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DESCRIPTIVE LIST
OF
HARDY NATIVE GRAPE VINES,

CULTIVATED AND FOR SALE BY

GEORGE W. CAMPBELL,
DELAWARE, OHIO.

RESIDENCE & GREENHOUSES OF
G.W. CAMPBELL, DELAWARE, O.

COLUMBUS, O:
GLENN & HEIDE, PRINTERS.
1865.

✓ THE DELAWARE GRAPE.

This variety, which was first disseminated from this place, Delaware, Ohio, still maintains its high position, as the very best, hardy, native grape in America. It is almost universally placed at the head of the list by the Pomological and Horticultural Societies, and by the most experienced and intelligent vineyardists in the country.

Where the Delaware grape is known, all recommendation, or description is unnecessary, but for the benefit of those who have not yet made its acquaintance, a brief description will be given; and a few recommendations added, from the highest and most reliable sources.

To produce the best results, the Delaware requires good cultivation and rich soil; its growth is then compact, vigorous and healthy, and its productiveness probably unequaled. It has been found perfectly hardy, enduring 27 degrees below zero uninjured. It is also early; ripening here usually by the first of September; and in favorable seasons earlier—fully three weeks before the Isabella. In the quality and flavor of its fruit, it may be safely pronounced superior to any other native grape yet introduced. In bunch and berry it is, under good cultivation, of full medium size, the clusters usually shouldered, compact and heavy; skin very thin, but tenacious; pulp tender and melting; juice abundant, rich, vinous, sugary, sprightly and refreshing in a degree indescribable; color a beautiful, light purplish maroon, or wine color when fully ripe, and the berries covered with a delicate whitish bloom. Whoever eats well grown Delaware grapes for the first time, experiences a new and most delightful sensation.

The following testimony selected from an immense mass of similar character, will indicate the reputation of the Delaware, where it is best known:

The Cincinnati Horticultural Society appointed a committee of its most intelligent and successful vinegrowers to make a report upon grapes, who submitted the following, in reference to the Delaware:

"We have been watching the Delaware grape for three or four years very closely, and found that the vines stand the winter freezing and spring frosts better than the Catawba, equally exposed and unprotected. No rot or mildew has yet been discovered, and no falling of the leaves until the fruit is fully ripe, and it ripens fully three weeks earlier than the Catawba. We have eight reasons why we place the Delaware at the head of the hardy grapes:

"1st. Superior quality for table use;

"2d. It produces finer and richer wine;

- "3d. The vines stand the winter freezing better than the Catawba;
- "4th. They stand the spring frosts better;
- "5th. They are not damaged by mildew;
- "6th. The grapes never rot;
- "7th. No falling of the leaves until the grapes are ripe;
- "8th. The certainty of their growing, and the general hardiness and healthiness of the vine.

"The Chairman of this Committee has already planted twelve hundred Delawares with such success that he is now preparing the ground for twelve hundred more next spring.

DR. S. MOSHER,	}	Committee.
R. BUCHANAN,		
JOHN E. MOTTIER, <i>Chairman</i> ,		

Dr. John A. Warder, President of the Ohio Pomological Society, and one of the most intelligent pomologists in the country, thus speaks of the Delaware:

"No new grape has ever had such a success in making friends by its sterling merits. As to the quality of the wine, I need only refer to the admirable test at the National Fair, which is a sample of all our trials. No member of the committee knew the names of the wines, and all voted the Delaware the best, even *above* the standard assumed as *best*. The same result attended all previous trials, our scale of one hundred degrees not being sufficient to measure the unexampled excellence of the Delaware wine. In this the committees have always been unanimous."

Mr. Thomas S. Kennedy, a very intelligent amateur horticulturist of Louisville, Ky., and President of the Kentucky Horticultural Society, thus writes me his views of the Delaware grape:

"The experience of another season has enabled me to become acquainted, *better and better*, with the sterling qualities of the Delaware, and to compare the vigorous growth of the vine and the delicious quality of the fruit with these qualities in numerous other kinds of high repute, which I am cultivating. I can conscientiously add my testimony to that of those persons who regard the Delaware, so far as now known, or tested, as in all respects the best and most desirable hardy grape grown in the country."

Recommendations from the highest sources might be multiplied to any extent, but it is not deemed necessary.

I regret to feel obliged to add a word of warning to purchasers of Delaware vines, for I am constantly receiving letters from those who have been victimized by unscrupulous and unprincipled dealers; and who, after having paid enormous prices for plants labeled as Delawares, have found them upon bearing to be either of the more common sorts, or of wild and utterly worthless character. The *true* Delaware grape was first sent out, and takes its name, from this place, Delaware, Ohio; and all *genuine* vines either come from here, or from plants propagated from them. It is really astonishing to know the quantities of common, or worthless sorts that have been grown and sold in all parts of the country for Delawares. I mention this to show the importance of purchasing only from parties of known reliability, and who have the Delaware in bearing.

