

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- |                          |   |                                     |   |
|--------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /<br>Couverture de couleur  | <input type="checkbox"/>            | Coloured pages / Pages de couleur   |
| <input type="checkbox"/> | Covers damaged /<br>Couverture endommagée   | <input type="checkbox"/>            | Pages damaged / Pages endommagées   |
| <input type="checkbox"/> | Covers restored and/or laminated /<br>Couverture restaurée et/ou pelliculée   | <input type="checkbox"/>            | Pages restored and/or laminated /<br>Pages restaurées et/ou pelliculées   |
| <input type="checkbox"/> | Cover title missing /<br>Le titre de couverture manque  | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed /<br>Pages décolorées, tachetées ou piquées   |
| <input type="checkbox"/> | Coloured maps /<br>Cartes géographiques en couleur  | <input type="checkbox"/>            | Pages detached / Pages détachées  |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /<br>Encre de couleur (i.e. autre que bleue ou noire)  | <input checked="" type="checkbox"/> | Showthrough / Transparence  |
| <input type="checkbox"/> | Coloured plates and/or illustrations /<br>Planches et/ou illustrations en couleur   | <input checked="" type="checkbox"/> | Quality of print varies /<br>Qualité inégale de l'impression  |
| <input type="checkbox"/> | Bound with other material /<br>Relié avec d'autres documents  | <input type="checkbox"/>            | Includes supplementary materials /<br>Comprend du matériel supplémentaire   |
| <input type="checkbox"/> | Only edition available /<br>Seule édition disponible  | <input type="checkbox"/>            | Blank leaves added during restorations may<br>appear within the text. Whenever possible, these<br>have been omitted from scanning / Il se peut que<br>certaines pages blanches ajoutées lors d'une<br>restauration apparaissent dans le texte, mais,<br>lorsque cela était possible, ces pages n'ont pas<br>été numérisées. |
| <input type="checkbox"/> | Tight binding may cause shadows or distortion<br>along interior margin / La reliure serrée peut<br>causer de l'ombre ou de la distorsion le long de la<br>marge intérieure. |                                     |   |
| <input type="checkbox"/> | Additional comments /<br>Commentaires supplémentaires:  |                                     |   |

THE  
CANADIAN  
HORTICULTURIST.

PUBLISHED BY  
THE FRUIT GROWERS' ASSOCIATION  
OF ONTARIO.

---

VOLUME VI.

---

D. W. BEADLE, EDITOR,

ST. CATHARINES, ONTARIO.

COPP, CLARK & CO.  
PRINTERS, 67 & 69 COLBORNE STREET, TORONTO.

1883.

INTRODUCED AND FOR SALE BY  
J. T. LOVETT,  
LITTLE SILVER, N. J.



NEW YORK, N. Y.

THE EARLIEST RASPBERRY IN EXISTENCE AND UNSURPASSED IN OTHER RESPECTS.

THE  
**Canadian Horticulturist.**

VOL. VI.]

JANUARY, 1883.

[No. 1.

THE HANSELL RASPBERRY.

THE COLOURED ILLUSTRATION which adorns this first number of the new year has been presented to our readers by Mr. J. T. Lovett, who is the introducer of this new fruit. It is quite impossible for the Editor to give any information concerning this new aspirant for public favour from personal acquaintance with the plants or the fruit, not yet having seen either. The following history and description is gathered from what Mr. Lovett publishes concerning this raspberry :

ITS HISTORY.—About eight years ago it was noticed growing among weeds and grass in a very unfavorable spot, where a raspberry not possessed of great constitutional vigor would have perished. After having been eaten down by a cow and barely escaped being dug up when the ground was cleared of rubbish, a branch struggled up into daylight sufficiently to bear fruit, which was so fine as to attract the attention of the owner, the late J. S. Hansell, who was an eminently successful fruit grower. He removed the plant to a more favorable location, and here its performance was so exceedingly fine that he set about increasing his stock of it as rapidly as possible, so that at

the time of his death he had ten acres of it growing.

DESCRIPTION.—It ripens very early, fully ten days in advance of the Brandywine growing beside it with the same treatment. It also invariably ripens its entire crop in a short space of time, about three weeks, and is wholly gone when the Cuthbert is at its height. The berry is medium to large, averaging larger than Brandywine and nearly as large as Cuthbert; the color is of the brightest crimson, and the firmness equalling that best of all shipping red raspberries, Brandywine. The quality is *best*, being notably rich and refreshing, and the odor delightfully agreeable. The canes are vigorous, productive and entirely hardy, having never been injured either by the heat of summer or cold of winter, and is believed by Mr. Lovett to be as hardy as the iron-clad Turner. It has been fruited on a liberal scale on the Hansell place and sent to market, commanding a high price on account of its earliness and quality, and proved to be peculiarly so profitable that with the sole object of fruit in view, the owner has extended his plantation of it to its present extent of more than ten acres. Such is Mr. Lovett's

high appreciation of this berry that he concludes his account of it by saying, that "the Hansell is the most desirable and valuable raspberry in existence."

This is certainly very high praise indeed from one who is well acquainted with the Cuthbert, which has been winning golden opinions from all cultivators of the raspberry, and rapidly taking the front rank as the best and most valuable red raspberry for market purposes. The ground, however, of the high position which he assigns to the Hansell is, that while possessing excellence of flavor and firmness to endure handling, it ripens so much earlier that it leads the market in price, and thus secures to the grower a larger pecuniary return than can be obtained from the excellent but later ripening Cuthbert.

However, plants of the Hansell are now in the market, and our growers of small fruits will not be slow to test its adaptation to the climate of Ontario. In a very short time its merits will have been put to the test in a very different climate from that of New Jersey and under conditions very different from those of the place of its origin. If it maintains the character given it by Mr. Lovett, our readers will have reason to thank him for introducing it to their attention.

**WINTER RADISHES.**—Winter Radishes should be sown during August. The *California Mammoth White Winter Radish* is the best variety. It is of good, mild flavor, and may be kept in good condition all winter in a cool cellar, if covered with sand. As with all Radishes, quality depends largely upon quick growth. —*American Garden.*

#### SOME OF THE NEW FRUITS.

Mr. R. H. Haines, of Moorestown, New Jersey, writing to the *National Farmer* about some of the fruits of comparatively recent introduction, says of the JEFFERSON GRAPE that it pleases him the most in the line of new red grapes; that it is fine-looking, large, of a pleasant flavor, and of a certain crispness of berry and distinctness of taste that makes it a pleasure to eat it; and that it ripens late enough to admit of its being kept in fine condition until January or February.

THE VERGENNES, he says, is also a fine red grape, hardy of vine, and ripening much earlier than the Jefferson.

BRUNTON'S EARLY BLACKBERRY is mentioned as attracting considerable attention, because it is one of the very earliest of the blackberries, ripening considerably in advance of Wilson's Early, and is proving very profitable in some sections on account of its earliness. The EARLY HARVEST BLACKBERRY is also becoming a favorite for earliness; but the TEXAS RED HYBRID, he thinks, is attracting more notice than all the others on account of the novelty of its color, it being a red blackberry and of fine eating qualities, and the berry being more nearly free from large seeds than any known blackberry; while the plants are estimated to yield nearly one-half more fruit than those of other blackberries. His plants have made a vigorous and healthy growth, and the fruit ripens so much earlier than the Wilson's Early that he thinks it may prove quite profitable in market if the plants are set out in sufficient quantity.

The CHAMPION QUINCE ripens very late, yet most persons, he says, will consider this an advantage, because it will not come in competition with the Orange Quince, and will keep until January and February. It is very large and showy and of excellent quality for

cooking, while the trees are often loaded down with fruit when only two or three years planted, while other sorts of the same age have not a single specimen.

The KIEFFER'S HYBRID PEAR, he adds, is a greater favorite than ever, now that people are learning that the trees are blight-proof, and that its large and high-colored fruit sells at such handsome prices.

We note on this point of being blight-proof that Mr. Thomas Meehan says that instances have occurred where the tree has suffered severely from the genuine fire-blight, so that it is hardly safe to say that the trees are wholly proof against the fire-blight, though they may be less subject to this sore malady of the pear than many other varieties. If it shall prove to be no more subject to this disease than the well-known Seckel, Duchess d'Angouleme, or Doctor Reeder, it will be an acquisition in this particular. It is no doubt a fact that large orchards of this pear have been planted, and that some of them are coming into bearing, and that the fruit canning establishments eagerly buy up this fruit for canning purposes, because of its handsome appearance when canned and its peculiar Quince-like flavor.

Mr. Charles Downing, the well-known American pomologist, met with a serious accident on the 9th of November last in the City of New York, by which two of his ribs were broken. He is eighty-one years old, and it is feared that permanent ill effects may result, though hopes are entertained that it will not prove fatal. Every reader of these pages, will, we are confident, feel as though a much esteemed personal friend had been prostrated by this accident, and will sympathize deeply with this veteran worker in the field of pomology who has done so much for our favourite science.

