

## 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.

- Coloured covers /  
Couverture de couleur
- Covers damaged /  
Couverture endommagée
- Covers restored and/or laminated /  
Couverture restaurée et/ou pelliculée
- Cover title missing /  
Le titre de couverture manque
- Coloured maps /  
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black) /  
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations /  
Planches et/ou illustrations en couleur
- Bound with other material /  
Relié avec d'autres documents
- Only edition available /  
Seule édition disponible
- Tight binding may cause shadows or distortion  
along interior margin / La reliure serrée peut  
causer de l'ombre ou de la distorsion le long de la  
marge intérieure.

- Coloured pages / Pages de couleur
- Pages damaged / Pages endommagées
- Pages restored and/or laminated /  
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées
- Pages detached / Pages détachées
- Showthrough / Transparence
- Quality of print varies /  
Qualité inégale de l'impression
- Includes supplementary materials /  
Comprend du matériel supplémentaire
- Blank leaves added during restorations may  
appear within the text. Whenever possible, these  
have been omitted from scanning / Il se peut que  
certaines pages blanches ajoutées lors d'une  
restauration apparaissent dans le texte, mais,  
lorsque cela était possible, ces pages n'ont pas  
été numérisées.

- Additional comments /  
Commentaires supplémentaires:      Continuous pagination.

516/3/40/6

CAHO

Vol. III.]

[No. 4.

T H E

# Canadian Horticulturist,

PUBLISHED BY

The Fruit Growers' Association of Ontario.

APRIL.



EDITOR:

D. W. BRADLEY.

ST. CATHARINES, ONTARIO.

NATIONAL LIBRARY  
CANADA  
BIBLIOTHEQUE NATIONALE

ST. CATHARINES:

R. & LEAVENWORTH'S BOOK AND JOB PRINTING ESTABLISHMENT.

1880.

# THE CANADIAN HORTICULTURIST.

Published by the Fruit Growers' Association of Ontario.

Rev. R. BURNET, President,

D. W. BEADLE, Secretary,  
St. Catharines.

Members of the Association will receive the "Horticulturist" without charge.  
Annual Subscriptions to those who are not Members, \$1.00.  
Remittances, business communications, and all articles for the *Horticulturist* to be addressed to the Secretary, at St. Catharines.

## ADVERTISING RATES.

Full page for whole year .....	\$30 00
Half page do. do. ....	17 50
Quarter page do. do. ....	8 75
Half above rates for six months. For less period than six months, 10 cts. per line per month, ten lines to the inch, full width of page.	

# ST. CATHARINES NURSERIES.



A full supply of

## Fruit & Ornamental Trees

And Plants of all kinds.

Orders by mail receive my best attention.

**WANTED!**—Active and reliable

Canvassers, to take orders in every part of the Province. Pay liberal.

Address, D. W. BEADLE, St. Catharines.

## CHARLES ARNOLD'S

# Four New Seedling Strawberries,

No's. 3, 4, 8, and 23,

Having now been tested by the side of the celebrated new American Strawberries, Monarch of the West, Sharpless, and several others, and found superior in size, flavor and productiveness, are now offered for sale.

Price by mail to members of the Fruit Growers' Association, and sent with the Saunders' Raspberry.

12 PLANTS EACH OF THE FOUR VARIETIES OF STRAWBERRY,	\$7 00.
6 do. do. do. do.	1 00.
6 BEADEN RASPBERRY.	1 00.

CHAS. ARNOLD, Nurseryman, Paris, Ont.



## THE BERBERRY AS A HEDGE PLANT.

BY A. HOOD, BARRIE, ONT.

The berberry is one of those unfortunate plants that a popular prejudice has in the old world almost banished from cultivation, and just as it was beginning to outgrow these prejudices on this side of the Atlantic, and recommend itself as the only really hardy hedge plant we possess, scientific investigation steps in and exerts a repressing influence on the growing popularity of this valuable hedge plant, threatening to banish it without ceremony from our fields and gardens; this outrage, however, on one of our best friends I cannot permit without a word of remonstrance.

Let us see in the first place what is the indictment against this unrivalled pig repeller and crop protector. It is charged then by popular prejudice that the berberry causes the rust in wheat, and by scientific investigators, who are more careful in their choice of expressions, not that it "causes rust,"—they are very careful not to go so far as that—but that the fungus which attaches itself to the straw and there growing becomes rust, that this fungus at one stage of its existence attaches itself to, and is sustained and nourished by the berberry. This is the charge. Very well, for the sake of argument suppose all this is admitted, what does it prove? Does it prove that if there was no berberry there would be no rust? Nothing of the kind. Does it prove that if there was no berberry there would be less rust? No, even this much is not shown; but it can be shown that whether there is berberry or not, in this country at least, there is always more or less rust, proving that the berberry is not by any means the only plant to which the rust producing fungus can attach itself, and on which it can feed and flourish. Could it be shown that if the berberry was banished there would be no rust—could it even be shown that without it there would be much less rust, I would say at once tear it up root and branch; but if such cannot be shown where is the wisdom in destroying our friends when by doing so we cannot weaken our enemies? Where is the use in discarding the berberry when it leaves us as far off as ever from banishing rust?

