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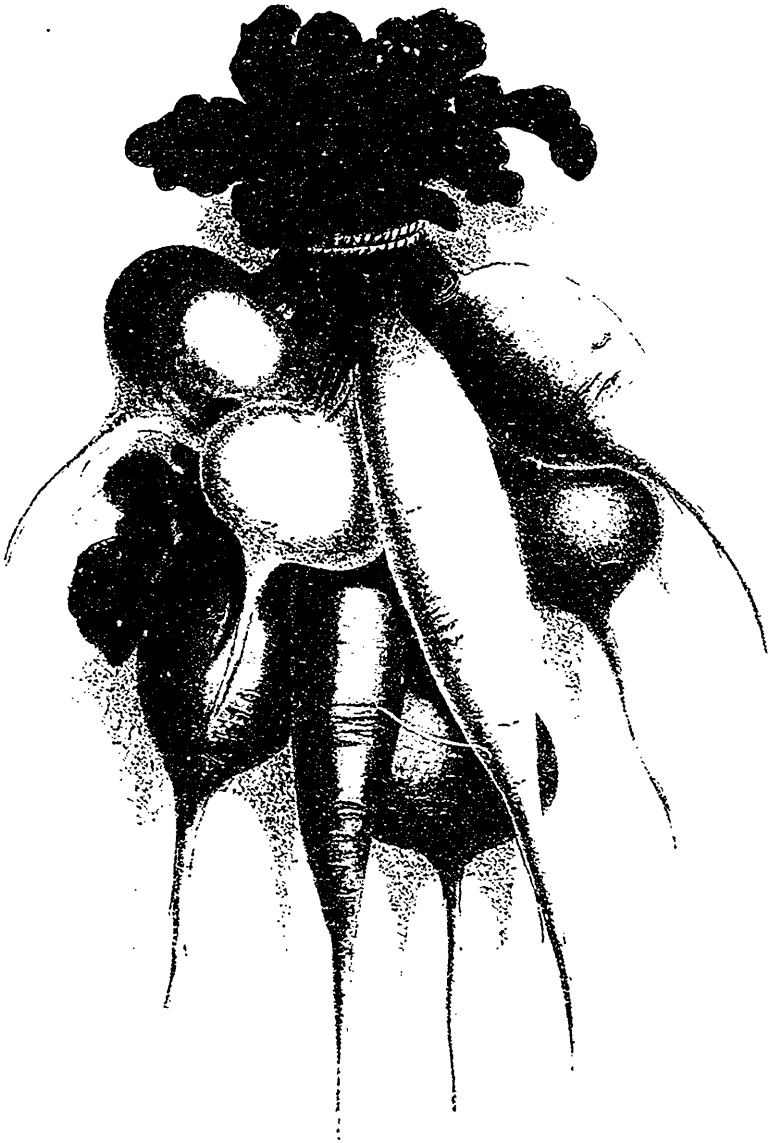


SUMMER RADISHES

PAINTED FOR VICK'S MONTHLY

NOTE.— *When this Number went to press we were under the impression that the Colored Plate of* "EVERLASTING FLOWERS" *which we ordered had been received. It turns out that it cannot be supplied, and therefore we present our readers with a very pretty plate of Summer Radishes instead. This change has caused some delay in the mailing of this number, and we hope that our Subscribers will accept of this apology. In future we expect to be able to mail the Magazine promptly on the first day of the month.*

SUMMER RADISHES.

Through the courtesy of Mr. James Vick we present our readers with a colored plate of Summer Radishes. They are among our most handsome vegetables, and when nicely grown are not only an acceptable relish, but a very pretty ornament to the table. Our readers will notice that the different varieties are numbered. The two numbered 1 and 8 are known as the red turnip radish, No. 1 having a white tip, No. 8 red throughout. When well grown the flesh is white and crisp, and the radishes about an inch and a half in diameter.

No. 2 is the French Breakfast radish, olive-shaped, light scarlet with white tip, a very pretty radish, and at the same time one of the earliest and most tender. It is usually esteemed to be the best of the radishes.

No. 3 is the White turnip, and No. 4 the Yellow turnip radish, very much the same as the red turnip variety, the difference being mainly in the color, which admits of a more pleasing variety for table ornament.

No. 5 is the Scarlet olive-shaped, a very fine sort, of excellent quality, and much esteemed. It does not differ materially from No. 2, except that it is not ornamented with the white tip.

No. 6 is known as the Long White Naples. It is a beautiful clear white, and an excellent sort, coming in after the olive-shaped varieties.

No. 7 is the favorite market radish, known as the Long Scarlet, a beautiful root, in use at the same time as the White Naples, with which it forms a pleasing contrast when nicely arranged in a glass.

Radishes should be grown in a light, warm soil, well sheltered from chilly winds, where they will grow fast, so that they may be crisp and tender.

THE

Canadian Horticulturist.

VOL. V.] FEBRUARY, 1882. [No. 2.

EVERLASTING FLOWERS.

The beautiful colored plate which is given to our readers in this number will shew them how abundant are our floral resources, and though we may not be able to have a green-house or conservatory from which we can gather flowers during the bleak winter days, yet we need not be without our bouquet for table or mantel decoration. These brightly-colored flowers can be grown in summer, and gathered at the proper time, laid away in a drawer, where they will retain all their freshness of coloring, until wanted to enliven the rooms whence the perishing beauties of flora have vanished.

Those of our readers who are familiar with these everlasting flowers will readily recognize each flower in this charming bouquet. That beautiful Acroclinium Roseum, with pink margined petals shading to white at the base, is a tender annual that should be started in a pot or box in the house to secure quick germination of the seed. It will grow to about eighteen inches in height, and yields a large number of its pretty daisy-like flowers. These should be gathered the first day they open, or even before they are fully open, else the centre is apt to be discolored. There is also a pure white variety. The Helichrysum flowers are also conspicuous, the one brownish-red, and the other dark-red, with purplish shade. These are easily grown from seed in the open border and attain a height of about two feet. Their colors are white, yellow, and various shades of brownish-red. The flowers should be cut just before they are fully expanded. The Xeranthemum is also easily grown; it flowers abundantly in colors of purple, blue and white, growing hardly a foot in height. Just above that white Helichrysum, and a little to the left, will be seen that old-time friend, the Globe Amaranth. It is best to sow the seed of this in a pot in the house, or in a hot bed, as it does not germinate freely in the open ground. They are pure white, flesh-colored and purplish-crimson. These should be gathered in the autumn after the flowers are fully developed. Just above this are the yellow and purple Statice, which, though not everlastings, are easily dried, and retain their color when in that condition. At the top of the bouquet are the white and rose-

colored Rhodanthe, with their lovely bell-shaped flowers. It is necessary to cut these before they are fully open, so that they may not lose their pretty bell-like form. Sow the seed of these also in a hot bed, if you have one; if not, in a pot or box. Next to these is Helipterum Sanfordi, a gem of beauty, with rich, yellow, star-like flowers, which will retain their beauty for many years. It grows about a foot high, is easily cultivated, and bears an abundance of flowers. The clusters should be cut just as the flower-buds are opening, tied in bunches, and hung in the shade; the flowers will expand while drying and retain their bright color. Those little flowers at the right, which look so like little button daisies, are grown extensively in France, where they are dyed all colors, or bleached white, and shipped all over the world. At the left hand, near the base, is a spray of the Hartford Fern (*Lygodium Palmatum*), a most elegant plant, the leaves of which will retain their form and color for years, if kept from the dust. Intermingled with these are those beautiful grasses, at the left the little Briza Minor, above it the Brizæform Bromus, at the top the Nebulous Agrostis, and near the bottom, on the right, the well-known quaking grass, *Briza Maxima*. Just below the yellow Helipterum is that airy, graceful, little Gypsophila, and below it a frond of the native Holly Fern.

Thus have we endeavoured to set forth the various flowers and plants of which this pretty bouquet is formed, that our friends may know how to make preparation in time and lay in a supply for another season. Then when the winter winds are howling and the garden is bleak and bare, you can bring forth your store of everlastings, grasses and ferns, and with a few evergreen sprays, deck your Christmas tables in spite of Jack Frost. To dry these nicely, the flowers should be tied in small bunches by the stems, and hung up with the heads down in the shade until dry, when they can be carefully stowed away in a drawer, or on the shelves of a dark closet, until wanted.

There is another grass that deserves to be mentioned here, which the writer has found most useful, and most beautiful too, for winter decoration. It is the striped Eulalia, which seems to be perfectly hardy, and whose graceful plumes, so like the Prince of Wales feather, lend such a charm to any attempt at winter decoration. It is a perennial, whose leaves, striped with white and bending in graceful curves, give so much beauty to the garden in summer, and its autumn plumes to the house in winter.

REPORT ON FRUITS.

