the above named raspberry for four or five years, in the garden of John H. C. Sneclode, and cheerfully testify to the fact that the berry is of excellent quality; that you can find from June until frost kills vegetation, a profusion of buds, blossoms, green and ripe berries on the bushes at all times, and the young wood bears a very heavy crop. And we will further state that as far as we know and have observed, Mr. Sneclode never covers them in the winter.

NELSON DEWEY, Ex-Gov. of Wisconsin.

H. GRIMM, Merchant.

G. PRIOR, Merchant.

JOHN A. K. LINDT, Merchant. CARL KLEINPELL, Merchant. JACOB J. BERNHARD, Merchant. And others."

On November 7th, 1889, we examined canes of this variety, and found fruit in all stages from the bloom to the perfected berry.

## BLACKBERRIES.

This long neglected, but most luscious, prolific and wholesome berry bids fair to become a willing tenant of gardens. It needs good soil and culture, the removal of all weak and superfluous shoots, and the shortening in and tying up of those left to fruit. A generous mulch of old half-rotted straw or leaves applied to the plants in the early part of summer will be found very beneficial in ripening the crop, making the berries much larger, sweeter and better in every way. Blackberries, if properly treated, are exceedingly productive, and, where firm varieties are grown, they are also profitable for shipping.

We advise for all garden fruits ample winter protection. This can be best obtained in cases of blackberries, raspberries, gooseberries and dewberries by loosening the soil about the roots, and gently bearing the canes prone to the ground, being careful to not break them; cover to a depth of three inches with soil. The labor is inexpensive, and guarantees a full crop of fruit, under all circumstances; prevents ravages of mice, and gives perfect security against the greatest enemy to successful small fruit culture—late and untimely spring frosts.

Early Harvest—A new variety of great promise, being exceedingly early in time of ripening and always reliable. The canes are strong and upright in growth, branching stout and vigorously; an enormous bearer. Berries sweet and of the highest quality, though not as large as some varieties; they are, however, of even, regular size, contain but few seeds and these are very small.

Stone's Hardy—An upright and vigorous grower; stocky, short-jointed; ripens early; turns dark red, and is the hardiest known blackberry. The fruit is, when fully ripe, glossy black; has no hard core, and is delicious in flavor; commences to ripen its first fruit five days later than Snyder, and continues bearing ten days longer; the fruit is well protected by thick, dense foliage.

Snyder—This is a well-known and popular variety. Very hardy and productive.

Ancient Britton—A valuable variety that is becoming very popular in many sections. Sells well in market and is very profitable; berries large and sweet. Does better on sandy land than on heavy soil. Requires winter protection, but is well worth the little labor this costs.

## DEWBERRIES.

Lucretia—The best of the blackberry family, and extremely hardy, and very productive; produces an abundance of fruit, remarkable not only for its large and uniform size, but excellent quality as well, as it is rich, sweet and luscious to the taste, and free from the hard core so common in some blackberries. The color is a glossy, shining black, and the berry ripens the first week in July. As the plant does not sucker it will be very desirable and much sought after for garden culture, while the training habit of the Lucretia will render winter protection very easy in severely cold climates without snow, where that precaution may be necessary. This berry has received endorsement and highest praise from the best horticulturists in the country. It has proven very satisfactory wherever tried, and we recommend it with the greatest confidence.

Some unscrupulous growers have sent out spurious plants for genuine Lucretia, thus creating a bad impression which the real variety will always remove. The original plants are said to have been obtained by an Ohio soldier, who noticed the fruit in its wild southern home while camping; after the war he returned to the place and dug up a number of the plants.

Windom—Is a berry that has proven of special value on the prairie soil of the Northwest. The fruit ripens with the later raspberries, is of large size and good quality. The plant is very hardy and more productive than any blackberry. We have taken at one picking sixteen quarts from ten hills. After the second season from planting the vines trail a little, but are stocky, growing about one and one-half feet high, with numerous branches. It presents a fine appearance when in bloom, as the blossoms are all on the outside of the hill, but as the fruit gets size the plant gradually settles, and at the time of ripening is very near the ground, and the fruit is much shaded by the new growth of the plant and is thus protected from winds and the beating storms.

We do not claim this dewberry to be of immense size, but growing in matted rows that never had any winter protection except snow, alongside of the Suyder blackberry, which had been tended by the most approved methods, including laying the canes down in fall and covering with earth, the fruit of the dewberry was nearly twice the size and twice as productive; when the plants are once well established they have a wonderful capacity for producing fruit under conditions of neglect that would be fatal to almost anything else in the small fruit line.

This berry has been grown in this country for the last twelve or thirteen years, on heavy, black prairie soil. It has been given no winter protection, depending entirely on the snow, of which we usually have plenty in winter, especially on the east or south side of the wind break. Its canes do not winterkill here, it bears regularly, the fruit sells readily at twenty cents a quart in our local markets. The fruit is superior for cooking, canning and preserves, and if left on the vines until well ripened, is one of the best for dessert, and will hang on ten days or more after turning black. It seems to us that, at least on the prairies of the Northwest—the land of high winds, blizzards, and  $40^{\circ}$  below zero, where all varieties of the blackberry must have winter protection, that the hardy dewberry must become popular, for the following reasons: It is of low spreading growth, the fruit and canes are not injured by our high winds, nor the canes injured by being broken by snow banks. The vines are as easily given winter protection by mulching as the strawberry.