#### SPECIAL FERTILIZERS FOR MELONS.

Dr. Sturtevant says that in growing melons, it seems well to add a handful of sulphate of potash, or several handfuls of wood ashes, to each hill. The effect seems to improve greatly the quality of the fruit grown, and if his experience is sufficient to generalize from, he would say that the addition of potash in excess to the soil upon which the melon is grown will add an excellent quality to the fruit.

#### PEACHES FOR MARKET.

Mr. P. M. Augur writes to the *Rural New Yorker* that he has been visiting the Delaware Peach Orchards, and mentions trees whose girth was from 36 to 44 inches, with proportionate heads, loaded with beautiful fruit. He says that most of the very early varieties rotted badly, still those who had good Alexanders got from two to three dollars per basket when they reached market in good order. Hale's Early also rotted badly, and Early Rivers rotted, while Early Beatrice were too small. The best kinds this year were Mountain Rose, Crawford's Early, Crawford's Late, Old Mixon Free, Reeve's Favourite, Moore's Favourite, Ward's Late, Stump the World and Smock.

He says that the Shakers at Enfield, Connecticut, last year thinned their Early Crawford's so that one hundred and forty peaches filled a bushel and sold them at their nearest market for eight dollars per bushel; and adds, "let all remember that fancy fruit brings fancy prices; it is the poor article that begs a market." The Mountain Rose takes the place of the Early York now; the Old Mixon Free is regarded as having many good qualities, and can be raised probably more cheaply than almost any other peach, and is excellent for canning, only that the fashion now

runs to yellow-fleshed peaches, hence Reeve's Favourite, Crawford's Late and Smock take the first places for canning.

While this may be true of canning, your Editor is credibly informed that for drying the white-fleshed peaches are all the rage, and that the drying establishments pay more for white peaches than for the yellow.

#### HOW TO DESTROY THE CABBAGE WORM.

A correspondent of the *Fruit Recorder* writing from Port Huron, Michigan, says that he commenced a series of experiments for the purpose of discovering something that would kill the worms and yet not be poisonous to human beings, and finally found that a solution of common alum made by dissolving one pound of alum in three gallons of rain water would kill the worms.

His mode of proceeding was to dissolve the alum in a small quantity of water by heating the water, and then add sufficient water to make the whole three gallons. When this was cold he put it into a common watering pot having a rose spout, and sprinkled his cabbage and cauliflower plants, keeping up this sprinkling as long as any of the insects were about, from the time that the white butterfly began to lay her eggs. He says that he watered them almost every evening, and thus kept his cabbage and cauliflower perfectly clean.

He also tried the alum solution on his currant bushes and with equally successful results, and recommends it for washing the trunks of young fruit trees, for the reason that it is a cheap, effectual and non-poisonous insecticide, acting instantaneously on the worm or caterpillar by means of its astringency and so contracting their tissues that they cannot breathe.

If any of the readers of the *Canadian*

*Horticulturist* should give this simple method a trial they will confer a favor on others by giving the results of their experience.

#### GRAPES UNDER GLASS.

It is not so difficult a matter to grow grapes under glass as many seem to imagine. The writer recently visited the cold graperies of S. D. Woodruff, Esq., St. Catharines, where the grapes were yet hanging on the vines in great profusion, beautifully ripened. Besides the splendid bunches of White Syrian and Black Hamburg, so frequently to be found in such houses, were some fine clusters of Canon Hall Muscat, the first that we have ever seen growing in Ontario. These grapes are all grown under Mr. Woodruff's personal supervision, without the intervention of a professional gardener; and the question naturally arises, why is it that there are so few gentlemen who undertake the culture of grapes under glass. It seems to be the general opinion that no one can grow these grapes but a professional; this is evidently not the case, as Mr. Woodruff has so abundantly demonstrated. A little application on the part of any gentleman to this matter will enable him to give such directions to his man-of-all-work as will result in a fine supply of these delicious grapes.

**WINTERING CABBAGE.**—We know of no better way to preserve cabbages through the winter than to plant or set them up in rows as they grow—that is, with the roots down—fill in with soil pretty freely, then make a covering by planting two posts where there is a fence to rest on, or four where there is not, allowing for a pitch to carry off the water; lay bean poles opposite the way of the pitch and cover with corn-fodder or straw or boards. In using through the winter avoid as much as possible the sun side and close up again. We have not found setting the cabbage upside down in the rows, as some do, of any advantage.—*Rural New Yorker.*

## CORRESPONDENCE.

## FRUIT TREES IN ALGOMA.

MR. EDITOR,—I am unable to give you any news of interest as to our future prospects for fruit-growing in this part of Ontario, as I planted a hundred fine apple trees the spring before last, and they were all winter-killed last winter, except three Hyslop and three Transcendant Crabs; and these six trees afford me encouragement to try again, as they have made a good growth this summer. Amongst those that I lost were, twenty Duchess of Oldenburg, ten Alexander, ten Snow, ten Red Astracans, and ten Russets. I had great confidence in these varieties standing our winter; and now they are standing examples to my other half-hardy favorites, which, of course, perished with them. But I have great pleasure in informing you and friend J. H. Cumming, of St. Hilaire, P. Q., that the Wealthy apple I received from the Association last spring, after being almost dried up in the mail-bags from the long delay in getting here, made a fair growth, stood the winter well, and has made three feet of growth this summer; and my hope is that it will come out all right in the spring.

Yours with respect,

W. WARNOCK.

Blind River, 11th Nov., 1882.

MR. EDITOR,—Enclosed please find my subscription for 1883 of one dollar. You will please send at distribution one of the Worden Grape vines, as I intend the planting of vines, and see if we cannot have improved grapes to grow here. There are some Concord and a few other sorts growing in the older settled parts of this Island. I think I can get these new hardy kinds to do as well with good care. The vine of the Moore's Early, received a few weeks ago, is looking well; but I

will know by spring how it will stand the winter.

We are having very open weather, thunder and lightning twice during the past week. I suppose this indicates open weather for some time yet; so the old settlers say.

My crops this season have been, for spring and fall wheat and rye, very good; barley has not been good in our part; oats only an average crop; potatoes only half a crop, on account of the bugs, and we could not get Paris green in time to save them; but I intend having a supply in time for next season.

Yours, with respect,

JAS. C. COOPER.

St. Joseph Island, Nov. 13, 1882.

## DO BEES INJURE GRAPES?

Seeing an article from the pen of Mr. Taylor, in November *Horticulturist*, on paper bags, grapes and bees, I thought said article certainly called for a reply. Mr. Taylor states that certain interested parties contend that bees do not puncture grapes, while he along with Hon. J. C. Rykert and other horticultural friends have actually seen them do it. Now, with all deference to these gentlemen, I must beg leave to differ with them. Whether I may be considered an interested party or not, I may simply state that I have a very fine collection of the finest varieties of grapes, also keep a number of colonies of bees, not for the profits they bring but from the pleasure they afford, mentally and physically, both to myself and family. I have kept from four to thirty colonies of bees for several years in the same garden as the grapes grow, and I have never lost a single bunch of grapes by bees. I have seen bees, wasps and flies all sucking the juices out of a bunch of grapes some of the berries of which had either cracked or been damaged by the cat-bird or oriole. The

oriole is a great enemy to grapes, as it just picks a hole in the berry and then leaves it, thus destroying all the berries on a vine in a few minutes. The bees quickly follow and take up the juices, but in this case are the bees not a benefit instead of an injury? Mr. Taylor is certainly misinformed as regards last winter being destructive on bees. On the contrary, it is rare to have bees come through a winter so strong and healthy. For proof see *Bee Journals*. Some time ago two bills were introduced in the California Legislature to do away with all bees, on account of puncturing and destroying grapes, but a careful examination and an extended debate proved that there was not a *single case* of bees puncturing grapes.

I may just state that I never had more bees and honey or a finer crop of grapes than this season. A desire to prevent others from falling into the same error, and also to prevent the innocent but industrious and useful bee from being blamed for some other guilty pest, must be my only excuse for asking you to insert the above in your valuable journal.

D. V. BEACOCK.

Brockville.

#### GLUCOSE HONEY.

Under the above heading, in the October number of the *Horticulturist*, page 239, will be found a short extract from an editorial in the Boston *Journal of Chemistry* for July, 1881: it concludes as follows:—Human ingenuity, it is stated, has reached the point of making honey and storing it in the comb without the intervention of the bee. By appropriate machinery a nice looking comb is made out of paraffine, and after the cells are filled with glucose syrup, this fictitious honey is warranted true white clover honey from Vermont.