The Grimes Golden Apples, also the Pomme Grise, have done very well with me. The Flemish Beauty Pear has done very well also. The Clapp's Favorite appears healthy, grows well, and blooms profusely, but has produced no fruit. Glass' Plum has done well, but I am, I fear, going to lose it with black-knot. Salem Grape did very well, but the Eumelan does not stand the winter's frosts.

R. GOWANLOCK.

Maple Hill, Jan. 2, 1882.

A FEW HINTS ON GRAPE GROWING.

(Concluded from page 10.)

The Green Grape Vine Sphinx also feeds on the leaves of the grape vine, as likewise does the beautiful Wood Nymph, shewn in Figure No. 8, and

Figure No. 8.
THE BEAUTIFUL WOOD NYMPH. (*Eudryas grata*).

though they have not as yet become very numerous, should be treated as possible enemies.

The Thrips, shewn in Figure No. 9, often becomes so numerous as to de-

Figure No. 9.
THE THRIPS. (*Tettigonia vitis*).
Here shewn highly magnified, the lines at the left indicating the natural size, in the one with the wings extended, in the other at rest.

stroy the leaves of the vine by preying upon their under-surface. This is particularly the case if too much wood is left on the vine when pruning, causing the foliage to become very dense and matted. This insect is more injurious to those vines whose leaves are thin and smooth, than to those whose leaves are thick and woolly. It is a very troublesome insect when it becomes abundant, and is not easily destroyed; but, fortunately, it does not follow that because they are abundant in one season, they will appear in like numbers the next.

WHERE GRAPES CAN BE SUCCESSFULLY GROWN.

In Europe it is thought that the lowest summer temperature in which the vine succeeds is 65 degrees Fahrenheit; that is, the mean temperature for the four months of June, July, August and September, must be equal to 65 degrees. Whether our native grapes are bound to the same limits of temperature, I cannot say; but we know that quite a number of varieties will grow and ripen their fruit at Ottawa, and at Peterboro', and Barrie. Hence it may be inferred that in any part of Canada not colder during the summer than those places just named, those sorts which ripen as early as the Delaware may be planted with every expectation of enjoying ripe fruit.

The Champion, Creveling, Eumelan, Merrimack, Moore's Early, Worden, Brighton, Massasoit, Martha and Lady, have been found to ripen as early, and some of them earlier than the Delaware, and hence may be expected to ripen their fruit wherever the Delaware will ripen.

Along the shores of Lake Huron and the Georgian Bay, the climate is so far modified by those large bodies of water, that many varieties ripening later than the Delaware succeed perfectly. There is a belt of land lying adjacent to those waters, the width of which has probably not yet been fully ascertained, where not only the varieties above mentioned will ripen, but also the Concord, and even the Iona and Isabella. At a certain distance from the water, the climate becomes less favorable, though the latitude is lower, and it will be found necessary to plant only those that ripen as early as the

Delaware. But the most favored localities for grape-growing are to be found on the southern shore of Lake Ontario and the northern shore of Lake Erie to and up the Detroit River, and on some of the islands lying in Lake Erie. There the ameliorating influence of the water is felt; spring frosts do not occur so late as at places farther in the interior, nor do the autumn frosts show themselves as early. The melting ice of the upper lakes continually flowing through Lake Erie, keeps the temperature of the water at a foot below the surface at about forty degrees of Fahrenheit during the month of May, so that the atmosphere is cooler than it is in the interior, and the buds do not burst as early as they do farther inland. By the latter part of July the temperature of the water rises to that of the atmosphere, in August the water becomes warmer than the air, in September the water is three degrees warmer, and in October six degrees warmer than the surrounding air. But the water is continually giving out its heat into the atmosphere, thereby keeping it at a higher temperature near the Lake than it is in the interior, and so preventing early autumn frosts. Elevation also has its influence upon the temperature. There is a line of altitude where the autumn frosts do not fall as early by many days—and sometimes weeks—as in the valley below. Many a farmer living in a rolling section of country, has noticed that Indian corn on the flats and in the bottoms has been severely injured by frost when that on rising ground and hill-sides has entirely escaped. This is owing to the fact that cold air is heavier than warm; it rolls down into the valleys and bottoms, while the warm air ascends the hill-sides and slopes. It is in such favored portions of the country that numerous varieties of grapes can be grown; there they not only ripen, as it is usually understood, but there they can be allowed to hang upon the vine, and develope all their saccharine properties, becoming much sweeter than the same variety becomes when the season is of shorter duration. And fortunately this embraces a large portion of Western Ontario, all that part lying between the two Lakes —Erie and Ontario— and that portion lying between a line running through Hamilton, London, Chatham and Sarnia, southward to Lake Erie.

There is another influence to be considered, and one which has a natural effect upon the growing of grapes in the highest degree of perfection, and indeed of all other fruits. I refer to the quantity of summer rain. It is true the amount of rain-fall in each year cannot be depended upon with the same certainty as the annual return of heat, yet in a series of years the average rain through the summer can be determined with considerable accuracy. The region of these great lakes, from the Thousand Islands of the St. Lawrence to the western extremity of Lake Superior, is favored with a smaller rain-fall than other parts of the country. Taking this entire region together, the average summer rain-fall is about ten inches of rain.

Within this belt or zone, where the average summer rain does not exceed ten inches, the cultivation of the vine has been attended with the greatest success; and we confidently predict that with favoring soil and exposure the choicest vines will be grown within this same area. Surely the land-owner who is so fortunate as to be located within these favoring limits need not delay to plant his vines. With the same care and attention that commands success in any undertaking, he may be reasonably certain of reaping a rich return for all his labor and enterprise. Within this favored region, the vine itself is more

vigorous and healthy, and the fruit of superior quality; and the days will come when the grapes of this part of Ontario will be in as great repute as the apples and pears are now. And these are growing in estimation every year, for experience is teaching the world that the apples of this region will keep better, bear transportation better, and are of better flavor than those of any other part of America. A bearing apple orchard of five acres now yields a better return than all the rest of a hundred-acre farm; and with the increasing supply comes a yet larger demand. So will it be with the vineyards and their fruits. Grapes in France command to-day a higher price than they do in Canada. And when the vineyards of this region shall have become perfected, the excellence of the grapes and wines understood, and the production sufficiently considerable to command attention, the prices received will be in correspondence with the excellence of the products. There need be no fear that fruit raising in Ontario will ever, or can ever, be over-done. There is a bushel of strawberries raised now for every quart that was grown ten or twelve years ago, and the price of a quart of strawberries is certainly not any less now than it was then. There are probably a hundred barrels of apples sent to market now for every barrel sold twenty years ago; yet the price has not diminished, but of the two has increased with the increased production. How many bushels of tomatoes were raised and sold a few years ago, and what was the price paid then? If the lamp of experience sheds any light upon the path of the fruit grower, that light reveals a consumption and demand more than keeping pace with the production.

CULTURE IN GARDENS.

There are some inconveniences attending the cultivation of the grape in town and village gardens, owing to the great amount of shade from adjacent buildings, and the want of free circulation of air. But these are in a great degree counterbalanced by the increased protection and heat from reflection, so that the fruit usually ripens earlier than in the open vineyard.

It is a very common mistake to plant the vine directly against the bottom of a wall or high fence, and to train it close to the wall. The proper method is to plant two or three feet from the wall, and train the vine up at that distance from it, thus giving space for the circulation of air between the vine and the wall or fence. The training and pruning should be conducted with reference to giving as much air and light as can be done. The wood should be well thinned out in spring, and the foliage exposed as fully as possible to the sun, while the fruit is kept wholly in the shade.

MANURING THE VINE.

Manures should be supplied with care, avoiding the use of coarse and unfermented materials, which usually tend to produce a rank growth of wood, and give a watery character to the fruit. Old and thoroughly-rotted barn-yard manure, ashes, ground bones, and a little salt, may be used as required. The practice of drenching the vines with soap-suds is very often injurious, always injurious unless the soil be very porous or otherwise most thoroughly drained. Those grapes which are forced into an unnatural size by excessive manuring and drenching are often very showy and pleasing to the eye, but very watery and flavorless to the palate.

GATHERING AND PUTTING UP FOR MARKET.

It is surprising that there should be so much carelessness manifested in the simple matter of getting fruit to market after it has been grown and ripened. There is no part of the business that

needs to be attended to with more care and nicety than the condition in which the fruit reaches the consumer, and no part of the business yields as great a return as the attention bestowed upon this apparently little matter. Were our farmers to assort their apples into first and second quality, putting up as first quality only those apples which were of full size for the particular variety, and that were free from every blemish, and putting up as second quality those that could be fairly classed as such, rejecting altogether or selling for cider-making all else, they would frequently receive more for the first-class apples alone than they now obtain for the entire crop, besides establishing a reputation for their brand that would enable them always to command a ready sale; and what is true of apples is true of every description of fruit.