The berberry is hardiness itself, and as a hedge plant has, I believe, no equal for a climate like ours. It is not in the least injured by the

rigorous fruit destroying climate of the Ottawa Valley, and would, I should imagine, be the only thing likely to be useful in the great North West. It possesses all the requisites of a perfect hedge plant, and more too, yes more, for it produces fruit which makes excellent preserves, and that surely cannot be considered indispensable in a hedge plant. The requisites are perfect hardiness, thrifty growth, prickly branches, sufficient strength when full grown to turn any animal, and a propensity to stool out from the crown of the plant just below the ground, which so thickens the base of a well trimmed hedge that the smallest pig could not crawl through, and prickly enough to prevent him making the attempt; and what is very important, it never suckers. All these requisites it possesses, besides which, a hedge of this plant presents a very agreeable appearance to the eye, and when in full blossom is very much admired. It is about the last thing in the garden or field to lose its leaves in the fall. There is no necessity for planting in double rows, as is always done with the English thorn, for every plant is capable when full grown of quite filling with its numerous shoots a space of fully one foot; but as it would take ten years or more to do this, it might be advisable to plant a little closer, say eight or nine inches. And with all these recommendations it has yet another, and a very important one in the eyes of the farmer, and that is, that cattle will not eat its leaves, so that it may be planted out without protection. And when once planted there is no trouble of renewing every third or fourth plant that may have died out, because with anything like proper planting and care they are all sure to live; and what is more, they grow so even with one another that there is very little difference between the best plant and the worst when of the same age.

The plants may be propagated from cuttings or grown from seed. The cuttings I have never tried, and have found it difficult to hit on just the right plan of raising from seed. The seed can be obtained from some American firms at forty cents per lb., but I do not know where it is to be had in Canada. The difficulty is to know when to sow it. If sowed in the spring, no matter how early, it will not come up the same year; a little of it may start in the fall and some the next spring, or not at all. If sowed late in the fall very little of it will start in the spring, and the rest perhaps not at all. The best success I have had was with some sowed early in August, which came up the

next spring. But had I known it in time, I should have done much better with some sowed in a hot-bed in spring, which did not come up that season at all, and I thought the seed had all rotted, till in the following spring, when the old hot-bed was scattered over the ground as manure, I found all or nearly all the seeds had made a start.

The purple-leaved variety, which is not propagated from seed, is very ornamental, and would look well planted at regular intervals along with the common kind.

### BEST VARIETIES OF CABBAGE.

The Editor of *Seed-time and Harvest*, published at La Plume, Lackawana Co., Penn., who has had large experience in the growing of vegetables, says, "do not attempt to grow cabbage in old gardens which have been long in cultivation, if a good new sod can be obtained. A deep sandy loam seeded to clover and plowed under early in autumn makes the best possible foundation on which to produce a crop the following season, with the aid of manure or special fertilizers."

**EARLY JERSEY WAKEFIELD.**—This variety he considers the best early sort, being the earliest of any that produces a solid head. The seed may either be sown in the fall and the plants wintered over in frames, or sown in March in a hot-bed, pricked out into a cold-frame in April, and planted in the open ground as soon as the weather will admit.

**HENDERSON'S EARLY SUMMER.**—He speaks very favorably of this newly introduced variety, which is but a very little later than the preceding, grows to a much larger size, and is very sure to form good solid heads. We may add that it is somewhat difficult to manage if the seed be sown in the fall and the plants wintered over, for if the autumn be a little warmer than was expected and extended a little longer, the plants have a strong tendency to run to seed. The better way with this sort is to rely on spring sowing in hot-bed. It possesses the good quality of standing a long time without bursting.

**NEWARK EARLY FLAT DUTCH** is used as a second early sort by the market gardeners of New Jersey, who supply the great cities, and is considered by our authority to be the best strain of Early Flat Dutch, yielding large and solid heads.

**EARLY WINNINGSTADT.**—Of this sort, he says that it is more sure to produce a head under any and all circumstances than any other,

and when planted on rich soil and well cultivated will produce heads of ten to twelve pounds in weight, but if given only poor soil and treated with neglect it will produce a solid head, though it may be no larger than a goose-egg. The heads of this sort are sugar-loaf or cone shaped.