Improved Dwarf Juneberry—The Juneberry is one of the most valuable berries, and it should be planted on every farm in the west. The wood is hard and firm and endures the extremes of our climate without injury. Its leaves are dark, glossy green and very much resembles the pear. The plant propagates from suckers. The flowers appear about the same time as the apple. The petals are white and five in number. The fruit is borne in clusters like the currant and ripens in June. Its size equals the wild gooseberry; shape round; color reddish purple at first and becomes a bluish black when fully ripened. Its flavor approaches the huckleberry, a mild, very rich sub-acid. Most people like its quality and pronounce it delicious. It may be served with sugar and cream or cooked sauce, and is splendid canned for winter use. The plant is about the heighth and form of the currant bush. It produces fruit in enormous quantities, and bears every year. It is also

perfectly hardy, not being injured by wet, cold or dry weather, and needs no special treatment. Rabbits do not injure it, and it will grow readily with only a scanty root.

Tree Cranberry—Those who are familiar with the tree or high bush Cranberry must admit that it combines the ornamental and useful to a high degree. Its beautiful red fruit clings to the branches until far into the winter. When viewed against a back ground of dark evergreens, the effect is most pleasing. They usually grow in clumps like the lilac, but can be trained into trees, with well-balanced tops. They are very hardy. They seldom grow on marshy land, but love a sloping hill-side, near a water course. The fruit is of excellent quality, and makes the richest of jelly, and and for sauce is almost equal that of the ordinary cranberry. By propagating from those that have the smallest seeds, with the aid of good care and cultivation, a vast improvement has been worked upon the wild stock. To say nothing of its fruit it is abundantly worthy a place in the lawn or yard.

## ASPARAGUS.

To make a good asparagus bed, the plants may be set in the fall or early spring. Prepare a place of fine, loamy soil, to which has been added a liberal dressing of good manure. Select two-year or strong one-year plants; and for a garden set in rows eighteen to twenty inches apart, with plants ten to twelve inches in a row. Make a small mound of the soil, over which the roots should be evenly spread, so that the crowns when covered, shall be three inches below the surface of the carth. If planted in the fall the whole bed should be covered before winter sets in, with two or three inches of coarse, stable manure, which may be lightly forked in between the rows as soon as the ground is softened in the spring.

Conover's Colossal-The best variety grown; large, tender and early.

## RHUBARB.

Exceedingly valuable for pies and tarts; no garden, especially in a new country, should be without it.

Linnaeus—Very large, productive, excellent. Victoria—Very large, long; great market sort.

## RUSSIAN MULBERRY.

This valuable fruit, timber and ornamental tree was brought to this country from latitude 49° western Russia, by the Mennonites, and is, as near as we can learn, a cross between the black mulberry of Persia, and a native Russian variety. The tree is a very rapid grower. Trees, the seed of which were planted six years ago, are now twenty feet in height and six to eight inches in diameter. The timber is hard and durable, and is used in the manufacture

of cabinet ware, and proves as lasting for fence posts as catalpa or red cedar. It commences to bear when two years old and is a prolific bearer, the fruit being about the size of Kittatinny blackberries. A very great per cent. of the berries are jet black, the balance a reddish white. They have a fine aromatic flavor and sub-acid sweet taste, and are used for dessert as we use raspberries or blackberries. The trees sometimes are so densely loaded as to exclude leaves. The leaves are mostly lobed or cut with five to twelve lobes, and are valuable food for silk worms. The bark is grayjsh white, branches drooping, and the beauty of this as a lawn or street tree is quite enough to commend it; but in addition to these merits it yields an abundant supply of its refreshing berries. The Mennonites use it as a hedge plant, and it makes a beautiful hedge and stands shearing as well as any tree on the list.

A correspondent from Reno Co., Kansas, writes as follows: "The Russian mulberry grows more and more in favor with us every year. We are now having one of our severe drouths, and many cottonwoods are burning out, while the mulberry, where established at all, never dries out. Even when so dry that the foliage droops for days, the first rain freshens them, and they grow again right along. They are very prolific bearers, and while the tree is small the fruit is not so large as on older trees. The Mennonites make fences and wind-breaks of the mulberry. Besides all these they plant pieces of ground very thick, which they cut off close to the ground every three or four years for fuel. In five years it will make a fence post that will outlive oak or cedar."

A prominent nurseryman of Iowa, among other things, says: "Trees six years from the seed have been grown twenty feet high, and six to eight inches in diameter. It is perfectly hardy, commences bearing when about two years old, fruit about the size of a blackberry, sub-acid in flavor and a tremendous bearer. We do not hesitate in saying that we believe this is going to be one of the most valuable timber trees for the west. It makes an excellent fence post that lasts nearly equal to red cedar; good fire wood; in fact the timber is suitable for almost any use a farmer may need timber."

## APRICOTS.

Plant fifteen feet apart each way. There is no fruit more delicious or beautiful than the apricot. The hardiest of all the apricots, the Russian, has stood 30° below zero without injury, while the Moorpark and Breda were frozen to the ground, and is free from all disease, worms and insects that have been so destructive to trees and fruit of the peach and plum. We have seen a great many of these trees growing in the Mennonite settlements of Nebraska, and have the first tree to see that was not perfectly healthy, vigorous and symmetrical. Fruit medium size and of the best quality, and brings the top price in market. We do not vouch for the hardiness of this apricot, however, its habit of growth is dwarf in nature, and is easily protected; the quality of the fruit is so fine that it is well worth the trial and trouble of amateurs to experiment with it.

#### IMPROVED RUSSIAN VARIETIES.

Alexander—Large size, oblong, yellow, flecked with red, flavor sweet and delicate; one of the best; season July 1st.

Alexis—Large to very large, yellow with red cheek; slightly acid; rich and luscious; season July 15th.

Catherine—Medium size, yellow, mild, sub-acid, good; season July 25th. Gibb—Medium size, yellow, sub-acid, rich, juicy; season June 20th. The best early sort, ripening with the strawberry.

