

# The Canadian Horticulturist

NOVEMBER, 1908

Volume 31, No. 11

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From the Horticulturist at the Experiment Station at Geneva, New York.

"In reply to your request of August 6, in regard to report on the Herbert Raspberry, will say that this variety has made a very good showing this year. The winter injury on two 27-foot rows was 5 and 10 per cent, respectively, the yield averaging 368 ounces. The injury to one row of Cuthberts of the same length was 25 per cent., the yield being 226 ounces. The growth of the canes of HERBERT is not so tall on our soil as that of Cuthbert, but we find that the berries average larger and are nearly as attractive as Cuthbert in general appearance. It is certainly a variety worthy of trial, and I have no hesitation in recommending it for this purpose."

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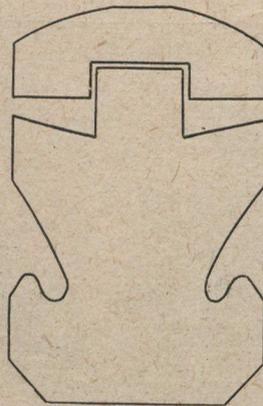
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# The Canadian Horticulturist

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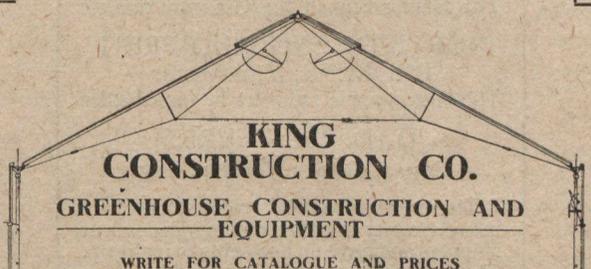
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# The Canadian Horticulturist

Vol. XXXI

NOVEMBER, 1908

No. 11

## Possibilities of Fruit Growing in Alberta

G. H. Hutton, Superintendent, Experimental Farm, Lacombe

IN DEALING with the subject, "Fruit Growing in Alberta," one must of necessity deal more in the somewhat speculative possibilities of development in the future, rather than the accomplished facts of the past and present. In being, in a measure, speculative and optimistic as to Alberta's future success in growing cultivated fruits of many kinds, one is heartily in accord with the general spirit of the west as applied to almost every line of her effort. The west reveals her speculative tendencies in regard to lots and lands and everywhere you go, the optimistic man is met, who is full of buoyant hope and lives in the future and its possibilities.

Alberta earnestly desires to be classed among those happy provinces where the clover blossom sheds its practical perfume, and where apples delight the eye and appetite. One is justified in indulging the hope that her desire will be realized when we consider that few countries or provinces can show a wider range of wild fruits of good quality than are produced here. The prairie in May is covered with the bloom, and later in due time with the fruit of the wild strawberry. This fruit is abundant and of good size—such a size, in fact, that settlers frequently gather plants from the prairie and give them garden cultivation with success.

Cultivated varieties of the strawberry have been tried here and there. These attempts have been generally successful, a gentleman of Red Deer claiming, under the single hedge row system, one quart to each plant. Another grower at Leduc produced a very fine patch last year, which gave good promise in May last. The results in fruit I have not learned. The size and quality of the fruit is all that could be desired. While we have no results from our work on the Experimental Farm to publish as yet, I am confident that good money can be made growing strawberries in Alberta with as little risk as elsewhere. Bloom can be held back slightly until danger of late frosts is largely past. Wind breaks can be provided so that the runners will root and not be blown about by the wind.

Following the strawberries, growing in the wild freedom of the prairie, are

gooseberries, currants and raspberries. These not only grow well according to nature's plan, yielding in quantities sufficient to tempt the Indian lasses to increase their worldly wealth by picking and peddling, but where cultivated varieties have been tried, success has attended every effort as far as I know. Red currants in particular do well.

All varieties of red, white and black currants planted on this farm have done well, though, since started in the spring of 1907, they have not reached heavy bearing age. Small quantities of fruit have been produced this year and the size and quantity is such that I feel war-

### A Credit

I have received THE CANADIAN HORTICULTURIST from the first number of its existence, in 1878, to the last number issued, being over 30 years without intermission. I always keep the copies of THE CANADIAN HORTICULTURIST and have bound a large number of the volumes. They are a credit to any book-shelf.—Daniel B. Hoover, Almira, Ont.

ranted in saying that these fruits should be planted in every farmer's garden, and that they can be counted on to give a good account of themselves.

In regard to the larger fruits, little definite can be said as a result of our work, except to say that we are trying cherries, plums and apples, and expect to succeed with some varieties of these fruits. We lost only about eight or ten per cent. of our trees during last winter, and we have trees that wintered through 1906-7, at Red Deer, and are vigorous. We have about 600 apple trees made up of some 150 varieties, and we hope to be in a position shortly to speak more definitely in regard to the varieties that will succeed. I have faith in the Duchess, Yellow Transparent and varieties of this class, while many of the Russian cross-bred apples are almost sure to succeed. I am informed on good authority that apples have been ripened at Medicine Hat, Magrath, Red Deer and Edmonton.

Our chief danger in winter is from the sudden spells of warm weather followed by equally sudden cold waves. In this vicinity and northward we are not as much exposed to this danger as farther south. Again, a danger to which we are exposed in lesser degree than farther south is the high winds. As time passes, protection from heavy loss may be secured through wind breaks of quick growing trees, such as cottonwood, Manitoba maples and so forth.

To sum up, I believe a success can be made of growing cultivated fruits of many kinds: (1) Because nature produces on the prairie in lavish abundance many kinds of these same fruits. (2) Because successes with strawberries, currants, gooseberries and apples are beginning to be recorded. (3) Because many of the failures, in apples particularly, may be traced to injudicious selection of varieties; (instances have been known where Northern Spys and Gravensteins have been planted.) (4) Because the climate is no more severe (minimum temperature last winter being twenty-one degrees) nor changeable than many parts of Ontario where apples are now regarded as a safe crop.

Thus the men who succeed in producing fruit in commercial quantities, will have a market at their door where strawberries and other small fruits seldom sell below fifteen cents a box (holding two layers of strawberries thinly spread), and where apples retail at \$2.75 a bushel box, to \$7.00 a barrel for "seconds." When one considers the enormous country to be supplied with fruit and the demand there will be for home grown fruit, trees and nursery stock, the prospect certainly looks good for the careful nursery man and fruit grower of Alberta.

Great as are the opportunities along many lines in this new country, one should not be accused of undue optimism or be charged with being carried away by the speculative spirit of the west, when he declares it is his belief that fruit-growing presents possibilities equal to any line of effort in pleasure and in profit—profit to the citizen who so succeeds, as well as to his nation.

# Fall Work in Orchards

J. W. Crow, Ontario Agricultural College, Guelph

THE sowing of a cover crop in mid-summer is the first step usually taken by the orchardist to prepare his trees for winter. This year, however, the prolonged drouth materially



**Protected from Mice, Rabbits and Sun-scald**

By wrapping with light-colored paper. Building paper is very satisfactory. Banking with earth is necessary—not distinctly shown in illustration.

checked the growth of trees, even where cover crops were not sown, and trees will probably go into winter conditions well ripened and capable of enduring severe cold. It is too late to discuss the sowing of cover crops this season, but there is at least one common form of climatic injury which still can be prevented by simple and inexpensive means. Sun-scald is far too common, particularly in northern sections and, where trunks are exposed, does a great amount of damage. Low heading of trees would obviate the conditions which permit of injuries of this kind, and it would be well for prospective planters to give this phase of the question some thought.

Illustrations accompanying this article give more or less valuable suggestions as to methods of avoiding this trouble on trees already established. Protection from mice and rabbits can, in the case of small trees at least, be secured at the same time. Large trees can be protected from the ravages of mice by doing away with places which might become harbors for these pests, and the careful use of poison is also to be recommended. In sections where winter protection to roots is necessary through

absence of sufficient snowfall, care should be taken that the material applied does not become a home for mice. Protection similar to that used for the same purpose in other cases, and illustrated herewith, could be used where there is danger of this kind.

Peach growers on the sandy soil about Leamington, Ontario, make use of tomato vines and similar material as a preventive of deep and injurious freezing of the soil. The snowfall in that locality is very light, and it may be that others similarly situated could adopt this practice to advantage. This covering serves also as a moisture-saving mulch in summer and does away with the necessity of cultivating close to the low-headed trees in common use in that district. Many orchards are headed as low as ten inches.

Look well to the condition of the orchard drains at this season. Most apple, pear and plum soils require drainage, and in preparing the ground for trees thorough drainage should be provided if it is not already present. Intelligently cared for orchards will often repay many times over the cost of installing efficient underdrainage, and fall is a very favorable season for this work. Where underdrains are already in place, they should be kept in good working con-

dition, and expert growers know that the better the drainage, the better also are the results secured.

The question of fall plowing in orchards seems to be a debatable one.



**Suggestion for Use in Preventing Sun-scald**

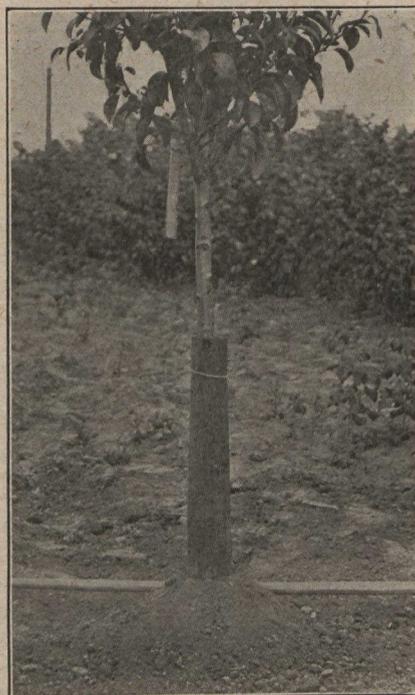
Any protection that can be held in place without providing a harbor for mice would be suitable

Early spring is usually considered the correct time as the inevitable injury to the root system can be most safely inflicted at that season. Less injury, too, is liable to occur through deep freezing, as the trees receive the benefit of any sod or other protective growth which may be present. Fall plowing is often recommended for heavy soils where it is desired to prepare a good seed bed for spring sown field crops. In orchard work, however, the case is different, as the trees are in many cases damaged by the otherwise beneficial deep freezing of the soil.

## Canadian Currants

W. T. Macoun, Ottawa

There are several good red currants of Canadian origin, but the most improvement is found in the new black varieties originated by Dr. Wm. Saunders. In a bulletin on "Bush Fruits," recently published, we described sixteen of these which are now named. The best of them are: Saunders, Kerry, Eclipse, Magnus, Clipper, Climax, Eagle, and Topsy. Their value lies in their great productiveness and good quality. Most of them are seedlings of a seedling of Black Naples.



**Tree Protected From Mice by Wooden Veneer**

Open to objection through injury which seems to be caused by formation of ice under the protection, otherwise very satisfactory. Veneers can be procured from basket manufacturers.

dition and with unobstructed outlets for surplus water. The writer has not seen a good orchard of any kind on wet

# Making and Managing a Cranberry Bog

Thos. D. McGill, Middle Clyde, Nova Scotia

**I**N STARTING the business of cultivating cranberries, the first thing to consider is the right place to plant them. Cranberries require peat covered with sand. The vines will grow almost anywhere, but to make them pay, give them the best place available. It is best to have the peat only a few inches thick, as it then requires only about four inches of sand, but I grow them successfully where the peat is from two to eight feet in depth. This depth requires from six to eight inches of sand.

Choose a location that can be flooded at will. The vines will grow without flooding (I cannot flood one of my patches) but to make the business profitable one wants all the advantages.

## USE ANY KIND OF SAND

The patch should be near some place where sand can be secured conveniently. Use clean sand, with or without gravel. I prefer the sand mixed with gravel, but there must not be any earth or clay mixed with it. A good test for the sand is to take a handful and press it hard for a moment and then let go; if it falls to pieces, it is all right, but if it holds together it is mixed with earth or clay, and will not do. The gravel that is usually put on our roads will not do, as it packs, being mixed with a kind of clay. The kind that I used was what they used to make plaster with, except that it was mixed in places with gravel. This has done better than the clean sand alone.

## PROTECT AGAINST FROST

The next thing to think about is frost. To one not in the business, it may seem that this is not of much account, but it is one of the most important points to consider in Nova Scotia. To know how to select a place that will escape frosts, one must know something about frost. He will give it another name and call it "cold air." Now, cold air is heavy and acts like water. It settles in the low places. Hence choose a place that will drain off the cold air; that is a place near a place still lower. A lake answers well for this purpose. A low piece of ground is the next best. One foot makes a lot of difference. For instance, part of my patch is a foot higher than the other part. This year the high place escaped frost; the other part was injured. It is no advantage to have the patch on high ground. If it happens to be surrounded by hills or high trees, cut the trees away on the lower side, and if the hills are high on all sides give it up. I have one place that is ten feet higher than the other place, and all surrounded by hills. I had to give it up.

## COVERING WITH SAND

After selecting the place, the next thing is to consider the best way to do

the work. The best way is to flood the patch a year. That will kill everything. Another way is to cover the top of the bog when the peat is only a few inches thick, with about four inches of sand. If the peat is from one to ten feet in depth, cover the grass and bushes with sand from six to ten inches deep. Some of the bushes may come through, but it is easy to pull them up. Before beginning to put on the sand, make a drain all around the patch three feet deep and two feet wide, and ditches across about 200 feet apart, two by two. I put most of my sand on in the winter on the ice. I blew up the sand with dynamite when the frost troubled me. The frost is not bad after you make a start and work every day. Another way is to lay a movable track

In planting I used a piece of steel like a large flat file with a handle on one end, and pressed the vines in the sand.

When building the dam have it high enough to cover over two feet the highest part of the patch. If the ice touches the vines it freezes to them and lifts them out the first time that the water rises. It requires two dams, one below the patch to flood and one to hold the water back until wanted.

## FLOODING

Flood the bog the tenth of November or sooner, if you notice the frost touching any of the vines. Let the water off about the 6th of May. Flood occasionally until the 21st of June. Do not flood again until September unless you have



A Cranberry Bog that Yielded One Barrel to the Square Rod

in sections and use a handcar that a man can shove. Move the track as you cover the bog.

## PLANTING THE VINES

I get my vines wherever I can find them. I found out that all vines would bear, but that vines that grow small berries when wild will be small when cultivated, perhaps slightly larger. The best plan is to get vines that grow large berries.

Plant the vines in rows two feet apart. Place the vines in little bunches six inches apart, with four vines in a bunch. The vines should be about six inches long. They do not require to have roots. As the tops grow, weed the patch to keep it clean. I used a small steel fork made all in one piece by a blacksmith.

strong reasons for so doing. I have injured the vines, destroyed the bloom and the berries by flooding in July and August to kill the cranberry worm.