I would also urge upon those intending to plant, the importance of or-

dering their vines early; for the demand has heretofore exceeded the supply, and I have been obliged every year to disappoint many whose orders came too late.

✓ ALLEN'S NEW WHITE HYBRID.

This remarkable new white grape was produced by J. F. Allen, of Salem, Massachusetts, by crossing the Golden Chasselas upon the Isabella, and is a seedling of the latter. It is a grape of great beauty, and of high vinous flavor, partaking more of the character of the Chasselas than the native. The vine is of vigorous, healthy growth, and gives great promise of excellence. Young vines bear sparingly; but increased age gives fruitfulness, and large, handsome bunches. It is hardier than the Isabella, and ripens considerably earlier. One of the finest white grapes yet introduced, and worthy a place in every collection.

✓ ANNA.

A white grape somewhat of the character of the Catawba and Diana, but said to be earlier. Will probably succeed wherever the Catawba and Isabella are successfully cultivated. With me, the Anna has not proven of remarkable excellence, though it is very highly commended by some eastern cultivators. The vine is hardy, but of slow, dwarfish growth; bunch and berry rather small, usually loose. It has considerable toughness of pulp, but is surrounded with a pleasant-flavored, sprightly juice next the skin. Somewhat liable to rot in unfavorable seasons.

✓ ADIRONDAC.

This new variety is claimed by its introducers to be "the best and earliest native grape." The vine is a fair grower, with foliage resembling the Isabella; but seems to lack hardiness, and will probably require protection in severe winters. Two years ago, this variety suffered by winter-killing, even where protected. The past winter, which was comparatively mild, it endured, with slight protection, uninjured. It has not yet fruited at Delaware, but fruit which I have seen on exhibition, impressed me very favorably. The following description by Mr. Fuller, who visited the original vine, gives a fair idea of the Adirondac:

"Bunch large and compact, shouldered; berries large and round, skin thin, dark, nearly black, covered with a delicate bloom; flesh tender, with scarcely any pulp, melting sweet, but not rich."

I regret to say the plants of this variety sent me by the original proprietors, have been of the most disreputable character, though sold at extravagant prices. Some of those which I sent out last season were from these plants; but I have now a fair stock of my own growing, which will be found of very superior quality.

✓ **ALVEY.**

A vigorous, healthy growing vine, with fruit of the character of Lenoir and Lincoln, but rather larger berries, and ripens earlier than either. It is highly recommended as an abundant bearer, of the finest quality, "equal to Delaware;" which last statement is *doubtful*. It is, in its foliage, intermediate between the Lincoln and the Pauline, and one of the most desirable of this class of grapes.

✓ **BALDWIN LENOIR.**

A grape but little known—said to be a seedling of the Lenoir. Reported the richest in grape sugar of 24 varieties tested by the Chief Chemist of the Agricultural Department at Washington. In foliage, and habit of growth it is much like Alvey and Lincoln.

✓ **BLACK KING.**

A strong growing, hardy and productive vine. Ripens its fruit early, which is sweet, but foxy. Bunches and berries of medium size. Desirable only for northern latitudes.

✓ **CLINTON.**

A good, hardy grape, a strong grower and productive. Bunches medium size, shouldered, long and narrow; somewhat irregular, but compact. Berries round, rather below medium; black, covered with a thin bloom; juicy, with a brisk, vinous flavor; eatable earlier than the Isabella, but is rather acid till touched by frost, when it becomes sweet and very good. If left to hang upon the vines till perfectly ripened, makes a wine of high, handsome color and fine flavor. This variety is *colored* long before it is *ripe*.

✓ **CONCORD.**

This variety has been before the public for some years, and although it is not a *very* good grape, has so many good qualities, that it has become very popular, and is really worthy of extensive cultivation, especially by those who cannot give the best attention to their vines, and who care more for *quantity* than superior quality of fruit. The vine is healthy, hardy, vigorous and productive. The fruit black, large in bunch and berry, handsome and good; ripens early, and hangs well on the vine. Makes a fair, but not first rate wine. It is much better in the Southern and Middle States, than in Massachusetts, where it originated, and seems to be growing in public estimation, especially at the South and West. The Indiana State Horticultural Society recommended it as *the one* grape for general cultivation. In Missouri it is also placed among the best for wine, and table use. It is found in most localities much more profitable than the Catawba by reason of earlier ripening, greater hardiness and productiveness, with almost entire exemption from mildew and rot.

✓ CREVELING.