It seems strange to us slow, easy going Canadians, that respectable Am-

erican journals should give circulation to such absurd and untruthful statements as the above. Dr. J. R. Nichols, the editor of the *Journal of Chemistry*, ought to have known the making of artificial comb-honey to be an impossibility; and if so, what excuse can be offered by him for giving circulation to a story which must of necessity very materially injure one of the most pleasant and profitable industries in the country, and in which many thousands of honest, respectable people are engaged?

Did he, like many others, assume the story to be true because it appeared in the respectable pages of the *Popular Science Monthly*? If so, he has probably seen his error before this, as the author of that article, in a letter to the *Bee Journal* in June last, after quoting from his own article the following sentence:—“In commercial honey which is entirely free from bee medication, the comb is made from paraffine, and filled with pure glucose by appropriate machinery”—states that this sentence was meant for a “scientific pleasantry.” The author of this “scientific pleasantry” admits that he knew his fabrication was being published and accepted as a truth in nearly all the papers in the country, yet lacked the manhood to affirm it a joke until the *Bee Journal* exposed the falsity and absurdity of the article. I have purposely omitted giving the name of the author of this “scientific pleasantry,” as I do not wish to give him that which that class of “professors” so earnestly desire—a fine advertisement. T. B.

Lindsay, Nov., 1882.

THE COLORADO BEETLE.—A labourer working on the American steamer *Wisconsin*, at Liverpool, on Thursday, found a live Colorado beetle. Information was sent to the Lords of the Privy Council, who ordered the insect to be killed and sent to Whitehall, which was done.

## CULTIVATION OF THE SUGAR BEET.

The quantity of seed required to the acre for the Sugar Beet would seem to be an insuperable objection to its cultivation as a financial enterprise, if the statement on page 238 of the *Canadian Horticulturist* is correct, for it says "about 10 tons of seed were used to the acre" at Coaticook, P. Q.

T. B.

Lindsay, Nov., 1882.

Thanks are due to our correspondent for calling attention to the above error. It should doubtless have read "10 lbs. of seed," though we have not now the article at hand from which the paragraph was taken to verify the correction.

## EASTER BEURRE PEAR.

This pear does well here. The tree is a good grower and bearer. I have it planted for but five years, and it has borne three crops of pears. This year it bore a bushel and a half. I think that a most excellent crop for so young a tree. The quality is very good for the season when pears are scarce, but it is not as good as some of the fall pears, though a great deal better than some of them.

HEBA RAWLINGS.

Ravenuswood, Ont.

## SOME GRAPES THAT HAVE NOT SUCCEEDED.

The *Rural New Yorker* has an experimental station of its own, somewhere in New Jersey we believe, where the new and old fruits and other things are tried. We learn as much from failure as from success, and it is but right that the public should be informed of the failures, that they may judge whether it is wise for them to continue the experiment. We clip the following from the *Rural New Yorker* of Nov. 25th:—

After what seems a sufficient trial, we have this Fall dug up and thrown away

the following grape vines: Quassaic (Ricketts), too tender; El Dorado (Ricketts), mildews and rots; Highland (Ricketts), too late in five seasons out of six, and sour when it does ripen; Newburgh (Ricketts), too tender; Rogers' No. 1, Goethe, too late—mildews badly, both leaves and fruit; Eumelan, grapes fall off.

## PREVENTABLE LOSSES.

I see harvested on one farm a moderate crop of corn and potatoes; just across the fence the yield is only about half as much, and just beyond it is a total failure. The land has every appearance of being equally fertile naturally. All have suffered from the drought, but not all alike. Here are certainly losses due to thoughtlessness and want of knowledge. It is supposable that each of these parties did nearly as well as their knowledge, training and energy permitted, yet the results are widely different, caused by the different degree of these elements possessed by each. If this be so, then to avoid the losses of the less successful farmer, his knowledge and land must approximate towards those of the more successful one. I have cited what I consider preventable losses of only two men, but there are thousands of just such men, and tens of thousands of just such cases, in every state. Who is to energize and instruct them? Who is to train and educate the 12,000,000 youth that now reside on the farm, so that such losses may not occur in the future? Who is to keep honored fathers abreast of the times—who were born in the beginning of the century, with limited opportunities for acquiring knowledge, and are hardly able to keep pace in their growth unassisted—with the improvements wrought by machinery, steam and chemistry? Twenty millions of men, women and children on the farm, all to a greater or less

degree desiring to be taught how to avoid the preventable losses and failures! Who is to do it? How is it to be done?—PROF. I. P. ROBERTS, in *The Journal of the American Agricultural Association*.

#### THE GLADIOLUS AS A FALL FLOWER.

The Gladiolus is one of the most beautiful and charming of all bulbous flowering plants, and should be far more extensively cultivated. As a late autumn flower, there is nothing to surpass it. They are of the easiest culture, and succeed in almost any variety of soil. I have not tried them in pure sand, but my poorest soil has given me as fine flowers and bulbs as I could desire. I usually plant them four or five inches deep, covering lightly, and after they have grown a few inches, hoe, drawing the earth to them, thus completing the covering. I find planting thus deep is a great aid in keeping them erect, and enables one to dispense with the use of stakes, and as the new bulbs are formed on top of the old ones, they are sufficiently below the surface to obtain requisite moisture and avoid being checked in growth should the surface become dry.



GLADIOLUS.

Many persons fail to get the most satisfaction, by planting too early and all at one time. If planted at intervals of two weeks or so for two or three months, the flowering season is much extended, and the later plantings come into flower when the bulk of other flowers are past. I know of no flower that embraces so wide a range and

variety of color and shades, from the most intensely brilliant and dazzling to the softest and most delicate tints, with various blendings of the same. The plants will stand quite a severe frost, or several of them, without injury, and after their more tender companions that helped to make up the beauty of the flower garden and lawn have withered and faded, the charming Gladiolus still remains to cheer our eyes and gladden our hearts. Even when the weather has become so cold as to freeze the ground, any flower-stalks near the point of blooming, if cut and put in water in the house, will continue to develop and unfold their bloom for two or three weeks, furnishing a source of great admiration to every visitor, and by their cheerful presence a welcome and attractive feature to any household, long after their companions have "withered and gone."

After the plants have ceased flowering, and before the ground is frozen deep enough to injure the bulbs, they should be taken up, the tops removed and the young bulbs put in paper bags, boxes, or something similar, labeled if the varieties are named, and kept in a dry cellar. The price of bulbs is now so low that no one need be deterred from engaging in their culture, in a small way at least. It is not necessary to pay fifty cents to one or two dollars for a single bulb; such prices belong to new and scarce varieties or novelties, and are no index of their beauty. A dozen bulbs of mixed colors can be had for a dollar, and as many choice-named varieties for double the amount, so that for a small investment the owner of the humblest yard or garden may be able to realize, and say with equal truthfulness, as has been said of the Lily,

"That even Solomon in all his glory  
Was not arrayed like one of these."

E. WILLIAMS, in *American Garden*.

## STAYMAN'S EARLY BLACKBERRY.

Dr. Stayman writes to the *Fruit Recorder* that he has a blackberry earlier, more hardy and perfect in blossom,

and more productive than Brunton's Early. It is a rather large, round berry, of the best quality, and is propagated either by suckers, cuttings, or from tips layered like the raspberry.



STAYMAN'S EARLY BLACKBERRY.

## A HORTICULTURAL SWINDLE.

I write you for a little information concerning Russian fruit trees. Two brothers of Iowa City are canvassing this (Audubon) county for what they call "genuine Russian apple trees." They say that there are no genuine Russian trees in America but theirs. They claim to sell for one Albaugh, president of the United States Horticultural Society. They get their trees shipped from Russia free of duty, and can sell them cheaper than other so-called Russian varieties.

Is there any truth in these statements? Who is president of the United States Horticultural Society? I did not "catch on," as I believe them to be fruit tree swindlers. This county has been sadly bled by such classes of men. By answering the above you

will greatly oblige a reader of the *Prairie Farmer*.

E. J.

Audubon, Iowa.

The persons are unmitigated swindlers. 1. There is no United States Horticultural Society. 2. There are plenty of Russian apples in America, and plenty of bearing trees, and at the Agricultural college farm of your State. 3. These chaps can get no better terms so far as tariff is concerned than any one else. 4. Trees of a size for planting cannot be economically shipped from Russia to the United States; only scions for grafting are sent.

The above is taken from the *Prairie Farmer* for the information of our readers, some of whom may have a visit from some of these swindlers, who do not confine their operations to Iowa, but visit Ontario with similar tales of the wonderful things which nobody can have but they only.

## GRAPES,

IN ULSTER AND ORANGE COUNTIES IN THE STATE OF NEW YORK.