After the vines begin to show blossoms the water will kill them. Water used rightly will kill all enemies except the "tip worm" that eats the buds, and so far I have found this one a hard one to fight. I am trying now by way of experiment, flooding my patch until the 10th of June, having the water shallow as possible, so it will be warm enough to kill the eggs.

## PICKING

The second year the patch should yield a few berries; the third year, a small crop; the fourth a good crop. I pick on the 20th of September. I have a large

building built with floors six feet apart, and have the berries placed about six inches deep on these floors. I had a large crop one year—put ninety barrels in a pile three feet deep—and lost all of them by frost. They keep well in a building like the one I now have, and color well.

A friend of mine living in this district is better located as regards frost. He picks October 1st, and ships at once.

I have a machine to winnow the berries with and then they run into a barrel.

I then use sieves fifteen feet long and two feet wide, sitting on benches two feet high. The berries are put into the sieves and hand-picked. The dirt and little berries drop through the sieve to the floor. I then put the good berries into barrels holding two bushels and three pecks and ship them in small lots. It pays best to sell at once while the berries are in good condition.

One great cause of berries spoiling is that they sweat in the barrel. The cause of them sweating is that they get cold in

the barrel during a cold spell of weather, and then the weather suddenly changes. The berries being cold, the warm weather condenses the moisture in the air, and the berries get wet. The secret is to keep the berries at an even temperature, either cold or hot.

A well-cared-for cranberry bog will yield one barrel to the square rod. I have had pickers that could pick six bushels a day. The pickers pick in peck boxes and the foreman marks it down every time they empty them.

## The Iris

H. J. Snelgrove, M.A., President, Ontario Horticultural Association

THE border of every garden should contain a bed of this singularly charming flower, whose name is derived from a Greek word meaning "rainbow," and indicating its beauty. The iris is a native of the north temperate zone, inhabiting Asia, Europe and North America, and in the hands of skillful horticulturists has undergone marvelous development during recent years.

Owing to their diversity of origin, the varieties have a great diversity of color—ranging from pure white, through all shades of mauve and blue to dark purple. The flowers of all the varieties are large and handsome, often stately, exhibiting beautiful variegation and shades of color. All are hardy.

The life of the flowers varies from three to six days. They are fragile, but if cut before the petals unroll they will keep fresh longer.

There are growing in the Botanic gardens about 300 species and varieties,

covering a blooming season of more than two months. The iris is so easily cultivated that everyone who is fond of flowers should have a good collection.

One of the finest early blossoming iris is the orris-root (*Iris Florentina*.) This is an old-fashioned species but it is one of the best. The flowers are large, lavender or nearly white in color, and delicately scented. It begins to bloom during the last week of May.

The varieties of Siberian iris also blossom at this time, and while not admired by many, owing probably to their resemblance to our wild species, they are of very attractive shades of blue or purplish-blue, and are particularly useful in bog-planting. Some of them reach a height of four feet.

After the Siberian iris, the many varieties of the so-called German iris begin to bloom. Two of the best of this May-flowering class are Kharput and Purple Ring, with flowers of great size and bluish purple in color. Closely following these are the other varieties in many forms and colors. As with the lilac, it is difficult to reduce the list to a reasonable number, but the following twelve give a good range of color and are among the very best in the opinion of Mr. W. T. Macoun, Dominion Horticulturist: Gracchus, Darius and Maori King for combinations of yellow and brown, Madame Chereate, Coeleste and Lord Seymour, for mauve and lavender; Mrs. H. Darwin, for white; Couquette, for pink; Walneri, Sappho and Duchess de Nemours for different shades of dark and light purple; and Jacquiana or Arnola for maroon or velvety purple.

While the varieties of *Iris pallida* might be first in the last group, they are kept separate to give an opportunity of mentioning three which should be in every collection if possible. These are Mandraliseuse, Racemosa and Lilacina.

After the German irises are over, about the first week of July, the magnifi-

cent *Iris aurea* begins to bloom. This species in good soil will reach nearly five feet in height. It has large golden yellow flowers and is altogether a striking and beautiful iris.

The Japanese varieties now follow and continue blooming through most of July. A dozen varieties will give a good range of color. These are lovely flowers, the richness of color and form giving them quite an orchid-like appearance. These are more often sold unnamed than the German irises, and most of even the unnamed ones are very satisfactory. The Japanese irises are not expensive.

There is another late blooming iris which should be mentioned, namely, *Iris ochroleuca*, usually known as *Iris gigantea*. It is a very striking erect species growing from four to five feet in height. The flowers are white and yellow.

To protect the leaves from frequent changes of temperature in winter, coal ashes will be found satisfactory.

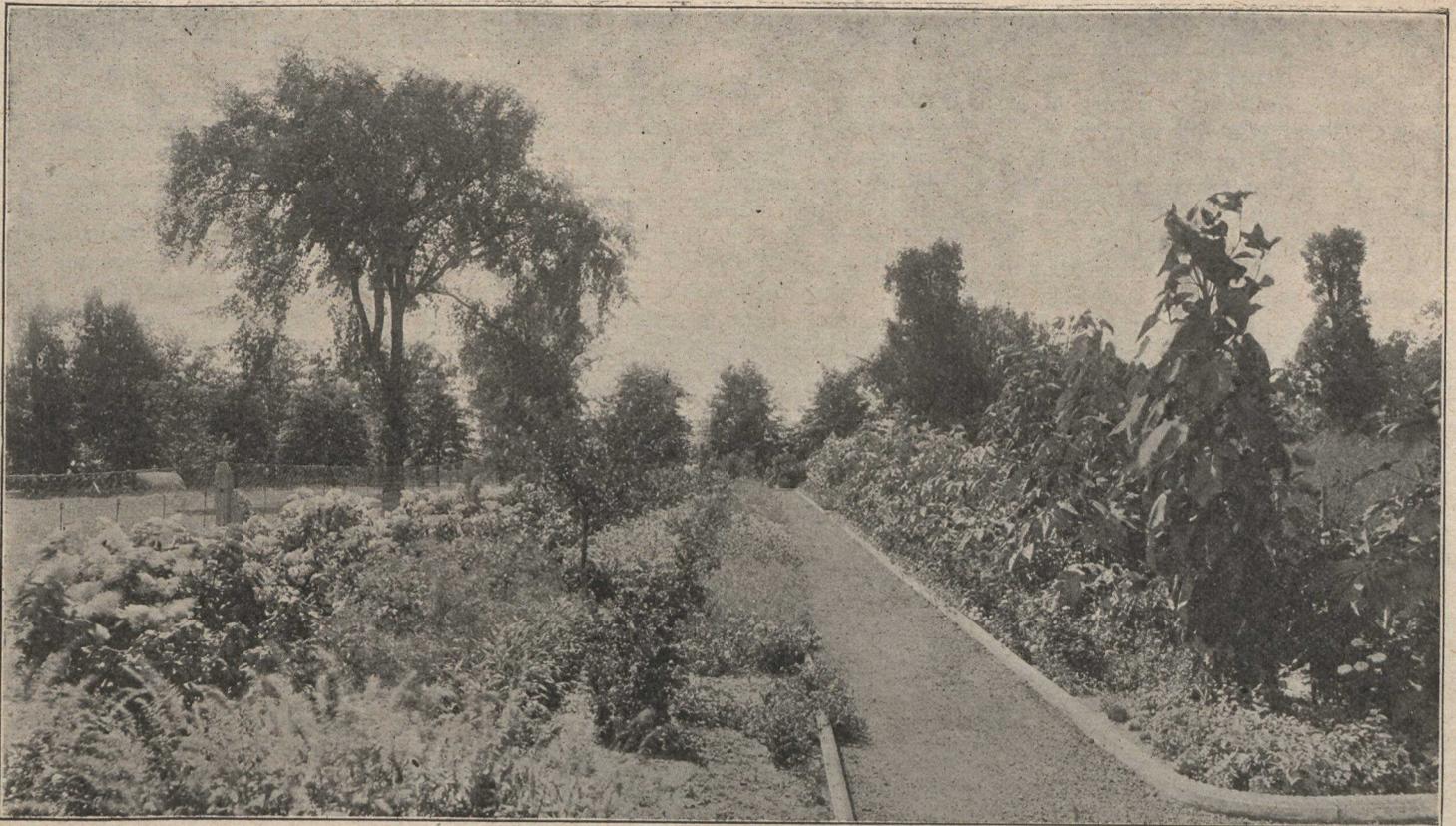


Major H. J. Snelgrove, M.A.

President of the Ontario Horticultural Association



Iris Germanica



A Well-Kept Walk Bordered by an Effective Planting of Annuals, Perennials and Fruits  
Gardens of Sir Henry M. Pellatt, Toronto—Mr. T. McVittie, gardener.

## A Beautiful Garden in Toronto

T. McVittie, Toronto

THE illustration on this page is a view of the east walk in Sir Henry M. Pellatt's flower garden, Toronto. As will be seen, the border on the left has for a background a hedge of *Hydrangea paniculata*. Next to this is a row each of gooseberry and black currant bushes. A space in front of these is planted with a collection of annuals and hardy perennials, which we endeavored to arrange so as to have a continuous bloom all summer.

Amongst the perennials in this border is one that deserves special mention,—*Geum coccineum*. This species grows about two feet in height; its spikes of bright scarlet flowers are very showy and fine for cutting, continuing in bloom from July until October.

The border on the right has for a background double hollyhocks and sunflowers, the front being filled in with annuals, such as ten-week stock, asters, verbena, *Phlox Drummondii*, and so forth, and bordered with dwarf daisy snowball.

In all the borders are planted several varieties of ricinus, the large glossy foliage of different colors giving the whole a tropical appearance. We intend filling all the borders with hardy perennials, as we believe that they are more satisfactory for the garden because of their per-

manent character, and the naturalness of their beauty. The value of the majority of hardy perennials as cut flowers for the house is immense. There is no arrange-

ment of flowers more graceful, varied or capable of giving better effect and none so easily adapted to almost every kind of garden.

## The Private Gardener

W. J. Wilshire, Montreal

EVERYTHING that tends to promote good will between gardener, employer and all concerned, helps in no small measure to make the gardener's work successful. It cannot be too strongly pointed out to the gardener, especially the young man taking hold of his first responsible position, that he has the making of the place largely in his own hands, and that upon his individual efforts, more than anything else, success or failure depends. Let him, therefore, bend all his energies towards making the place a success, in every sense of the word. Let him remember that while he is a servant, he is a responsible one, and in no sense to be classed with the laborer, or even the ordinary mechanic, and that his work will be judged by results, not by the number of hours he works in the greenhouse. He should not forget that he is hired as

a gardener and that all work in that connection should be his first consideration. It is a great mistake to try to run every department in the establishment. A temporary advantage may be gained by running around, doing work with which he has, strictly speaking, no concern, but if it is done at the neglect of his legitimate occupation, depend upon it, it will not pay in the long run. The gardener should always remember that the owners of the place have some rights, and that their opinions are occasionally entitled to respect. He should study their tastes, and cater to them as far as he finds it practicable, however absurd they may sometimes appear to be. It is astonishing how some people appreciate little things, such as the growing of a few common or simple flowers, to which they are particularly partial.

Every gardener should, if possible,

join at least one horticultural society, and give it all possible support. Nothing stimulates him like meeting his fellow gardeners in friendly rivalry at exhibitions. There is no incentive to greater efforts like striving to gain the foremost rank as a prize winner. Nothing keeps his interest in his work from flagging like striving to keep on top, if once he gets there. Some gardeners deplore the decline of horticultural societies, yet they do nothing to support them. They will blame the general public for the indifferent support they give to exhibitions,

while they themselves never lift a finger to help make them a success. When asked for reasons, they will talk of the indifference of their employers, or, perhaps, tell you they do not care for their plants to be taken to exhibitions for fear they will get spoiled. In nine cases out of ten, the true reason is not far to seek. Few people are so thin-skinned as to mind their plants suffering an occasional defeat. But they don't relish it too often, and the very fact that they object so strenuously to it becoming chronic, is conclusive proof that they are not so in-

different as they are made to appear.

Let the gardener once demonstrate his ability to hold his own with the best of them, and his employer's objections to exhibitions will rapidly disappear. He will be quick to see that instead of getting a lot of spoiled plants, he stands to gain considerably by the continual improvement in their condition, and far from being indifferent, his plants will be in evidence at every exhibition. The society will be stronger for that support, and the gardener the better for the experience gained.

## A Garden Competition at Short Notice

**A**MONG the horticultural societies in Ontario that are doing excellent work is the one at Hespeler. Through the efforts of the society and particularly of its energetic officers, the townspeople are taking a greater interest in the improvement of their homes and Hespeler is fast becoming one of the most beautiful towns in the province. Instead of a horticultural show, as is usually held, the directors of the society this year decided to inspect the gardens of the members on short notice and to award prizes for the best ten. Only two weeks' notice was given. There was no time to make elaborate preparations for the judging. The scheme placed the judges in a position to see the gardens as they are ordinarily kept by the members. The judges of gardens were Messrs G. W. Tebbs, president of the society, Jas. Hyslop and Robt. Davis, and the judge of the school childrens' exhibits—given by the society, Mr. David Witmer.

One of the features of the competition was the generally well-cared for condition of fruit trees. In many cases, better fruit would result if the specimens on the trees had been thinned earlier in the year. Some trees were useless and had better be disposed of. The judges pointed out that more nut trees could be introduced on the grounds of the members with good effect; they would be both ornamental and profitable.

The pear scab was found in every part of the town. In one instance on a lawn which perhaps is one of the best kept in Hespeler, a Flemish Beauty pear tree, which is very susceptible to this disease, had been top-grafted with Bartlett, the new heads showing no signs of disease.

Most lawns were found to be well kept but many would be much improved by rolling. One member made a serviceable roller by filling an iron tube with cement, inserting crank and handle before the cement had set. On some lawns, the appearance was spoiled by allowing the immediate foreground to grow wild and the portions near bushes and trees to go unclipped and in places, to be worn bare.

The first impressions of such grounds, therefore, could not be good.

Some of the gardens were greatly spoiled in appearance, and probably in productiveness by their over-crowded condition. One in particular was very full of weeds. Poor vegetables in it were struggling upward seeking the light and air necessary for their existence. There was no room to walk except amongst the over-crowded plants and no vestige of room to wheel a barrow.

In many places, the sidewalks of the town and the walks around and about the homes had grass and weeds growing between the boards. This detracts from the general well-kept appearance of the grounds. A few handfuls of salt scattered between the boards would make a great improvement.

Some members had kept the grass outside the fences well clipped and had planted a few trees there. This is a pointer for others to follow.

As the judging took place during the first week of September, it was too late to see the grounds at their best but there was evidence to show that most of them had had a fine display of flowers. In only one case was a rockery observed. In Hespeler, where there are so many rocks and pretty stones, a few more rockeries, clad with ferns and mosses, should be seen. They would make a great improvement in shady corners where nothing else of importance will thrive.