If grapes are torn roughly from the vines, tossed into two bushel baskets and hurried in a lumber waggon to the nearest market, no wonder that the bruized, dripping berries are passed by, and if sold at last, sold for almost nothing Were the same grapes brought to market in a clean and attractive condition, they would sell without trouble at the full market price.

In order to have the grapes reach market in the best possible condition, and particularly when they must be transported to some considerable distance, they should be gathered only when they are dry, the clusters cut carefully from the vine, and laid into shallow baskets without handling more than is absolutely necessary, so as to preserve as much of the bloom upon the berries as possible. They should not be piled up, but kept spread out thinly, so that the weight of the fruit shall not break the berries beneath. After gathering they should be taken to some cool, well-aired room for two or three days, and some of the superfluous moisture allowed to evaporate. This will toughen the skins so that they will not burst so easily upon being slightly pressed. The clusters should be lifted up carefully by the stem, and all unripe or defective, bruized or broken berries cut off with sharp-pointed scissors. They may now be laid into the boxes in which they are to be transported to market. These boxes should not be large nor deep, but shallow, and made to hold only a few pounds. The best boxes for this purpose are made of a thin veneer of elm or whitewood or basswood. They are made of various forms and sizes, some are round and some are square. I prefer the square form, for the reason that they can be packed more compactly into a case, and a given weight of fruit will occupy less space. The grapes should be packed in these boxes as compactly as possible without breaking any of the berries, and so that when the lid is closed upon them they will be lightly pressed. This will prevent the fruit from shaking about in the boxes. Cases should be made so that these boxes when filled will fit snugly into them, and made as light as is compatible with the needed strength, and of a size that a man can handle one of them without effort when filled with the boxes of fruit. When these cases are filled and closed, there should be no space for the boxes of fruit to rattle about, but each box should be held firmly in its place. In this condition the grapes can be sent to any market within reach of rail or water communication, and will arrive in good condition and sell for the best price.

It is usual in filling these boxes to fasten the top on the box and open the bottom, and then pack the finest-looking and most showy clusters first, using smaller clusters if need be in filling up, but not putting in any berries of inferior quality. When the box is full

the bottom is fastened securely, and when the dealer opens the box to exhibit the fruit to his customers it presents a fine, attractive appearance.

When these boxes are properly made they are very light, and are sold by weight with the fruit. In this way the purchaser has a convenient package in which to carry home his fruit, and when properly regulated will have paid the cost of the box. Frequently these boxes will be found convenient, and to secure the sale of the fruit at a better price, even when it is not necessary to transport them by railway, and the grower carries them in his own wagon to the nearest market.

It makes considerable difference to the grower whether he gets four or six cents per pound for his grapes. Up to the day of gathering the fruit he will have expended a given sum upon his vineyard, and now if he harvests and markets his crop in such a way that it sells for only four cents per pound, when he might have got six cents, he is a great loser. If he have an acre of grapes yielding him say only three tons, or six thousand pounds, the difference between four and six cents per pound is one hundred and twenty dollars, which will pay for considerable extra labor, a great deal more than the cost of the difference between careful and slovenly harvesting.

PROFITS OF GRAPE CULTURE.

The question is often asked by those who are thinking of planting for market, will it pay? To this inquiry it may be truthfully replied that the raising of fruit for market is like every other business, the question of profit depends mainly upon the energy, attention and skill of the grower. An acre of grape vines in full bearing will yield five tons of grapes, or ten thousand pounds If, then, the grower realizes only four cents per pound, he will have received four hundred dollars from his acre. But if a judicious selection of varieties is made, so that there shall be a continual supply of fruit from the time that the earliest ripens to the end of the season, the price will be more likely to average at least six cents per pound, in which case the acre's crop will be six hundred dollars. A grower near Hamilton, who takes good care of his vines, realizes ten cents per pound for his entire crop. And why may not you?

CHOICE OF VARIETIES.

The following list embraces most of the varieties now in cultivation which can be successfully grown in any part of Ontario. I frankly state my own opinion of their qualities, in the hope that my experience and observation may be of service to those who desire to plant:

ADIRONDAC.—Ripens early, usually a few days before the Hartford Prolific. In size of bunch and berry, it much resembles the Isabella. The color is black. The flesh is soft and breaking, sweet and agreeable flavor, bearing more resemblance to a Black Hamburg than any other hardy grape that I have yet seen. And yet such is its lack of vigor and endurance, that I cannot advise any one to plant it who is not willing to give it great care and attention.

AGAWAM.—Also known as Rogers' Number 15. The best flavored of all his red varieties; bunches variable in size, berries large, dark red, tender and juicy, with a pleasant, somewhat musky flavor. Ripe a little after the Concord. In unfavorable seasons the vine is apt to mildew, otherwise it is hardy, vigorous and productive.

ALLEN'S HYBRID.—This grape is one of the best in quality, but the vine is not hardy, and very subject to mildew.

ALVEY.—The berry is quite small, the vine only moderately productive, and the variety not desirable.

ANNA.—I only name this variety for the purpose of cautioning Canadians from purchasing it; for it is worthless in our latitude.

BLOOD'S BLACK.—This is wholly unworthy of cultivation, and he who purchases it wastes his money.

BARRY.—Rogers' Number 43. An excellent black grape, large, sweet, and nearly free from pulp. Ripe at the same time as the Concord. Vine hardy, vigorous and productive.

BRIGHTON.—A valuable variety; hardy, vigorous, ripens its wood early, very productive, berries large, dark crimson when fully ripe, sweet, aromatic. Ripe as early as the Delaware. Worthy of a place in every garden.

CATAWBA.—Will not ripen thoroughly in most of Canada, requiring a longer season than we possess. He who plants largely of this sort here will surely regret having done so, unless he plant on the Islands of Lake Erie.

CHAMPION.—A very vigorous, exceedingly hardy and productive grape, capable of enduring great severity of climate, and succeeding everywhere. It is a pioneer variety for the coldest parts of the country, ripening early, and yielding fruit under most adverse circumstances. It has been very profitable on account of its earliness and great productiveness; yet it is not of fine quality, and will eventually give way to better grapes ripening as early. The berries are large, black and attractive, borne in medium-sized clusters. If you have not been able to grow grapes in your locality, this will surely succeed and ripen a fine crop of fruit.

CLINTON.—This variety is planted chiefly for wine. The bunches and berries are small; when thoroughly ripe a very pleasant, refreshing grape. The fruit can be easily kept in any cool place free from frost, and improves in flavor. The vine is perfectly hardy and very productive.

CONCORD.—A most profitable market grape; large bunch and berry, black, covered with a beautiful bloom. In Missouri and Southern Ohio, it is planted extensively for wine. It is one of the most hardy and most prolific sorts we have, giving a generous return of fruit to the cultivator. It has been largely planted for market, and, notwithstanding that the price rules low, such is the yield and certainty of crop that it is one of the most profitable.

CREVELING.—An early ripening variety of excellent quality; bunch and berrry about the size of the Isabella. The berries frequently set very poorly, making the bunches straggling. Were it not for this defect it would be highly valued for its fine flavor and early ripening.

CUYAHOGA.—Ripens too late to be valuable.

DELAWARE.—I do not hesitate to say that this is one of the best hardy grapes that I have yet fruited. It is hardy—very hardy—enduring our winters well. It is very productive. The flavor is sweet, delicious, refreshing. The vine, when once established, is thrifty, making a growth nearly equal to the Clinton. It will bear higher cultivation than most other sorts, and well repays the generous treatment. Yet I have seen it in a sod, wholly neglected, bearing an immense crop of beautiful fruit. Some complain that it does not succeed with them; but the fault is probably in the treatment or soil, not in the variety. This grape, while excellent for the table, is equally valuable for wine, and is largely planted for that purpose.

DIANA.—This variety will yield the most satisfactory results in a very dry,

warm and rather poor soil. In a rich soil it runs to wood, and in a damp or cold soil will not ripen its fruit. It ripens very late. When ripe, the fruit is very sweet, and has a flavor peculiar to itself; and when wine is made exclusively from the juice of this grape, the peculiar Diana flavor is distinctly perceptible in the wine.

DUCHESS.—The quality of this grape is excellent, but as it ripens a little after the Concord, it will not be suitable for the colder parts of Ontario. Besides this, the vine seems to be easily affected by adverse influences and lacking in constitutional vigor. However, it is a new sort, not yet thoroughly tested, and time will be needed fully to ascertain its value for us. It is pale greenish yellow when ripe.

EARLY VICTOR.—A very hardy, healthy variety, which gives promise of being very valuable for us, on account of its vigorous constitution, great productiveness and early ripening. The bunches are above medium size, compact; berries medium, round, black, with a heavy blue bloom; juicy, sweet, free from foxiness; ripe fully a week before the Hartford Prolific.