Mr. E. Williams writes to the *Rural New Yorker* an account of his visit to these famous grape regions, and gives his impressions of quite a number of varieties of grapes that he found growing and bearing. The following are some of the kinds he mentions :

*Empire State*, a white variety produced from Hartford and Clinton ; foliage good, vine productive ; cluster of good size, compact shoulders ; berries medium ; very promising ; quality good.

*Lady Washington* was found to be doing well—much better than we had expected from the culture it received. We had expected to see these grapes under the very highest condition of culture. Mr. Ricketts said this was the general impression of visitors, but here under reverse conditions they certainly gave evidence of more merit than we could expect under the circumstances. Next season the *Lady Washington* will fruit for the first time over a wide extent of territory and begin to make its reputation for the future. The Editor of the *Rural New Yorker* remarks that this has fruited at his experimental grounds, but disappoints him.

*Newburgh Muscat*, raised by Dr. Culbert, of Newburgh, a cross of Hartford and Iona ; white, of first quality ; one of the *best* of vines ; vigorous and apparently healthy. It was bearing its first fruit, and we could not, therefore, judge of its productiveness, but its quality so impressed all that the desire to have a vine for our own use was unanimous.

*Belinda* (Miner), white, sweet ; cracks badly. Of the *Lady* and *Martha* type.

*Liuden* (Miner), black ; not as sweet as *Concord*, otherwise similar.

*Brighton* here was in absolute perfection. We failed to discover the least trace of mildew, and the proprietor says he has never seen it at all affected in this way on his grounds, which is the reason he has so confidently recommended it for years past, as it always does well with him.

*Po'keepsie Red* (Caywood), we here saw outside the originator's ground, and it is doing as well, if not better. It is said to be a cross of Delaware and Iona, much of the same character as the former—some say better. Although it originated some years ago, it is not yet disseminated.

*Wyoming Red*, a vigorous grower ; fruit larger than Delaware and darker in color ; very foxy and poor in quality ; ripens with *Champion* and keeps well.

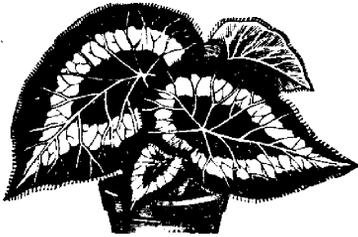
*Duchess* was seen at home under the master's care at Mr. Caywood's, yielding a fair crop and splitting considerably. A portion of the clusters had been bagged and these were found to be splitting worse than those exposed. As to the best time to apply the bags, Mr. Caywood claimed that those clusters inclosed at or before blooming were the most perfect. He thought the most failures with the *Duchess* were due to continuous fertilizing. If the soil was thin he would manure it well at the start before setting the vines and afterward withhold fertilizers, otherwise an excessive growth of wood and little fruit would be the result. When once established a little fertilizer in the shape of bone or wood ashes was all that seemed to be needed.

*Ulster Prolific*, a red variety of his, presented quite a vigorous appearance ; fruit medium ; bunch small and rather foxy. The Editor of the *Rural* adds that specimens of this variety sent to him were among the very best he had ever tasted.

Mr. Williams' next call was on Mr. Lucas, one of the most careful and painstaking cultivators in the vicinity, whom he found in the vineyard gathering the luscious Delawares, and they were very fine; clusters large and perfect. He was then getting 15c. per pound for them and 12c. for Marthas, both of which he grows largely. His Hartfords and Concords were also fine; but the long rows and well cropped Delawares attracted the most attention, as none of the party had ever seen the like before. Mr. Lucas tries to avoid over-cropping his vines and prefers a good crop of first-class fruit to a large one of second quality.

#### BEGONIA REX.

Nothing can be handsomer than a good plant of this, and it is an easy



BEGONIA REX.

matter to have fine specimens if only one particular is remembered, and that is, not to wet the leaves or expose them to the strong rays of the sun. They do not require any special culture, all that is required is to keep them in a light, but sunless place; keep them moist without wetting stems or leaves, and not repotting them often, for some very nice plants have been killed by this operation. A very interesting feature in connection with these plants is their propagation, which is ordinarily done by taking off a well-matured and healthy leaf, and cutting through the fleshy vein on the under side of the leaf, laying these leaves with the under side down on pans of

very sandy soil, mixed with finely cut moss, and putting a couple of small stones on the leaf to keep it down close to the sand. Keep the latter moist, and in a little while the veins will strike root where they have been cut, and young plants will subsequently appear; let these grow until well established, and then pot off singly in peaty, sandy soil, keeping close and well shaded for a few days; for this purpose a starch box, covered with a pane of glass, is a cheap convenience and will hold a good many pots.—*Farm and Garden.*

#### THE SQUASH.

As the Squash is of tropical origin, it is altogether useless to sow the seed until the ground becomes warm, and all danger of frost is over, which in this latitude is about the middle of May. Indeed, there is nothing to be gained by planting earlier, for when once established they grow with extreme rapidity and great luxuriance.

The Squash is highly prized by many, and with a little care and attention to the proper selection of varieties and the preservation of their fruit, they can be had in perfection for at least nine months in the year. It is also a vegetable that requires but little skill and care in its cultivation, and although they will grow readily in almost any soil, yet they will more than repay a liberal and generous treatment, and as they delight in a warm, rich soil, it is best to manure in the hill, care being taken to break the manure up well, and also to thoroughly and deeply incorporate it with the soil. At least a dozen seeds should be placed in each hill, and when the plants become strong and well established, all should be removed with the exception of three of the most promising. When young, the plants should be sprinkled occasionally with air-slaked lime, ashes, or soot, in

order to preserve them from the attacks of the bug.

There are numerous varieties of the Squash, some being of a yellow color, others pale green, and some mottled or striped; again, some are smooth and hard, others warty and rough; they are usually classed as winter and summer varieties, but from a cultural stand-point it is preferable to class them as bush and running. For the bush varieties the hills may be placed about three feet apart, and for the running sorts six or eight. Good stable manure is to be preferred. As some sixteen or twenty varieties are enumerated in the catalogues of our leading seedsmen, it is rather a difficult task for a novice to select a few of the best, and although some may differ from me regarding the merits of the varieties named below, I believe that any or all of them will prove to be satisfactory.

Where garden space is limited, and only one variety can be given one cannot do better than to choose the *Perfect Gem*. For amateurs I would have no hesitation in placing it at the head of the list, as it is excellent both as a summer and winter Squash. It is remarkably productive, the fruit being from four to six inches in diameter, and of a creamy-white color. It is also an excellent keeper in a cool, dry room, remaining in perfection until spring. It also has the peculiar property of setting the fruit near the main stalks before commencing to run; the vines occasionally reach the length of twenty feet.

*The Early Bush Summer Crookneck* is the best and richest flavored of the summer sorts. It is very early and is also remarkably productive, the fruit being of an orange-yellow color, covered with rough warty excrescences.

*The Early Yellow Bush Scolloped*, is an abundant bearer. It is a good, early

Squash. It is not as richly flavored as the preceding sort, but is earlier. *The White Bush Scolloped*, is a variety of this, differing in color only. Both varieties are more generally known under the name of *Patty Pan*.

*The Turban or Turk's Cap* is an excellent variety for fall and early winter use. It is of a greenish-yellow color, occasionally striped with white. The flesh is thick and of an orange-yellow color, and of fine flavor when properly ripe.

*The Yokohama* is also an excellent early winter sort. The flesh is of a deep orange color, sweet and dry. It is said to be superior to any Pumpkin for pies. When in perfection it is a very desirable addition to our list of Squashes, but with me has proved to be very variable, some seasons being all that could be desired, and at other times almost worthless.

*The Mammoth* is desirable for exhibition purposes principally, as the fruit can be grown to an enormous size, some specimens attaining a weight of over two hundred pounds.

*The Winter Crookneck* is of fair quality, and is a good keeper. The fruit is of a pale yellow color, with a long neck. It is much prized in the Eastern States, where it is extensively grown for fall and winter use.

*Canada Crookneck* is a small, early variety of the preceding. It bears and keeps well, and is by many considered preferable.

*The Hubbard* is a well-known sort, and is more extensively grown than any other Squash. It is the best table Squash yet known, and is a general favorite. It is an excellent keeping variety, with a dry, fine-flavored flesh, and a hard, flinty skin when properly ripe.

*The Marblehead* resembles the Hubbard in appearance, but is more produc-

tive than that well-known sort. It is also said to be a better keeper, but I do not find it to be any improvement in this respect. Its flesh is lighter in color than the Hubbard, and is of excellent flavor, sweet and dry, and is a very desirable variety.

The *Butman* resembles the Hubbard in size, but can be readily recognized from all other sorts by its bright-green color, being occasionally striped with white. It has a thick shell and cream-colored flesh. Its flavor differs from all other varieties and is dry and sweet.