This variety is also known as the Catawissa, or Bloom, and is one of the very best grapes of its class. So far as I have observed, it has received almost universal commendation, as being hardy, very early and productive; handsome in bunch and berry, and of quality superior to the Concord, Logan, Isabella, or any black grape of its family. Extensively grown in some parts of Pennsylvania, and regarded as very valuable for earliness and great productiveness. It produces also a fine red wine.

✓ CUYAHOGA.

A new white or light green grape, originated near Cleveland; supposed to be a seedling from the Isabella; a grape of good size, handsome bunches and fine quality; in foliage and habit of growth, very strong and vigorous; as far as tested, hardy and productive. Young vines are sometimes disposed to mildew, which checks their growth. Older vines are nearly free from it. In habit of growth and foliage, the Cuyahoga is much like the Isabella; but in the quality of its fruit, is much superior, being very delicate in flavor, thin-skinned, and nearly free from pulp. It requires as long a season as the Catawba to ripen; but when perfectly matured, is a very fine variety.

✓ CASSADY,

Is a medium sized, greenish white grape, with a salmon tint on the sunny side, and covered with white bloom. Juicy, with but little pulp; flavor pleasant, and quality good. Vine vigorous, hardy and productive.

✓ CLARA.

A seedling, originated in Philadelphia, is thus described by Dr. Brinckle, in the Horticulturist:

"Bunch and berry medium; round, green, faintly tinged with salmon where exposed to the sun; flesh tender, juicy; flavor rich, sweet and delicious; quality, best; period of maturity, September."

✓ DIANA.

A very fine grape, when well ripened. A strong, healthy-growing vine; but gives its best results on warm, dry, and rather thin soils. On rich ground it produces a great growth of wood, with little fruit; and is also rather tender in winter. Well grown, on favorable soils, it bears abundantly; has fine, large, compact bunches, and is highly esteemed both as a table and wine grape.

✓ ELSINBURG.

A desirable grape for the garden, somewhat resembling the Lenoir, with large, long bunches; berries rather small, black, skin thin, without pulp and of rich, sweet, vinous flavor.

✓ GOLDEN CLINTON.

A new grape from Rochester, N. Y.; an accidental seedling; from its foliage and habit of growth, supposed to be a seedling of the Clinton, but the fruit is of a light green or yellowish hue. John Phin, Esq., of Rochester, in his work on "Open Air Grape Culture," says of this variety, which was formerly known by the name of "King," or "White King," on page 255: "It appears to be as hardy as the Clinton, and as the flavor is much superior, it cannot fail to be a valuable acquisition."

✓ GARIGUES.

A vigorous grower, resembles Isabella, is hardy and productive; bunches large, rather loose, shouldered. Berries large, oval, covered with bloom. Slightly pulpy, but sweet and rich; ripens about ten days before Isabella.

✓ HARTFORD PROLIFIC,

Is a grape originated in Connecticut. Is of good quality, quite early, hardy, and very productive. Considered especially valuable for northern localities, where Isabella and Catawba do not ripen well. A valuable early market grape.

✓ HERBEMONT, OR WARREN,

Is a Southern grape, of fine quality, with large bunches, but small berries. It is of very vigorous growth, and productive. The fruit is black or blue-black, abounds in rich, refreshing juice, and its berries are characterized by Mr. Downing as "bags of wine." It is late in ripening, and tender for northern localities, requiring a southern exposure, and protection in winter.

✓ IONA.

A new seedling, originated by Dr. Grant. So far as can be judged from three years personal experience, and the testimony of others who have further tested it, the Iona must be regarded as a grape of great promise. Thus far, the vines have been very healthy and vigorous—those in bearing the present season, especially so; and though the season is not favorable, the fruit of the Iona is perfectly free from rot or mildew, while Catawbas in the same garden are nearly destroyed. The following description, from "Fuller's Grape Culturist," is quite correct:

"Bunches large, shouldered, compact; berries large, round, semi-transparent when they begin to ripen, but growing opaque as the color deepens. Skin thin, pale red, with small, deep red veins at first, changing to dark red when fully ripe. Flesh tender, with very little pulp at the center; sweet, brisk flavor, excellent, but not quite equal to Delaware. Ripens from 10th to 20th of September."

✓ ISRAELLA.

Another new seedling raised by Dr. Grant, and claimed by him to be "the earliest black grape of large size and excellent quality that is hardy," and to ripen one week before the Iona. It is a very vigorous growing vine, but I cannot fruit it before next year. I have had opportunities of eating the fruit the past season, and found it equal to the following description, also taken from "Fuller's Grape Culturist:"

"Bunches medium to large, shouldered, compact; berries large, slightly oval; skin thin, black; flesh tender to the center, sweet and rich. Ripens the 1st of September."