FOTTLER'S EARLY DRUMHEAD.—We are indebted to our co-laborer for a package of the seed of this variety—which he thinks he has greatly improved since it came into his hands—and intend to give it a careful trial. He considers it to be the best variety for all purposes, being intermediate between the Winningstadt and Flat Dutch, and producing large, white, flat heads, which often attain to twenty pounds in weight.

PERFECTION DRUMHEAD SAVOY is considered by all growers to be the best of this class, which is the very best class in point of flavor. The heads of this variety are large, solid, and finely curled.

LARGE FLAT DUTCH.—Some have given the prefix "Excelsior" to this variety as a distinguishing mark of a distinct strain, but our trials have not enabled us to see the difference. The advantage of this variety over some others is that it will endure the summer heat and drouth that prevail in some parts of Ontario better than any other sort. It is very sure to head, and the heads are large, flat and solid. Having less outer leaves than most large growing varieties, the plants can be set closer together.

---

#### TO PREVENT GRUBS FROM DESTROYING YOUNG STRAWBERRY PLANTS.

A correspondent of the *Fruit Recorder* says that the ravages of white grubs in new strawberry beds can be wholly prevented by dipping the roots of the plants at the time of setting in a solution of copperas and salt, made by dissolving half a pint of salt and one ounce of copperas in a pail three-fourths full of water. The plants should be formed into bundles as large as can be conveniently handled, and the roots thoroughly dipped in the solution, and set out at once. He says that he has used this for a number of years with perfect success, thereby securing a vigorous growth and unbroken rows; and that he is very much in favor of salt and copperas for all kinds of fruit and vegetables, having used copperas on strawberries at the rate of

three pounds to a square rod, and about the same of salt, which produced the largest possible sized fruit and dark heavy foliage. He adds that for potatoes this will be found to give the very best satisfaction, producing a strong, rapid growth of vine, great productiveness, and freedom from rot.

### JONAH'S GOURD.

BY REV. VINCENT CLEMENTI, B.A., PETERBOROUGH.

*"Came up in a night, and perished in a night."*—JONAH IV. 10.

The Assyrian sun's perfervid heat  
 Upon the prophet's temples beat,  
 And well nigh scorched his brain :  
 When lo ! at the Almighty's word  
 Forth sprang a most luxuriant gourd  
 To ease him of his pain.

But scarce had he enjoyed one day  
 Exemption from the solar ray,  
 And rest and shelter found,  
 When some foul "worm" from earth-bound haunt  
 Approached, and ere next morn the plant  
 Lay withered on the ground.

So have I seen some petted flower,  
 My garden's pride, at evening hour  
 Uplift its gorgeous head ;  
 But "when the morning rose next day,"  
 That flower—its glory passed away—  
 Lay worm-cut on its bed.

And thus, too, when our hearts beat high ;  
 When with too fond idolatry  
 We cling to aught of earthly mould,—  
 Wife, husband, children, rank or gold,—  
 Forgetful that the Hand that gave  
 Can take away :—'tis then we brave  
 The wrath of Him whose treasury  
 Has "worms" as well as "gourds" laid by  
 To test His children's love.  
 The heart, elate at night, by morn  
 Grief-struck, lies bleeding and forlorn,  
 God's chastening hand to prove.  
 And if we read aright, we see  
 The "uses of adversity"  
 To waft our thoughts above.

## FENCES.

BY REV. R. BURNET, PRESIDENT F. G. A., HAMILTON.

"Give us a live fence," said one at our Winter Meeting last week, "give us a live fence." Another said "Let us have *no* fences. Let a man fence in his own cattle, and not his neighbours' out." "Osage makes a good fence," exclaimed a third, while another went strong for Old Country Thorn. What shall be done when doctors disagree?

The grand question of fencing is beginning to force itself upon the attention of patriots. It has received attention on the other sides of our lines. The increasing scarcity of fencing timber, the expense connected with fencing, and the improved method of feeding cattle, all combine to give an interest to the subject of fencing, which in other circumstances it would not have had.

We have only one answer to give to the query, What is the best live fence? Others may differ from our view, but let us agree to differ, and discuss the matter soberly and earnestly. Recently we met, with a distinguished fruit grower and farmer, and his mind was made up to make use of the Osage Orange, and indeed he had made arrangements for planting. The Old Country Thorn suited another. In Westminster any one can see for himself what the Old Country Thorn can do in the shape of making a good hedge. The Messrs. Macpherson have miles of it. The expense connected with its care is considerable, and strange to say, the outcry is general, it is too rampant a grower. This in our latitude, climate and soil may be said of almost any variety of hedge plant. We despair of getting any one plant wholly suitable to the varying variety of our longitudinal country.