EARLY DAWN.—The quality of this grape is very good, but I have found the vine very subject to mildew, and lacking in vigor of constitution. The bunches and berries are of medium size; berries black, with a thick bloom, juicy, rich, sweet and good; ripe fully a week before the Hartford Prolific. Were the vine only healthy, and not subject to mildew, it would be a desirable variety.

ELDORADO.—Thus far this vine has been healthy and vigorous. The clusters are large, berries full medium size, white, juicy and high-flavored. Ripens as early as the Hartford Prolific.

EUMELAN.—This vine has not proved to be as desirable in our climate as was hoped. It has not seemed to possess sufficient hardiness of constitution to adapt itself to many localities, and the fruit is lacking in richness and flavor.

HARTFORD PROLIFIC—This was at one time the earliest grape we had. It is of poor quality at best, the berries drop from the bunch when ripe, and, although it sold well on account of its earliness, we have now so many that ripen as early, and some even earlier, that it will soon be superseded.

HERBERT. Rogers' No. 44.—A large black berry, grown in large, long bunches; sweet, rich and fine-flavored; one of the best in quality of the Rogers' Hybrids. It ripens early, and the vine is hardy and productive.

HIGHLAND.—A new hybrid variety not yet tested in our climate. Berries large, black, and of fine quality.

ISRAELLA.—Has gone out of sight since the introduction of earlier ripening sorts. It is not a fruit of high quality. Ripe just after the Hartford Prolific.

IONA.—Did this grape ripen well in our climate it would deserve a foremost position in every garden. I esteem it one of superior quality; juicy, sweet and high-flavored; but it is too late for general cultivation in this Province. Only in the warmest sections can it be relied upon to ripen. The bunch is large, long and loose; berries red, medium size.

IVES SEEDLING.—Not worth growing in this climate. It is used in some sections for wine, but the berries have such a hard pulp and foxy flavor that they are not fit for table use.

JANESVILLE. — Another variety of poor quality, but which ripens early, and enjoys a very robust constitution. The vine is very hardy, healthy and productive; the berries black and medium in size. It can be planted with Champion in the colder sections.

JEFFERSON.—A new variety raised by crossing the Concord and Iona. Thus far it has proved to be very healthy and vigorous, with large, thick downy leaves. It is a large, handsome and showy fruit, light red, covered with a thin lilac bloom, juicy, sweet and rich, with a sprightly aromatic flavor; much resembling the Iona, and the nearest approach to its delightful flavor of any yet introduced. It ripens with the Concord, and should be tried by every one who finds the Concord to ripen. It promises to be a most valuable market sort on account of its showy appearance, superb flavor, and maintaining its sprightliness for a long time after being gathered. (*See Cut.*)

LADY.—The earliest ripening white grape. The bunches are only of medium size, berries about as large as the Concord, of a light greenish-yellow when ripe, very sweet and pleasant. The vine is quite hardy, vigorous and healthy. It is well deserving of trial in our climate.

LADY WASHINGTON.—Certainly the most magnificent looking hardy grape I have yet seen, and as fine in flavor as it is beautiful in appearance. The vine appears to be perfectly healthy, the leaves are large, thick and downy, promising to endure well the extreme changes of our climate. The bunches are very large, berries medium, pale yellow, with a delicate pink tinge on the exposed side; juicy, sweet, slightly vinous, and fine quality. It ripens just after the Concord. If this grape on further trial should succeed well in our climate, it will be a most noble acquisition, and a most profitable market sort. I trust everybody will give it a trial who lives where the Concord will ripen. (*See Cut on Page* 36.)

LINDLEY. Rogers' Number 9.—A strong growing, healthy vine, and remarkably productive. Both bunch and berry are of medium size; color red when ripe; sweet, juicy, and somewhat aromatic. An excellent variety, ripening just before the Concord.

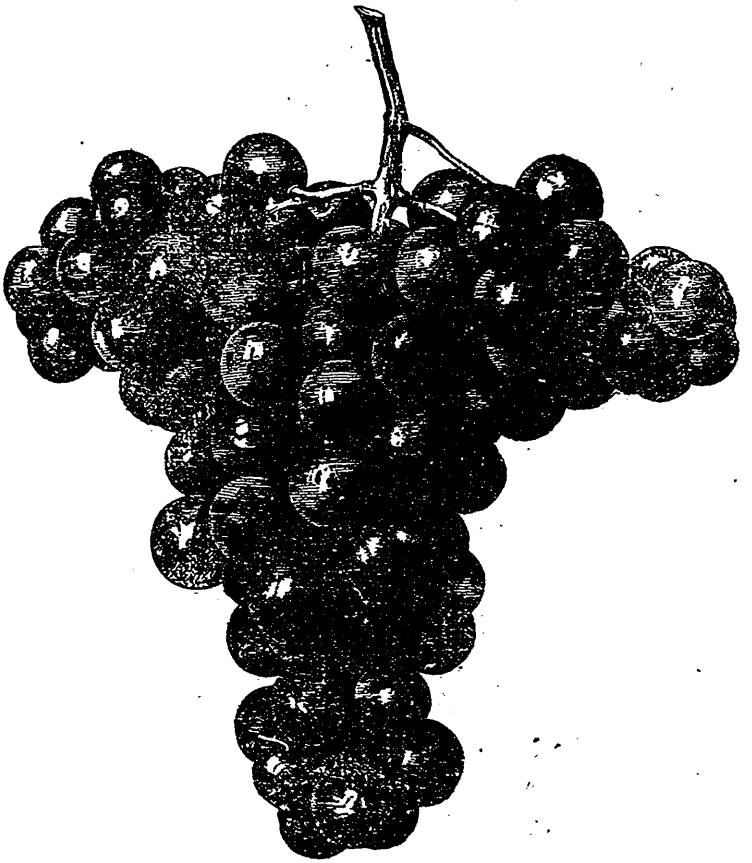
MARTHA.—A very hardy, healthy and productive vine; the bunches and berries are about like those of the Concord; the color is a light greenish yellow; flavor sweet, with considerable of the muskiness of the Concord; but ripening a little earlier.

MASSASOIT.—The earliest ripening of all the Rogers Hybrids, and known as his Number 3. The bunches and berries are of medium size, red, good flavor, and ripe as early as the Hartford Prolific. The vine is hardy and vigorous.

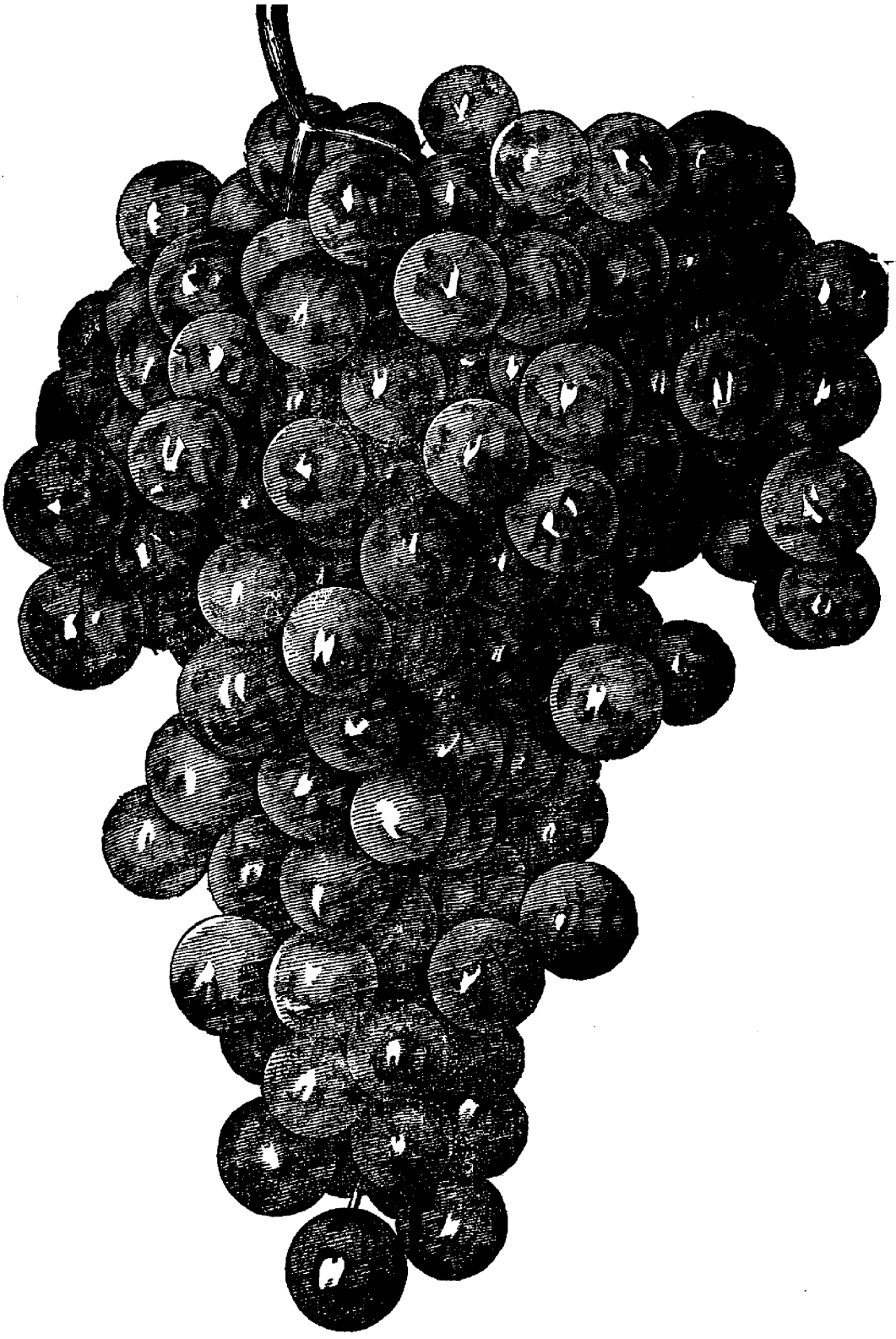
MERRIMACK. Rogers' Number 19.—This also ripens earlier than the Concord, the fruit is black, large, rich and sweet, and the vine is productive and vigorous. Very like the Wilder in quality and flavor, and ripening about the same time.