J. L. Budd—Large size, white with red cheek; sweet, juicy, extra fine; season August 1st. The best late variety.

Nichotas-Medium to large, white, sweet, melting; season July 10th.

## STRAWBERRIES.

The earlier strawberries are set out in the spring the better. Keep the roots from frost, wind and sun. Moist, but well drained soil is best adapted to the strawberry. Avoid the shade of trees, cultivate deeply and keep the ground mellow and light. The more the ground is enriched the more abundant and larger the fruit. For the garden, set the plants eighteen inches apart. If to be cultivated with a horse, the rows should be three feet apart and plants one foot in the row,—14,520 for an acre. Keep the ground clean and mellow by cultivation. As the ground begins to freeze, cover the plants thoroughly, but lightly with leaves or straw that is free from all seed. In the spring remove the mulching, cultivate thoroughly, and then replace it between the rows to keep down weeds and prevent fruit from lying on the ground.

Wilson's Albany (H.)—An old and reliable variety, very abundant bearer. The most widely known and universally successful strawberry.

Captain Jack (H)—Plant vigorous and very productive. Berries large, roundish, scarlet. Flesh firm and of excellent quality. The editor of "Colman's Rural World" says it is the most profitable berry, that it bears twice as much as Wilson under similar treatment, and ships well.

Crescent Seedling (P)—Large conical, slightly depressed at the apex, bright scarlet, flesh moderately firm, quality one of the best. The plant is a vigorous grower and very productive. Ripens early. It is represented to be the most productive variety in the world; also that the berry averages about double the size of the Wilson throughout the season.

Sharpless (H)—Very large, average specimen, under good cultivation measuring one and a half inches in diameter. Generally oblong, narrowing to the apex; irregular, often flattened, clear light red, with a smooth, shining surface, firm, sweet with a delicious aroma; vigorous, hardy and very productive when raised in hills with the runners cut off. Perhaps the best farmer's berry for home consumption known to horticulturists.

Manchester (P)—"The Manchester is one of the most desirable strawberries we have ever raised, and we have tested not less than 250 different kinds. Our plants are exceedingly vigorous and productive. We have examined them and find that each plant on an average bears sixteen flowering stems, and that each flowering stem bears on an average ten berries, giving one hundred and sixty berries to a plant. We beg to emphasize that we are speaking of average plants. On one plant we counted twenty-two flowering stems, and two hundred berries in the various stages from ripe to just set. This berry is firm, very uniform as to shape, which is roundish, conical, it ripens in every part, and averages above medium as long as it remains in fruit. The quality when ripe is good, though like the Wilson, it is sour when it first colors—a characteristic, it seems, of all excellent market berries. It ripens with the Shatpless.

On the grounds of the plain, hard-working farmer, with whom it originated, it thrives in a light, dry, sandy soil. With us it thrives in a moist soil inclining to clay. Several years ago from our own test, we spoke highly of the Sharpless, and soon after its introduction, of the Cumberland Triumph. We have never had occasion to regret this, and have now little fear that we shall regret recommending the Manchester to our readers as the best market berry at present known."

Warfield's No. 2 (P)—A seedling discovered by B. C. Warfield, of Illinois, in 1883. It fruited in 1884, and a bed containing five square feet yielded a quart every second day. The blossom is pistillate. Plant, a vigorous grower with long penetrating roots to resist drouth. It blossoms and ripens with the Crescent, and has tall leaves that protect the blossoms from spring frosts. Single plants have produced one hundred and ninety-five blossoms and berries. It equals the Wilson as a shipper, and is superior to it in every other respect. We consider this as the coming market berry.

Haverland (P)—Originated in 1882, by B. H. Haverland, of Hamilton County, Ohio, from seed of the Crescent, fertilized by the Sharpless. During the past dry season it made a better growth than any other variety. Not a spot of rust appeared on it; wonderfully productive. The originator says: "It is, perhaps, the most productive of any strawberry now cultivated. The berries are firm, uniform in shape, very large and of most excellent flavor, and bright red color. It sells more readily and brings a better price than any other strawberry. The plants are very large, healthy, vigorous and ripen their fruit evenly and early, holding on through the season."

Monmouth (H)—The earliest of all strawberries and the most vigorous. Ripens two weeks before Sharpless, never rusts or burns; large, very firm, brilliant scarlet, regular form, delicious quality, and wonderfully prolific, excelling in vigor and productiveness even Crescent; having a perfect blossom, fruit double the size, and all the merits of that popular variety magnified and none of its defects.

Jesse (H)—The best berry for either home or market ever introduced. It is faultless. The variety was originated from seed of the Sharpless by F. W. Loudon, of Janesville, Wis. The plant is large, healthy, free from rust, a vigorous grower and wonderfully productive. Blossoms, perfect, fruit very large, sometimes wedge-shaped, but never cox-combed or mis-shapen. Color, bright red all over; in quality, one of the best. "I have more faith in it than in any other now in the market."

(Bubach's No. 5 (P)—One of the very best ever introduced The commercial fruit grower will find in it a very profitable variety to raise. The plant is large, healthy, vigorous and very productive; leaves dark green and free from rust, runners strong and abundant; blossoms pistillate; fruit, very large; the first berries slightly irregular, but usually of good form. It ripens all over and is a good keeper. The quality is good.