Without disparaging the opinions and views of others, we are persuaded the Honey Locust tree, (*Gleditsia Triacantha*), is more suited for a live fence in the Province of Ontario than any other tree or shrub adapted for fencing purposes. Objections to its use for this purpose may be made. It is too rampant and stately a grower. We admit as regards a fence that this is a strong objection. Perhaps, however, on second thought, even this may have its advantages. We are seeking trees for shelter, shade and ornament. Two purposes are well served by using the Honey Locust. First, it is a perfect hedge, and will resist cattle effectually. Second, it makes an agreeable shade, and at the same time no mean wind-break. It requires to be planted

quite close; it will make room for itself. Should any of our members pass through St. Catharines they will have an opportunity of examining a good Honey Locust hedge on the street leading to the Railway Station, near the Welland Canal. Here and there, it is true, there are gaps, but care at first planting, and speedily renewing the decayed plants, will amply provide for all necessities. To the question, then, What is the best live fence? we would answer unhesitatingly the Honey Locust.

We have had it affirmed again and again that the fruit of this tree is the husk which the prodigal of the gospel did eat. Its sheath-shaped seed-pod no doubt giving coloring to the popular belief. Whether this rumor be true or not, it is a fact that the Honey Locust resists the swine, and in saying this we may affirm that it will prove impervious to any domesticated animal.

The following article is so intimately connected with the subject treated by the President, that we copy it for the further information of our readers.

### THE HONEY LOCUST HEDGE.

(From the *American Agriculturist*.)

\* \* \* We now consider the method of making a hedge. One can start with the seeds, or purchase young trees from the nurseries. Of course it is cheapest, so far as outlay is concerned, to begin with seeds. If one can afford to buy the plants he will gain a year, or perhaps two, in making the hedge.

**SOWING THE SEEDS.**—In our own experience with them, the seeds had been kept all winter in the pods; they were taken from the pods and sown at once, coming up as readily as beans. Purchased seeds may have become too dry, and it will be safest to soak them by pouring on warm water, and allowing them to remain in the water for about twenty-four hours. A seed-bed of good light soil should be prepared, and the seeds sown as if they were beans, dropping them about three inches apart in the drill. The rows, if to be worked by hand, may be fifteen inches apart, and twice that distance if a horse cultivator is to be used. During the season the young trees are to be well cared for by working between the rows and pulling up the weeds that appear in the rows. If any plants are crowded by too thick sowing, thin them while quite young.

**SETTING THE HEDGE.**—Usually the plants will be large enough when one year old, but if they have not made a strong growth they may be allowed to grow another year. Nurserymen furnish the plants at one or two years old as may be desired. The first thing to be done with the plants, whether home-raised or purchased, is to

assort them according to size, making two or three sizes. The object of this is to secure uniformity in the hedge; if a small plant is set between two large ones, the larger plants will keep the advantage, and there will be a weak place in the hedge. Besides assorting, the plants must be prepared by trimming, cutting back the long tap-root, and shortening the tops by cutting off the main stem and larger branches about one-half. This is very important, the object being to make the plant branch near the ground, which it will not do if the tops are all left on. In these operations do not expose the roots to the air more than is necessary. The line of the hedge should be well plowed and harrowed, but no manure will be needed; it should be a well prepared bed about four feet wide, in the centre of which the hedge is to be set. It is very important that the hedge be set straight, and this can be best secured by stretching a line as a guide in planting. The plants are to be set eight inches apart, and may be put in with a dibble, a large trowel, or by opening a cut with the spade, whichever method the planter may be most familiar with. A proper hedge—thick at the bottom—can only be made in four or five years, and it must have each year a severe cutting back, which should begin the first fall, cutting the plants back to a height proportionate to their growth. But of this it is not our purpose to treat at present. To answer some inquiries, we may say that in localities where the Osage Orange is perfectly hardy, we should prefer it to Honey Locust, on account of its greater beauty if for no other reason; but there is a wide belt where it is uncertain, and still another where it will not endure the winters, and in these the Honey Locust is the most valuable of all hedge plants thus far tested. It has been objected that the Honey Locust is not suited to hedge making because it is naturally a large tree, and can not be dwarfed without injury. The objection is entirely without weight, as we know that it has been in successful use for over thirty years; besides the same applies to the Osage Orange, which will grow to a tree sixty feet in height.