The *Boston Marrow* is very highly esteemed by some, and is the most popular kind in the Boston markets. The flesh is of a deep orange color, and is finely flavored.—CHAS. E. PARNELL, in *American Garden*.

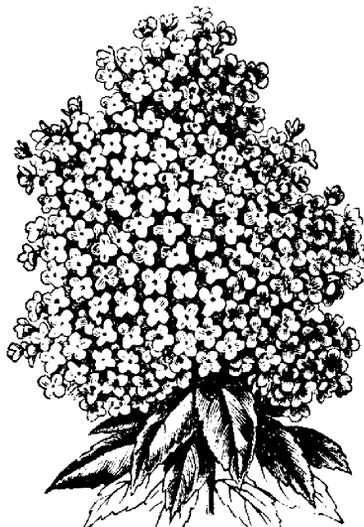
#### ORNAMENTAL SHRUBS.

The proper selection of the kinds of shrubs best suited to the extent and general character of our lawns is always a matter of importance, and, even after a judicious choice has been made, the requirements of each kind should be regarded in planting. To obtain success, precaution must be taken as to their adaptability to soil, and that the more tender ones be placed in sheltered positions. Shrubs may flourish and be perfectly hardy on one spot, while but a short distance off they will prove a failure. The soil must be thoroughly drained and the wood well ripened, or else the shrubs will not stand the winter.

The Massachusetts Horticultural Society during the past year devoted several meetings to the discussion of this important subject, and the list below comprises the species most highly recommended by members of the Society.

*Hydrangea paniculata grandiflora*, though introduced here over a quarter of a century ago, and one of our most

beautiful and desirable shrubs, has not been cultivated to any extent until a few years ago. The plant is perfectly hardy, and requires no care other than that bestowed upon our finer varieties



HYDRANGEA PANICULATA FLOWER-SPIKE.

of flowering shrubs. *Hydrangea paniculata*, of which *grandiflora* is a variety, has a finer foliage, is more graceful, and quite as hardy. Whether grown singly or in groups, the *Hydrangea* represents all that is grandest in a shrub, as *Exochorda grandiflora* does all that is most beautiful. To these may be added a third.

*Viburnum plicatum*, introduced into this country some thirty years ago, and, though neglected at that time, has recently taken its place among our handsomest shrubs. It resembles the common Snowball, but is much more delicate. It produces large trusses of pure white flowers in great profusion. The trusses are very compact and the individual flowers have great substance. It is not as common as the *Hydrangea*, being of slower growth and more difficult to propagate.

*Viburnum macrocephalum* resembles *V. plicatum*, only the cluster of flowers is larger. There are several native species well worthy of cultivation, and which thrive wondrously under a little attention.

*Kalmia latifolia*, also a native, is one of our most beautiful as well as showy flowering shrubs, though somewhat difficult to grow; yet, with proper attention to the condition of the soil, success will generally reward our efforts.

*Prunus triloba* is a beautiful shrub, with wreaths of rosy pink blossoms.

*Spiraea arifolia*, *S. prunifolia*, and *S. Thunbergii*, are all fine, handsome shrubs, and readily cultivated. Thunberg's *Spiraea* does not grow large, and is very appropriate for small places. It blooms in early spring.

*Cornus sanguinea*, the Red Dogwood, "is well known, and is desirable for its winter effects, its red branches being very showy when divested of their leaves."

*Deutzia crenata flore-pleno*. The double-flowering *Deutzias* are rapidly growing in favor, and they ought to find a place in every garden, large or small. The dwarf single-flowering is a charming plant, which, on account of its small size, free flowering qualities and hardiness, cannot be too highly recommended for small gardens. It has ample, bright foliage, its flowers are snowy white, and are produced in great profusion early in June.

*Weigela rosea* has held its own against all new-comers, on account of its fine habit.

The *Rhododendrons* and *Ghent Azaleas* are too well known to need any description here. Few shrubs possess the attractions of these magnificent plants, and the admiration they excite should be a spur to their more general dissemination.

*Clethra alnifolia* and *Cassandra calyculata*, both native shrubs, are also very beautiful under cultivation.

Among shrubs of recent introduction the following are named as being of great promise, and desirable for hardiness and beauty:

*Clematis Davidiana* and *C. tubulosa* are erect-growing species, from two to four feet high, and in midsummer are covered with beautiful blue flowers like panicles of *Hyacinths*. Unfortunately, they do not seed freely, and are difficult to propagate. *C. Davidiana* is the more desirable of the two.

*Desmodium penduliflorum* *D. penduliflorum album*, and *D. Canadense*, are hardy on dry soils. All are suffruticose rather than shrubby. The first two are especially valuable on account of blooming late in autumn, when there are but few flowers. The flowers of the first are purple, and all are pea-shaped.

*Styrax Japonica* is perfectly hardy in dry soils. It has white flowers, similar to those of *S. Americana*, but perhaps a little larger. The latter is a very pretty shrub, from four to six feet in height, which ought to be in every collection. The flowers resemble those of *Halesia*, or Silver Bell.

*Andromeda polifolia* is a native species, which, under cultivation, becomes one of the gems of the garden. The foliage is of a glaucous color. It is perfectly hardy.

*Andromeda Catesbaei* is of rapid growth and easily propagated. When planted with *Rhododendrons* nothing is more beautiful, and with the protection they afford is perfectly hardy; if not sheltered, the ends of the shoots are sometimes injured.

*Andromeda Japonica* is perfectly hardy. It wants to bloom too early in spring, but five years out of six it will be good.

*Berberis Sinensis* is perfectly hardy, grows two or three feet high, and is of drooping habit. When full of ripe fruit, it looks like a fountain of scarlet.

*Berberis Thunbergii* has fine autumn foliage, and when the fruit, which is of a deep, rich scarlet color, is ripe, forms a perfect picture. It is a low growing shrub.

*Neviusia Alabamensis* belongs to the Rose family; it has numerous bunches of pure white flowers, and is quite showy. Though from Alabama, it is perfectly hardy.

*Erica vagans*, *E. v. rubra*, *E. carnea*, and *Calluna vulgaris* all do well on thoroughly drained land, with a slight covering; if the snow blows off and leaves them bare, they burn.

*Leiophyllum buxifolium* has stood in the Botanic Garden at Cambridge for twelve years. It is a small evergreen bush, growing about one foot high. A larger form, from the mountains of North Carolina, has a larger leaf, of a more waxen appearance.—*American Garden*.

#### RELATION OF SEEDS TO QUALITY IN FRUITS AND VEGETABLES.

In 1879 I was strongly impressed with the apparent relation between the abundance of seed and the quality of the fruit in the case of the Christiana melon. Of the crop of this year I tasted many hundred melons, keeping the seed only of those which were of very superior flavor and quality. Where the quality was very superior, the quantity of seed was small; where the quality was not up to standard, the seeds were in greater abundance; where the quality was very inferior, the seeds were very numerous. I have not as yet collected sufficient material for the thorough discussion of the relation between quality and seeding, but such

observations as I have thus far obtained seem to indicate that such a relation exists; and as our fruits and vegetables gain in certain respects, this gain is counterbalanced by a loss elsewhere.—*E. LEWIS STURTEVANT, M.D., in The Journal of the American Agricultural Association.*

#### SOUHEGAN BLACK CAP RASPBERRY.

*The Souhegan Black Cap Raspberry* was grown from the seed by a farmer in Hillsborough County, N. H., in 1870, and bearing fruit of great promise was propagated and extended into fruiting plantations, and the fruit sold in the large towns of the County, for at least eight years past.

A tree dealer saw merit in its beauty and quality, and contracted to take all that could be grown for his orders. His sales were not very large, and the originator and grower of the plants did not receive much satisfaction in trying to get his rich production upon the market. He continued to grow and sell fruit, selling few plants, knowing it would sometime become known and command a place on the market.

In Hawthorne Hall, Boston, Sept. 1881, the Souhegan was under discussion before the American Pomological Society, before an audience of fruit growers from all parts of the country. Jacob W. Manning of Reading, Mass., Mr. Hale of Conn., Mr Lovett of N. J., and others, had only good words for it. It originated in the valley of the Souhegan River, N. H. The old merits were stated as I gave them in 1879. Perfect hardihood, unparalleled in fruitfulness, berries often three-fourths of an inch in diameter, with thirty berries on a single branch, ripening before any other Black Cap known, of superior quality, a clear black color, not the light bloom borne by all other varieties of the species; the bloom or mouldy look has been a detri-

ment to the sale of the older Black Cap Raspberries, but with the Souhegan that objection disappears.

It is likely that millions of plants will be required to supply the coming demand for it. The tests of its superiority are such that it may well be said to be "a new epoch" in small fruit culture.