Gardens that were comparatively small, with no pretence of supplying a "little of everything," were the best arranged and in the cleanest condition. A few vegetables, and those good, a few flowers, and those excellent, gave the best impression and probably the greatest satisfaction to their owners. In one garden, a new member was gardening for the first time and his little plot was kept in a way, in its planning and arrangement, that older horticulturists might well imitate.

In some instances, the judges noticed crops that grow tall indiscriminately planted between plants of lower growth.

The latter naturally get smothered and have not a chance to come to perfect maturity. This can be guarded against when planning the lay-out of the garden in the spring. There were comparatively few varieties of shrubs and bushes on the lawns and where these exist, they would be more effective if they had been grouped around the outside of the lawn rather than dotted here and there like plants in a nursery.

A few more creepers on the houses, a few more fancy window and verandah boxes and a few shade trees at the front of the properties would make Hespeler even more beautiful than now. The horticultural society is ready at all times to assist the townspeople in every way possible. It is the present intention of the directorate to carry on the same line of work next year. There are already evidences of a more than doubled membership. Many other societies in the province could follow with profit this scheme of inspecting gardens on short notice.

### Basic Slag

What is the correct rate at which to apply basic slag to garden (vegetable) land?—Amateur, Halton Co., Ont.

The rate of application of basic slag depends upon, first, the nature and condition of the soil, and, second, upon the frequency of application. If the material were to be used only once in a long interval then it might be applied at the rate of 500 to 800 pounds an acre, but if it is intended to be used yearly not more than 300 to 500 pounds should be applied.—W. P. Gamble, O. A. C., Guelph.

### Inspires Even Poets

I also your journal enjoy,  
And wish you the strength of Rob  
Roy,  
For many long years,  
'Mid everyone's cheers,  
Its pages with pluck to employ.  
—Wm. Murray, bard of the St.  
Andrew's Society of Hamilton.

# Ornamental Gardening in Southern British Columbia

G. A. Knight, Victoria

**M**OST conifers, evergreen and deciduous shrubs that grow in the temperate zone and some subtropical ones do well in the southern part of British Columbia. In conifers, *Araucaria imbricata*, *Cedrus Deodara*, *C. Libani*, *C. Atlantica*, cypress, retinosporas, arborvitae, many species of pine and others do well. The different varieties of holly do remarkably well. It is best to plant all of them in the fall as soon as there is enough rain to thoroughly moisten the soil. Root action will then commence before winter sets in and the plants or trees do not feel the effects of transplanting. If planted later in fall or in the spring they do not do so well. The spring usually is dry with high cold winds that cut and dry up the foliage when there is no root action.

Laurel, box, privet and so forth can be planted any time from the middle of October until the first of May with safety. Deciduous shrubs can be planted from the first of November to the middle of April. They are often planted earlier and later but it is not advisable.

Roses are often planted too late and do not give satisfaction. They can be planted from the middle of November until the last of February with safety. Much depends upon the season. If we get early frosts, the roses shed their leaves and can be transplanted earlier.

## GARDENING IN VICTORIA

Victoria has a shortage of water and

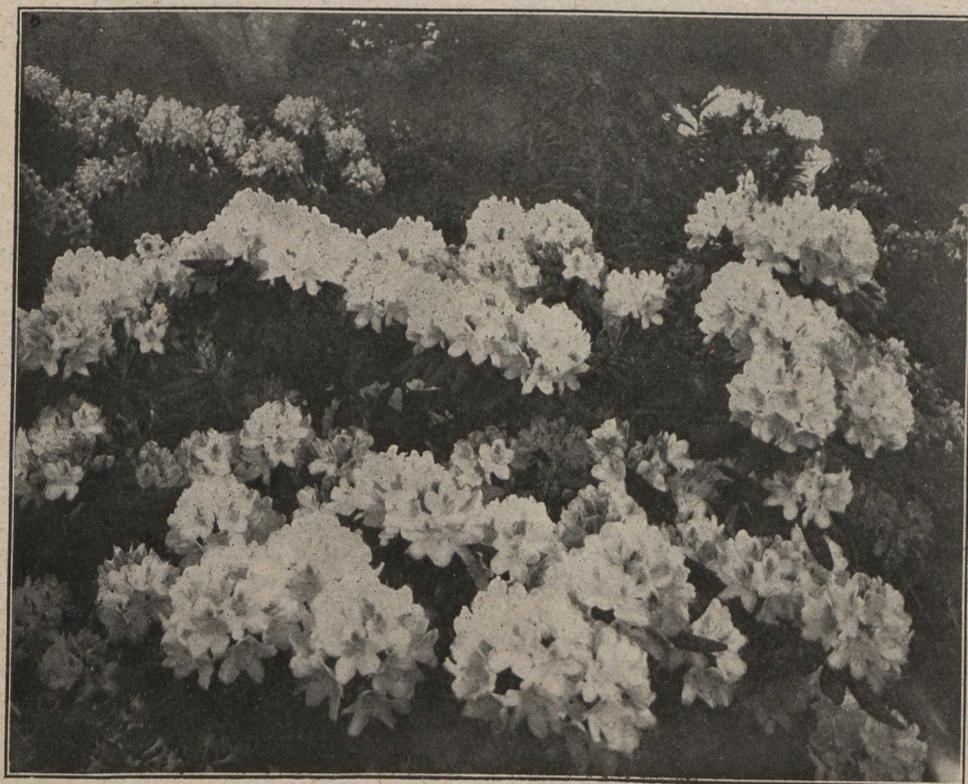
many gardens that were beautiful a few years ago are now a disgrace to the city. Many citizens will not pay a high price for water for their gardens. Even if they are willing and reside on the higher levels, there is no force. This is a great mistake. There is plenty of water in the

mountains. It will have to be brought down and should have been long ago. As there are so many forests in this part of the country, the citizens of Victoria should have free water for their gardens and there should be no dusty streets and shade trees.



View of Flower Show Held in Victoria, British Columbia, Last August

From the *Victoria Colonist*



Rhododendrons Grow to Perfection in Victoria, B.C.

From the *Victoria Colonist*.

Victoria usually looks better in winter than in summer. In winter, the lawns are green, the evergreen foliage is clean and the beautiful holly with its red berries are bright and beautiful; some of the latter are really magnificent. The pyracantha, ivy and the different varieties of laurel are very beautiful. Some of them flower all winter. We also have some very fine specimens of *Araucaria imbricata*, usually called "monkey puzzle." Many of our native evergreens and deciduous trees and shrubs also are very beautiful.

Some varieties of pears will succeed where other fruits might fail. They thrive on clay soil, if well underdrained.

Did you learn anything new about gardening this season? If so, tell it to others through the columns of *THE CANADIAN HORTICULTURIST*.

*THE CANADIAN HORTICULTURIST* would like to hear oftener from readers who grow raspberries, blackberries, currants, or gooseberries. Send for publication a description of your patch and tell how you plant, cultivate, prune, pick and market.

# Plant Protection in Winter

Wm. Hunt, Ontario Agricultural College, Guelph

**O**UT-OF-DOOR spring-flowering bulbs, especially the late planted ones or those that have not yet been planted, will benefit by having some protective material put over them some time before very severe weather sets in. Four or five inches of long, strawy manure, straw, long grass or autumn leaves placed over them prevents, to a very great extent, the bulbs from being lifted or heaved from the ground by sharp frosts and helps them to start into root action during early winter. Some evergreen spruce or pine boughs may be put over the manure, not only to keep the covering in its place, but also to do away with the unsightly appearance the manure presents during the winter when not covered with snow. In exposed places it may be necessary to fasten the covering down with wire or pegs to keep it in place.

Bulbs that were planted at the proper time—the second or third week in October—may not need protecting as much as the late planted ones, but even these will benefit by some protection, especially in sections where the snowfall is partial and of uncertain duration. Dutch hyacinths and crown imperials should have some protection, as they are not quite as hardy as tulips, narcissi, crocus, and most other spring flowering bulbs. Tulips and narcissi especially can be planted as late as the weather will permit, but are better planted earlier.

Where Japanese lilies, such as *Lilium auratum*, *L. speciosum rubrum* and *L. speciosum album*, are attempted to be grown out of doors, they should be covered with at least a foot in depth of strawy manure. These lilies, however, are seldom a permanent success as border plants even in the warmest parts of Ontario. About the second or third week in November is usually about the best time to put winter covering on bulb beds or borders.

## BORDER PLANTS

Tender border plants, such as hollyhocks, *Campanula media* (the biennial cup-and-saucer plant), pansies, Shasta daisy, Chinese pinks or any other partially tender border plant that requires protection, must receive very different treatment from that recommended for bulbs and tubers. Too often they are treated exactly the same. Better no protection at all than to treat them in the same way as for bulbs.

After many tests and experiments for protecting border plants as mentioned, I have found nothing better than to place over the plants first some small pieces of brushwood, old raspberry canes or coarse trimmings from the perennial border. A few leaves may be sprinkled over and

among these a light covering of strawy manure about two inches in thickness, over the top of all. This method of covering plants not only collects and conserves the snow around and over the plants, but what is of far more importance, where it is essential to preserve and keep alive the top growth of the plant, the brush or trimmings mentioned allow of a circulation of air—something absolutely necessary to plant life even when dormant in winter—and prevents the plants from being smothered and often rotted and killed as they usually are by a heavy covering of leaves or manure alone. When the latter is applied to growing plants alone for protection, it becomes wet and soddened, then freezes solid, thus forming a solid mass of ice over the plant, effectually excluding the air and usually results in smothering and rotting the plant.

In our often changeable weather in winter, and more especially during the vagaries of late winter and early spring weather, I have found the light covering mentioned of great benefit to tender plant life in borders. Whilst admitting sufficient light and air to sustain plant life, it effectually excludes the hot sun thus to a great extent preventing the alternate freezing and thawing so detrimental to plant life in late winter and early spring. Banking the snow over tender plants protects them materially during winter, but is of uncertain duration and benefit in early spring. There is no better protective material for plant life than dry light snow as long as it lasts.

## BUSH ROSES AND SHRUBS

Budded or grafted plants or hybrid perpetual, or hybrid tea roses especially in most sections of Ontario, are benefited by some protection. A good plan is to first tie the bush up in a bunch, then before severe frosts bank some soil around the plant to about twelve inches in height in the shape of a cone. The base of the cone should be about twelve to eighteen inches in diameter and run up to a point near the stem of the plant at the top. The soil should be patted down firmly on the surface to pitch off the rain and moisture. A forkful of strawy manure thrown on the top of the cone of soil around the plant will help it. Roses grown on their own roots are hardier and less liable to be winter killed than are the budded or grafted plants. Own-root roses are a little slower at first in giving flowering results, but are much more enduring than worked or budded stock. I planted some own-root roses in 1883 that are still living and doing well every year, whilst the grafted bushes planted at the same time have been renewed several times since then.

The more tender kind of roses, such as hybrid teas, teas, and the polyanth and souper type of roses, require better protection than the hybrid perpetuals. Tying the top of these in a bunch and thatching them with straw, or first covering the plants with leaves and placing a sugar or flour barrel or some boards over them, makes a good protection. A nail keg would answer for small plants. Holes one inch in diameter here and there should be bored in side of barrel to admit air. A mulching of leaves or strawy manure six or eight inches in depth put on late in November around bush roses also helps to protect them materially.

The great point in preserving these tender roses is the exclusion of moisture, sun and frost as much as possible, and the admission of air to prevent dampness and mould or fungous diseases. Small tender-flowering shrubs can be treated in the same way as roses during the winter.

## CLIMBING ROSES

Climbing roses, such as Crimson Rambler, Baltimore Belle and other tender varieties, should be taken down from the supports they have been growing on and the growth tied or pegged down close to the ground to keep the growth below the snow line as much as possible. Throw some straw or strawy manure about three or four inches in depth over the canes or growth so as to cover them about the thickness mentioned. Burlap or the rush matting used as a lining for tea chests are also good materials for wrapping around tender roses or shrubs, instead of using the manure or straw. Avoid putting the covering on too early in the season, as this induces field mice to make a home for the winter in the covering, often resulting in the destruction of the plants from the mice gnawing and eating the growth of the plant. Covering up too early also prevents the growth from hardening and ripening, the latter being a very essential point to secure to prevent the winter killing of plant life. About the end of November is usually early enough to cover up climbing roses.

Remove the winter covering from protected plants early in spring (about the first week in April), before growth commences. Choose dull, mild weather for the operation. Remove only a small portion of the covering, leaving a portion of the dryest for a time so as to gradually inure the plants to their more exposed conditions.

If you are interested in what others tell you through the columns of THE CANADIAN HORTICULTURIST, write an article on your experience for their benefit.

# What Amateur Gardeners Can Do in November

EVERYTHING that is accomplished in the autumn months is so much help towards the spring gardening. The garden should receive a general cleaning up. Fallen leaves may be



Some Saskatchewan-Grown Flowers

Exhibit of Mrs. Guinn at Prince Albert Exhibition

placed on the compost. Most other kinds of rubbish are better gathered and burned. Rubbish harbors insects and vermin, and the roots and stalks of plants may carry the spores of fungi.

Protect the bulb beds, border plants, roses and shrubs. Read the suggestions given in an excellent article on another page. Read, also, the practical article on the fall treatment of weeds.

Bulbs for spring flowering should have been planted before this but there is still time. As good results do not follow from late planted bulbs as from those planted earlier.

Roses may be planted early this month in favored localities. Fall planted roses will give a fair crop of bloom the following season.

If a top dressing has not been applied to the lawn this fall, see that it is done at once. Use clean manure or an earth mulch, as recommended in previous issues.

This is an excellent time to make a compost to furnish good potting soil for use next year. Gather some sods and place them in a square pile, grass side downwards. On each two layers of sods, place a layer of manure, five or six inches thick, and continue building until you think that you have sufficient. This will be ready for use next spring.

## THE WINDOW GARDEN

When re-potting plants, do not forget the drainage. If you want best results, use new pots. Water immediately after re-potting.

The most important thing in the growing of house plants is watering. Many persons give their plants a little water every day. This is wrong. They should receive water only when it is required. This is indicated by a dryness in the surface of the soil and by the pot giving

a hollow sound when knocked with the knuckles. When applying water give a good soaking, then withhold until the condition mentioned returns.

Leave the pot hydrangeas outside until touched by five or six degrees of frost. This is necessary to secure the proper ripening of the wood.

Place fuchsias and pot roses in a fairly moist cellar. They require a period of rest.

Pot some bulbs; there is still time. Even though this work has already been done, a few potted now will give a later succession of bloom.

House plants should receive an occasional draught of fresh air but see that same does not fall directly on the plants. Increase the temperature in the house as the weather grows colder.