Jewell (P)—Originated by P. M. Augur, Connecticut State Pomologist. As a profitable market berry for hill culture this is one of the best. It makes a large plant, is perfectly healthy, free from rust, and an enormous bearer, blossoms pistillate. Fruit very large, of good form, ripens all over, and is of good quality. It makes few runners. It ripened berries sixty-two consecutive days in Dayton, Ohio. "At Providence, R. I., the Jewell took the first premium for size, first for color, and first for form. At the Strawberry Show of the Massachusetts Horticultural Society, held in Boston, June 29th, a special prize was given the Jewell. At the Belmont (Mass.) Strawberry Show, held June 30th, 1887, the first premium for the first two quarts of any variety was given to the Jewell, and we understand that it was the opinion of the committee that these two quarts of Jewell, exhibited by Mr. Barnard, were the best of any berries ever exhibited at any show of the Society."

## ORNAMENTAL DEPARTMENT.

The value of ornamental trees, shrubs etc., is inestimable to those who have given the subject their attention. While most people appreciate well arranged and well kept grounds, large or small, many fail to realize that they can have equally fine grounds. These have had a few shrubs or roses growing in thick turf, with no attention given to pruning or cultivation. Under such circumstances, good results could hardly be expected. Aside from the pleasure of having fine trees, shrubs, vines and flowers on the grounds surrounding a home, few realize how much these add to the commercial value of a place. A purchaser having to decide between a house with a bare and unkept yard, and one surrounded by fine ornamental and fruit trees, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take some years of patient effort to secure. Sagacious men are led, from a knowledge of these facts to plant fine trees and shrubs about, vacant lots and others, intended to be put on the market. Lots thus planted readily secure purchasers at remunerative prices, when other grounds are waiting for buyers. There is no greater refining influence in nature than that imparted in the cultivation of the beautiful, in tree, shrub and flower. The hearts of the children are more closely bound by the sweet and pure ties of home, if that home is surrounded by trees and shrubbery and well kept flower beds. Contrast such a home where the one with the bare walls and the barren yard invite the searching rays of the sun to scorch and almost blind, and the bleak winds of winter to shriek and howl about the house, with no friendly trees to raise their arms in mute protection.

Do not make the mistake of planting at random all over your grounds. A fine, well cut lawn is one of the handsomest features of a place. Trees may be planted along a lawn or avenue leading to the house, or dotted about the house on lines radiating from it. This will secure light and air, and good views from the house. Upright shrubs and roses appear best and should be planted, each class by itself, about the borders of the grounds. These beds should be well cultivated and the plants annually pruned.

When the growth of the plants has made them very thick, some should be removed. It is not advisable to plant so little that years must elapse before

the desired effect will be produced. It is economy to plant a surplus to begin with and then to gradually thin out as may be required. Vines should be planted near to and be allowed to climb upon and about the house, or they may be trained on posts, arbors or stakes, as the fancy indicates, and placed in suitable positions on the lawn.

## DECIDUOUS ORNAMENTAL TREES.

Ornamental trees, as a rule, fare worse than fruit trees even, being usually set in grassy yards or streets. Street trees obtained from forests have, usually, poor roots, and are planted in narrow holes, in hard ground, exposed to the tramping and rubbing of stock, if, indeed, they are not made hitching-posts, and gnawed to death. Nursery grown trees are much more certain to live in transplanting. Street trees should be taken up with large, sound roots, and planted fresh and early, in holes dug in a strip, say ten feet wide, of very deeply plowed, reasonably dry ground. Then mulch and protect thoroughly from stock. During spring and early summer, especially the first year after planting, watch and dig around two or three times in the season.

Ash, (American White)—Native, well known; hardy, vigorous, upright ornamental, and exceedingly valuable.

American Black birch-Rapid, upright; shoots dark; bark fragrant and sweet.

White Birch—Very vigorous and upright, the trunk soon becoming silvery white; very striking, especially among evergreens.

Yellow Birch-Shoots grayish yellow; vigorous.

Walnut, Black—The well known and very valuable nut and timber tree. It will pay to plant it largely.

White Walnut or Butternut-Also very valuable.

Catalpa, Speciosa—(The hardy Catalpa.) This is the "new" hardy variety so highly esteemed, and being so largely planted as a timber tree; and while it is thus hardy and useful, there is no more ornamental tree grown. A specimen tree, some forty feet in height, and two feet in diameter at the base is really magnificent, with its broad heart-shaped leaves and immense clusters of tri-colored flowers, each bunch a bouquet in itself.

Cottonwood—Well known native; wonderfully rapid grower; one of our best western shade trees.

Elm, (American White)—Most notable and desirable shade tree, succeeding admirably west; native.

Horse Chestnut—Well known and highly esteemed east; not so vigorous on western soil, but does reasonably well.

Kentucky Coffee Tree-Native; hardy; very sparse coarse shoots, foliage handsome; splendid lawn tree.

**Larch**—American (Tamarack) well known, beautiful; thrives admirably here.

European Larch—Elegant, picturesque form; valuable for timber; should be planted early in the spring; does well here.

Linden, (American Basswood)—Foliage large; very vigorous and ornamental; transplants well; when in flower is most admirable for bees.

**Maple**, (Ash-leaved or Box Elder)—Beautiful and esteemed native; vigorous growth, fine form and peculiar foliage; perfectly hardy.

Norway Maple—Foreign; admired for its compact form, strong growth and large, rich foliage; most esteemed European maple,

Silver-Leaved Maple, (White or soft)—The great timber and shade maple; growth very rapid; estemed for all prairie uses. Can be furnished in large quantities and of many sizes.

Sugar Maple, (Rock)—Well known, most valuable and beautiful native maple; of slow growth, but great hardihood and permanence.

Wier's Cut-Leaved Maple—A new and handsome variety of the silver-leaved; equally hardy and vigorous, of drooping, graceful habit, and with leaves deeply and regularly cut. We consider this one of the prettiest lawn trees of recent introduction.

Mountain Ash, (American)—Fruits early and profusely; growth moderate; foliage and fruit large, branches coarser, habit more dwarf than the European.