#### WINTER MEETING OF THE FRUIT GROWERS' ASSOCIATION.

This meeting was held in the Council Chamber in the city of Hamilton, on Wednesday and Thursday, 18th and 19th Feb'y, 1880. There was a good attendance of members from various parts of the Province.

On taking the chair, the President introduced to the meeting Mr. J. S. Woodward, of Lockport, N. Y., a delegate from the Horticultural Society of Western New York.

After the reading of the minutes of the last meeting by the Secretary, the President reported that he had complied with the request made by the Association, and waited upon the Hon. Mr. Pope, who assured him that he would have such inquiries made as would lead to the obtaining of accurate statistics with regard to the fruit production of Canada.

Vice-President Roy being called to the chair, the President announced that he had been favored with a paper from Dr. John A.

Warder, of Ohio, on planting trees along our road-sides for shelter, shade and ornament, and remarking that Dr. Warder had given great attention to forestry, and that he is an acknowledged authority upon all matters relating to the subject, proceeded to read the paper he had received, which was listened to with marked interest. The paper is too lengthy to admit of its being transferred to the pages of the HORTICULTURIST, but it will be given entire to our members in the Annual Report. The principal trees recommended by the writer to be planted were our native White and Black Spruces, the Hemlock Spruce, the Balsam Fir and the Norway Spruce. Of this last he says, that "though an imported species, has proved itself a good immigrant in all parts of our Continent where it has been planted, and is entitled to a front rank in avenue, wind-break or grove." Of the Hemlock Spruce he says, "it is one of your most beautiful native conifers when well exposed upon a grassy lawn or springing from a mass of native rocks. Its color is supremely lovely, and holds well." Of the Pines, he speaks very strongly in favor of the White Pine, styling it the "Queen of the Pines," on account of its extreme grace and beauty, either singly or in groups. The Norway or Red Pine he designates as a superior tree, whether planted for shelter, shade or ornament, and says we may plant it largely without fear of disappointment, the young trees excelling in growth the Scotch and Austrian Pines.

Among deciduous trees he assigns a prominent place to the Maples, giving the preference to the Sugar Maple, on account of the majestic beauty of its form and the gorgeous coloring of its autumnal foliage. Of the Elms, he seems to have a strong partiality for the American White Elm, whose branches form such noble gothic arches over the streets of so many New England cities. Our Oaks he thinks have been quite too much overlooked by our tree planters, for where they have been introduced they have given great satisfaction, and suggests that if some of our streets were planted with the Scarlet Oak they would furnish a most gorgeous fringing to the highway during the autumnal drive. For road-side planting preference is given to the Green Ash over its fellow because of its smaller size and clean, shining, dark-green leaves, while the tree grows rapidly and is very hardy. The paper closes with mention of the Tulip Tree, than which we have none more beautiful in form, foliage or flower, or more free from insect foes, and yet one that is but seldom planted.

A lengthened discussion followed the reading of this paper, in which the members present gave their experience of the growth, hardiness, beauty and value of many of our shade and forest trees.

W. Saunders, London, stated that the Nordman's Fir, and the European Silver Fir had not proved to be hardy in that part of the country, and objected to the planting of Poplars and Wild Cherry as shade trees, because they were so badly infested with insects.

P. E. Bucke, Ottawa, mentioned the Basswood as a handsome shade tree, also the Sweet Chestnut. The Lombardy Poplar is planted by the Ottawa Railway as a protection against snow drifts. He also mentioned the Birches as hardy trees.

Chief Johnson, Tuscarora, mentioned the Black Walnut as a valuable timber tree, saying that he has been offered a dollar per foot for trees of it when from twenty to twenty-five years old. The Sugar Maple was also a very valuable tree.

President Burnet thought our own Canadian White Pine the model tree for shade, ornament and profit.

J. S. Woodward, Lockport, N. Y., said that in his part of the State more Maples were used for road-side planting than any other tree. The Black Walnut should be abundantly planted because of its value for timber; those grown in the open ground being better than the forest grown, and soon attaining a size sufficient to make them valuable.

Vice-President Roy, Owen Sound, planted seeds of the Black Walnut ten years ago, and the trees are now bearing nuts. He spoke of the elasticity of the White Pine, the branches not being broken by the weight of the snow, which in his section is often very considerable.

B. Gott, Arkona, thought that the nuts both of the Black Walnut and Hickory were improved by cultivation.

J. S. Woodward, Lockport, N. Y., desired to speak of the great value of the Hickory, and to advise extensive planting of this tree, on account of the value of the nuts and of the timber. He thought that the worst enemy this variety of our trees had was the axe-handle hunter.