Some plants that do well in north or north-east windows are ferns, begonias, callas, *Asparagus plumosus*, *Primula obconica* and Chinese primroses. Plants that have more richly colored flowers require more sunshine.

Grow rex begonias in leaf mould and sand with good drainage. Water moderately and keep somewhat back from the light. Do not allow water to get on the leaves.

To enable all the plants in the window to secure light to the best advantage, arrange them with the smaller plants in

in boxes deep enough so that the tops of the celery will be, at most, only an inch or two above the top edges. Pack the celery closely with the roots in earth or sand. If the tops show signs of wilting, do not sprinkle them with water but apply it through a tube or otherwise to the roots.

Store the garden roots and potatoes. A few parsnips may be left in the ground all winter.

Store onions in a cool, dry cellar on slatted shelves where there is plenty of ventilation. A temperature just above freezing point suits them best.

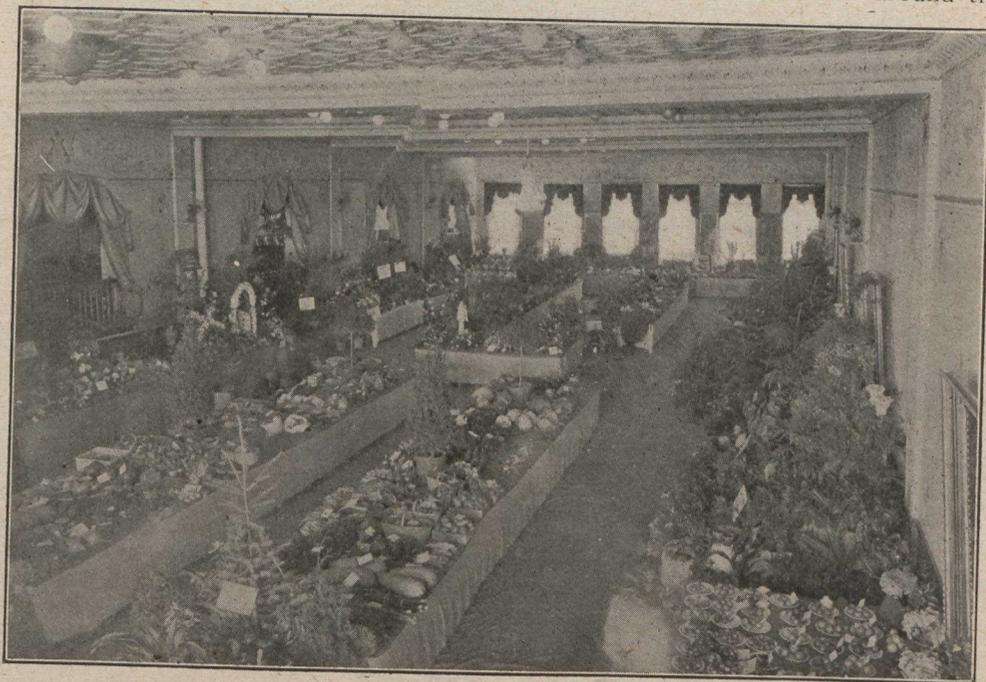
Remove from the garden all weeds, especially those bearing seed pods, and burn them. Apply a dressing of manure and spade or plow it in. If the ground is not well drained, this is a good time to make it so.

## FALL WORK WITH FRUIT

Protect the strawberry patch. While the plants may come through safely, they will be better for the protection in case of danger. Mulch them with clean straw. Manure is apt to contain weed seeds but it will do if nothing else is available. Do not apply the mulch until the ground is well frozen.

As currants and gooseberries are hardy, they may be planted now. Prune them any time after the leaves fall.

A few forkfuls of manure around the



Horticultural Exhibition Held in Winnipeg Last Summer Demonstrated the Possibilities of Manitoba Horticulture

front and the larger ones at the sides and rear. Turn them at least once a week to prevent one-sidedness and to give all sides a chance at the sunlight.

## THE VEGETABLE GARDEN

Dig and store the late celery. If you have only a few dozen heads, place them

raspberry and blackberry plants will be advantageous. The same may be said of young fruit trees but do not do this to the latter until you have wrapped the trunks with paper and banked them slightly at the bottom. This is to prevent injury from mice.

# The Fall Treatment of Garden Weeds

J. Eaton Howitt, M.S.A., Ontario Agricultural College, Guelph

PERHAPS in no place do weeds give more trouble or look more unsightly than in the vegetable garden. Many gardens are so badly infested with weeds that constant hoeing and cultivation is required throughout the season in order to keep them out of the rows and give the crop a fair chance. This continuous hoeing and cultivating is tedious, laborious and costly and might to a large extent be done away with and time and money saved by proper attention being given to the garden in the fall of the year after the crop has been removed.

Most of the weeds that are pests in the vegetable garden are annuals such as pigweed and lamb's quarters, or winter annuals like shepherd's purse. The majority of them mature seeds late in the fall after the ordinary cultivation of the garden has ceased and the seeds of most of them will germinate as soon as they are mature. The treatment, therefore, is to plow the ground as soon as the crop is removed to prevent the maturing of the weeds. This plowing must be shallow, not more than three or four inches deep in order to keep the weed seeds in the soil near the surface. Next harrow thoroughly to form a good seed bed and induce the weed seeds to germinate. As soon as a growth of young weeds is obtained cultivate them out. Repeat the harrowing and cultivating several times as by each stirring of the soil more weed seeds will be made to germinate and the young plants destroyed by the cultivation. Thus the soil will be to a large extent freed from the weed seeds that under ordinary conditions would produce a growth of weeds in the crop the following season.

It is a good practice, especially if the soil is apt to be a little damp and cold, to ridge up the garden last thing before the ground freezes. This will hasten the warming and drying of the ground in the spring and when the ridges are harrowed down any weeds that have escaped the fall cultivation will be destroyed.

If patches of weeds are allowed to seed in the fence corners and waste places near the garden, the foregoing treatment will be of little avail as the soil will be reseeded by every wind that blows. All such patches of weeds must, therefore, be cut before they mature their seeds.

Care must be taken not to use manure containing weed seeds. Manure suspected of containing weed seeds should be piled and allowed to heat thoroughly before being applied.

"A stitch in time saves nine." Such indeed is the case in dealing with garden weeds. A little time and trouble spent in the fall when the work is slack, a little

care given to the cutting of weeds in waste places at the proper time, and to the securing of manure free from weed seeds will save a great deal of time and

labor during the busy season of the year, thus lessening greatly the cost of producing a crop and adding materially to the margin of profit.

## Variety Tests With Beans and Peas

H. S. Peart, Horticultural Experiment Station, Jordan Harbor, Ontario

AT the beginning of our work with varieties of vegetables, we endeavored to secure the leading varieties that have been placed upon the market. Although we grew 104 varieties of beans and 109 varieties of peas, many are entirely useless. We would suggest the following varieties as those being worthy of trial by our vegetable growers and kitchen gardeners.

Among the best early beans are Earliest Hopkins Red Valentine, Long Pod Forcer, Davis Kidney, Bountiful Bush, Early Red Valentine, Longfellow and New California Wax. Prolific German Wax, Dwarf Horticultural, Stringless Green Pod, Mighty Nice, Rennies' X X X Best Green, Imperial Golden Wax, Giant Stringless Green Pod, Early Red Valentine, ripen somewhat later, giving a succession of picking. Hodson's Wax was decidedly the heaviest cropper we had but New Pearl Wax, Black Wax, Refugee Improved and Large White Marrowfat are worthy

of further trial and test for late crop.

The peas which we would recommend are as follows. Early:—Briggs' Extra Early, Rural New Yorker, McLean's Little Gem, First of All, Prolific Early Market and Rawson's Clipper. Medium,—French Canner, Improved Stratagem, Telegraph, Burpee's Profusion, Heroine, Horsford's Market Garden, Mammoth Melting Sugar, Burpee's Quantity, and Dwarf Gray Sugar. Late,—Rennie's Queen, Matchless, Early Dwarf, Britanny Sugar, Bliss Everbearing, Long Island Mammoth, Black Eyed Marrowfat, Marblehead Early Marrowfat, Prodigious and Royal Dwarf White Marrowfat.

While there are a number of other varieties grown throughout the province, these are the ones that have proved to be the best with us this season. Growers should not form the opinion, however, that are recommending these varieties only. Further tests may show that some of the others may be superior to those mentioned.

## Forcing Tomatoes

W. S. Blair, Macdonald College

THE variety, "Frogmore Selected," was used in the experiments that were conducted at the Macdonald College, and recorded in the October issue of THE CANADIAN HORTICULTURIST. The benches contained six inches of soil. There is some difficulty in transplanting from a six-inch pot to this depth of soil, and we think that a six inch pan would suit the plant as well, and be better for transplanting on account of being shallower.

The plants were trained to a single stem, and supported with No. 10 wire stuck into the soil at one end and fastened to wires running over the benches. These supports were five and one-half feet long. To these the plants were tied with raffia whenever it was necessary. Strong coarse wool twine makes a good support. This twine is tied to a wire running across the bench below and to a similar wire above. The plants are tied to this the same as where wire is used.

The plants were trained to a single stem by pinching off all but the upper or primary shoot. In pinching off the side branches or suckers, it is necessary to go

over the plant every few days, for they make very rapid growth and unless removed when small they take considerable strength from the plant. When the plants in the pots are getting large it is advisable to use No. 10 wire, about eighteen inches long, as a support.

The temperature was kept at sixty degrees during the night, and in the day time during very dull weather, the house registered about this mark. During bright days the temperature would go up to seventy or eighty degrees according to the day and in the late spring sometimes to ninety degrees.

Tomatoes require plenty of fresh air in order to make stocky, thrifty growth; therefore, particular care in ventilating is necessary. Avoid cold draughts.

It is quite important not to water too heavily. The soil should be thoroughly wet to the bottom of the benches and kept moist but not saturated. In winter, two waterings per week are usually quite sufficient. As the season advances and the plants increase in size, more, of course, will be required. During the early growth of the tomato the atmos-

phere is better kept moist, but a dry atmosphere is the best for aiding in pollination, and preventing rot. The leaves of the tomato plant are better, and more healthy if not syringed at all.

As already stated, tomatoes require a dry warm atmosphere to facilitate pollination. The pollen is shed freely during the middle of bright days, and it is at this time that the plants require hand pollination. This point is a very important one, especially in northern districts, and unless considerable attention is given to it, the profits from the crop will not amount to much. Various devices are used for doing this work but we found a rabbit's tail, tied to a short stick, the best. With this one can go over the plants very rapidly and as the fruits were all regular and marketable, this device evidently is one that we can safely recommend for pollinating the plants.

#### MARKETING

The bulk of our fruit was sold on commission in Montreal. They were shipped in three- and four-pound till boxes, four boxes to a crate. This we found to be the best method for handling this fancy fruit, and all plants grown in greenhouses should produce fancy stock. The three-pound till boxes are the most convenient. The crates are made the depth of the till boxes and three three-inch slats put across top and bottom.

#### INSECTS

The white fly is the most difficult insect to deal with. To control it, we confine ourselves entirely to the use of hydrocyanic acid gas. This fly when disturbed, will fly around the plant and usually return to the same plant. On examination of the under side of a leaf, you notice what appear to be eggs, but on closer examination with a glass you will find that part only are eggs and part are nymphs. It takes about thirteen days for the eggs to hatch into nymphs, and when hatched, they move over the under surface of the leaf for a short time and then insert their beaks into the tissue of the leaf, taking on somewhat the appearance of a scale. These turn into the adult white fly in about five weeks time. This insect, owing to its sucking mouth parts, cannot be controlled by poison placed on the foliage, and you all know that fumigation with tobacco does very little good. We found that one ounce of potassium cyanide to 2,000 cubic feet was quite effective in getting rid of the fly. Of course the tightness of the house and the kind of night may make it necessary to use one ounce to 1,800 cubic feet, or even stronger. This gas is made according to the following formula: One ounce of high-grade cyanide of potassium, (ninety to ninety-five per cent.); one ounce (by measure) of commercial sul-

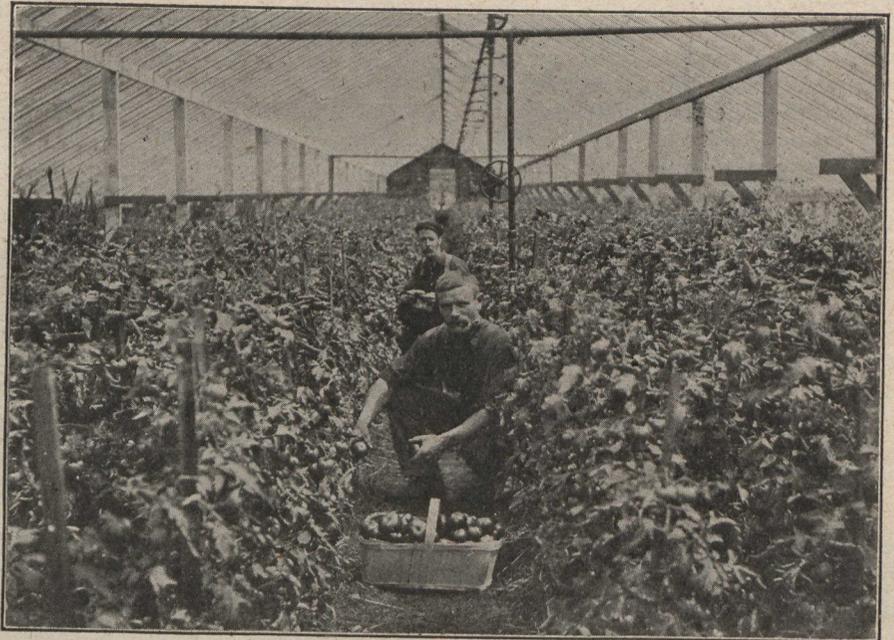
phuric acid; four ounces (by measure) of water.

For information as to how best to use this material, I would advise you to look up *The Canadian Florist*, issues of June 10 and July 3. In any case do not use this gas without first becoming familiar with its nature. It is a deadly gas and must be handled with care.

I have already stated that in order to run in tomatoes after carnations and violets it is necessary to sacrifice the latter part of these crops. As a general rule, the market demand for violets and carnations is not brisk after Easter and, therefore, we think it possible in many cases to discard part of these crops in favor of tomatoes. In no case do we think it advisable to bench tomatoes later than the latter part of March; in fact, I would say not later than the mid-

working over the soil and handling the plants. This is not a large job. In comparison with floral plants the tomato is not an expensive one to handle.

It is also a possible practice and one followed by some growers to plant in the carnation bench by simply removing a plant or two where the tomato is to be set and working up only a small area of soil for this purpose, thus getting some crop of the remaining carnations while the tomatoes are making their early growth. This, however, I would not advise. I do not think that there is any material gain by such a practice. The plant does not get as good a start, you cannot work over the soil in such a thorough and expeditious manner, and the carnations obtained do not compensate for injury sustained through working out the carnation plants later on.