MOORE'S EARLY.—A most valuable grape for our climate on account of the early ripening of both wood and fruit. It will grow as far north as any, and ripen its fruit perfectly. It is a black grape; in bunch and berry about the same size as the Concord, and fully equal, if not better, in flavor. It is ripe some time before the Hartford Prolific; and will doubtless prove to be a most profitable very early market grape. It should find a place in every garden. (*See Cut on Page* 37.)

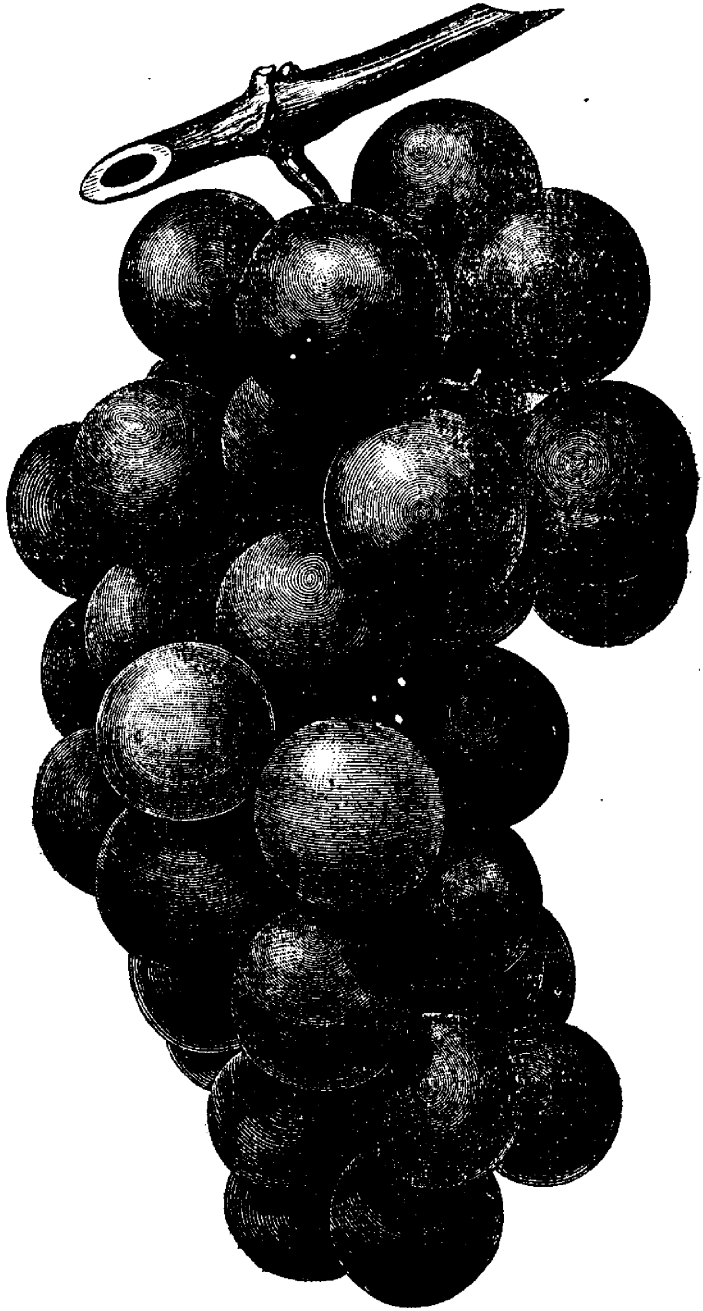
POCKLINGTON.—A very large, showy, white grape; sweet, rich, with the musky flavor of the Labursca family. The vine is healthy, vigorous, hardy and productive. It would seem to ripen fully just after the Concord. It will doubtless prove to be a profitable market grape on account of its large size of bunch and berry and showy appearance. (*See Cut on Page* 38.)



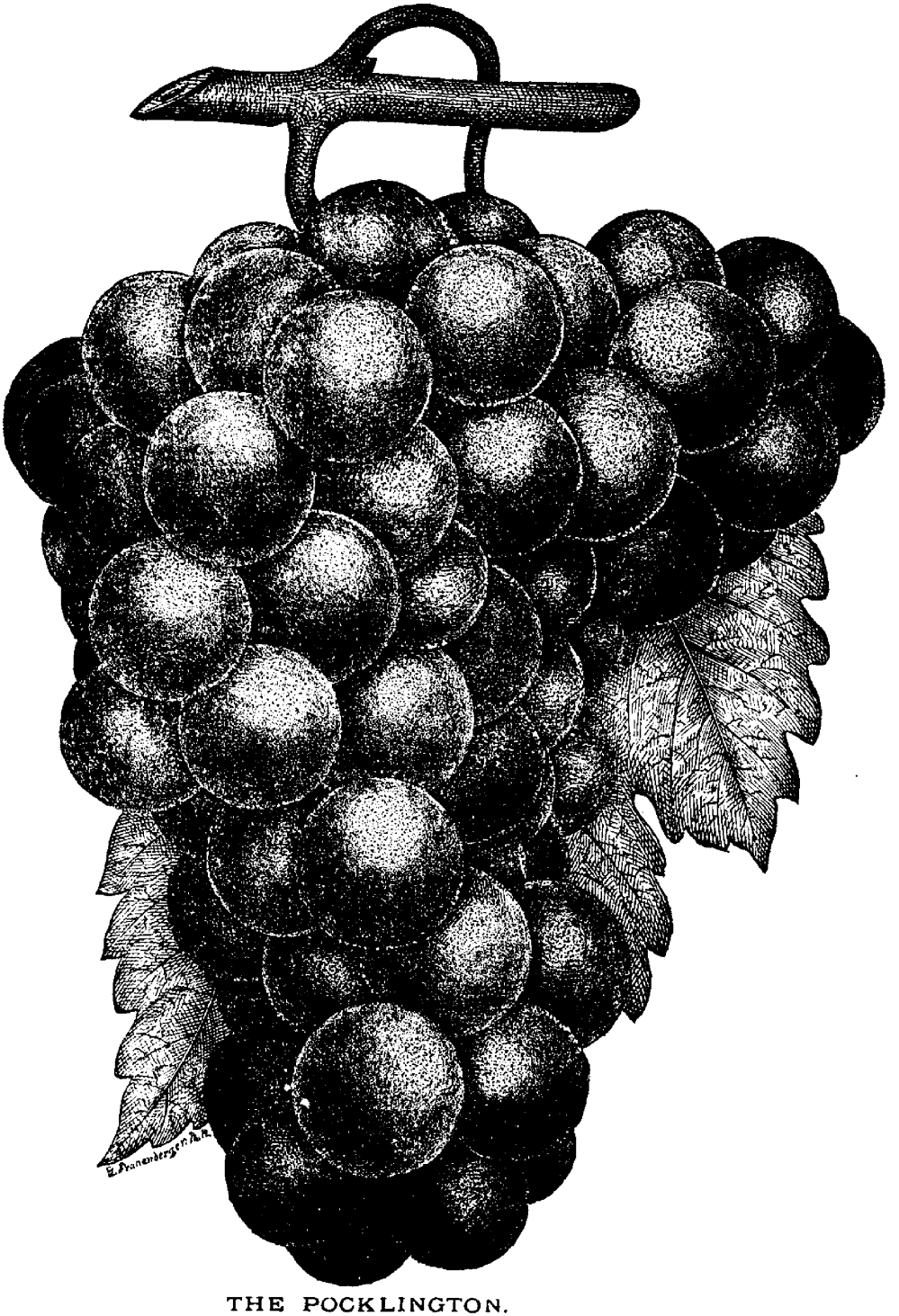
JEFFERSON. Reduced One-third.