Thos. Beall, Lindsay, read a paper on the planting of trees, in which he expressed the opinion that no tree indigenous to this Province has so many and such strong claims for consideration at the present time as the Black Walnut. It is easily propagated, grows rapidly, has a fine appearance even when comparatively young, and when old is one of the most magnificent trees to be found in this or any other country,

and is at maturity the most valuable of all our trees for its timber. The paper proceeds to show the commercial and other values of this tree, and the ease with which it may be profitably grown. It will be published in full in the Annual Report.

Mr. Chas. Arnold, Paris, read an interesting paper, in which he considered the question, What shall we plant? and answered it by saying, "Plant apple trees for profit, and still continue to plant, until at least one-eighth of this portion of Ontario shall be covered with apple trees," and gave as his reasons that no portion of the earth can grow better apples, and but a very small portion can grow as good; while the great north-west now being so rapidly settled must buy its supply of apples.

Besides planting apple trees, however, Mr. Arnold advised the planting of belts of Norway Spruce around the orchards, and the planting of waste land, hillsides and steep slopes and banks, with such trees as the Black Walnut, Hickory, and other kinds that will thrive in the various localities. This paper will also appear in the Annual Report.

Mr. B. Gott, Arkona, read a paper on forest tree seeds and seedlings, in which he spoke of the influence of forestry upon our fruit growing and agricultural interests, the value of timber belts and wooded lands in modifying the force of winds, and protecting fruit trees and grain crops from sudden changes of temperature. That we might be enabled to propagate these trees cheaply, he called attention to the proper time for gathering and planting seeds of our forest trees. The Maples ripen their seeds early in summer, and grow best if gathered and sown immediately, and indeed all tree seeds germinate most freely if sown as soon as they ripen. Mr. Gott proceeded to give some directions for preserving tree seeds in a fresh state, and also for the preparation of seed beds, the sowing of seeds, and the care of the young seedlings, for full details of which we must refer our readers to the paper, which will be given in full in the next Annual Report.

Mr. W. Saunders, London, read a paper on some deciduous trees and shrubs worthy of more general cultivation. We have not space to enumerate all that were mentioned, but must content ourselves with noticing a few, knowing that our readers will have the paper in full in the next Annual Report, and can then study it at their pleasure. One that Mr. Saunders mentioned is a native of our own forest, and

one of the most showy when in flower: It is pleasurably associated with memories of childhood rambles, and gathering of wild wood flowers in the spring-time of the year, and redolent of the odors of those balmy, sunny spring days so beautifully in harmony with those early days of life's own spring-time, before the shadows have fallen darkly on the pathway, before the clouds return after the rain. It is the Flowering Dogwood, which forms a small tree of sixteen to twenty feet in height, opening its large white flowers in May, which in the autumn are replaced by bright red berries, while the foliage changes as the season advances to most showy red and purple. Another beautiful tree, well worthy of the attention of every one who plants for shade or ornament, is fitly spoken of in this paper, the Tulip Tree. It may be found in considerable numbers in the vicinity of St. Catharines, and a few have been planted on one of the streets of the city. It seems to be exempt from the attacks of leaf-eating caterpillars, and is one of the most interesting shade trees, both in its foliage and flowers.

Of trees not indigenous, he mentions among others the Ginko or Maidenhair Tree, one of the most interesting of all that endure our climate. It would seem as though in this tree we had caught nature in the very act of passing from the needle-like leaf of the pine to the broad leaf of our deciduous trees, for the leaves have the appearance when closely examined of a number of pine leaves welded together and slightly flattened in the process. In form the leaf is much like a single frond of our Maidenhair Fern, whence the name Maidenhair Tree.

Mr. Saunders also mentions that recent addition to our hardy shrubs, the Panicle-flowered Hydrangea, (*Hydrangea paniculata*.) He speaks of it as attaining a height of from eight to ten feet, at which size it must be a most showy and attractive object, with each branch terminating in a large pyramidal cluster of white flowers of nearly or quite a foot in length, which continue for many weeks, gradually changing from white to a faint flesh color.

After the reading of these papers members spoke of other shrubs and trees which had proved to be hardy and at the same time most beautiful ornaments of the lawn, such as the scarlet flowering Japan Quince, the sweet-scented Daphne Mezereon, which had proved hardy at Lindsay, and others.

## YELLOW S IN THE PEACH.

The yellows in the peach was discussed, and the necessity of Legislative action was strongly urged. The Secretary read the Statute of the State of Michigan providing for the destruction of all peach trees affected with the yellows.

Mr. W. M. Orr, Stoney Creek, said that this disease was becoming seriously prevalent.