A Thousand Tomato Plants in An Ontario Forcing House  
Establishment of Chas. Darvell, Lambton Mills

dle of March, for the reason that the fruit comes into competition with southern grown tomatoes which are so plentifully put upon the market during June and July, and also with our own outside grown tomatoes after the middle of July. We are always sure of getting a better price for the greenhouse stock, but even so the prices drop materially after the middle of July, as is indicated by the returns from house No. 2, as given.

It is wise, also, to have the plants well advanced for benching, for in this way the crop is brought into fruiting much earlier. Our tomato house returned us 42.72 cents per square foot from March 12 to July 29. This we think is a good showing and much in advance of any returns that could be had from violets or carnations. You have, of course, the expense of cleaning out the other crop,

Whether the spring forcing of tomatoes can be followed profitably or not, depends upon the particular line followed by the grower. He often can work in certain lines at this season of the year to supply a special trade, such as bedding-out stock for instance, and possibly in some cases do better, but I am convinced that in a great many cases the forcing of tomatoes can be followed to much greater profit.

Results similar to those given here can be obtained by any florist or gardener under glass. The plants in this experiment were given only average treatment, for as we aim to run our houses along commercial lines, we cannot afford to do anything except what the average grower would find it necessary to do.

We obtained only the wholesale prices and did not cater to a special trade. We could have obtained higher prices by

placing our fruit on a special market, but we prefer in all our work to ship to a commission merchant, getting rid of our fruit on a general market, for in this we believe we can best study average existing conditions.

House No. 1 represents fairly well what can be done by following the

chrysanthemum crop with tomatoes. The returns from this house were 67.85 cents per square foot.

It is advisable to run in a considerable area to this crop rather than only one bench or part of a bench in different houses. We much prefer to give up an entire house to the crop for in this way

favorable conditions for its development can best be obtained. It is wise, also, to select the lightest house. Conditions modify practice in all lines of horticultural work; therefore, whether florists can work this business on a profitable basis or not, along with floral crops, is a matter for the individual to decide.

## Harvesting and Storing Celery

J. H. Copeland, Chilliwack, British Columbia

**L**IFTING and storing celery for winter is very necessary in our British Columbia climate. Although not so severe as that of Ontario, yet we have at times quite sharp frosts which injure celery for shipping and, as time is precious in the short days of fall, we must try to get our crop harvested as speedily as possible.

I take a plow with one horse attachment and run a furrow down one side of the row and up the other, a trifle deeper than the celery. It is then quite an easy matter to cut the roots with a long handled shovel and have just the right amount of root on the plant. Then pick up the plant with the left hand and with the first finger of the right hand, quickly strip off the outside stalks until none but good sound stalks are left. This is very important as, if soft stalks are left, they soon begin to decay and spoil the whole head. Be sure to trim well.

If in danger of frost, we sometimes cache our crop. We lay it in straight piles of say, four dozen in a pile and throw a light covering of dirt over it. It will take no harm for a week or two. It is possible to get our crop out of danger by this plan very quickly.

To store for winter keeping, take two boards one foot wide and, say, sixteen feet long. Place them parallel about ten inches apart. Stand the celery upright between these boards. Have two or three lengths and when one is full, shovel dirt against it, packing it down nicely about eighteen inches thick until you get to the top of the board. Then draw up board and fill it up with dirt until you get the bank higher than the celery. Remove the boards and cover with a light covering of marsh hay or two narrow boards to keep the water off and to protect from slight frosts. When severe frosts come, shovel the dirt completely over the tops of the boards, but this is unnecessary only in very cold climates. In British Columbia we find it necessary only to bank close up to the boards. By this method we can keep celery in fine condition until quite late in the spring and with very little cost. The celery blanches perfectly in these trenches. For late keeping, it is best not to blanch too much before

storing. Try and store when dry for, if stored wet, there is danger of rotting in the trench.

### Practical Celery Culture

W. J. Justice, Barrie, Ont.

The accompanying illustration shows part of my celery patch, which was grown ready for market in sixty days from planting out. The three bundles which I hold in my hand, as shown by

water forced through a small nozzle. The tank shown in the distance gives ample pressure and the work is done very quickly and cleanly. Less water is made use of than would be the case if a brush was used to do the cleaning.

### About Strawberries

E. S. Hendry, Milton, N. S.

Towards the end of May, 1907, I selected a small plot of ground ten yards



A Celery Patch That Was Ready For Market in Sixty Days

the illustration, aggregated a weight of three pounds four ounces. They were not selected but taken as they came in the row and washed and trimmed ready for sale before weighing. This crop was grown on ground occupied by a crop of onions grown from Dutch sets. It was done in the following manner:

About two weeks before the onions were ready for bunching, I fertilized the spaces between every fourth and fifth row, and thoroughly stirred it into the soil with a narrow digging fork. I began planting the celery the first week in July, using good, stocky plants about four inches high. I always planted after four o'clock in the afternoon, and watered well the same evening. As soon as the onions were sold, all the ground between the rows of celery was dug, burying all weeds.

In washing celery for market, I use

square on which to grow strawberries. The ground had been well enriched for a garden the year before and received a light dressing of stable manure at the time of planting. The rows were laid off two feet apart and the plants set two feet apart in the rows. Each plant was allowed to put out two runners, the rest being pinched off, thus leaving the plants eight inches apart in the row. As the ground was weedy it required frequent cultivation in summer to keep the plot clean. Late in the autumn, I covered one-half of the patch with brush and left the remainder unprotected. The only difference that I could see in the spring was that those which were unprotected bloomed and fruited a few days earlier than the protected plants. The yield was much the same in two cases. From the whole plot I picked 150 quarts of choice berries which paid well for the trouble.

# QUESTION AND ANSWER DEPARTMENT

## Drying Prunes

Have prunes been dried in Canada? What system of evaporation is employde? Are evaporators made or put up in this country?—C. T., Welland Co., Ont.

We have not heard of prunes being dried successfully. It may have been done in British Columbia. Write to Mr. Thos. A. Sharpe, superintendent, Experimental Farm, Agassiz, B. C., for definite information on this point. Sun-drying can be depended upon only in countries that have long seasons of warm weather and where the air is dry and the nights are dewless. In some of our most favored fruit districts, however, it may be practised to supplement the work of the evaporator. If prunes could be dried in this country at all, it probably would have to be done by means of evaporation. There are many styles of evaporators on the market, from the small affairs capable of drying two or three bushels a day to the giant factory driers capable of turning out several hundred bushels a day. There are a few firms in Canada that manufacture or put up evaporators. Consult the advertising columns of THE CANADIAN HORTICULTURIST.

## Spiræa\* Van Houttei

How can Spiræa Van Houttei be propagated?—W. D. L., Q'Appelle Co., Sask.

This species of Spiræa may be propagated by means of seeds sown as soon as ripe or stratified until spring. It may be propagated, also, by cutting either mature or green wood. The former may be taken at this season and stored until spring. Green cuttings are made in summer and handled in cold frames.

## Seedling Cannas

Do seedling cannas attain their normal height the first year?—C. R., Peel Co., Ont.

Much depends upon the size of the seedling cannas when planted out and their culture, whether they will attain full height the first year. As a rule, they scarcely attain the full height the first season.

## Wintering Wallflowers

Are wallflowers hardy in Canada; if not, would a protection of leaves and straw be sufficient or must a frame be used?—C. R., Peel Co., Ont.

Wall flowers are not entirely hardy even in the warmest parts of Ontario and are rather difficult to keep over winter. It might be possible to save them with a covering of leaves and straw as mention-

ed, but a cold frame would be safer. Throw some dry leaves or long strawy litter over the plants before severe winter sets in, about the middle of November, and place boards over the frame so as to exclude moisture. I have wintered them in this way tolerably well. The plants can also be lifted, potted, and kept in a cool window or even in a light cellar during the winter, and planted out again in the spring, or can be left growing in the pots.—Wm. Hunt, O. A. C., Guelph.

## Funkias

What is the best position for *Funkia grandiflora*? I bought these for *F. alba* but they are blue. The clumps are large but soon after coming out the leaves were eaten by some insect. I have them in a south bed which is sheltered from the mid-day sun.—T. L., York Co., Ont.

Funkias like a partially shaded position where they get very little sun, the north side of a fence or building being a good position for them. They like a light, loamy soil with some leaf soil mixed with it. When planted in a sunny place, the flowers wilt very quickly. The hot sun also burns the foliage. Sprinkling the foliage with white hellebore powder, or spraying with a weak solution of Paris green water—half a teaspoonful of Paris green to a gallon of water, well mixed—has been effective in preventing attacks of the insect that eats the leaves.—Wm. Hunt, O. A. C., Guelph.

## Fall Care of Asparagus

1. When should asparagus stalks be cut, why then and why cut at all? 2. Does the ripening of the seed draw much nourishment from the root? 3. What other operations are necessary in the fall?—W. A., Carleton Co., Ont.

1.—Asparagus plants should be cut as soon as they dry sufficiently to be broken down by a harrow or a rake. They should then be gathered and burned. There are various reasons for cutting them. Their removal in time will prevent the scattering of seeds. Furthermore, they have done their work and are not required longer. They must be removed in order to make it easier for harvesting the young sprouts the following spring.

2.—The early development of the seed is dependent indirectly upon the root for the nutriment required but the actual ripening is dependent more particularly upon the leaves and leaf stalks. As the seed is maturing, these latter portions of the plant give up a large part of the

elaborated food that had been stored within them and this passes into the seed. The making of food for asparagus leaves goes on throughout the active leaf period of the plant. The large percentage of this reserve store of material goes to the root for the growth of next year's shoots, and a small percentage is used up in the formation of the berries, which requires several months. All this time the leaves are doing a double duty simultaneously—namely, the making of the berries and the storage of the roots. It is probable that if there were no berries formed there would be a large amount of food stored in the root. There is no direct withdrawal of nourishment from the roots during the summer, for the formation of the berries.

3.—The surface of the bed should have a top-dressing of well-rotted stable manure, which should be worked into the soil this fall. Manure left on the surface until spring will prevent early growth. As asparagus is a spring vegetable, it is desirable to have the sprouts appear as early as possible.

## Tomatoes Grown on Trellis

R. S. Hood, Galt, Ont.

The illustration shows some tomato plants that I had growing in my garden during the past summer. They are the Majestic variety. I planted them be-



Tomato Vines Eleven Feet High

side a wire netting trellis, and tied them to it as they grew, which they certainly did. They did not stop growing till Jack Frost took a crack at them on October 2nd. They were eleven feet high.

I took two of the plants to the agricultural show held in Galt, on October 1st and 2nd. They were quite a curiosity. The tomatoes were large, smooth and very solid. They were fine for slicing and yielded a bountiful crop.

# The Canadian Horticulturist

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PETERBORO AND TORONTO



## The Only Horticultural Magazine in the Dominion

OFFICIAL ORGAN OF BRITISH COLUMBIA, ONTARIO, QUE-  
BEC, NEW BRUNSWICK AND PRINCE EDWARD ISLAND

FRUIT GROWERS' ASSOCIATIONS AND OF THE ONT-  
ARIO VEGETABLE GROWERS' ASSOCIATION

H. BRONSON COWAN,

Managing Editor and Business Manager

A. B. CUTTING, B.S.A., Horticultural Editor

W. G. ROOK, Advertising Manager

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### CIRCULATION STATEMENT

Since the subscription price of The Canadian Horticulturist was reduced from \$1.00 to 60 cents a year, the circulation has grown rapidly. The following is a sworn statement of the net paid circulation of The Canadian Horticulturist for the year ending with Dec., 1907. The figures given are exclusive of samples and spoiled copies, and of papers sent to advertisers. Some months, including the sample copies, from 10,000 to 12,000 copies of The Canadian Horticulturist are mailed to people known to be interested in the growing of fruit, flowers or vegetables.

### Circulation Statement

January, 1907.....	4,947	January, 1908.....	7,650
February, 1907.....	5,520	February, 1908.....	7,824
March, 1907.....	6,380	March, 1908.....	8,056
April, 1907.....	6,460	April, 1908.....	8,250
May, 1907.....	6,620	May, 1908.....	8,573
June, 1907.....	6,780	June, 1908.....	8,840
July, 1907.....	6,920	July, 1908.....	9,015
August, 1907.....	6,880	August, 1908.....	9,070
September, 1907.....	7,080	September, 1908.....	9,121
October, 1907.....	7,210	October, 1908.....	9,215
November, 1907.....	7,257		
December, 1907.....	7,500		

Total for the year, 79,525

Average each issue in 1907, 6,627

Sworn detailed statements will be mailed upon application.

### Our Protective Policy

We want the readers of The Canadian Horticulturist to feel that they can deal with our advertisers with our assurance of the advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber, therefore, have good cause to be dissatisfied with the treatment he receives from any of our advertisers, we will look into the matter and investigate the circumstances fully. Should we find reason, even in the slightest degree, we will discontinue immediately the publication of their advertisements in The Horticulturist. Should the circumstances warrant, we will expose them through the columns of the paper. Thus, we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefits of this Protective Policy is that you include in all your letters to advertisers the words, "I saw your ad. in The Canadian Horticulturist." Complaints should be made to us as soon as possible after reason for dissatisfaction has been found.

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## EDITORIAL

### QUEEN VICTORIA PARK

One of the beauty spots of Canada is Queen Victoria Park at Niagara Falls. It compares favorably with any park of similar pretensions on the continent. All patriotic Canadians are proud of it and well they should be.

The high standard of excellence to which this park has been raised can be credited to the able management of the late superintendent, Mr. Jas. Wilson, and of its late chief gardener, Mr. Roderick Cameron. These men deserve much praise for their untiring efforts in making the park what it is.

It is understood that permanent successors to Messrs. Wilson and Cameron have not yet been appointed. This is due probably to the fact that it is extremely difficult to find men capable of maintaining the standard of the past few years. Some of the persons now connected with the park know more about politics than about gardening and landscape art. None but thoroughly qualified men should be considered in the appointment.

### HORTICULTURAL CONVENTION

The annual convention of the Ontario Horticultural Association will be held at Toronto on November 10th and 11th. An excellent program has been prepared and the executive committee expects every active horticultural society in the province to be worthily represented at the sessions of the association which is calculated to be mutually beneficial to all.

There will be interesting discussions on the practical management of horticultural societies. Measures will be submitted, showing the necessity of an increased legislative grant to our horticultural societies, if they are to maintain their present ratio of progress. Reports will be presented giving the original results of experiments in the culture of fruits and flowers. The important work of civic improvement and the beautifying of home surroundings will be discussed and illustrated. Every suggestion that is contributed to advance the interests of the societies and thereby enhance the wealth and the beauty of the province will be gladly welcomed for the benefit of all the people. Steps will be taken to promote combination among horticulturists and their co-operation with the municipal and provincial authorities in extending their influence for good throughout the country.