✓ LYDIA.

A new seedling grape, found on Kelly's Island; also, one of the new white, or light green grapes, of superior quality and flavor. The bunches are medium to large; berries large, oval, with salmon tint where exposed to the sun, sweet and good in flavor. A desirable and promising variety. Ripens early—a few days later than the Delaware.

✓ LOUISA.

A seedling from the Isabella, raised by Samuel Miller, of Pennsylvania; is said to be a better grape than the Isabella, and ten days earlier; by some, considered an acquisition. Vine strong, vigorous and healthy.

✓ LENOIR,

Is almost identical with the Herbemont, except that the vine is hardier, bunches smaller, and the fruit ripens about two weeks earlier. The quality and flavor of the fruit is much the same, but more sugary, rendering the Lenoir the most valuable grape for the north.

✓ LINCOLN.

This variety was, for a long time, confounded with the Herbemont and Lenoir, and though much like the latter variety in its rich, spicy, vinous flavor, is quite distinct in foliage. It is said to be rather hardier, more productive, and a little earlier than the Lenoir.

✓ LOGAN,

Is a variety having some claims to public favor. It is a grape resembling the Isabella, both in bunch and berry. It is, however, distinct in foliage and flavor from that variety, and is also of greater hardiness, and much earlier, ripening at the same time with the Delaware. Reports as to the Logan from different localities are somewhat variable. While some regard it very highly, others have found it less desirable than they anticipated.

✓ MAXATAWNEY.

A white grape which originated in Pennsylvania, where it is very highly commended. The Pennsylvania Horticultural Society reported upon specimens exhibited before them, that they were unequalled in flavor by any other American variety. It is described as a most vigorous grower, hardy, bunch large, berry size of Isabella, white and very beautiful in appearance.

✓ MOTTLED. (CARPENTER'S.)

✓ A promising seedling, which originated on Kelly's Island. A seedling of the Catawba, earlier in ripening, and less disposed to mildew and rot than its parent. A table grape of fair quality; bunches and berries medium size, compact; color like the Catawba, but mottled with darker shades; flavor brisk and sprightly; in texture always pulpy and rather astringent at the centre. Mr. Carpenter has exhibited some wine of superior character from this variety, and it is thought to be especially valuable as a wine grape.

✓ NORTON'S VIRGINIA SEEDLING.

A grape of much vigor of growth, hardy and productive. Bunches long and large; berries small, black. Has acquired considerable reputation South and West as a wine grape.

✓ OPORTO.

A strong growing vine of the Clinton family. Said to make a fine wine resembling Port. Of no value as a table grape.

✓ PAULINE.

A Southern grape, of the same family as the Lincoln and Alvey. Not fully tested at the North. A strong, healthy grower, and as hardy as the Herbemont. Said to be superior for both wine and table, and to ripen earlier than Herbemont.

✓ REBECCA,

Is a white grape of fine quality and great beauty. The tendency of the vine to mildew, while young, is an objection; but with increased age and vigor of growth, I have found this tendency greatly to decrease. It ripens early; only a few days later than the Delaware; is moderately productive, and though probably not well suited to extensive vineyard culture, is worthy a place in every garden or general collection. Requires protection from severe cold in winter.

✓ ROGERS' NEW HYBRIDS.

These extraordinary grapes were originated by Mr. E. S. Rogers, of Salem, Massachusetts, by hybridizing the wild Mammoth grape of New Eng-

land with the foreign Black Hamburg and Golden Chasselas. The product has been some seedlings of great vigor and luxuriance of growth, productive, hardy, and of great beauty and excellence. Hon. Marshall P. Wilder, of Boston, formerly President of the Massachusetts Horticultural and United States Pomological Societies, wrote to Mr. Rogers, upon the receipt of some of these grapes, as follows :

"I have never doubted that the proper hybridization of our native with the foreign grapes would be productive of great improvement; but considering the care requisite in the judicious crossing of the varieties, I have been apprehensive that not much would be realized at present from that source. I am, however, no longer incredulous; you have accomplished the work; you have achieved a conquest over nature, and your efforts will constitute a new era in American grape culture. The size, flavor and beauty of several of the sorts will render them decided acquisitions to our list of hardy grapes.

"I was especially pleased with the delicate aroma of these, retaining no longer the strong, foxy taste of the mother, but the rich, chastened flavor of the Diana. *Some of them, I think, will prove superior to that excellent sort.*"

I have fruited several of these Hybrids the past three years, and as my own opinion of them is often asked, will state my impressions, so far as my experience goes. In quality, they compare favorably with the Catawba, Isabella, Concord, Diana, and all grapes of that class, and some of them are equal or superior to the varieties named. None of them are equal in flavor to the Delaware or Iona. As to vigor and healthiness of growth, size of the fruit, and beauty of appearance, they exceed any native grapes I have ever seen; and in these respects they fairly rival the celebrated Black Hamburg. From those who have purchased and fruited these varieties, I have had expressions only of satisfaction and pleasure.