Dr. Watt, Niagara, thought that a shorter Act than that of Michigan would be better suited to our needs, and suggested that a competent inspector might be appointed, whose duty it should be, when so required by any one complaining of the existence of the disease, to examine the suspected trees, and if found to be diseased empowered to destroy the trees.

Mr. Pettit, Grimsby, thought that the only reliable method of eradicating the yellows was to dig up and burn every tree that showed symptoms of the disease.

Mr. Cline, Grimsby, was satisfied that cutting out the affected trees as soon as the disease appeared was the only remedy, and he was confident that the disease was infectious.

Mr. A. M. Smith, Drummondville, said that the disease was spreading in his section, and he feared that soon there would not be a single sound tree. It first made its appearance about four years ago. It was believed that the disease was communicated to healthy trees by the pollen carried by insects from a diseased to a healthy tree, or by pruning the tree with a knife or saw that had been used on a diseased tree.

Mr. Woodward, Lockport, N. Y., said that in his State they were behind Michigan in that they had not enacted a law to prevent the spread of the yellows. He understood that the law worked well in Michigan, and that by means of its provisions the peach growers in some parts of the State had stamped out the disease. He believed that there was not a peach orchard in Western New York that was exempt from this disease.

Mr. Page, Fonthill, remarked that a thorough inspection of orchards in that vicinity had failed to reveal any appearance of the disease.

On motion of Dr. Watt, the President appointed Messrs. A. H. Pettit, W. Roy, W. Saunders, and R. Burnet a committee to prepare a Bill for the eradication of the yellows, and wait upon the Government to urge the passage of such a measure.

## VEGETABLES.

Dr. Watt moved the appointment of a committee on vegetables of recent introduction, who should make observations during the summer and report at the next winter meeting. The President appointed Mr. Page, Chairman, Messrs. A. W. Taylor, Hood, Chas. H. Biggar, Dempsey and Allan.

A. M. Smith suggested that a committee should be appointed on new fruits, who should take notes of all newly introduced fruits that came under their observation, and report at the next winter meeting. The President thereupon appointed A. McD. Allan, Chairman, Messrs. Burnet, Dempsey, A. M. Smith, Arnold, Holton, Beadle, Gott, Morris and Saunders.

## PRIZES BY THE AGRICULTURAL AND ARTS ASSOCIATION.

A resolution was introduced by Mr. Anderson, of Ayr, and carried, to the effect that the Provincial Agricultural and Arts Association be requested to give prizes for the best apple picker, apple packer, apple parer, and apple dryer.

In regard to packing apples, Mr. Anderson remarked that it was essential that the apples should be well pressed into the barrels, so as to keep them from moving at all in the barrel when undergoing handling in transportation.

Mr. Beadle, St. Catharines, remarked that an apple picker was a very convenient instrument for gathering a few specimens from the extremities of the branches, but he never had seen anything that would gather a crop of apples equal to a pair of human hands. It was of great importance that the fruit should be carefully gathered by hand without bruising, and put into the barrel in a sound condition, and firmly pressed, so that the apples could not move no matter how roughly the barrel was handled. He spoke also of the great importance of putting only perfect apples into the barrel, rejecting all that were imperfect, under size, wormy or in any way defective. He was glad that any steps should be taken to call attention to the drying of fruit in this Province. A great many of our most excellent autumn fruits were lost by decay, because we had no drying and canning establishments of sufficient capacity to work up the fruit before it perished. There was certainly a most excellent opening for fruit drying and fruit canning establishments in several of our fruit centres. He had often

wondered why enterprising men of business did not inform themselves upon these branches of industry, and put up a drying establishment and a canning factory at such a noted fruit and vegetable centre as St. Catharines. The only canning establishment in the Dominion as he believed is the one at Grimsby, and that has not a capacity sufficient to supply one-thousandth part of the canned fruit consumed in this Dominion. Nor could he see why we could not can fruits as well and cheaply as our cousins over the border, and compete favorably with them in foreign markets. The profits on fruit dried in some of the large evaporators in the United States he understood to be very satisfactory.

#### FENCES, AND CATTLE RUNNING AT LARGE.

This subject called out a very interesting and animated discussion.

Dr. Watt remarked that we had become so accustomed to the practice of keeping up fences along our highways, in order to keep other people's cattle from damaging our grain fields and other crops, that we had no conception what a tax we were paying in this very matter of keeping up road-side fences. "Why," he would ask, "should I pay a tax of ten, twenty, or perhaps thirty dollars a year that my neighbors may pasture their cattle upon the highway? And yet that is in reality what many of us are doing. Why should not every man be obliged to take care of his own animals, and so keep them that they cannot trespass upon my fields?—*To be continued.*

#### QUESTION DRAWER.

Mr. D. Shoff, MacGillivray, asks:—

"How is this weather going to develop fruit buds, injuriously or not? Give your opinion in the *HORTICULTURIST*. I have lived here forty years, and I never saw such a winter as this. Last fall we had a second growth of flowering shrubs, and in flower."