It is hoped that no society receiving a legislative grant will be so dead to its responsibilities and opportunities as to fail to send a delegate to this auxiliary alliance of horticultural societies, whose annual meeting inaugurates a great forward movement in the noble work of education and extension in which they are engaged. The success of this convention means greater usefulness for our societies and greater love for and pride in our homes and our country.

### THE COMING CONFERENCE

Fruit growers in all parts of Canada should now be preparing for the Dominion Fruit Conference promised for the winter or spring of 1909. The need for conferences of this kind is felt by fruit men everywhere and has been pointed out in these columns many times. Many letters from men prominently connected with the industry were published last year. It was then confidently expected that the Hon. Sydney Fisher would call a third conference last spring, similar

to the excellent and important one held in Ottawa in March 1906. While the minister had made no definite promise in respect to the date for same, the delegates to the 1906 conference gathered the impression that they might expect another in 1908. It did not come off. A live-stock conference was to be held and, according to the minister, this would interfere with the holding of a fruit conference; in other words, two agricultural conferences cannot be held in Ottawa during the same year. The fruit growers did not complain. They accepted the decision and waited.

We are now rapidly approaching the time for the holding of the third conference. At all conventions of local fruit growers' associations the matter should be discussed. Questions of national importance should be decided on for discussion. Among them we would suggest an enquiry into the working-out of The Cold Storage Act as it affects the fruit industry. Scores of subjects equally important require attention. Readers of THE CANADIAN HORTICULTURIST are invited to send suggestions for publication. Let us all get together and plan together for the Dominion Fruit Conference in 1909.

In our issue for November last year, we referred editorially to the pilfering or petty stealing in orchards to which fruit growers are subjected. The practice is not confined to the country. It is followed even more in our towns and cities. Freeholders and householders in urban municipalities are constantly occasioned much annoyance and loss. Boys are the most troublesome. They locate the trees early in the season (many of them have known the best trees for years) and when the fruit is ripe, and often times before, they make wholesale raids. The remedy is in the hands of the owners and of the police. One prosecution, with possibly a brief term in jail as the penalty, if well advertised in the press, would do much to make the boys realize that stealing fruit is as great a crime as stealing money.

The progress of two of Ontario's largest and most active horticultural societies—namely, Ottawa and St. Catharines—is due in a large measure to the publicity given them by one or more newspapers in those cities. The success of any society depends to a great extent upon co-operation with its local press. There are many other horticultural societies in Ontario that would be better off if they could get their newspapers interested. How about Toronto for instance?

The drawing features of conventions are the papers and addresses that are read and delivered and the discussions that usually result. The paper and its discussion are equally important; in many cases, the discussion that the paper incites is the more valuable of the two. As the season of conventions is near at hand, it would be well for speakers to remember that it is not always the lengthy paper or address that is the most valuable. In the time allotted, the reading of the paper should not occupy more than half. It furnishes the subject for discussion and is, therefore, in effect, an introduction to the debate. Quality in an address is the first consideration. Oftentimes the quality is not as apparent as it should be until brought out by an analytical discussion.

I enjoy THE CANADIAN HORTICULTURIST very much, and I think that the people in the United States have something to learn in the way of putting out a practical magazine of that sort.—W. W. Bassett, Monticello, Fla.

## A Pioneer Gardener

Among the 10,000 subscribers to THE CANADIAN HORTICULTURIST, there are a number who have been readers of the publication for many years, some of them since the first issue appeared, over 30 years ago. One of the latter is Mr. Robt. Walker, of St. Catharines, Ont., whose portrait is published herewith. He was one of the early subscribers, and has been a constant friend of THE CANADIAN HORTICULTURIST ever since. In a recent letter to the editor, Mr. Walker refers to some of his horticultural experiences, as follows:



Mr. Robert Walker

"I take great interest in the letters from correspondents published in your valuable paper from time to time, and it occurred to me to enquire if any farmer or gardener had grown an acre of tomatoes previous to 1869. In that year I grew about one acre and a quarter of tomatoes. The crop was abundant and proved a financial success. Many visitors from a distance and neighbors came to see them, some out of curiosity and others for information. I had also about one acre of grape vines planted in 1871, mostly Roger's varieties, Concord, Allen's Hybrid, Ontario, Isabella and a few Montgomerys.

"I was told that neither tomatoes nor grapevines were grown to the same extent previous to the dates mentioned, and would be glad if you or any correspondent would inform me where in Ontario a similar or greater area was planted with tomato or grape vines before these dates. At that time I was gardener to the late W. J. McCalla, Esq., and the grounds were situated in the township of Grantham, county of Lincoln, and are now a part of the city of St. Catharines.

"In the year 1884, we had in the conservatory a century plant (*Agave Americana*) in bloom, the flower stem being 20 feet high. It was sold to the Horticultural Gardens, in Toronto. I have not seen any record of an *Agave* blooming in Canada since 1884. One bloomed in Rochester, N. Y., in 1869, and 50,000 persons paid to see it."

## A South Australian Law

*The Standard of Empire*

Regulations issued by the government dealing with the importation of plants and fruit, the practical outcome of resolutions passed at the recent interstate conference, absolutely prohibit the introduction into South Australia of any grape-vine from any country or state. They also provide for the admission of other living trees, plants, or fruit from any other state, if accompanied by a government certificate declaring that they have been examined before being exported and found to be reasonably free from disease, and that the packages containing the exports are new or have been thoroughly disinfected by a specified process.

The regulations further prohibit the importation of any plant from a country where the insect *Phylloxera vastatrix* is known to exist, unless accompanied by a grower's declaration that the plant was grown further than 50 yards from any vine and that no phylloxera exists or has existed in the garden from which the plant came.

## NOTES FROM THE PROVINCES

### British Columbia

The fruit crop of the Okanagan Valley will be 50 per cent. larger this season than in any previous year, according to Mr. R. M. Palmer, Provincial Commissioner of Horticulture. The fruit growers should have a good year. The old orchards are bearing more fruit than ever, while many of the young ones are beginning to give returns. In the words of Mr. Palmer, "The increase in the fruit output will go on getting larger each year as the newer orchards develop but there is little or no danger of outstripping the demand. New markets are opening up. For instance, this year the Australian trade offered to take 40,000 boxes or 60 cars of apples of a certain grade but it has not been found possible to spare so much fruit. There is an unlimited market for high grade fruit also in the United Kingdom. Some of the large Okanagan firms contemplate making shipments to England this year.

"Furthermore, the northwest has 250,000 additional customers each year, which is one of the reasons why the question of distribution of the crop is such a vital one. With fresh consumers and fresh dealers, both wholesale and retail, springing up every year on the prairie, the question of marketing is one which requires both wisdom and care and not a little enterprise. It constitutes one of the most important problems in the fruit industry at the present moment. Although the industry has difficulties to face and problems to solve, everything seems in a prosperous condition."

### New Westminster Fair

*B. C. Saturday Sunset*

The fruit exhibition was one of the most remarkable which visitors to the fair have ever witnessed. Yearly the number of entries increase but those in most close touch with this department were surprised beyond measure not only with the numbers which far exceeded those of last year but with the quality.

The exhibit was significant. Not only does it indicate that fruit growing is becoming a more and more popular avenue of revenue for the farmer but the fruit-grower is now getting the art down to a science and the products are the best than an ideal soil, an ideal climate and the best of attention can produce.

### Victoria Exhibition

*G. A. Knight*

Although we have had two dry summers in succession, our fruit turned out remarkably well! this season, and there were some grand displays of apples, pears and plums at the Provincial Exhibition in Victoria. There was one thing, however, that ruffled the tempers of many exhibitors and others and not without cause. Before the judges started to place the awards, one of our sub-inspectors of fruit pests started on a tour of inspection with magnifying glass in hand. Plate after plate of beautiful fruit that would have been prize winners was condemned. If he found the slightest trace of fungous disease, or oyster-shell scale, off he marched with the plates containing such pests and piled them in a corner of the

building. How desolate those beauties looked piled in that corner! Many thousand pairs of sympathetic, but indignant eyes were cast upon them in their six days of isolation, and also upon the many bad gaps that were made on the tables. It was outrageous work and should not occur again.

The display of grapes and peaches also was good. On the coast, however, these fruits have to be grown against a wall to get them to perfection.

### Kootenay Valley, B. C.

*H. W. Power*

Contrary to general expectations, Kootenay growers did not this year realize the handsome profits from strawberry growing that past seasons have led them to expect. A combination of circumstances, over which no control could be had and which are likely to crop up at any time in any business, were responsible. In the first place, the financial depression in the neighboring republic lessened the demand there for strawberries considerably with an attendant falling off in prices and a big surplus of fruit of a perishable nature which the growers were anxious to get rid of at any old price, as long as they managed to get something. Consequently, a great deal of the surplus American berries found their way to the Canadian prairie provinces,—the only market, outside of the purely local one, open to British Columbia growers. After the results were totalled up it was found that the Kootenay growers would receive about 90 cents or \$1.00 a crate for their berries, this leaving a very small margin of profit. The amount of strawberries that can be produced upon a given piece of Kootenay ground is so heavy that a few cents more or less per crate will often mean a vast difference to the producer's bank account.

Strawberries were shipped this year from Gray's Harbor, near Crawford Bay, as far east as Prince Arthur, Ont., arriving at their destination in the best of condition. Extra choice Kaslo berries were sold in Calgary for \$2.50 a crate, being from 50 cents to \$1.00 more than the ruling market price.

KOOTENAY NOTES FROM E. W. DYNES

The continued progress of the fruit growing industry in Kootenay has made way for a new undertaking—the Kootenay Jam Factory. Their exhibit at the Nelson Fair was much admired and Earl Grey was heard to speak in complimentary terms of the enterprise of the owners. He backed up his words by ordering a case of Kootenay jam. If possible, fruit canning will also be engaged in.

The management of the fairs held at Nelson and Revelstoke were successful in obtaining the services of Mr. J. L. Porter of Hood River, Ore., as judge. In an interview, he stated that the people of Kootenay might well be proud of the progress they were making in fruit culture. When asked as to how Kootenay compared with Hood River, he said that the question could hardly be considered a fair one as Hood River had 15 years of progress and experience in her favor. However, as far as he had been able to test, with the varieties that were ripe, they were quite the equal of any he had seen anywhere.

Mr. Porter warned the growers that they

would have to be watchful and careful and keep their orchards clean by spraying, for he had noticed a few apples on exhibit that showed evidences of lack of spraying. He further stated that if the growers of Kootenay were to get the best results it would be necessary for them to concentrate upon a few varieties, the ones which they can grow best, and then market together and on a large scale.

Mr. Porter had struck a key note. The difficulties of selling and transportation are the problems that are worrying the growers the most just now. The markets are ready to buy their fruit, they have long since proved that they can produce the stuff, but the difficulties mentioned have yet to be disposed of. The operations of the local association along this line have been singularly unsuccessful during the present year and many ideas are being suggested, of which we shall hear more later.

The fruit crop this year is very good. A number of new orchards are coming into bearing which will increase the output materially. The Covert estate at Grand Forks will produce about 25 car loads of fruit. Some 15 cars from this district are being shipped to Australia. More were wanted but this was all that could be supplied of the varieties called for.

A noticeable feature of the past season was the splendid sample of peaches. Those on exhibit from Grand Fork at the Nelson fair could not be improved upon anywhere. One grower has signified his intention of planting five acres of peaches next spring. This, in view of the fact that even the most enthusiastic Kootenaians have not claimed the Kootenay to be much of a peach district, is very gratifying.

### Saskatchewan

In the province of Saskatchewan one would hardly expect to find a vineyard, yet Mr. Walter Shreeve of Prince Albert has one in miniature. Although the vines are young they withstood the storms of last winter and are doing well. The varieties are Ives and Concord.

While not on a large scale, Mr. Shreeve has demonstrated in many ways what can be grown in small fruits of all kinds. His strawberries and raspberries grow early and are on the market earlier than those many points further south. He grows a large assortment of vegetables as well and has green peas in the local market in early July.

### Annapolis Valley, N. S.

R. J. Messenger

While ideal weather is giving the farmers an excellent opportunity to pick apples, it is feared that the extremely warm weather will injure the keeping qualities of our fruit. In almost all cases it is fully ripe. Nonpareils, Baldwins and even Bishop Hopkins leave the trees very easily. We have been highly favored in the absence of wind. In quality and coloring the fruit is excellent. Never before in the writer's memory, have we had such clean, highly colored fruit. I picked some Blenheims to-day (October 19) that were as highly colored as Kings. The crop is, in most cases, showing up beyond the estimates of last month, and a larger percentage than usual will pack.

Buyers are beginning to wake up. A steamer was loaded at Annapolis about the middle of October with Kings, Ribstons, and Baldwins principally. The prices paid were \$2.00 for Kings, \$1.75 for Blenheims and \$1.50 for other varieties. Some winter fruit has been bought for \$2.00 a barrel, packed, but the farmers are slow about taking this figure for their best varieties.

Picking is about done and apples are moving to warehouses. Barrels are very scarce; a natural outcome of the underestimate of the quantity.

The New Brunswick Cold Storage Co will receive quite a quantity of apples from this county. These will go into cold storage, be shipped across in season and sold in the English Markets.

The Horticultural Show at Kentville, in the opinion of authorities, excelled anything yet put upon the continent. The sound, sane judgment of Messrs. Smith and McNeill, who placed the awards, won the respect and admiration of all those who knew what commercial show apples ought to be.

### Exhibition Dates Changed

The dates for the holding of the fifth annual Ontario Horticultural Exhibition have been moved forward one day, to enable the opening being held on the evening of Thanksgiving Day, November 9. It is expected that the exhibition this year will eclipse any previous effort of the association and will be the largest exhibition of its kind ever held in America.

The exhibition has outgrown Massey Hall and will be held this year in the St. Lawrence Arena, King Street, East, Toronto. This is the building that has so successfully accommodated the Horse Show, the Automobile Show, and various other large public functions. The exhibition will continue during the entire week. Each evening there will be a programme in which the regimental bands of Toronto will take part.

The entrance to the Arena and the Arena itself will be lavishly decorated with bay trees, plants, flowers, fruit and bunting. In fact it will be almost impossible to recognize the building after the decorators have finished their work. The Arena will be divided into four parts for the showing of flowers, fruit, vegetables and honey. These sections will be divided by colonnades and arches. The effect of the whole will be one of the most pleasing sights, one could imagine. The decorated dining tables, set complete to seat eight persons, are expected to be one of the features of the exhibition. There is great rivalry among the Toronto decorators and caterers, to see who can set up the most artistic and correctly set dining table. This feature will attract thousands of ladies who are interested in matters of this nature. The whole building will be comfortably heated, and there will be free seats for those who wish to sit and enjoy the music and the beautiful flowers.