The following are sent to me by Mr. Rogers, as the best selection of his Hybrids :

- ✓ No. 1. A handsome, large grape, sweet, rich flavor; yellowish white, with a red flush on the sunny side. Cross with Black Hamburg. Ripens with the Isabella.
- ✓ No. 2. One of the largest of all the hybrids; dark purple color; bunch and berry very large; same cross as No. 1, but more vinous. Is a little later in ripening than No. 1; and is in flavor somewhat like the Catawba.
- ✓ No. 3. Large, oval grape, size of well-grown Isabellas; light purple color; early and of fine flavor; somewhat like the Diana in quality, but with less pulp. The earliest and best, so far as I have tested the hybrids, ripening with the Delaware. The vine is a strong, healthy grower, but not so rampant as some others. Will probably become one of our most desirable grapes.
- ✓ No. 4. Very large purple grape, of the Hamburg cross, which variety it closely resembles in bunch and berry. One of the best of the hybrids. The Cincinnati Horticultural Society reported upon this variety, as the best black seedling grape which had come before them.
- ✓ No. 5. Beautiful red grape, sweet and rich. Cross with Chasselas. Early and vigorous.

- ✓ No. 9. Same cross as No. 5, but distinct in flavor. A good and desirable grape.
- ✓ No. 13. Same cross as Nos. 5 and 9, and similar in appearance and quality; promising.
- ✓ No. 15. Considered by Mr. Rogers his best variety. Is a red grape of the Hamburg cross; early, large, productive, and of great vigor of growth. Fruit of rich, high, and peculiar aromatic flavor.
- ✓ No. 19. Very large, and earlier than the Diana; regarded by many as the finest grape in the collection; is of the size and color of the Black Hamburg; bunches and fruit large and compact; a very strong grower.
- ✓ No. 33. Closely resembles No. 19 in appearance, but is somewhat earlier, and promises, though different, to be quite equal in flavor.

I have several other numbers of Mr. Rogers' Hybrids, which I have not yet tested.

✓ SHAKER, OR UNION VILLAGE.

Is a very large and beautiful grape, rivaling the Black Hamburg in size and appearance. It is a very strong grower, and good bearer; in quality, usually thought rather better than the Isabella. When planted in rich soil, is a most rampant grower, and requires protection in winter. At the last session of the American Pomological Society, this grape was declared to be identical with the Ontario, and the decision is probably correct.

✓ TAYLOR'S BULLITT,

Has been highly recommended, but accounts differ very much as to its value. The vine is of very rapid, vigorous growth, apparently productive, bunches small, berries medium in size, color nearly white, flavor sweet, but to my taste inferior to the Rebecca, Cuyahoga or Lydia. I have seen it recommended by several cultivators in Missouri and elsewhere as superior and very desirable for the table and wine; but as far as my own experience goes, it has not met my expectations.

✓ TO-KALON,

Known also as Carter or Wyman, is a large, handsome grape; but is a shy bearer, except under high cultivation. The bunches and berries are both large; color blue-black, covered with profuse bloom. Is, when fully ripe, sweet and rich, and nearly without pulp.

✓ UNDERHILL'S SEEDLING.

A new grape, claimed by its introducer to be something valuable; but of which I have no present knowledge, except that the vines appear vigorous and healthy.

✓ UNION VILLAGE SEEDLING.

A variety raised by the late N. Longworth, which he considered somewhat better, and two weeks earlier than the Union Village. It has the general characteristics of its parent, though the foliage is less lobed and rather coarser. It is, like the Union Village, tender in very severe winters.

TO CORRESPONDENTS.

For the many flattering expressions of satisfaction which I have received from my correspondents during the past season, I am truly grateful. My stock of vines the present season now bids fair to surpass those of any former year. I have added largely to my facilities for propagating, and confining my attention almost exclusively to the growing of grape vines, believe that better and more reliable results are thus produced, than by those who give the subject only partial, or divided attention. Orders will be promptly and carefully filled, and satisfaction guaranteed. No vines substituted without orders. If the kinds ordered cannot be furnished, the money will be returned. Where several varieties are ordered, it is better, to avoid mistakes, to make a separate list, instead of naming them in the body of a letter. The greatest care will be taken to avoid errors; but if any occur, they will be promptly repaired on being made known; and if any vines fail to grow, from any fault or defect in the plants, they will be replaced without charge.