At present (March 1st) the fruit buds seem to be sound, and unless we have warm weather later in the season sufficient to bring out the fruit buds more fully, followed by frosts severe enough to kill them, there will be a good crop of fruit. March is usually the trying month, and there is probably more danger of injury than usual, owing to the unusually mild weather of the winter.

## **MOORE'S EARLY, the New \$60.00 Prize Grape.**

Very hardy, very early, and fine quality; never mildews. Winner of First Class Certificate of Merit. The Sixty Dollar (\$60) for the Best New Seedling. Twenty-six (26) First Prizes. Two (2) Silver Medals.

### **MOORE'S NEW CROSS-BRED ASPARAGUS!**

*The largest grown!* Send for Circular.

**JOHN B. MOORE, Concord, Mass.**

---

### **THE CANADIAN HORTICULTURIST**

May be found on file at GEO. P. ROWELL & Co's ADVERTISING BUREAU, (No. 10 Spruce Street), where Advertising contracts may be made for it in New York.

# REMOVAL OF THE

## Niagara Falls Fruit Gardens.

The undersigned being about to MOVE HIS FRUIT GARDENS  
FROM DRUMMONDVILLE TO ST. CATHARINES,

Offers for sale the coming Spring a large assortment of

**Berry Plants, Currants, Grapes, Gooseberries,**

— ALSO —

### **FRUIT & ORNAMENTAL TREES**

Very cheap, in order to clear the ground and save removal.

#### **STRAWBERRIES.**

NEW DOMINION and WILSON'S ALBANY, 50 cents per 100. \$2.50 per 1000.  
\$20.00 per 10,000.

CRESCENT SEEDLING, claimed to be the most productive berry in America; has  
produced 15,000 quarts per acre. 75 cts. per 100; \$3.00 per 1000.

A selection from any of the following varieties by mail for \$1.00 per 100:—

COL. CHENEY, JUCUNDA, CHAS. DOWNING, MONARCH OF THE WEST,  
KENTUCKY, GREAT AMERICAN, LATE CONE, ARNOLD'S No. 49,  
STERLING, and TRIUMPH DE GAND.

SHARPLESS, (Ellwanger & Barry's new berry), \$1.00 per dozen.

#### **RASPBERRIES.**

AMAZON, BRANDYWINE, CLARK, HERSTINE, HIGHLAND HARDY,  
PHILADELPHIA, TURNER, and NAOMI, 50 cts. per dozen, by mail;  
\$2.00 per 100, by express.

DIADEM and PRIDE OF THE HUDSON, 25 cts. each, by mail.

DAVISON'S THORNLESS and MAMMOTH CLUSTER, \$1.50 per 100; \$10.00  
per 1000.

DORCHESTER, (the earliest and hardest of the Blackberries), \$1.50 per 100; \$10.00  
per 1000.

#### **CURRANTS.**

BLACK ENGLISH CURRANTS, (2 years, strong); \$1.50 per 100; \$10.00 per 1000.

BLACK NAPLES, \$3.00 per 100; \$25.00 per 1000.

CHERRY and WHITE GRAPE CURRANTS, \$3.00 per 100.

#### **GOOSEBERRIES.**

HOUGHTON GOOSEBERRY, (2 years, large), \$3.00 per 100; \$20.00 per 1000.

DOWNING and SMITH'S IMPROVED, \$1.50 per dozen; \$8.00 per 100.

#### **GRAPE VINES.**

CONCORD, 2 years, \$5.00 per 100; \$40.00 per 1000.

ROGERS' HYBRIDS, DELEWARE, and HARTFORD PROLIFIC, 20 cents each;  
\$12.00 per 100.

BURNET, 1 year, strong, 25 cents each.

BRIGHTON, 1 year, 25 cts. each; \$15 per 100. 2 years, 30 cts. each; \$25 per 100.

CHAMPION, 1 year, 20 cts. each; \$10 per 100. 2 years, 25 cts. each; \$15 per 100.

MOORE'S EARLY, 1 year, 75 cts. each; \$50.00 per 100. 2 years, \$1.00 each.

An extra offer by mail: 1 Moore's Early, and 1 Brighton, good strong plants, 1  
year old, for \$1.00. Or 1 Burnet, 1 Brighton, and 1 Champion for \$1.00.

Prices of Fruit and Ornamental Trees sent on application.

Address, A. M. SMITH, Box 571, St. Catharines, Ont.