**Mountain** Ash, (European)—Very hardy, vigorous and handsome, with superb clusters of scarlet berries; popular, succeeding admirably on the prairies.

**Mountain Ash**, (Oak-Leaved)—A variety of the preceding, with dense, beautiful head, and hardy, lobed leaves; fruits early and profusely; fine.

Poplar, (Aspen-Leaved or Trembling)—A hardy native.

Balm of Gilead—Large-leaved, vigorous; the buds medicinally valuable.

Lo \* bardy—Well known, and of very rapid, tall growth.

Salisburia, (Japan Ginko)—A rare and beautiful tree, with peculiar fan-shaped foliage; hardy here.

Willow (Gray or White)—Tall, hardy, vigorous grower; unsurpassed for wind-breaks.

Russian Willow (Laurel-Leaved)—Large shining leaves resembling the laurel; beautiful tree.

Osier-The common "basket" willow. Low growing with long, slender shoots.

## WEEPING TREES.

**Mountain** Ash (European Weeping)—Rapid grower; one of the finest for lawns.

Weeping Mountain Ash (American)—A strong grower and remarkably pendant; very striking; most hardy weeper for the North.

Birch, (European White Weeping)—One of the most beautiful of trees, very vigorous, graceful, perfectly hardy, with the purest silvery white bark, contrasting elegantly with evergreens; erect while young, drooping afterward.

Cut-Leaved Weeping Birch—Erect, stately, rapid, hardy, with long; fine pendant branches, and delicately cut leaves; the trunk very white; no tree more elegant for the lawn or yard.

Elm, Camperdown Weeping—A Scotch variety; grafted five or six feet high, it forms a very fine umbrella-like head; large shiny leaves.

Fulva Pendula—Weeping Slippery Elm—A native American variety and, all things considered, the most valuable weeper.

**Poplar Weeping**, (Grandidentata)—Growth distinct and vigorous, perfectly hardy and very desirable.

Willow, Kilmarnock Weeping—Superb variety; hardy, vigorous, with a very regular, graceful pendant habit; needs a hardier stock for the Northwest than the one in general use.

New American Weeping Willow-Slender, vigorous, hardy, very ornamental.

Weeping-Common sort; esteemed, but not always hardy.

Wisconsin Weeping Willow—Similar to the common weeping, but perfectly hardy. A very suitable tree for cemetery planting.

## EVERGREENS.

Evergreens, nursery grown, transplant as easily as any class of trees. Young trees or those of moderate or small size are the most certain and profitable to remove. Deep digging, thorough culture and mulching, are very useful, especially in dry seasons. Early spring planting we have found the best, but they can safely be removed in wet seasons quite late, or until the new shoots are started. If soil inclines to be dry in planting, tramp or pound down the earth very firmly (but carefully) on roots. The importance of this can scarcely be overstated.

In transplanting the roots should never be exposed to the sun and air a single minute unnecessarily. "Heel in" your trees, i. e., bury roots and tramp thoroughly the dirt on them as soon as unpacked. Evergreens are most superb for screens or wind-breaks around buildings, orchards and stock corrals. Norway Spruce, White and Scotch Pine, Red Cedar and Arbor Vitæ, are all admirable for that purpose. The last two for low screens should be planted eighteen inches apart, and clipped twice each year while young, in June and August. For high screens plant two or more rows, ten or twelve feet apart, so as to "break joints." Evergreens should be suffered to branch out near the ground.

Arbor Vitee, American—(White Cedar, incorrectly)—Fine form; lightish green, flat foliage; vigorous, exceedingly useful timber tree and desirable for screens.

**Pyramidal Arbor Vitee**—Very upright, same habit as Irish juniper; growth very dense, with rich, dark, luxuriant foliage; to our fancy far surpassing any of the juniper family, while its superior hardiness entitles it to a place in every yard or lawn.

Siberian Arbor Vitæ-Of slow, compact, perfectly hardy growth and beautiful form. Most esteemed ornamental variety.

Tom Thumb—New dwarf; beautiful rounded form, with slender shoots; hardy.

Balsam, Silver Fir—The most popular American evergreen; form pyramidal; foliage, dark, rich green above, silvery beneath; hardy.

Cedar Red—Well known, valuable, very vigorous; fair for screens and bears clipping into almost any shape.

Juniper, Irish—The most esteemed variety; growth vigorous, very upright and compact; of excellent color and quite hardy.

Prostrate or Trailing Juniper—Low, creeping, vigorous and pretty. Juniper Savin—Low, with dense, rich, dark green foliage; unequaled for low screens or hedges. Perfectly hardy. This transplants readily and bears shearing to better advantage than any evergreen; for borders to driveways, or division lines between fine residence property, it is unsurpassed.

Swedish Juniper—Very handsome, upright, hardy, with beautiful light green foliage; contrasts finely with the Irish.

**Norway**—A fine, hardy, robust American variety, with long, yellowish green pliable leaves; vigorous, regular growth, like the Austrian pine, but attains much greater size. The wood is harder than white pine.

Scotch Pine—Immense grower and very popular; of beautiful form and color; leaves short, bright green, a most superb tree. The king for shelter belts on the prairies.

White Pine—Noblest American sort; very vigorous here, excellent to transplant, and of fine form and color; in breadth and massiveness only equaled by the Norway spruce.

Spruce, White, American or Silver—A well known native; growth moderate, regular, beautiful; considerably like the Norway spruce and popular. Does not sunburn.

Norway Spruce—Highly esteemed, hardy evergreen; of vigorous and regular growth; foliage bright green, dense; superb for screens.