As far as possible, all letters of inquiry, enclosing stamp, will be promptly answered; but during the Spring and Fall, my business correspondence is very large, and I cannot undertake to answer inquiries as to soil, methods of planting, training, &c., for the reason that I have not time. "Fuller's Grape Culturist," by A. S. Fuller, of Ridgwood, Bergen county, N. J., can be had of the author, postpaid, for \$1 50, and is a valuable work, giving full information on these subjects. I am also often asked to recommend periodicals giving information on horticultural subjects: The Horticulturist, published by G. E. & F. W. Woodward, New York, \$2 50; The Gardener's Monthly, edited by Thos. Meehan, and published by W. G. P. Brinckloe, Philadelphia, \$2; Hovey's Magazine of Horticulture, by Hovey & Co., Boston, \$2 per annum, are all monthly journals, especially devoted to gardening and horticulture. The Ohio Farmer, by Messrs. Harris & Fairchild, Cleveland, Ohio, \$2 50; The Country Gentleman, by Luther Tucker & Son, Albany, N. Y., \$2 50, are published weekly, and are devoted to Agriculture and Horticulture. The American Agriculturist, by Orange Judd, New York, \$1 50, is a monthly journal for the garden, farm and household. I take all the above named publications, and can recommend them as well worth their cost.

In reply to inquiries as to my experiments in raising new hybrids and seedling grapes, I can only say that I have a few varieties under trial that I consider promising; and I am every year producing new ones. I have, however, none that I am yet prepared to say are worthy of being disseminated.

MODE AND TIME OF PLANTING.

I have found little difference in the growth of vines, whether planted in the Fall or Spring. When planted in the Fall, and slightly protected during the first Winter, an early start, and, usually a more vigorous growth may be expected, than from vines transplanted in the Spring. A somewhat elevated situation, and a deep, pervious soil, moderately rich, is best. A calcareous clay loam, well underdrained, will produce good, healthy vines and fruit, and if abounding somewhat with gravel or pebbles, so much the better. If lime does not exist naturally in the soil, it should be pretty freely supplied; and if the soil is poor, enrich it with any well decomposed manure at hand. Fresh, or partially decomposed manure induces unhealthy growth, and disposes the vines to mildew. Low situations, where water can settle and stagnate about the roots *will not answer*. Where immediate fruiting of young vines is desired, permit but *one* cane to grow; stop, or pinch off all laterals at one joint from the main stem; keep the vine tied upright, and at the height of four or five feet, pinch off the leading shoot. This course will strengthen the lower buds, and often give fruit the year after planting.

QUALITY OF VINES, &c.

The best quality of vines, at the highest prices named, are believed to be equal to any offered at much higher rates, by other parties; and for immediate and permanent good results, will not fail to give the highest satisfaction to careful cultivators. I cannot claim that "my vines are superior to those of all other cultivators," but I can truly say, that they are better in all respects, than any I have ever seen from those who do make this somewhat extraordinary, and, to say the least, not over-modest pretension. The vines at lower prices, are of smaller sizes, but all carefully selected, well-rooted, and such as are sure to grow and do well with ordinary good attention. The largest, extra vines of Delaware, Concord, Hartford Prolific, Allen's Hybrid, and other varieties, are of the strongest growth, are cultivated with special care, layered from old bearing vines. They are equal in size to good three and four year old vines; all of them would have borne fruit the present season, if permitted; and are filled with fruit-buds for immediate bearing.

Small quantities of one year old vines can be sent safely, and most economically, by mail, under the new postage law: but large vines, and large quantities are best sent by express. When desired, express charges can be prepaid here, and usually at lower rates than are charged at the end of the route.

A small charge will be made for packing, to cover cost of boxes and packing material. Where plants are ordered by mail, 10 cents per single vine, or 30 cents per dozen, should be added for expenses of packing and postage.

Where this Catalogue contains the information asked by letters of inquiry, it will usually be mailed in answer, instead of a written reply.

When one dozen or more vines are ordered, they may be had in different varieties at the dozen price, in quantities not less than one-fourth dozen of each kind. And where one hundred or more vines are ordered, at the price per hundred for quantities not less than 25 of each variety.

Terms, CASH.

PRICES OF VINES. DELAWARE.

	SINGLE.	DOZEN.	HUNDRED.
Extra layers, for immediate bearing.....	\$3 00	\$24 00	\$150 00
No. 1 layers, very fine, strong.....	1 50	12 00	75 00
No. 2, layers, good, strong roots.....	75	6 00	38 00
No. 3 layers, good plants.....	50	4 00	25 00
Single eyes, No. 1, 2 years, extra.....	1 00	9 00	60 00
“ “ “ 2, “.....	75	6 00	38 00
“ “ “ 1, extra, 1 year, best.....	60	5 00	30 00
“ “ “ 2, fine.....	50	4 00	25 00
“ “ “ 3, good, well rooted.....	40	3 00	20 00

The above are all *good* plants, equal to any in the market. Smaller vines as low as \$10 to \$15 per hundred.