LADY WASHINGTON.



MOORE'S EARLY.



THE POCKLINGTON.

A BRANCH OF THE PRENTISS GRAPE,
From a Photograph, showing its great productiveness.

PRENTISS.—Another new white grape of excellent quality, and promising to be valuable where the Concord will succeed. The vine so far has proved to be hardy and very productive. The bunches are of good size, very compact, berries medium size, yellowish-green when ripe, sweet, juicy and of pleasant flavor. It will bear transportation unusually well, and keep in fine condition for a long time. It ripens about with the Concord. (*See Cut on Page* 59.)

REBECCA.—A delicious little grape, but very difficult of cultivation, not enduring well the extreme changes of our climate. Only those who are willing to give it most careful cultivation should ever plant it in this climate. It is a light-green when ripe, sweet and excellent.

SALEM. Rogers' No. 22.—A very popular grape, on account of the large size of bunch and berry, good quality of the fruit, and the healthy, hardy and vigorous character of the vine. It is nearly a maroon color when fully ripe; sweet, juicy and somewhat aromatic; ripe a little before the Concord.

SENASQUA.—A showy black grape of good quality, but ripening too late for general cultivation.

VERGENNES.—A very handsome red grape not much earlier than the Concord, but ripening its wood very early, and therefore likely to be very hardy. The leaves are thick and leathery; the vine exceedingly productive, vigorous and healthy. The fruit will keep a long time, retaining its fresh, sprightly flavor. It is well worthy of a trial in our climate.

WALTER.—A red grape, ripening at the same time as the Concord, of good quality, but it has not been planted sufficiently in Ontario to test its value in our climate, and it has not gained any great popularity elsewhere.

WILDER. Rogers' No. 4.—Probably this variety is the most popular of all the Rogers Hybrids. It has been very widely distributed, and everywhere is highly prized. It is large both in bunch and berry; black, sweet and very pleasant flavor. It ripens a very little earlier than the Concord, is a better grape and more showy. It is now beginning to receive the attention which it deserves as a market grape, and is being extensively planted for that purpose. The vine is vigorous, hardy, and productive.

WORDEN.—A black grape resembling the Concord, but ripening some ten days earlier. The bunches are large, compact and handsome; the berries are also large and showy. The vine is apparently as healthy, hardy, vigorous and productive as the Concord. In quality it is generally regarded as better than the Concord. It is valuable on account of its earliness and hardy character.

Instead of having only two or three varieties of grapes to plant, we are now becoming truly embarrassed by the number we have from which to make our selection. Each year adds some new varieties for trial, and so the number will go on increasing from year to year. Let us hope that increasing numbers will bring increased improvements, until we shall have at last found the grape that combines all excellences, and satisfies all expectations. Then may grape-growers bring forth the silver trumpet, proclaim the year of jubilee, and, sitting beneath the perfect vine, enjoy that rest for which the heart is ever sighing.

CUMBERLAND TRIUMPH (H).—A very fine berry in all respects; of very large size, fine form, beautiful color and excellent quality, and is growing into general favor. At the Nurserymen's Convention, held at Cleveland in June last, it was pronounced by good judges the finest appearing variety on the table.

A. M. PURDY.

WINTER BLOOMING PLANTS.

All the Geraniums are excellent window plants, but some of them are shy winter bloomers, yet many of them are handsome enough in their foliage, even if they are destitute of flowers. The most constant bloomers of any I have grown are Jean Sisley, a large, dazzling scarlet, with a distinct white eye; Master Christine, a single pink, and Loarine, a light scarlet, but the trusses are very large and full. These three are almost constant bloomers. Give Geraniums plenty of sunshine and fresh air, a moderate amount of water, to which there should be occasionally added some liquid manure, and abundant room to grow in, and they generally behave very satisfactory.

A few of the Fuchsias, or Lady's Eardrop, as they are sometimes called, are good winter bloomers. They are, however, strong feeders, and will starve to death on a soil in which a Geranium would grow luxuriantly, and more manure should be used with the soil in which they are potted. The following varieties have bloomed well for me all winter through: Arabella, tube and sepals pure white, corolla red; Speciosa, pale red sepals, corolla pale rose; and Lustre, waxy white tube and sepals, corolla tinted crimson and orange. I have never yet had a double variety that bloomed well in winter.

We have a magnificent class of plants in the Begonia. I will divide them into two classes, namely: the flowering and leaf varieties. Although the former all have handsome foliage, they are mostly prized for their beautiful flowers, which are produced in great profusion. They do best in a loose soil composed mostly of leaf mould and sand, and require a warm and partially shaded situation. Sandersonii and Hybrida Multiflora are the best winter bloomers. The former bears scarlet, and the latter rosy pink flowers. The leaf varieties are only grown for the beauty of the foliage, and the most prominent is the variety known as Begonia Rex.

BEGONIA REX.

The leaves of this grow very large. I have one plant of Rex and one of Queen of Hanover, which have been growing in a log hanging basket for over three years, and some of the leaves have measured over 14 inches across.

The largest leaves of some others do not measure more than six inches in diameter, all of which are variegated and margined with silvery and metallic colors of different hues. They should never be planted out in our hot summer sun as bedding plants, but for window plants, or for wardian cases or ferneries, they cannot be excelled. Some think that Begonias are hard to grow, but it is an erroneous idea, as after you once understand their nature, their culture is very easy, and they all make capital window plants.

The Calla, or Lily of the Nile, is a fine house plant, and all it requires is

CALLA LILY.

an abundance of warm water, and plenty of sunshine, and if given the required

rest in summer, will not fail to produce its large white flowers all winter through.—PRIMROSE, *in Western Horticulturist.*

HOW TO PLANT TREES.

BY N. ROBERTSON, GOVERNMENT GROUNDS, OTTAWA.

A great deal has been written and said about tree planting. Some advise one way, some another. I will give you my method, with which I have been very successful, and, as it differs somewhat from the usual mode, may be interesting to some of your readers. I go into the woods, select a place where it is thick with strong, young, healthy, rapid-growing trees. I commence by making a trench across so as I will get as many as I want. I may have to destroy some until I get a right start. I then undermine, taking out the trees as I advance; this gives me a chance not to destroy the roots. I care nothing about the top, because I cut them into what is called poles eight or ten feet long. Sometimes I draw them out by hitching a team when I can get them so far excavated that I can turn them down enough to hitch above where I intend to cut them off; by this method I often get almost the entire root. I have three particular points in this: good root, a stem without any blemish, and a rapid growing tree. This is seldom to be got where most people recommend trees to be taken from—isolated ones on the outside of the woods; they are generally scraggy and stunted, and to get their roots you would have to follow a long way to get at the fibres on their points, without which they will have a hard struggle to live. Another point recommended is to plant so that the tree will stand in the direction it was before being moved; that I never think about, but always study to have the longest and most roots on the side where the wind will be strongest, which is generally the west, on an open exposure.

For years I was much against this system of cutting trees into poles, and fought hard against one of the most successful tree planters in Canada about this pole business. I have trees planted under the system described that have many strong shoots six and eight feet long—Hard Maple, Elm, &c.—under the most unfavorable circumstances. In planting, be particular to have the hole into which you plant much larger than your roots; and be sure you draw out all your roots to their length before you put on your soil; clean away all the black, leafy soil about them, for if that is left, and gets once dry, you will not easily wet it again. Break down the edges of your holes as you progress, not to leave them as if they were confined in a flower pot; and when finished, put around them a good heavy mulch, I do not care what of—sawdust, manure, or straw. This last you can keep by throwing a few spadefuls of soil over; let it pass out over the edges of your holes at least one foot.

I have no doubt that the best time to plant is the fall, as, if left till spring, the trees are too far advanced before the frost is out of the ground; and by fall planting the soil gets settled about the roots, and they go on with the season.

Trees cut like poles have another great advantage. For the first season they require no stakes to guard against the wind shaking them, which is a necessity with a top; for depend upon it, if your tree is allowed to sway with the wind, your roots will take very little hold that season, and may die, often the second year, from this very cause.

All who try this system will find out that they will get a much prettier headed tree, and much sooner see a

tree of beauty than by any other, as, when your roots have plenty of fibrous roots, and are in vigorous health, three years will give you nice trees.

THE CUTHBERT RASPBERRY—ITS MERITS AND DEMERITS.

BY T. C. ROBINSON, OWEN SOUND.

No fruit seems to have been so well received, and so nearly to have monopolized the attention given by fruit growers to its class of late years, as the Cuthbert with our American neighbors; and now that it is putting in an appearance on this side of the line, a few words of critical description may be in order.