### National Apple Show

Fifty thousand square feet of apples will be on display at Spokane, Wash., during the National Apple Show to be held in that city Dec. 7 to 12 of this year. It will be the largest exhibit of apples ever made and to house them, the big state armory building and an additional structure five times as large will be needed. Apples of all the standard winter varieties will be included in this display and every style of pack and wrap will be demonstrated.

Exhibits for the show are assured from all sections of the world where apples are grown successfully. North Carolina has established a cold storage plant for the collection of choice apples for the Spokane Exposition. British Columbia has appointed agents at Kelowna and other points in the fruit belt to collect apples for the National Show. Many inquiries also, have been received from Ontario and other Canadian provinces, and it is expected there will be a number of entries from this side of the boundary. There are two special contests for Canada, one having cash prizes of \$175

for the best two barrels or six boxes, one or more varieties, and the other is for the best exhibit of not less than three varieties of apples grown in the East Kootenay district of British Columbia, for which five acres of irrigated land is offered as first prize.

Manager H. J. Neely has made arrangements for the storage of apples received before the show opens, for which no charge will be made except in the carload contest. For this, a nominal fee will be charged.

### Horticultural Program

The annual convention of the Ontario Horticultural Association will be held in the City Hall, Toronto, on November 10 and 11. The following program has been prepared:

#### NOVEMBER 10TH—AFTERNOON SESSION

2:00 p.m.—President's Address. 2:30 p.m.—Report of Secretary-Treasurer. 3:00 p.m.—Report of Superintendent.

3:30 p.m.—"Laying Out and Planting of Small Gardens," (with diagrams), by Roderick Cameron, Assistant Park Commissioner, Toronto.

4:15 p.m.—"Window Boxes, Baskets and Rustic Stands," by Wm. Hunt, O. A. C., Guelph.

4:45 p.m.—"The Best Methods of Keeping Summer-Flowering Bulbs and Tuberosous Plants," by J. McPherson Ross, Toronto.

#### EVENING SESSION

8:00 p.m.—"Some Gardens Visited in England and Scotland," by R. B. Whyte, Ottawa.

"The Civic Improvement Movement in Ontario," (with lantern slides), by Professor Hutt, O. A. C., Guelph.

#### NOVEMBER 11TH—MORNING SESSION

9:30 a.m.—Election of Officers.

10:00 a.m.—"The Necessity of an Increased Legislative Grant," by Mr. W. Burgoyne, St. Catharines.

10:30 a.m.—Question box, grievances, etc.

11:00 a.m.—"Results of Distribution of Flower Seeds to School Children," by Mr. C. A. Hesson, St. Catharines.

#### AFTERNOON SESSION

2:00 p.m.—"Best Half-Hardy Tub Plants for Ornamentation of Grounds in Summer, and How to Keep Them During Winter," by Roderick Cameron, Toronto.

2:30 p.m.—"Perennial Borders," by W. T. Macoun, C. E. F., Ottawa.

3:00 p.m.—"Labor Saving Tools for Garden Work," by H. Simmers, Toronto.

3:30 p.m.—"Notes on Some New Peonies," by R. B. Whyte, Ottawa.

4:00 p.m.—"Increasing Membership," by a member of Galt or Brampton Society.

### Vegetable Growers' Program

The Ontario Vegetable Growers' Association will hold a one-day convention on Thursday, November 12 in Toronto during the week of the Ontario Horticultural Exhibition. The following is the program:

#### MORNING SESSION

9:00 a.m.—President's Address. 9:30 a.m.—Discussion on President's Address. 9:45 a.m.—Report of Secretary-Treasurer.

10:00 a.m.—Address on "Onion Growing Industry," by A. McMeans, O. A. C., Guelph.

#### AFTERNOON SESSION

2:00 p.m.—"Notes on Irrigation," by W. T. Macoun, C. E. F., Ottawa.

2:30 p.m.—"Onions," by A. McKenney, Essex.

3:30 p.m.—"Tomatoes," by Mr. Turney, O. A. C., Guelph.

4:30 p.m.—"Combatting Insects and Fungous Foes of Vegetables," by T. D. Jarvis, O. A. C., Guelph.

### Grape Culture Again

Editor, THE CANADIAN HORTICULTURIST:—In last August number appeared an article entitled "The Summer Care of Vineyards" by G. H. Carpenter, Fruitland, Ont., upon which I would like to offer a few friendly thoughts. First, he says, "The great point in summer cultivation is to keep down everything but the grape vines." The deduction seems to be that the grape vines must be encouraged to spread sprawling over the ground in obedience to their own sweet will. Is this Mr. Carpenter's method? If it is, we would like to say that there is a better method and that Mr. Carpenter has scarcely touched grape vine culture.

Again, under the heading of "Summer Pruning," he says: "All sprouts should be kept down. Summer pruning is advocated by some growers but we have not followed the latter practice." From this we would gather that Mr. Carpenter is a long way off if he has not followed this practice. He is scarcely in a forward position to figure as a teacher in grape vine culture but judging from the samples of grapes we sometimes get from that region and knowing something of their method of culture, I suppose that Mr. Carpenter would be considered not far astray. But allow me to say that the laxity and carelessness of some grape-growers so called should be a crying shame on the industry.

As Mr. Carpenter knows, or should know, the highest and best results cannot be obtained in the vineyard without a thorough and most complete and most persistent system of summer pruning, no matter what the other conditions may be. What, for instance, is the value of grapes grown upon vines completely let alone and allowed to run over the entire ground as they may

incline? The better the environment, the worse the results. The grape vine is a most tractable and flexible thing of life and can be made to do and be almost anything that one may desire.

Grape vines should be intelligently pruned summer and winter. Practice the most advisable, careful and persistent system of training and pruning possible to be had at any price. See that your bunches are full and perfectly developed and your berries completely filled with the best and most nutritious and tasty juices of the highest value to be had, which is aided by good Canadian soil and climate. If you cannot do this, be willing to retire from the business and admit others who will minister willingly to the growing wants and needs of the intelligent people of this great and growing country, who know a good thing when they see it.—B. Gott, Strathroy, Ont.

#### MR. CARPENTER'S REPLY

Editor, THE CANADIAN HORTICULTURIST:—There are some expressions and statements in an article by me on grape culture that appeared in the August issue of THE CANADIAN HORTICULTURIST that apparently are unintelligible to Mr. Gott of Strathroy. At least, judging from his criticisms of the article in question, that appear elsewhere in this issue, such would seem to be the case.

In the first place Mr. Gott has put upon my expression, "keep down everything but the grape vines," a construction that for a novice in grape culture would perhaps be pardonable. Coming from Mr. Gott, however, who I believe has been an enthusiastic horticulturist for years, the criticism is rather superfluous. He fears that if this were carried out to the letter that the vines would have a tendency to spread

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"sprawling over the ground," certainly an undesirable result. Mr. Gott evidently forgets that the article referred to deals only with the summer care of a vineyard. The winter work when most of the pruning and the tying is done is not touched upon. In a vineyard that is systematically pruned in winter and the vines properly tied up either to two or three wires according to the system of pruning followed, the vines will hardly form a network over the ground during the summer even though no summer pruning be practised. Reading further in the paragraph in which the expression appears, Mr. Gott will see that it has reference to cultivation only, the point being that clean cultivation should be followed in summer.

From my remarks on summer pruning, Mr. Gott concludes that I am in a poor position to minister to the needs of the grape growing public. In that article I was not posing as a teacher. I described a method of summer care of a vineyard that has been followed in our vineyard with most satisfactory results. We have not been hampered in our cultivation operations by the vines sprawling all over the ground.

Mr. Gott is right when he says that a systematic method of summer pruning should be followed. He is wrong when he imagines that a complete network of vines would obscure the ground if such a system were not practiced. If such has been his experience then his system of winter pruning and tying is faulty. As I said in my previous article we remove all sprouts and trim back the vines to a certain extent in order to retard vine production and thus promote the production of fruit, I believe, as I have said, that if all non-bearing wood were removed even better results would be obtained. No doubt this is what Mr. Gott refers to when he speaks of a most complete

and systematic system of summer pruning. That we do not do this can hardly be attributed to laxity and carelessness as Mr. Gott would infer.

The aim of a producer of any commodity should be to produce the highest grade possible. This is what we strive to do in the matter of grape production. In this respect the method we have followed has availed us. It may appear crude to such eminent horticulturists as Mr. Gott. True, it can be improved and will be improved; yet, the fact that it has been the means of enabling us to produce a good quality of fruit, is evident that we are not so very "far off" as Mr. Gott would lead us to believe.—G. H. Carpenter, Fruitland, Ont.

The University of Maine has ordered, at the Quebec fruit station, Village des Aulnais, several hardy and productive varieties of plums. Professor Gardner, formerly of the Macdonald College, wants to try, at Orono, Me., the varieties that do so well at this Quebec station. Mr. August Dupuis, the director, has been successful in growing fruits at this station that at one time were thought to be impossible to grow so far north.

We have recently been advised by T. J. Poupert, of Covent Garden, London, Eng., that they have just taken a large fruit warehouse, which they claim is the finest in London, and that they are in a better position than ever to care for the constantly increasing trade of Canadian apples, on the London market. The great quantity of apples consumed in London and vicinity, makes London one of the leading centres in Great Britain for Canadian apples. This firm transact their business by private treaty only and, therefore, are in a position to sell each mark on its merits. Their advertisement appears on another page.



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## Apples on Lake Ontario

Alex. McNeill, Chief Fruit Division, Ottawa

Everywhere there is evidence that, though orchards in the counties from Halton to Hastings bordering on Lake Ontario, as mentioned in the August issue of THE CANADIAN HORTICULTURIST have been giving excellent returns, the orchardists are very poorly informed in their business. There is very great need for educational work throughout the whole of this district. By way of practical recommendation I would suggest:

1. That main tile drains, at least, be run through the depressions in the orchard. It would be much better if the whole ground were thoroughly under-drained, but if only the main drains were put in it would improve matters very much.

2. That cultivation be commenced as soon as the frost is out of the ground and the cover crop sown not later than the middle of July.

3. That all orchards, old and young, be sprayed at least three times with the poisoned Bordeaux mixture, the first spraying to be made as soon as the first green is seen; the second spraying as soon as the blossoms have fallen; and the third spraying ten days or two weeks later. Better still, spray first with lime and sulphur between March 20th and April 20th or not later than just before the buds swell, and then three times with the Bordeaux mixture as directed above. Either of these systems of spraying, even if followed mechanically, would hold in check nine-tenths of the insects and fungous diseases which infest the orchards.

4. That an improvement be made in the system of pruning which would keep the outside of the trees thinner and would grow

more new wood on the larger branches towards the centre of the tree.

5. That experiments be made in the low headed form of tree. This would have to be done consistently throughout the whole of one young orchard, and the implements of culture would have to correspond to the low-headed form.

6. Organization among the apple growers, not only for the purpose of selling their fruit, but for the purpose of buying supplies and for the purpose of rendering themselves in a measure independent of the itinerant apple buyer. The Inspection and Sale Act should be widely distributed and carefully read by every apple grower; otherwise a certain class of apple buyers are apt to make false representations to the financial loss of the growers. I was unable to find a single grower who had sold under a contract drawn up by himself. Where contracts were signed they were drawn up by the buyer and wholly in his interest. If a written contract accompanied every sale, with the stipulation that the grades No. 1 and No. 2 referred to in the contract would mean Grade No. 1 and Grade No. 2 as defined by the Inspection and Sale Act, much annoyance and serious financial loss would be avoided.

### Apples Sold Privately

On another page of this issue may be seen the card of Mr. A. S. Chapin, 75 Yonge St., Toronto, one of our largest apple exporters whose firms a representative of THE CANADIAN HORTICULTURIST had the pleasure of calling upon during a visit to the Motherland. In Liverpool, Mr. Chapin represents the firm of D. Crossley & Sons, who have been in business in that city over 50 years. This firm sells exclusively by private sale

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As for a Sulky Plow—well, it just amounts to this: In the same time and *with the same horse flesh* you, by walking, can turn as much sod *in one day* with a "C. O. G." as another man can turn *in two days* with a single furrow sulky. That's worth considering.

Read what a prominent orchardist, Ezra Honsberger of Jordan Station, has to say: "In regard to two-furrow Orchard Plow, I find it just what the orchardists want. You can plow against the tree or vine without the horses interfering with the tree, in fact it is a great deal better than the single two-horse plow.

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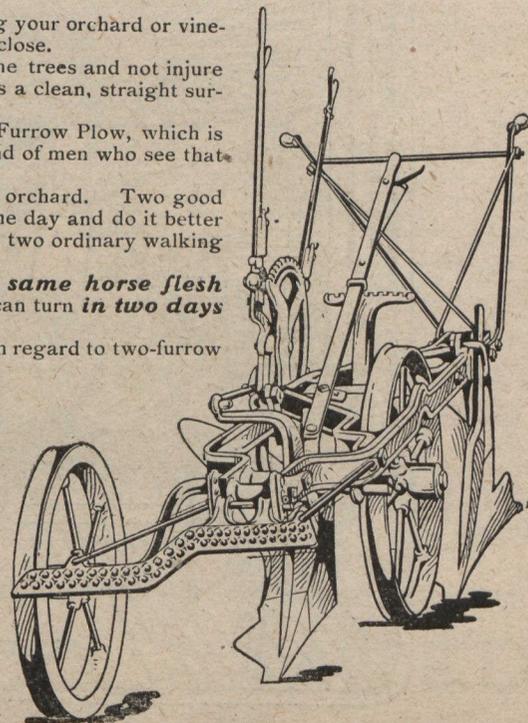
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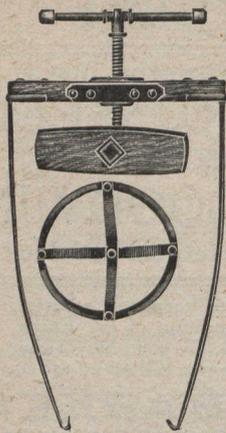
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and has a large connection with the inland cities. By this method, the apples are examined thoroughly and sold on their merits, and, when the sale is made, the buyer must take delivery at once, thus avoiding "slacks" and "wets" which are so common on a declining market when buyers are allowed until four o'clock next day to take delivery.

In Manchester, Mr. Chapin represents the North of England Fruit Brokers, which is one of the two firms that are large receivers of Canadian apples. Their method of selling apples is by auction and these two firms practically supply the Canadian apples for Manchester and the surrounding country which, in a radius of 12 miles, has a population of 8,000,000.