The *Souhegan Raspberry* has again fruited, this exceptionally dry season, and justifies my claim of superiority over all others of its class. It is again the very earliest, coming in just as the late strawberries go out. With good culture it will grow three-quarters of an inch in diameter, often bearing twenty to thirty berries on a cluster and carries well to market. It is of superior quality to eat, making a rich sauce, pie or pudding, or a spirited wine in case an excess of crop, or long rain, should soften the berries.

We saw fruit gathered on Saturday that stood in boxes until Monday, before sending to market, yet in condition to stand at least two days longer. It is a marvel to see the immense number of clusters of fruit that a single cane will yield.

A great number of fruit growers were slow to admit the merits of the *Souhegan*, who now regret the delay; but are ready to plant by the hundred or thousand now. One planter proposes to set twenty thousand, being convinced of its superior advantages, enduring the hardest winters, early ripening, quantity, size, quality, firmness, and popular demand where known in market.

The earliest picking for eight years past commenced in June.

A first-class Certificate of Merit was cheerfully awarded me for a display of the *Souhegan Raspberry*, by the Fruit Committee of the Massachusetts Horticultural Society, where it was shown for the first time in 1882.

There is no higher authority than the approval of the above Society where testimonials for fruit are desired.

JACOB W. MANNING.

Reading, Mass.

#### CLETHRA ALNIFOLIA.

This shrub is now attracting attention as a forage for the *honey bee*. It is practical to plant for this purpose by the acre; it transplants safely, is propagated very easily by suckers and layers; will grow on any soil, even if too wet for cultivation, and in any situation; blossoms late and through a long season, from July 1st to Sept. Bees swarm upon it, apparently to the exclusion of other flowers.

Miss Parsons, of Cape Ann, Mass. (where it grows naturally in the greatest perfection), in the winter of 1876, called the attention of the Editor of the *American Bee Journal* of Chicago to it in these words,—“I never knew it to fail from any cause whatever \* \* \* Cold appears never to harm it. *The honey is about white, thick and of fine flavor.*”

Its leaves are light green; flowers are pure white, in spikes three to six inches long. A group of this *Clethra* in bloom will perfume the air for twenty rods around; a handful will fill a room with its delightful fragrance. It blooms from July 1st to September; its cultivation is simple, growing to perfection where the lilac will succeed. It never fails to bloom after a hard winter. Its effect is impressive when grown in large masses, as produced by a dozen or more plants set in a group. It has never been so well shown to the public as in Central Park, New York.

It leaves out late in spring and blooms on plants one to eight feet high, according to age and vigor of growth.

A strong plant in vigorous soil would make a hundred plants by suckers alone in three years, and the planter

of a thousand can extend its culture to acres.

The only question is, can the bee-keeper afford to furnish his bees with additional forage in this sweetest of flowers, blooming as it does at a time when flowers are limited. We say, that planting the *Clethra Alnifolia* is not a doubtful experiment, and certainly not an expensive one.

It is a neat, upright growing shrub as an ornamental plant. Its fragrance in a bouquet is as strong and enduring as the *Lilium Auratum* or the *Tuberosa*. I predict its coming popularity so that no collection of shrubs will be complete without it.

Its abundance and lasting fragrance suggest its use for a new perfumery.

Following is an extract of a letter by Charles Downing, the Horticulturist, whose opinion is of as much weight as that of any man in America:—

“The *Clethra* has always been a favorite shrub with me, flowering at a time when there are but few shrubs in bloom, the fragrance is delightful. It is not so much planted as it should be.”

JACOB W. MANNING.

Reading, Mass.

#### THE LOMBARD PLUM.

This plum holds about the same position among other varieties that the Baldwin does among apples, the Bartlett with other pears, and the Wilson among strawberries. Although moderate in flavor, the hardiness, free growth and great productiveness of the tree, and the beauty of the brilliant fruit, render it one of the most valuable sorts for market. Nelson Bogue of Batavia gives special attention to the cultivation of this variety, and when on his grounds two years ago, we saw many trees, then in the third year of their growth from transplanting, bearing by estimate not less than half a bushel of plums, the

central branches being covered with dense masses of brilliant violet-red plums. He now informs us that the product of the ninety trees which we then saw, was forty-six bushels, being slightly over half a bushel each as an average. Last year, or the season following, he had only twenty-five bushels; present season the crop is estimated at seventy-five bushels, this being the fifth year from transplanting. The trees receive the best cultivation, and from some cause which we cannot explain, the fruit is not attacked by the curculio. The branches are kept clear of the black knot by prompt excision, the laborers being directed when they see any appearance of it on any tree, to drop all other work immediately, cut off the diseased portion and burn it.—*Country Gentleman*.

#### THE BLACK WALNUT.

An address delivered last winter by W. H. RAGAN, secretary of the Indiana Horticultural Society, on cultivating the black walnut for profit, contains so much that is valuable that we are induced to refer on the present occasion to some of the facts which it presents, and to add a few further suggestions. Mr. Ragan thinks the black walnut the most valuable of all trees for artificial plantations and timber belts. He states that a man in Wisconsin planted “a piece of land” twenty-three years ago with this tree. We are not informed the extent of the land covered with it, but that the trees, sixteen to eighteen inches in diameter, were sold for \$27,000. He adds that walnut lumber now commands from \$75 to \$100 per thousand feet in the cities, for parlor decoration and other purposes. The tree bears nuts at an early age, and annually thereafter, which have an important commercial value.

In raising the trees, it is of utmost importance to do everything in the best

manner. Those who carelessly plant the nuts, especially after they have dried for a long time, will probably fail to get trees; or if any grow, and the owner expects the young trees to take care of themselves, he will be greatly disappointed. Mr. Ragan's directions are, therefore, to the point, when he says the ground should be prepared in the best manner in the autumn. Furrow the ground off each way as for corn, except that the rows should be seven feet apart. Take the nuts, fresh from the tree, and plant two at each crossing. They are to be covered shallow, just enough to hide them. So much for planting. Then next spring furrow the seven-foot spaces intermediate between the rows, and plant with corn or potatoes. The corn and young trees will be all cultivated alike, and the young trees must be kept clean. The second spring thin out the trees to one in a hill. The thinnings will fill any vacant spaces where needed. Corn or potatoes may be planted the second, or even the third year, and after that the trees must be cultivated and kept clean until they occupy the whole ground so fully as to keep down by their shade all weeds and grass. Standing so near as seven feet, the trees will not require trimming, but will thus trim themselves. But when they begin to suffer from crowding, take out every alternate tree in each row, and in a few years another thinning may be made by taking out alternate trees in the rows at right angles to the first, leaving them fourteen feet each way. If the trees are to stand until they become quite large, additional thinning may be necessary. But they should always be thick enough to obviate the side trimming of branches. The thinnings will always possess considerable value.

At fourteen feet apart there would be over 200 trees to the acre, and these should sell for five dollars each in a quarter of a century, or \$1,000 an acre.

It is not likely that the timber will become cheaper in future years. If the good cultivation and management here described are given, there will be little or no failure of a full, even growth. If the work is carelessly performed, and the trees neglected, they will be poor and scattered. The regular planting in rows, and the continued cultivation until they wholly shade down all other growth are indispensable to success, and they are equally necessary in raising plantations of any other trees, as chestnuts, locusts, or catalpas.—*Country Gentleman.*

#### SOME NEW SORTS OF BEANS.

The White Marrow is still as popular as ever and is extensively grown for large markets.

The Early Feejee will always be a popular variety from the fact of its extreme earliness and being very hardy. It is one of the most productive we have, and the quality is excellent. In New England many of the farmers after hoeing the corn the first time plant beans between the hills, and so obtain two crops from the same field, while the latter product is protected by the growing corn, and if a little late is not liable to be injured by early frosts. Very often from eight to ten bushels are obtained to the acre when the season is favorable and the soil is moderately rich; for be it remembered that soil for beans must not be too rich since they are apt to "run to vines" instead of beans, hence the soil should not be too fertile. We wish in this article more especially to call attention to two or three new sorts of dwarf or bush beans as being well worthy the attention of all growers of the low growing sorts.