Hemlock or Weeping—A very beautiful tree—no foreign sort equal to it; thrives well here and is exceedingly ornamental. As a wind-break on our wind-swept prairies, this tree is unsurpassed.

Yucca Filamentosa—To our minds this always suggests a miniature Century Plant, and we know of no shrub that it so nearly resembles. With its stout, lance-shaped foliage, and stems rising some four or five feet, forming a pyramid of branching panicles of large, drooping, cream white flowers, it certainly presents a grand appearance and is truly handsome. Fine for cemetery decoration.

## DECIDUOUS ORNAMENTAL SHRUBS.

**Almond**—Dwarf double flowering. Flowers like small roses, very double, early, profuse; deep blush fading to lighter; very popular and perfectly hardy.

Flowering Almond, New Double White—New; robust, hardy, flowers equally as profusely as above, but pure white; exceedingly beautiful.

Rose of Sharon—Esteemed for summer and autumn flowers, and usually hardy here. We have a select assortment of the best named varieties, double and single.

**Berberry** (Common)—Very hardy; growth dense; has nice little flowers and becomes most profusely covered with tart red berries all winter; fine for pies and sauce.

Purple Berberry—Leaves, flowers, and berries purple; one of the very best hardy shrubs; makes a beautiful clump.

Calycanthus (Sweet-scented shrub, Carolina Spice.)—Wood and flowers deliciously fragrant, hardy.

Chionanthus or White Fringe—Fine, hardy shrub, with large foliage and profuse white, fringe-like flowers in May or June; very desirable.

Chlethra Alnifolia—Medium, slender growth; white, late, fragrant flowers; a hardy American shrub; very desirable.

Elder, Variegated Leaved—A handsome plant of strong growth, with beautiful variegated foliage.

Cut-Leaved Elder-A single variety, with very finely cut leaves.

Cut-Leaved Sumac—A sport of the staghorn sumac of dwarf habit, with elegant cut-leaf foliage, which is very noticeable from the rich coloring.

Honeysuckle—An upright, desirable shrub of fine form; of vigorous growth, perfectly hardy, with profuse flowers, followed by different colored berries; five varieties.

Hydrangea, Paniculata Grandiflora—This superb variety was introduced from Japan, and is the most striking and elegant of all the species. The flowers are pure white, changing to pink, and are borne in immense trusses from ten to twelve inches long, and nearly the same in diameter; continues in bloom from July until frost. It is entirely hardy, which is more than can be said of most of the other varieties.

*Litae*. (Common Purple, White, Chinese or Siberian)—Immense clusters of bloom; very fragrant.

*Lilac Chionanthus*—( Josikea, Double-Flowered)—Distinct with large, shining leaves and late flowers.

Purple Fringe (Mist or Smoke Tree)—Nearly covered with singular, beautiful purple, fringe-like flowers in July; hardy and very ornamental.

**Snowball** (Viburnum Opulus)—A magnificent old favorite tall growing shrub, with very showy, pure white flowers, produced in large balls. No lawn or yard complete without it.

Spireas (Billardi.)—Rose colored, in long succession.

Spireas Fortunii, or Callosa—Large bunches of rosy flowers. Blooms nearly all summer; fine.

Spirea Prunifolia—Double-flowering, plum-leaved; beautiful; foliage neat, shining; flowers profuse like white daisies; from Japan; May.

Spirea Reevesii-Lance-leaved; snowy white.

Spirea Reevesii Flora Pleno-Fine, double, white.

Spirea Salicifolia-Willow-leaved; flowers white, profuse; June.

Syringa (Mock Orange)—The Syringa is a strong growing shrub, with very fragrant white flowers; hardy and popular.

Coronarius or Common-Produces white very sweet scented flowers in profusion; very pretty.

Strawberry Tree (Euonymous or Burning Bush) - American Wahoo-Foliage handsome, fine crimson fruit in autum; perfectly hardy and in every way exceedingly ornamental.

Wiegelia-Rosea-Rose colored; from China; hardy, and bears the most profuse, light, rosy trumpet flowers in May; in every way the most superb shrub of its season.

## VINES AND CREEPERS.

Aristolochia (Dutchman's Pipe)—A vigorous climber, with large, broad leaves, and peculiar light brown flowers resembling a pipe.

Ampelopsis—Quinquefolia (Virginia Creeper; American Ivy)—Native; one of the most vigorous and hardy climbers; foliage becomes rich crimson in autumn; very desirable for walls, etc.

Celastrus (Bitter Sweet) - Native, vigorous, with yellow flowers and orange colored berries; hardy.

#### HONEYSUCKLES.

These are among the most esteemed climbers grown, and worthily so. Nearly all, but especially the last two varieties named, are perfectly hardy.

Monthly Fragrant-Blooms all summer; delightfully fragrant, buff and pink.

Scarlet Trumpet—Coral flowers; very vigorous and hardy, blooming all summer.

Yellow Trumpet-Equally desirable, differing only in color.

Wistaria—American; one of the finest climbers; of rapid growth and perfectly hardy, with long, pendulous clusters of bluish purple flowers in June.

#### CLEMATIS.

This class of climbing plants has become very popular within the last few years, and great attention is now given to their cultivation. A large number of beautiful varieties have been obtained, bearing large, showy flowers. The colors are grand. The following varieties are all hardy and mostly perpetual bloomers. The Clematis can be grown in any fair, good garden soil, and effectively trained on walls, trellises or verandas, or as specimens on the lawn, or massed in large beds. They are hardy and of permanent value.

Coccinea—Bright scarlet has been a color hitherto unknown in Clematis, but in this sort we have that color which, when placed in contrast with the blue, purple, and white kinds, has a most striking effect. It is equally hardy as the other well known sorts, and has most attractive foliage and seed-pods, as well as lovely flowers.