It is not a fruit of unqualified excellence any more than any of our choicest apples or plums or pears, though the almost unqualified praise it has met with would perhaps lead us to think so. The truth is, we needed a good raspberry that would grow anywhere, and both eat and sell well, more than any other kind of fruit, except perhaps the gooseberry, that so many points of excellence combined in this raspberry fully account for its popularity without assuming for it perfection, as many seem inclined. We have had, it is true, raspberries of fine size and delicious flavor, like Clarke and Knevet's Giant, but to a lack of hardiness has been joined a softness which unfitted them for market uses. The grand old Franconia, so good for both market and home use, would not grow large enough to bear a paying crop on light soils, and would grow so large and soft on heavy soils as to winter-kill in most parts of the country. Philadelphia, the acme of productiveness, and sufficiently hardy, was too soft and dark-colored and poor-flavored to stand the test; and so on down the list, pausing at that model of raspberry hardiness, the Turner, to note that its sweetness, hardiness and vigorous growth, and adaptability to light soils, do not quite make up for a slight lack of firmness, size, and uniformity of ripening, necessary to a first-class market variety, while its earliness leaves a great want still for a good late variety. Just here the Cuthbert steps in, and hence its welcome. Its size is all that can reasonably be asked—not monstrous, you know, as some representations make it appear, unless extra cultivation is given, when it no doubt can be grown over an inch in longest diameter; but with fair market culture, it will run $\frac{5}{8}$ to $\frac{3}{4}$ of an inch by the quart. In shape it is much longer than the raspberries we have been used to—a cone, more pointedly conical than even Turner, which is quite long for a raspberry. It seems about as firm as Franconia, that is, as firm as a market raspberry needs to be; and its color is rich enough and bright enough, as grown with me, to satisfy the most exacting. How it will grow on poor, light land I cannot say, as I only have it on good land, or on poor, light land, so close to a richer, heavier strip that the roots have made themselves at home in the good soil on one side of the plant; and right here let me say that this question of its behavior on poor soils is one to which I do not propose to extend my experience. I have had enough of fruit growing on land not fit to grow even white beans, and think too highly of the Cuthbert to subject it to such a test. I have Franconias of three years' growth on such land that after the discouragement of last June's frost (clipping foliage, not blossoms), refused in such a dry season to give one quart to every twenty or thirty plants, even with the stimulus of a good mulch of manure. No doubt many fruit growers have just such land, and for their encouragement may serve the experience of American fruit growers who claim

to have succeeded with Cuthbert on light soil, but that is a point on which I stand aside. But as to productiveness I have no doubt personally. I do not like to say it is as productive as Philadelphia, simply because I should like a little more experience with it before praising it so highly. With it on my place three seasons—in only one of which it had growth enough to bear a full crop—I am not going to write as if I knew all about it; but, taking into account the mutilation of the roots to remove the suckers for planting, I have no hesitation in placing it second only to Philadelphia in bearing qualities, out of a dozen *red* raspberries tested so far.

But what are its faults? A distinguished American horticulturist and nurseryman says that is just what he has been trying for years to find out—and can't. Such excellence as this in the Cuthbert is more than I can see, but its demerits are certainly neither great nor numerous. Such as they are on my grounds, however, I state them, as we need to look on both sides of a question of fruit as of anything else.

And first, the canes do not seem quite stiff enough for the load of fruit. The stems shoot up with great rapidity in spring; in late summer they grow slower and mature innumerable fruit buds, and the stalk, of course, thickens up, but does not appear to acquire that toughness and rigidity of fibre we note in the Philadelphia and Turner. With the long laterals which summer pinching causes, of course the effect is to let some of the fruit get splashed in the event of a heavy rain, and if deep snows come in winter these laterals are apt to be broken off. Older experience may show a stiffening up of the cane, and different application of pinching favor a growth of laterals too high to be broken down by snows, but I simply state what I have seen so far.

Then I have not been able to quite gauge its hardiness. The first winter the yearling plants, together with foreign sorts, were badly killed—perhaps, indeed probably, because of too vigorous late growth—but frozen they were, and the fact must be faced. Last winter they came through smiling in spite of that cold dip that almost brought the thermometer down from the peg and the oldest inhabitant to his memory's end. But Clarke and Franconia came through too, nearly as well. And this winter, January 13th, they are green to the tips, except where very late fall growth was made—but the foreign sorts are not far behind.

On the whole, I do not think in this climate it is any hardier than Franconia, Clarke, &c., on one year old plants, but rather more so when full grown; but I do not regard the moist favorable climate of Owen Sound fit to decide the question, and I look eagerly for reports of my brother fruit growers in other districts to fix its value as to hardiness for the Province, conscious too that Cuthbert did not get a fair relative trial with me, because I had it on rich soil that caused quick soft growth, while the other sorts were on poor soil that caused closer grained hardier wood.

Lastly, it has a large hollow—perhaps not wider than other sorts; but that long crimson cone fits on to a long stem, and fits pretty tightly too, though not so as to break in the picking, and when it comes off and lies with its neighbors in a quart basket, I should expect, after jolting in the express car, or standing thirty hours in a shop window, a sinking down in the basket that would cause a distinct murmur at the purchaser's end of the line.

That's the Cuthbert. There's room for a better berry—a little better—and, as usual, a number of claimants for public favor are ready to step in;

among which Lost Rubies stands first perhaps. But these are untried, and may turn out good or the reverse. If any man *knows* any raspberry that is better than Cuthbert, let him speak up! It must be good indeed! I don't; and if any man wants raspberries without too much trouble and plants the Cuthbert, I shall expect him to get lots of large handsome berries that are very good to take—internally or to market—and to feel about as satisfied as he can well expect to be in the fruit business.

EVERGREENS FOR HEDGE, &c.

Clinton, Jan. 20th, 1882.

DEAR SIR.—1. What kind of evergreens is suitable for a low hedge in a garden or cemetery that will stand trimming and not break down with the snow?

2. What kind of evergreens are suitable for a lawn as trees for ornament?

3 What time of the year should they be pruned to make them grow close?

4. Is there any particular way of trimming them?

5. Is any book published with diagrams showing the proper way?

6. Will it hurt trees twenty years old to cut them back to make them grow close? A SUBSCRIBER.

ANSWER.

1. The best are the dwarf Arbor Vitæs, which are of easy culture, can be trimmed in any form, and seldom get broken by the snow.

2. The Hemlock Spruce, White Spruce, Norway Spruce, Austrian Pine, Scotch Pine and White Pine, are all fine lawn trees, especially in grounds of considerable size. The American Arbor Vitæ, Siberian Arbor Vitæ, Sweedish Juniper, Prostrate Juniper, Savin Juniper and American Yew, are suitable for smaller grounds.

3. The best time to prune them is the last of May or first of June, when the trees are beginning to make a new growth.

4. The best method of pruning the Pine and Spruces is to rub off the terminal buds of the branches it is desired to make more dense just as they begin to push. If this is done when the trees are small, and kept up as occasion may require, it will never be necessary to use the knife, and the trees can be kept compact and symmetrical with ease. The Arbor Vitæs and Junipers can be trimmed with the shears and brought into any desired form. In all cases it is desirable to commence the pruning when the trees are small, so that but little cutting away will be needed.

5. We have never seen any such work.

7. No, if the pruning be not too severe. It will require more time to bring such a tree into a dense form than one that is young, but by patient shortening in every season, cutting off the ends of the branches, and waiting for the tree to grow more dense from year to year, the object will at length be accomplished without cutting off large branches, which would make the tree unsightly for some time.

THE CUMBERLAND STRAWBERRY.—Chas. Hurd, of Michigan, says: The Cumberland Triumph is the largest and most *delicately* flavored berry on my grounds. It is a berry to delight the amateur, is a rank grower and an abundant bearer. A few days since I received a letter from Mr. Miller, the originator, in which he says that from 1¾ acres this season he obtained 270 bushels. I consider it among the finest cultivated.—*Fruit Recorder.*

FIVE RASPBERRIES COMPARED.

I have been myself daily picking among the following named red raspberries during the last week, comparing points, which count in estimating the value of varieties, and hand you herewith, in a tabulated form, the results. My land is a sandy loam, and that occupied by the raspberries is about uniform in quality, about right to produce forty bushels of dent corn per acre.

In this scale of points I give ten, not as perfection, but as the highest yet reached by any variety—as for instance, Thwack is the hardiest, Reliance most productive, while Turner is generally conceded a standard in respect to flavor of the berry:

NAME OF BERRY.	Hardiness.	Productiveness.	Firmness of Fruit.	Size of Fruit.	Attractiveness In boxes (color).	Quality.	Total.
Thwack	10	8	10	8	10	8	54
Reliance	9	10	9	10	8	8	54
Turner	8	8	8	8	9	10	51
Cuthbert, or "Queen of Market"	8	9	7	9	7	8	48
Winant	9	9	8	8	9	9	52

REMARKS.—Those who grow berries solely for market will pay no attention to quality, for—I regret to say—quality counts zero in the market, while attractiveness (including size and color) counts everything. Those, on the other hand, who grow berries for their own use only will look at good quality, hardiness, and productiveness, rather than for large size and brightness of color.