There are four sorts of wax beans—Black Wax, Dwarf White Wax, Crys-

tal White Wax, and Golden Wax Dwarf. The first sort is not a new sort, but its excellent quality makes it a popular variety to cultivate wherever known. As a string bean it has but few equals, and it is also a good shell bean. The White Wax, a pure white sort, cannot be too highly praised, and every kitchen garden should contain a few hills of this desirable bean. The Crystal White Wax and the Golden Wax Dwarf, two new sorts, are decidedly among the best varieties of bush beans grown, and command the very highest price in the markets. The first sort is a beautiful white bean, with large waxy transparent pods. It is stringless, very crisp and tender and of fine flavor. The pods harden slowly, so that they remain in good condition for the table longer than most of the other sorts. This sort commands the highest price of any bush bean grown. The Golden Wax Dwarf has the name of being not only a good snap bean, but also a good shell bean, and is therefore a desirable sort to grow for the market, while for the farmer's own table hardly any other sort can take its place. The pods are of good size, long and quite brittle. Some marketmen pronounce it the best snap bean cultivated, its tenderness and flavor making it extremely popular. When grown on suitable land the bean crop is one of the best paying of all products grown on the farm, since they command a ready sale and usually are a cheap article of food. Of running beans the new sort from France known there as the Moret D'Or and here as the Golden Butter bean is attracting considerable attention. It is without doubt one of the most prolific of the pole or running sorts, while its quality is unsurpassed. The pods are a golden yellow, very handsome and well-filled. Growers of the pole bean should certainly test this sort.—*Farm and Garden.*

#### WHAT PLANTS TO GROW IN THE HOUSE.

Most amateur florists undertake too much. They would like a large collection and they want choice kinds like those they see in conservatories belonging to wealthy people.

After several years of experience I have come to the conclusion that we have but a comparatively small list of plants which it is advisable for the amateur to select from for ordinary window culture. As one gains experience and becomes familiar with the requirements of the plants under his care, it will do to "branch out." Plants which they would have failed with at the beginning, they may succeed with later. It is better in this, as in most other undertakings, to go slowly. Learn how to take care of a few less particular plants before you undertake to care for some which require more careful treatment.

Let us suppose that you have but one window in which to grow plants; you want flowering kinds for the most part, and you cannot have more than a dozen in all unless your window is a large one, for it is far more satisfactory to have a few plants with room for development than a large number crowded together until all individuality is lost in a confused mass of foliage. Shall I select for you? Well, my first choice is the

#### GERANIUM,

because it is one of the most easily cared for plants that we have, and it is one of the most free flowering, and its foliage is always bright and vigorous. There are other plants that I prefer to the Geranium, but under the supposed circumstances none that I would unhesitatingly recommend. It is sure to do well if not shamefully neglected. It is the flower for the million. The particular varieties I would leave you to select for yourself. I think I would first

choose a scarlet. The variety called "Herald of Spring" is my favorite among the scarlets. But there are dozens of others which you might consider equally as fine, possibly finer; and where there are so many to select from it is not of much use to name one particular variety. I would select the Single Geraniums for winter culture because the double varieties do not bloom freely beyond November. To my mind the single ones are handsomest. If you want a pink variety, one that is almost always in bloom, you can do no better than take "Master Christine." It is a beautiful, soft rose color, marked white, and blooms profusely. You can suit your taste about color, for we have Geraniums in all shades of scarlet and crimson, pink, salmon, magenta and white. The "nosegay" or Dwarf Geraniums are better for small collections than larger growers, for, while the plant is dwarfish, the flowers are as large and profuse as those on the robust kinds. Of course you want a *Rose Geranium*. No collection is complete without it.

#### HELIOTROPE.

This favorite flower will bloom all through the winter, and though not showy, its fragrance and its modest beauty make it a general favorite. It likes a warm sunny place. You want a



CALLA.

It would be well worth cultivating if it did not bloom, because of its large, fine leaves, borne on stalks from a foot and a half to three feet high, giving the plant a tropical appearance. When we add to the attractive foliage its large, trumpet-

shaped white flowers, with their delightful fragrance, we have one of the finest and most desirable plants in the entire list of kinds suitable for house-culture. It requires a large amount of water and the pot should stand in a deep saucer which is never allowed to get empty. Let the water given it be as warm as you can bear on your hand.

For an additional list, I would name *Carnation*, *Abutilon*, *Begonia*, *Chrysanthemum*, *Cyclamen*, *Eupatorium*, *Petunia*, *Chinese Primrose*, *Oxalis*, *Lantana*, and for training about the window, *Ivy*, *Cobea* and *Smilax*.—E. R. REXFORD, in *Farm Library*.

#### FRUITS IN RUSSIA.

The readers of the *Canadian Horticulturist* will remember some communications from Mr. Chas. Gibb, written while he was in Russia investigating the fruits of that country, and published in the November number for 1882. He was accompanied by Prof. Budd, of the Iowa Agricultural College, who writes as follows to the *Iowa Homestead* :—

"The blackberries, huckleberries and cranberries we see here are wholly unlike those of the United States. I should also state that plums and cherry trees are not grown in tree form any more than are the gooseberries and currant. They are really large bushes with several stems from the roots. The pruning is done by cutting out the older stems, as the most and the best fruit is found on the younger offshoots. Really these northern cherries and plums are large shrubs rather than trees, but very desirable in fruit.

"In fruit growing the Russian is a creature of habit and a close follower of the habits of his forefathers. This tendency is bad enough in south Europe, but it is intensified here to a degree often painful to the versatile American. For instance, in the immense province of Vladimio, east of Moscow, the whole province is given to growing the cherry. Hundreds of proprietors have orchards of

ten thousand trees (or rather bushes), and the products are shipped to every part of the empire. In the cherry season, Vladimio cherries are plenty and cheap in every Russian city reached by railroads or water. We are told that whole trains are loaded with them for Siberia and the far north-eastern cities of the plains. South of Vladimio, but still near to the 50th parallel, where the thermometer reaches at times 50 degrees below zero, Fahrenheit, is grown the plum in quantities absolutely immense. These plums vary in season and color, but they are all of one race, which seems indigenous to northern Asia. Many of the varieties we met at Nishney are equal to the best German prunes, which they resemble in shape and texture of flesh. The color is usually red, and the *suture* at one side is peculiar to the race. As we go south (or rather east of the Volga), we reach the apple growing districts, not because the soil or climate are better than in Vladimio, but because the people happened to drift in the early ages in this direction. One of the large orchardists who brings fruit here by the barge load grows only four varieties specially suited for the Nishney market during August and the first week in September. These varieties are (1) *Borovetsky*, a large oblong variety with crimson stripes. In quality and appearance it is superior to our Duchess. (2) *Miron Krasnyi*, an early variety now past its prime. It is showy, mild in flavor, and much eaten from hand by Russians, who do not like acid apples except for cooking. (3) *Titofka*.—This is not our *Tetofsky*, but it is a very large, oblong, ridged, highly colored, and really good variety. Many of the specimens look so much like large specimens of Benoni as to deceive the expert. The flesh is pinkish white, somewhat coarse, but breaking, tender, juicy, and pleasantly sub-acid. This variety seems popular in all parts of Europe. (4) *Summer Aport*. In Russia are grown four Aports, three of which are late autumn or winter. The one now in market on the Volga in immense quantity is known in Moscow as *Aport Oseniati*. It is large and highly colored with splashes of pink and crimson. It may always be known by its one-sided stem and lip, something like Roman Stem."

### PARIS GREEN FOR ROSE BUGS.

I heard a member of the Western New York Horticultural Society say at the meeting at Rochester last winter, that Paris green could be used with safety on grape vines, to protect them from the ravages of rose bugs, and it encouraged me to try it



ROSE BUG. on my vines this summer. I have about 150 newly planted vines that were growing finely. They were attacked by the rose bugs; many of them were nearly covered with them, and were fast being destroyed. I applied Paris green in water in the same proportion that I use on potatoes—about one teaspoonful to a pailful of water. It cleaned the vines of bugs, but a two days' rain washed off the poison, and we gave them a second application, thoroughly drenching the vines, and they are now free from bugs, and I cannot see that they are at all injured by the poison. I give this experience as rose bugs have proved a great pest to grape vines in this State. —C. D. S., *Spencer, Mass.*

### GRAPES, THEIR VALUE AND CULTURE.

The value of the grape, and the ease with which it is cultivated, are two points not yet so well understood by American farmers as they should be. No Fruit is more refreshing, and none more healthful. There can be no doubt that if grapes were grown and freely used by every family in the land, the avoidance of sickness and its attendant loss of time and expenditure for medicine, would many times compensate the time and money expended in their culture, saying nothing of the comfort they would add to many a household. But besides being among the fruits most valued by the rich, no fruit is so emphatically the poor man's fruit as the

grape. Whoever owns a house with a strip of land three feet wide around it may produce an abundant supply of grapes for his family; and in order to do this he need not spend more than three or four hours' labor during the year. Even he who lives in a rented house may produce his own grapes, as his vines may be planted in tubs of earth which he can carry with him from place to place, bedding them in the soil of each successive home until the time for removal comes, and feeding them with the material which is the universal product of every household, and which might thus be made a means of adding to the comfort and health of its inmates, instead of being, as it now so often is, a medium for the spread of disease.