Clematis Flammula—Well known. Its small, light green foliage is mostly hidden by large clusters of white fragrant flowers.

Jackmanni—Deep, violet, purple; flowers produced in masses; one of the best, especially for bedding; of vigorous growth and really superb.

Virgin's Bower-Common white flowering.

Vitacella—An old and well known variety; flowers medium size, deep purplish blue, and produced very profusely.

## ROSES.

Roses are the most beautiful of flowers, and they are among the easiest to raise in perfection. They require plenty of manure and good cultivation. Old and decayed branches and at least half the previous season's growth should be cut away early each spring, and a little cutting back after the first blooming will insure more late flowers. In order to get the best results from roses in our northern climate, they must be carefully protected during winter. After the severe frosts of fall, when growth is fully checked, bend the branches to the ground, and cover with several inches of earth and sods. For more tender varieties put coarse litter on top of sods. In the spring, do not uncover until the severe frosts are over.

Insects-If the "thrip" or fly appears, syringe the plants daily with a strong steeped solution of tobacco stems (one pound of stems to five gallons of water), or a solution of whale oil soap (one pound of soap to eight gallons of water), until the insects are mastered. Rose bugs which work at the flowers must be picked off. The presence of the rose caterpillar can be detected by its glueing two or more leaves together, to form a shelter. These leaves should be promptly pressed together with the thumb and finger. Insects which eat the leaves can be destroyed by applying white hellebore when the foliage is damp. The secret of success in destroying all species of insects lies in applying the appropriate remedy as soon as the insects appear.

#### JUNE ROSES.

Harrison Yellow-Small, bright yellow, robust and hardy. Madame Plantier-Profusely blooming in clusters; very hardy, and a favorite rose for cemetery planting.

Persian Yellow-Double, deep yellow; very pretty and early.

#### JUNE MOSSES.

Blush Moss-Beautifully cupped, very mossy; free. Countess of Murinais-Pure white, large and fine; one of the best. Glory of Mosses-Pale rose, very large, and flat in form; robust. Princess Adelaide-Pale blush rose, medium size, fine; very strong

grower.

#### CLIMBING ROSES.

These are admirably adapted for covering walls, trellises, old trees, unsightly buildings, etc. Among them the Prairie Rose takes the first rank. Their rapid growth, perfect hardiness, luxuriant foliage, late blooming and immense clusters of beautiful flowers, commend them to everyone who wants a splendid climbing rose.

Baltimore Belle-Blush, becoming white; flowers in immense clusters, and the buds are of fine form; a splendid climber, fairly covered with flowers in early summer.

Gem of the Prairie-Rosy, in clusters; hardy; the only fragrant climbing rose.

Queen of the Prairie-Rosy, in clusters, hardy; very popular and good.

#### PERPETUAL ROSES.

Belle of Normandy-Lavender blush; large.

General Jacqueminot—Rich, velvety scarlet, changing to purplish; in clusters; superb, a fine grower, and one of the best roses grown.

General Washington—Brilliant, rosy crimson, double; one of the finest.

Jules Margottin—Rosy pink; large and full, flat, and very thin.

La France—Beautiful pale peach with rose center, very large and full; very free blooming and constant; is classed sometimes with tea roses; very sweet and probably the finest rose grown.

La Reine-Very large, high rose, double fragrant.

Mad. Charles Wood-Vivid crimson, shaded purple; a constant bloomer and one of the best of the class.

## TREE OR STANDARD ROSES.

The magnificence of this queenly flower, the rose, entitles it to a more honorable position than the form in which it naturally blooms, the shrub or bush, and the aim of professionals for years has been to elevate it to the dignity of the tree form.

In the mild, humid climate of France this has been done to perfection, but unfortunately, the French tree roses, that have been very largely imported, have proven to be worthless in this severe climate, owing to the fact that the stems on which they are budded are too large and stiff to be bent to the earth to receive the winter protection that the tender tops demand. We have obviated this difficulty perfectly by budding into the wild dog rose, using stems ½ to %-inch diameter; these are pliable, and can be readily laid down for winter protection, they are abundant bloomers of various colors, crimson, pink, and white, many of them blooming throughout the summer and fall, and no plant or shrub that we have ever handled has given such general satisfaction as the Tree Rose.

## HARDY FLOWERING PLANTS.

Herbaceous Paeonies—Double Crimson—Well known; rather early; full double, brilliant, indispensable.

Fragrans or Rose Scented—Tall, late, free, in small clusters; large, full, double, center projecting; deep rose color, exquisitely fragrant.

Whitleii-Magnificent, large; white with yellow center, in clusters.

**Phlox**—Choice herbaceous perennials, of the easiest culture; perfectly hardy, nearly ever-blooming, and offered at such low rates that no garden should be without them; crimson.

Dahlias—The most popular summer and autumn flowers. The Dahlia is impatient of shade or drouth, and likes rich, deep, moist soil. When planting drive a neat stake firmly in the ground close to the root. As the stems grow they should be carefully tied with bass bark or soft twine. After the plants are once started, a heavy mulching of manure and in hot, dry weather an occasional soaking with water, is very beneficial. In fall cut off tops and cover the roots with dry sand, and place in cool cellar.

Gladiolus—The Gladiolus is the most beautiful of the summer or tender bulbs, with tall spikes of flowers, some two feet or more in height, often several from the same bulb. The flowers are of almost every desirable color, brilliant scarlet, crimson, creamy white, striped, blotched and spotted in the most curious manner. Set the bulbs from six to nine inches apart and about four inches deep. Plant from middle of April until first of June. In the fall, before hard frosts, take up the bulbs, remove the tops, leave to dry in the air for a few days, and store in some cool place, secure from frost, until spring. The Gladiolus is becoming exceedingly popular everywhere, and while no flower has shown such wonderful improvement in the twenty past years, none has shown such a rapid advance in public favor.