ALLEN'S WHITE HYBRID.

Extra layers, for bearing, best.....	\$1 50	\$12 00	
Single eyes and layers, No. 1.....	1 00	9 00	\$50 00
“ “ No. 2.....	75	6 00	38 00

ADIRONDAC.

Single eyes, No. 1, extra.....	\$2 00	\$18 00	\$120 00
“ “ “ 2, fine.....	1 50	12 00	80 00

ANNA.

Extra layers, for bearing.....	\$1 00	\$9 00	
Single eyes, No. 1 and layers.....	60	5 00	\$30 00

ALVEY.

Extra layers, for bearing.....	\$1 00	\$9 00	
Single eyes and good layers.....	75	6 00	\$38 00

CONCORD.

Extra layers, for immediate bearing.....	\$1 00	\$9 00	\$50 00
No. 1, layers, very fine, strong.....	60	5 00	30 00
No. 2, “ fine, strong roots.....	40	3 00	20 00
No. 3, “ good, well-rooted.....	20	1 50	10 00
Two years transplanted, extra.....	60	5 00	30 00
“ “ No. 1.....	50	4 00	25 00
“ “ No. 2.....	30	2 50	15 00

CREVELING.

	SINGLE.	DOZEN.	HUNDRED.
Extra layers for bearing.....	\$1 00	\$9 00	
Two years transplanted, extra	60	5 00	\$30 00
“ “ good, and layers.....	50	4 00	25 00
Single eyes, 1 year, strong	40	3 00	20 00

DIANA.

Extra layers, for bearing.....	\$1 00	\$9 00	\$50 00
No. 1, large layers.....	60	5 00	30 00
No. 2, good layers.....	50	4 00	25 00

HARTFORD PROLIFIC.

Extra layers for bearing.....	\$1 00	\$9 00	\$50 00
No. 1, layers, very fine.....	60	5 00	30 00
No. 2, “ strong roots.....	40	3 00	20 00
No. 3, “ good roots.	20	1 50	10 00

A few hundred 2 year vines at same price as Concord's.

IONA.

Extra large layers from bearing vines	\$3 00		
“ two years, fine.....	2 50	\$24 00	
“ one year, No. 1.....	1 50	15 00	\$100 00
No. 2, “ strong.....	1 00	10 00	80 00

ISRAELLA.

Extra, 2 years, fine.....	\$2 50	\$24 00	
“ one year, No. 1.....	1 50	15 00	\$100 00
No. 2, “ strong.....	1 00	10 00	80 00

REBECCA.

Extra large layers.....	\$ 75	\$6 00	
No. 1, two years, strong.....	60	5 00	\$30 00
No. 2, “ “	40	3 00	20 00

ROGERS' HYBRIDS.

Extra large layers.....	\$1 50	\$12 00	
“ two years.....	1 00	9 00	
“ one year.....	75	6 00	\$40 00

The following varieties in smaller quantities:

BLACK KING—Strong layers and two years, 50 cents.

BALDWIN LENOIR—Strong, one year, 50 cents; \$4 per dozen.

CLINTON—Two years, 30 cents each; \$2 50 per dozen; \$15 per hundred; one year, 20 cents, each; \$1 50 per dozen; \$10 per hundred.

CATAWBA AND ISABELLA—One and two years, 10 to 20 cents each; \$1 to \$2 per dozen; \$5 to \$10 per hundred.

CUYAHOGA—One year, 50 cents; \$4 per dozen; two years and strong layers, 75 cents to \$1 each.

CLARA—One year, 30 to 50 cents; strong layers, 75 cents.

CASSADY—One year, 30 to 50 cents.

ELSLINBURGH—Strong layers, 50 to 75 cents.

GOLDEN CLINTON—One year, 30 cents; strong layers, 50 cents.