The grape vine is ordinarily propagated by taking well-ripened wood of the present season's growth, after the leaves have fallen, cutting it into lengths containing two or three joints each, and planting these cuttings in mellow earth at such depth that the top bud shall be just above the surface. In making the cutting, the vine should be cut away close below the lower bud, but a couple of inches should be left above the top bud in order that the cutting may be more easily seen in hoeing. Of cuttings thus managed and kept moderately moist, the larger portion will strike root and will make, during the season, a growth of a few feet of vine and a dense mass of fibrous roots. These make the "yearling" vines of the nurserymen, and are decidedly preferable for transplanting to the older vines in our estimation.

One-year-old vines of the common sorts may be bought at a price which leaves no excuse on that score for neglecting to plant. Such a vine, if planted in a well drained and thoroughly pulverized plot of land, will be ready to begin bearing by the third year from the planting, and when in full bearing

will yield annually from a few pounds to several bushels of fruit, according to the season and to the manner in which it is trained, since it may be kept within a very small compass, as in field culture, or allowed to spread at will over a wall or tree.

Any soil which will produce wheat or corn will produce grapes; but drainage either natural or artificial, is essential. If the soil is not naturally rich, it should be well manured, in order to produce a rapid and vigorous growth of vine during the first three years.

Of varieties, the Concord is the one grape for the million. Vigorous, hardy, productive, of a flavor that only the connoisseur finds defective, it combines more excellencies than most other varieties. For him who plants but one vine, the Concord, therefore, is the vine to plant. When the vineyard becomes large enough to begin to admit of variety, then plant the Delaware, which is nearly as hardy as the Concord, while the fruit is of more delicate flavor.—*Farm and Fireside.*

#### FUNKIAS.

These, botanically known as *Funkia*, and commonly called Blue or White Day Lilies, according to the color of their flowers, are among the good old-fashioned, hardy perennials we should like to see more recognized in our gardens than they are at present. They are natives of China and Japan, perfectly hardy, and adapt themselves very agreeably to cultivation in our gardens. There are several sorts well worth growing and not uncommon in our gardens but there is great confusion in their nomenclature. Siebold's *Funkia* is a noble plant and forms a large mass of tropical-appearing, glaucous-green leaves which are of themselves very ornamental. It blossoms about or before the middle of July, and has large,

lilac-blue, scentless flowers. Fortune's Funkia is nearly related to Siebold's. The species commonly known as the White Day Lily, namely subcordata and its larger form called grandiflora are, however, perhaps the best of all for us. They have large masses of green leaves, and in July and August, lots of large, funnel-shaped, white, fragrant blossoms. The common Blue Day Lily, known as *ovata*, is at its best during the last fortnight of July; it is, too, a vigorous species with ample leaves; but of it there are some varieties of smaller growth and later season. The Narrow-leaved Funkia is a pretty little species that blossoms in September; its flowers are blue. Besides these species and several other varieties esteemed for their flowers, there are many very distinctly variegated-leaved varieties, such as the White, the Blue, the Lance-leaved, and especially one called *undulata*. The most prominently variegated form of *undulata* has white leaves banded around with green, not unlike those of a recently introduced hydrangea. The variegated forms flower as freely as the plain-leaved ones, except, perhaps, in the case of *undulata*, but in that instance the foliage is reckoned of more importance than the flowers, and in order to prolong the season of the good condition of the leaves, the flower spikes are usually plucked off before the blossoms open. Besides, as border clumps the variegated sorts are often used as edgings to shrubbery borders.

These Funkias are of the easiest possible culture, and enjoy a rich, friable soil and a sheltered but faintly shaded situation. They will grow well enough in the open, sunny border or under the thin shade of trees, and the stronger kinds especially will hold their own with profit if planted out as clumps upon the grass in some slightly shaded place. The great drawback to the planting of them in open, sunny places is their suscepti-

bility to "scorching" in Summer. It is very vexing to find that when your Funkias are in untarnished vigor, there comes a shower or a day or two of dull weather succeeded by hot sunshine, and your Funkia leaves are all damaged. But such is the case, and we know of no plants more certainly affected in this way than the Funkias.

They all ripen seeds; some kinds, as *ovata*, do so extravagantly, but for tidiness sake it is well to cut over the spikes as soon as the flowers are past. They are readily propagated from seeds; indeed, even so fine a species as Siebold's sows itself freely; but the variegated forms are perpetuated by division. They are perfectly hardy, but the first frost cuts them down as if they were dahlias, but the roots are unhurt. It is a good plan then to cut away the leaves and place a forkful of decayed manure about their crowns there to remain; when they begin to grow in Spring, their leaves will soon cover the manure which not only stimulates them as food, but preserves the soil cool and open about the crowns.

Funkias used to be known as Day Lilies, but this common name being also used for the genus *Hemerocallis*, Mr. Robinson, of England, recently advertised for a new English name for Funkia. Among the many proposed "Plantain Lily" was the one he accepted. He deemed it a happy one, because of the likeness of the Funkia leaves to those of some of the tropical plantains. —*Rural New Yorker*.

WILSON STRAWBERRY.—A correspondent of the *Country Gentleman* writing from Ohio, says in an article on the fruit raised in his State: "Of strawberries, the Wilson takes the lead in about the proportion of ten acres to one of all other varieties grown; and as far as I can judge will continue to lead for some time to come, as no other variety that I know of is so popular both with growers and buyers."

### THE CARDINAL FLOWER.

Clare, Anabel, and little Hugh,  
Brush from the grass the inoning dew,  
In quest of flowers. With laughter sweet,  
They press with eager, tireless feet,  
Down lanes ablaze with Golden Rod,  
Where white and crimson Thistles nod,  
Where purple Asters, leaning, look  
At purple Asters in the brook.

They gather wreaths of Clematis,  
And blithely, deeming naught amiss,  
Where pale pink Roses lately grew,  
Pluck shining spheres of scarlet hue,  
And berries like red ivory gleam  
From stems of glossy Wintergreen.  
And now their bright, enraptured eyes  
Are fastened on a rarer prize ;  
Upon a steep bank, just beyond  
The confines of a marshy pond,  
In lonely grandeur brave and tall,  
There flames a scarlet Cardinal.

They pick their way among the rocks,  
Their pains the radiant vision mocks.  
All reaching is in vain, and they,  
With backward glances, turn away,  
Till, flushed and weary with their toils,  
And laden with the brilliant spoils,  
That, wilting now within their arms,  
Are losing fast their early charms,  
They rest beside the roadside brook,  
With half a disappointed look.

Ah, Clare and Anabel and Hugh,  
Not if you search the meadows through,  
And gather more than you can hold  
Of autumn's purple, red, and gold,  
Will you find aught so fair to each,  
As that one flower you could not reach !

*Congregationalist.*

### COVERING STRAWBERRY BEDS.

The *Germantown Telegraph* says :

"Often there is much said, and especially at this season of the year, about covering strawberries ; and many persons are induced by what they read to act so as to heartily regret it when the spring comes round. We have known people to act on this suggestion, and cover their strawberry beds with manure, and find the whole completely rotten in the spring. And yet a little covering with the right kind of material is not a bad thing. If the plants are left entirely unprotected the leaves are browned and often destroyed ; while it must have been noted by every observant gardener that the best fruit comes from plants that have managed to keep their leaves bright and green till their spring

flowers appear. And this is why a covering of snow the whole winter is so good for the strawberry crop. As we have remarked, when the leaves are browned the crop is small ; but when the snow covers the plants all the winter long, they come out in the spring in the best possible condition.

"But we cannot always depend on the snow. It does not always come, or continue in the regular way. So if some light material can be put over the plants, that will not smother and rot them, and yet will be just enough to make a shade from the winter sun and a screen from frosty winds, it will be doing a good turn to the strawberry plant. Manure is bad. There is salt in it, especially when fresh, which is destructive to foliage ; but clean straw, or swamp or marsh hay that is free from weeds, answers the purpose very well. But it must not be put on very thick. The idea is, just enough to make a thin screen, and yet not enough to hold the moisture long. Shade without damp is the idea. Such light protection is good for the strawberry plants."

THE CARDINAL FLOWER.—There is no difficulty in cultivating the Cardinal Flower (*Lobelia Cardinalis*). It prefers damp, rich soil, but with a little care it can be grown almost anywhere. The best way is to get a good load of swamp dirt, which is mainly leaf mould, and make a bed in a shady or half-shady position. Of course the plants will do better if they can be removed from their native place with care, retaining a good quantity of soil with the roots, and be speedily replanted ; but we have taken them up with but little soil, kept them several days, carried them a hundred miles, and planted them in conditions not particularly favorable with very good results. Among the many too much neglected native wild flowers there are none whose form and color better challenge our admiration ; and when we know with what ease they are started, and that, being perennial, they continue from year to year to repay the attention once bestowed, we wonder they are not more frequently seen in our gardens.