There are some characteristics of the above named varieties not noted in the table which should have an influence in determining upon a selection. The Turner is a few days earlier in ripening than either of the others. It is followed in two or three days by Thwack and Winant, then comes Reliance, and latest the Cuthbert. The Reliance continues in bearing a little longer than any other sort of red raspberries. The crop of Reliance is but two-thirds ripened at this date (July 18), whereas Turners gave their last picking for the season two days since.

All these varieties sprout from the roots plentifully, and the young plants coming up between the rows must be mercilessly destroyed, or the "patch" will soon "run to waste."

Of black-cap raspberries, the Gregg still takes the lead, though the canes were sadly damaged last winter—a rare exception to its hitherto uniform hardiness.—O. B. GALUSHA, *in Prairie Farmer.*

BOOKS AND PERIODICALS.

THE MONTREAL WITNESS

Is presenting a picture to each subscriber to the weekly edition, and two to each subscriber to the daily. They are stirring pictures of military life—the one a battle scene, and the other a very suggestive after the battle roll-call.

E. P. ROE'S CATALOGUE OF SMALL FRUITS AND GRAPE VINES for the Spring of 1882—

Gives a concise description of a large number of Strawberries, Raspberries, Blackberries, Currants, Gooseberries and Hardy Grapes. He speaks in very high praise of the Bidwell Strawberry.

AMERICAN AGRICULTURIST.

The January number of this long-established monthly, which now enters upon its fortieth year, is promptly to hand, full of illustrations and information interesting to every farmer and gardener. Issued by the Orange Judd Company, 751 Broadway, New York, at $1 50 per annum.

JOURNAL OF THE AMERICAN AGRICULTURAL ASSOCIATION

Is published quarterly. The last number that has reached us is the one for July and October, 1881. It is full of interesting papers, on such topics as Agricultural Instruction for the Young; the Railroad and the Farmer; Preventable Losses, &c. It is published by the Association, at 127 Water St., New York, price $2 00 per annum.

THE AMERICAN MONTHLY MICROSCOPICAL JOURNAL, edited and published by Romyn Hitchcock, F.R.M.S., No. 53 Maiden Lane, New York, at one dollar per annum—

Is replete with information for the microscopical student, and some of its articles full of interest to the general reader.

THE GARDENER'S MONTHLY.

The January number for 1882 of this valuable horticultural journal is to hand. It is replete as usual with interesting information concerning new and rare plants and fruits. Published by Chas. H. Marot, 814 Chestnut Street, Philadelphia, Penn.

AMERICAN WINE AND GRAPE GROWER.

Devoted to the culture of the vine, wine-making, and kindred industries. Is published monthly, at 20 Vesey St., New York. Subscription price, $2 00 a year. The December number has a very interesting paper on the pomological resources of Texas.

NOTES FROM SUNNYLAND, on the Manatee River, Gulf Coast of South Florida.

A very interesting little book, of some eighty pages, by Samuel C. Upham, of Braidentown, Flor., giving some stirring incidents in the early history of that region, and an account of the climate and fruit productions of that part of the State. He tells us that the first pound of coffee grown in the United States was raised at Fogartyville, Flor., in 1880, by Madame Julia Atzeroth. Also that the fruits grown there are the orange, lemon, lime, guava, pomegranate, persimmon, olive, almond, &c. The lowest temperature was 38°, and the highest 96°, during the year 1880. He claims that South Florida will one day supply the world with oranges, and that of better quality than those now brought from the Mediterranean.

The little people have no reason to complain that they are overlooked by writers or publishers now-a-days. We have before us four publications especially designed for their amusement and instruction, published by D. Lothrop & Co., Boston, Mass. They are—"Wide Awake," an illustrated monthly magazine, for $2 50 a year, intended for the larger young people; "Babyland," a monthly at 50 cents a year, for the very little ones; "Little Folk's Reader," a monthly at 75 cents a year, for primary schools and kindergartens; and "The Pansy," which is issued weekly at 50 cents a year. These are all beautifully illustrated, and printed in the best style, and abound with interesting stories that cannot fail to please the young readers.

THE SOUTHERN CULTIVATOR.

We have received the January number of *The Southern Cultivator and Dixie Farmer*, the oldest, as it is the best, agricultural journal in the Southern States. It is now published by Jas. P. Harrison & Co., of Atlanta. Dr. W. L. Jones, for years the editor of this popular journal, retains his position; Dr. J. S. Lawton is the associate. Under this management, *The Southern Cultivator* will not only maintain its former high standard, but, with the assistance of ample capital and increased facilities, and contributions from the most eminent and popular writers on Agriculture in this country, will attain a higher standing than ever.

The number before us is a gem. No journal of its kind can excel it in the value of its reading matter, the beauty of its illustrations, and its adaptation to the demands of progressive Southern agriculture. The illustrated title page is the finest of the kind we have ever seen. *The Southern Cultivator and Dixie Farmer* should be read and studied by every farmer and planter in the South. The terms, $1 50 a year, with special rates for clubs, are remarkably low.

THE USE OF FLOWERS.

God might have made the earth bring forth
Enough for great and small,
The oak-tree and the cedar-tree,
Without a flower at all.

We might have had enough,—enough
For every want of ours,
For luxury, medicine, and toil,—
And yet have had no flowers.

The ore within the mountain mine
Requireth none to grow,
Nor does it need the Lotus flower
To make the river flow.

The clouds might give abundant rain,
The nightly dews might fall,
And the herb that keepeth life in man
Might yet have drunk them all.

Then wherefore, wherefore were they made
And dyed with rainbow light,
All fashioned with supremest grace,
Upspringing day and night?

Springing in valleys green and low,
And on the mountains high,
And in the silent wilderness,
Where no man passeth by?

Our outward life requires them not,
Then wherefore had they birth?
To minister delight to man—
To beautify the earth.

To comfort him, to whisper hope
Whene'er his faith is dim,
For whoso careth for the flowers
Will much more care for Him

MARY HOWITT.

PAPER BAGS FOR GRAPES.—George W. Campbell says that further experiments with paper bags of thin manilla on grapes during growth and ripening, show that they preserve against birds and rot. The bunches should be previously thinned out, to make the bagging easy. The grapes ripen perfectly.—*Country Gentleman.*

THE MAMMOTH PEARL POTATO.—We cut into single eyes and planted one-half bushel of Mammoth Pearl potatoes last spring, after the middle of May, and the first of October we dug from same 36 bushels of very large, smooth, white potatoes. All who saw them growing were astonished at the vines, which completely covered the ground, but when they saw the yield they opened their eyes in wonder. Such beauties had never before been seen in this or any other country. The beauty of these potatoes is this: there is not a hollow or rotten one in the lot, and they are such rank growers the bugs can't catch them.—A. W. F., *in Fruit Recorder.*

SQUASHES to keep well must first be well ripened; second, they should be gathered before heavy frosts come; third, should be well dried; fourth, the shell should be well glazed over, and while it need not be thick it should be hard; fifth, they should be kept where the temperature is very even, never very cold, or very hot; sixth, in handling, great care should be taken not to bruise them—this is of the highest importance.

WE are informed by G. H. Miller, of the *ad-interim* committee, that the Cumberland strawberry, in addition to its large size, handsome form and good quality, has been successfully shipped from Barnesville to Chicago (some 400 or 500 miles), arriving in fine order, and selling as high as $9.60 per bushel. As it has commonly been supposed to be too soft for long conveyance, this fact gives it additional value.—*Country Gentleman.*

STRAWBERRIES IN IOWA.—A correspondent of the *Prairie Farmer*, in Southern Iowa, says the Sharpless, Great American, Col. Cheney, Lincoln and Longfellow have all failed with him, while the Charles Downing, Kentucky and Crescent succeed well, and the old Monroe Scarlet, raised by Ellwanger & Barry, of Rochester, holds its own against weeds and neglect, and has borne well every year for twenty-five years.—*Country Gentleman.*

IMPROVEMENTS IN FRUIT DRYERS.—Mr. David Britton, of Jonesborough, Ill., has patented a fruit dryer, which has superior drying facilities and offers increased conveniences for inserting, changing, and removing the fruit. It consists of a drying house having a separable strip in its roof to provide for the escape of the moist air and to promote circulation of the heated air, a furnace for heating the incoming air; guiding, and distributing plates for the air to, at the sides of, and above the furnace; a series of tracks of ways on opposite sides of the interior of the drying house and arranged one above the other to support tiers of drawers which hold the fruit to be dried; and separable end frames having crossbars and hinged doors to provide for the entry and removal of the drawers with very little waste of heated air.—*Scientific American.*

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