## HARDY HERBACEOUS FLOWERING PLANTS.

Astilbe Japonica—Beautiful feathery, white flowers in spikes, produced in May. One of the finest flowering plants, and much "forced" for its graceful plumy flowers in winter.

Campanula (Bell Flower)-Various sorts, mostly white or blue.

Beautiful and meritorious plants.

Convallaria Majalis (Lilly of the Valley)—Perfectly hardy bulbous plants, producing small, exquisitely neat, fragrant white bells; among the earliest and most admired flowers. Foliage large; six inches; May.

**Delphinium** (Larkspur)—Various sorts, mostly blue or purple; very beautiful and showy flowers. Three feet.

**Dianthus** (Sweet William)—Grass Pinks; popular old favorites with bright flowers of the most spicy fragrance.

Dielytra or Dicentra Spectabilis (Bleeding Heart)—Very curious and beautiful; immensely hardy and continues long in bloom; foliage neat; flowers pendant form arcs or sprays, fine crimson, with white, gem-like stamens protruding; admirable for forcing and one of the finest hardy plants; two feet; May and June.

Pyrethrum-Feverfew-Double, white, very pretty and useful.

## FOREST TREES FOR TIMBER CLAIMS.

A large and growing demand for stock for timber claims exists on the frontier. We are prepared to meet this in a satisfactory manner. Of the trees within reach, the department accept Cottonwood, white or gray Willow, Ash, Box Elder, Soft Maple, Hard Maple, Walnut, Butternut, Pines, Spruce and Balsam. Can furnish Cottonwood and White Willow cuttings also. The timber culture law requires five acres of land to be broken within one year from date of filing. Within the second year from filing, this five acres must be cultivated and a second five acres broken. Within the third year from filing the first five acres must be planted to trees, seeds or cuttings, at the rate of 2,700 trees on each acre, and the second five acres cultivated. Within the fourth year from filing the entire ten acres must be planted to trees, seeds or cuttings, making a total of 27,000 trees on the entire ten acres, and the fifth, sixth, seventh and eighth years the ten acres must be cultivated, at the end of which

time a patent will be issued if claimant can show six hundred and seventy-five living and thrifty trees on each acre, 6,750 in all.

In case through any effect of climate the trees, seeds, or cuttings fail to grow, claimant is permitted to replant the following year, it being desirable that he make an affidavit, in proper form, setting forth that he planted said trees, seeds or cuttings in accordance with law, and that failure did ensue through the effects of climate, and that he place this affidavit on file in the land office in which he made his original filing. This is not required by law, but is a wise precaution, and might prevent a contest for the claim for reason of noncompliance with the law. Great care should be exercised in planting, as this is one of the most important parts of the entire job. After removing the crop in the fall previous to planting, plow the land deep, harrow down thoroughly, and the law contemplates trees being planted four feet apart in rows four feet from each other. On some accounts it is preferable to plant the rows eight feet apart, and the trees or cuttings two feet apart in the rows, the effect being the same, i. e., putting the same number of trees upon the land.

By planting in rows eight feet apart, you have the use of half the land for crops, and the claim will receive better attention if the land is producing a crop. The best crop to plant is a low growing variety of corn. This will give the trees cultivation best adapted to their wants, and the standing stubble will collect and hold in winter the snow-nature's own protection. Again, in thinning the trees out to eight feet apart each way to secure the number demanded by law, some judgment can be used in making selection of the most thrifty and promising to be left standing. Seedlings or cuttings should be planted in the spring, when land is in good condition for corn planting. Set with a spade or dibble, setting firmly into the earth and packing carefully. The seedling should be set a little deeper than it stood in the ground before. The cutting should have one bud left out of the ground, then cultivate thoroughly as you would corn. Follow this up until the middle of July each year, and you will have a grove that will be worth a hundred times its cost and a farm that is equivalent to a fortune, to the possessor. A strip of land, at least ten rods wide, well cultivated and kept free from grass and weeds, should surround your grove to protect from prairie fires.



#### THE

# Jewell Nursery Co.

LAKE CITY, MINN.

To Whom it may Concern:

The undersigned cheerfully recommend The Jewell Nursery Company, of Lake City, Minnesota, to all parties desiring to plant nursery stock that is hardy and well adapted to cultivation in the great Northwest.

They are the most extensive growers of trees in the northwest; their orchards supplied the fruit that gave Minnesota the first premium at Richmond, Va., and at the New Orleans Exposition in 1884, and their exhibits have always been to the front, wherever shown.

We believe the managers to be good business men, giving careful attention to the various details of their business, and that any contracts made by them will be faithfully performed.

SAM'L DOUGHTY, President Lake City Bank, Lake City, Minn.

C. A. HUBBARD, Cashier

J. A. LEONARD, Editor Republican, Lake City, Minn.

H. McNEIL, Editor Graphic Sentinel, Lake City, Minn.

#### REFERENCES BY PERMISSION.

W. R. MERRIAM, Governor of Minnesota, St. Paul, Minn.

A. R. McGILL, Ex-Governor, Minneapolis Minn.

J. S. PILLSBURY, Ex-Governor, Minneapolis, Minn.

W. J. HAHN, Ex-Attorney General, Minneapolis, Minn.

H. P. UPHAM, President First National Bank, St. Paul, Minn.

Prof. S. B. GREEN, Secretary Minnesota State Horticultural Society, St. Anthony Park, Minnesota.

WYMAN ELLIOTT, President Minnesota State Horticultural Society, Minneapolis, Minn.