- GARIGUES—Strong layers, 30 to 50 cents.
 HERBEMONT—Strong layers, 50 cents.
 LYDIA—One year, 50 cents; \$4 per doz; strong layers, 75 cents to \$1.
 LOUISA—Strong layers, 50 cents.
 LENOIR—One year, 50 cents.
 LINCOLN—One year and strong layers, 50 cents to \$1.
 LOGAN—One year and strong layers, 25 to 50 cents.
 MAXATAWNEY—Strong one year, 50 cents; \$4 per dozen; two years and strong layers, 75 cents to \$1.
 MOTTLED—Strong one year, 50 cents; \$4 per dozen; strong layers, \$1.
 NORTON'S VIRGINIA—One year, 50 cents; \$4 per dozen; \$25 per hundred.
 OPORTO—Two years and strong layers, 25 cents; \$2 per dozen.
 PAULINE—Strong layers, 50 cents to \$1.
 TAYLOR'S BULLITT—One year, 25 cents; \$2 per dozen; two years, 50 cents; \$4 per dozen.
 TO-KALON—One and two years and layers, 25 to 50 cents.
 UNION VILLAGE—One year strong, 75 cents; \$6 per dozen; a few strong layers, \$1 each.
 UNION VILLAGE SEEDLING—Strong, one year, 50 cents to \$1.
 UNDERHILL'S SEEDLING—One and two years, 50 cents to \$1.

CURRENTS.

The following varieties are selected as the best of all currents, for large size, vigorous growth, fine quality and productiveness. They will be found true to name, being propagated from bearing plants; and greatly superior to the common sorts.

CHERRY—The largest red currant; often as large as medium sized cherries; very vigorous and productive; 20 cents each; \$1 50 per dozen.

VERSA ILLES, OR LA VERSAILLAISE—A very large, red currant, with long bunches; less acid than the Cherry currant, and very desirable; strong grower, and productive; probably the very best red currant in cultivation, 20 cents each; \$2 per dozen; \$10 per hundred.

WHITE GRAPE CURRANT—The best of all the white currents, for large size, productiveness, and delicate, fine flavor; 20 cents each; \$2 per dozen; \$10 per hundred.

WHITE TRANSPARENT—A large, white, sweet currant; much like the White Grape; 20 cents each; \$2 per dozen; \$10 per hundred.

BLACK NAPLES—The finest black currant; very large, vigorous and productive; valuable for culinary use, and for wine. For jellies and jam, usually preferred to the red currents. Cooking destroys the odor of the black currant which is disagreeable to many persons. For wine, add two gallons of clear, soft water to one gallon of the expressed juice, and three pounds of refined sugar to each gallon of the mixture. Scalding the juice before mixing, improves the wine, which somewhat resembles port, and is very useful in sickness and in all cases where wine is needed. Strong plants, one and two years, 10 to 20 cents each; \$1 to \$2 per dozen; \$5 to \$10 per hundred.

RASPBERRIES.

- ✓ **KIRTLAND**—A fine, large, early red raspberry; perfectly hardy, vigorous and productive. Needs no protection in winter, and has never failed, since I have known it, to produce an abundant crop. Valuable for family use and market. 75 cents per dozen; \$3 per hundred.
- ✓ **CATAWISSA**—Ever-bearing raspberry; \$2 per dozen.
- **DOOLITTLE'S IMPROVED BLACK CAP**—50 cents per dozen; \$3 per hundred.

STRAWBERRIES.

To raise extra fine strawberries, they must be cultivated in rows, or hills, in rich, well-prepared ground, and not allowed to *run*. When allowed to run together, and become filled with weeds, even the largest and best varieties become dwarfed, and unprofitable. They are greatly benefited by a light covering of straw during winter. The following are among the best:

- ✓ **AGRICULTURIST**—Very large and fine—stock limited, \$1 per dozen; \$5 per hundred.
- ✓ **JUCUNDA**—With good cultivation, the finest strawberry I have ever seen. It is said to be the celebrated "700" of Mr. Knox, who says it is the most remarkable strawberry of which he has any knowledge; \$1 per dozen; \$5 per hundred.
- ✓ **BROOKLYN SCARLET**—The best and earliest of the "Tribune strawberries;" \$1 per dozen; \$5 per hundred.
- ✓ **RUSSELL'S GREAT PROLIFIC**—50 cents per dozen; \$2 per hundred.
- ✓ **SMITH'S BUFFALO**—50 cents per dozen; \$1 50 per hundred; \$10 per thousand.
- ✓ **TRIOMPHE DE GAND**—25 cents per dozen; \$1 50 per hundred; \$10 per thousand.
- ✓ **AUSTIN SHAKER SEEDLING**—50 cents per dozen; \$1 50 per hundred.
- ✓ **BURR'S PINE-TRUE**—One of the highest flavored and best for family use; 50 cents per dozen; \$1 50 per hundred.
- ✓ **JENNY LIND**—Fine, large, early variety—25 cents per dozen; \$1 50 per hundred.

HOUGHTON'S SEEDLING GOOSEBERRY.

Very hardy, productive, and does not mildew. 10 cents each; \$1 per dozen; \$5 per hundred.

DOWNING'S EVER-BEARING MULBERRY.

Strong, one year grafted trees, \$1 each; two years, \$2.