In Glasgow Mr. Chapin represents Thomson & Mathieson and in London, D. D. Pankhurst. These firms have each a very large retail trade in connection with their auction business and are their own auctioneers. Their method is to put a reserve bid on the apples when they put them up at auction and, if this price is not reached, the apples are "bid in" and sold next day by private sale, thus giving the shipper two chances.

Any of these firms are among the best and most reliable firms in the business. Canadian fruit shippers will do well to correspond with Mr. Chapin before consigning.

We feel that we cannot be without **THE CANADIAN HORTICULTURIST**.—T. H. Farley, Elgin Co., Ont.

A new catalogue has been issued by The Canadian Nursery Co., Montreal. It contains an excellent descriptive list of fruits, ornamental trees, shrubs and plants that will well repay its readers in the wealth of information given alone. See the advertisement of this firm on another page of this issue.

## An Appreciation

Editor, **THE CANADIAN HORTICULTURIST**:—Your September issue was one of the best of your many good ones. I was especially struck with Inspector Carey's vigorous treatment of what many consider a worn-out subject. Two points he mentioned are worthy of emphasis: First.—Picking period. I hold that all apples should be off the trees at least by October 25th. In my own experience I aim to have everything picked up to winter apples and all work cleared away by October 10th, so that the next fifteen days may be spent wholly in picking winter. Second.—Though I have never done so, I should consider it a very short-sighted policy for any farmer to sell his apples on the trees and allow a stranger to come in and pick them, since a careless picker could do a lot of injury to a tree in the way of breaking branches and tearing off fruit buds.

Another thing I like about **THE CANADIAN HORTICULTURIST** is that it is not wholly given to the commercial side of horticulture. The articles on the care of lawns, flower gardens and beautifying the home appeal very strongly to me. I regret that such a paper is not taken by every household in Canada, for if there is one thing more than another that should be cultivated to a greater extent among, not only our rural population, but our town and city dwellers, it is the beautifying of the home surroundings. In institute work as well as home practice, I have always tried to show that the best way to keep our boys and girls at home is to make that home attractive. In this the hints in your paper have been a help.—R. J. Messenger, Bridgetown, N. S.

I like **THE CANADIAN HORTICULTURIST** and do not forget to say so to any person that I think might be interested.—W. J. Justice, Barrie, Ont.



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### Next Dominion Conference

The satisfactory results that have accrued from the Dominion Fruit Conference held in Ottawa, March, 1906, make it probable that the conference promised for 1909 will be of even greater value. Now is the time to start planning for it. Innumerable problems of national importance require a national understanding. Some letters already have been received by THE CANADIAN HORTICULTURIST pointing out the need for another conference and suggesting subjects for discussion. Others are requested. Send suggestions for publication. The following ones indicate the general trend of opinion on this matter:

Mr. Norman E. Jack, Chateaugay Basin, Que.:—"Another Dominion Fruit Conference should be held soon, as the last one was attended with such good results. Considering the rapid development of the fruit-growing industry in the Dominion it seems to me that every two years is not too often for the holding of such conferences. The results which have followed the proper defining of the grades of apples would warrant similar conferences every two years, as the beneficial results have far overbalanced any expenditure. More could be done in regard to the transportation and refrigeration problems, and if some means could be devised whereby the advantages of the co-operative system could be more widely advocated, it would be a great boon to the fruit interests. It is to be hoped also that at the next conference something will be done to separate the fruit interests from the dairy interests, and that we shall have a Fruit Commissioner appointed who will devote his entire time to the better development of this rapidly growing industry."

Mr. D. Johnson, Forest, Ont.:—"There should be a Dominion Conference of fruit

growers held at Ottawa this winter in order to talk over and come to conclusions on questions affecting the fruit industry of Canada as a whole. Each of the provinces have their annual conventions of growers and the good effect that such meetings have had on the industry no one will deny.—If the Dominion Government is really desirous of meeting the requirements of the people, they surely should take advantage of such opportunities to get in touch with them and to legislate to promote their interest. The transportation and marketing of fruit are two questions which could well be discussed with great profit. Freight despatch is so slow and uncertain that it is impossible to ship tender fruit in that way to distant points and express rates are so high that it is equally impossible to ship beyond a certain radius. Thus it will be seen that the growers are unable to ship their fruit beyond a certain point and the consumer must do without, simply because the transportation facilities are so bad. Markets are also required and, if such are found, nearly everything else will right itself in the efforts to reach it. Many other questions could be discussed and worked out with great value to the country as a whole, if the Government would do as it should and hold a Dominion Conference this winter."

The Dominion Government commissioned Dr. Jas. Fletcher, Dominion Entomologist, to make an inspection last month of the orchards on Indian reservations in British Columbia.

A well-prepared circular describing the Herbert raspberry has been issued by the Ottawa Nurseries, 253 Bell St., Ottawa. It gives the experience of a number of leading growers and of experiment stations with this excellent variety. Write for a copy.

### Codling Moth Preventive

A preventive of the codling moth, which is as troublesome to apple growers in Australia as it is in Canada, is reported as the result of experiments made for some time in the vicinity of Sydney, reports Mr. J. S. Larke, Canadian Trade Commissioner for Australasia. Small bunches of herbs, thyme and pennyroyal, are fastened securely around the stem of each apple tree. Over this is placed a close rain-proof bandage to protect the herbs from rain. This is said to be a perfect protection. The moth crawls up the tree until it reaches the herbs and then returns to the ground where it is destroyed by ants.

It is claimed that trees protected in this way had perfect fruit, while others not treated were worthless. The advantage over the commonly used system of bandages is that there is no necessity for frequent visits to the bandages and destruction of the moths.

### Blueberries in Nova Scotia

R. J. Messenger, Bridgetown

One uncultivated fruit, in which considerable business is done in Nova Scotia, is the blueberry. From the western end of the province in particular, large quantities are shipped yearly to Boston.

Raw, stewed, pied, puddinged—in any shape or form of edibility, the blueberry is delightful. If time and space would permit I would write columns in eulogy of this dear little fruit.

This fruit grows without cultivation. In some of our pastures the bushes threaten to drive out the dairy cow.



## The Soil Fumigant

For the destruction of Slugs, Ants, Millipedes, Wireworms, Cutworms, Potato Bugs, Woodlice, Eelworms, and ALL Insects, Bugs, and Lice which live or pupate in the ground. Destroy the insects before they get on the trees with—

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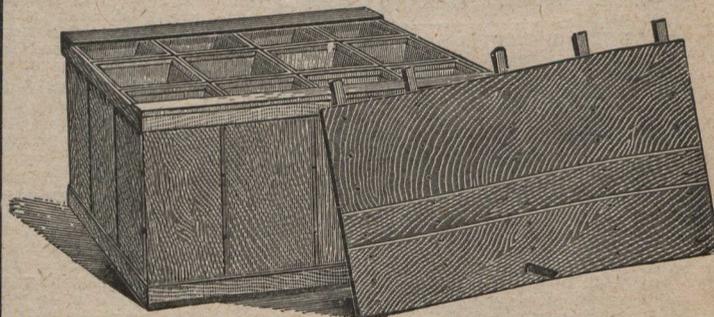
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**Fruit Growers' Program**

The convention of the Ontario Fruit Growers' Association to be held in Toronto on November 10 and 11, promises to be of great interest and value. The following is the program, subject to changes and additions:

**NOV. 10—MORNING SESSION**

President's annual address.—A. W. Peart, Burlington. Reading of correspondence and appointing of committees.

Report of Standing Committees: New Fruits.—W. T. Macoun, C. E. F., Ottawa; H. L. Hutt, O. A. C., Guelph; E. Morris, Fonthill. Co-operative.—Jas. E. Johnson, Simcoe. Transportation.—W. H. Bunting, St. Catharines.

"Toronto Fruit Market."—H. St. C. Fisher, Queenstown.

**AFTERNOON SESSION**

"Commercial Spraying of Apple Orchards."—D. Johnson, Forest. Discussion by J. C. Smith, Burlington; J. C. Harris, Ingersoll; Jas. E. Johnson, Simcoe.

"The Apple Maggot and Blister Leaf Mites."—Prof. Wm. Lochhead, Macdonald College.

"The Handling of the Strawberry Plantation."—S. H. Rittenhouse, Jordan Harbor. Discussion led by A. E. Sherrington, Walkerton.

**EVENING SESSION**

"Results of Orchard Surveys in New York State."—Prof. Chas. S. Wilson, Cornell University, Ithaca, N. Y.

"Observations in the Use of Fertilizers in German Orchards."—Prof. R. Harcourt, O. A. C., Guelph.

**NOV. 11—MORNING SESSION**

"The Commercial Status of Our Standard Varieties of Fruits."—Open discussion by

members as to the present value of our common varieties, their susceptibility to disease, etc., on the following: Apples, peaches, pears, grapes, plums.

"Prevalent Fungous Diseases of Ontario Orchards."—"Fire and Twig Blight" and "Peach Yellows."—Prof. M. B. Waite, Pathologist, United States Department of Agriculture, Washington, D. C.

"The Shipment of Early Apples and Tender Fruits to Great Britain."—J. A. Rudick, Commissioner Cold Storage, Ottawa.

**AFTERNOON SESSION**

"Observation by the District Representatives of the Department of Agriculture of Fruit Conditions": 1. Essex County.—A. McKenney, Essex. 2. Prince Edward County.—R. M. Winslow, Picton. 3. Simcoe County.—R. S. Mortimer, Collingwood. 4. Ontario County.—J. H. Hare, Whitby.

"Marketing Our Fruit"; "Packing."—Elmer Lick. "Packages."—H. L. Roberts, Grimsby. "Markets."—E. G. H. Pattison, Winona.

"The Western Provinces as an Outlet for Our Fruit."—J. W. Crow, O. A. C., Guelph.

At the annual meeting of the Pomological and Fruit Growing Society of Quebec, to be held at Macdonald College, Dec. 2 and 3, it is expected that there will be a large fruit exhibit. The premium list has been issued. Write to the secretary, Peter Reid, Chateauguay Basin, Que., for a copy.

Readers of THE CANADIAN HORTICULTURIST in the western provinces and in British Columbia should not forget the coming convention of the Northwest Fruit Growers' Association to be held in Portland, Ore., Dec. 2-4. The Oregon State Horticultural Society will meet at the same place on Dec. 1.



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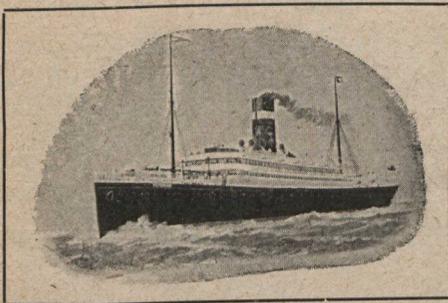
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VICTORIAN	Thursday, 5 Nov. 10.00 a.m.	Fri., 6, 11.00 a.m.
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TUNISIAN	Saturday, 28 " - - -	- - -
VICTORIAN	Friday, 4 Dec. - - -	Sat., 5 Dec. - - -

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GRAMPIAN, new	Saturday, 7 Nov., Daylight <sup>t</sup>
PRETORIAN	Saturday, 11 " Daylight
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NUMIDIAN	From BOSTON Wednesday, 25 Nov.

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POMERANIAN	Saturday, Nov. 7th	ONTARIAN	Saturday, Nov. 14th	CORINTHIAN	Thursday, Nov. 19th

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### Horticultural Convention

The following paragraph of the constitution of the Ontario Horticultural Association regulates the number of delegates that each

society is allowed to send to the annual convention to be held in Toronto, Nov. 10 and 11: "Each society shall be entitled to be represented by two delegates, and any society having a membership exceeding 100 shall be entitled to an additional representation in the proportion of one delegate to each 100 or fraction of 100."

The program for the convention is published on page 248. Since that page went to press, the following additions and changes have been made: Mr. J. M. Dickson of Hamilton will speak on the "Representation of Our Association on the Boards of the Canadian National Exhibition and of the Ontario Horticultural Exhibition." The question of increasing membership will be discussed by Mr. J. F. Watson, Ottawa, and Mr. J. P. Jaffrey, Galt. The paper on "Results of Distribution of Flower Seeds to School Children" will be read by Mr. Jas. A. Wiley, St. Catharines, in place of Mr. Hesson. Mr. H. H. Groff, Simcoe, will read a paper on "Scientific Plant Breeding."

### Ottawa Flower Guild

A flower guild has been organized in Ottawa. Its objects are twofold,—to teach the children to love flowers, and further, to show them how they may assist the Ottawa Horticultural Society and the Ottawa Improvement Commission in beautifying the city; and secondly to furnish them with several means of recreation. Plants were distributed to the children with directions for their culture.

The plants and flowers grown by the children will be exhibited at the flower shows of the horticultural society. Many prominent citizens have promised to give prizes. It is expected that the Guild will become a big factor in the work of improving and beautifying the Capital City.

### Plant Eats Insects

*Picton Gazette.*

Did you ever see a plant eat flies and even "Daddy Longlegs?" A plant of this description, of the orchid species is to be seen among the collection of curious plants that belong to Mr. W. T. Ross, Collector of Customs, Picton, Ont. In his hunt for plants, out of the ordinary run of things in plant life, Mr. Ross has accumulated many most interesting specimens, for he is a well-known and enthusiastic horticulturist, but perhaps the most interesting study is his latest addition, known as the Venus fly trap, a carnivorous plant. These plants grow only in one known place in the world, North Carolina, and are unique of their kind. It is about the oddest thing imaginable to see their small oval leaves, bend inwards at the centre stem running through the leaf, and with their teeth-like edges—close in upon a fly or spider, and then proceed to devour the insect, thus engulfed.

Capt. S. Musgrave of the British army who has just returned from a trip of exploration in Colombo has seen much of these plants and made a study in dissecting them. He declares he found that this species of plant had digestive organs, a brain and nerve ganglia, like human beings.

Get a copy of our catalog of horticultural books. Sent free on request. Write to our Book Department.

I received the fountain pen, which you sent me for securing two new subscriptions to THE CANADIAN HORTICULTURIST, and am well pleased with it. I shall continue to make your paper known wherever possible.—E. Campin, Port Hope, Ont.

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Mr. Banford of Hainesville, Ont., writes on Jan. 19, 1907, "The roofing I bought from you in 1900 has given perfect satisfaction....I am well pleased....just as bright as when it was put on, no rust, no holes, no leakage. I am satisfied there is no better shingle."

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FOREST, ONTARIO

### A Special Inspector

The Ontario Department of Agriculture has further aided the co-operative fruit associations the present season by appointing Mr. Jos Backus of St. Catharines as special travelling inspector in barrel packing. Mr. Backus has had considerable experience along the line and has already been on the road for a month.

He reports that almost all of the packers are doing good work. A few exceptions have been noted, but these have all expressed their willingness to learn, and Mr. Backus has been able to give them some valuable assistance. The work of instruction will continue throughout the fall until all of the apples have been forwarded to their destination.

### Room for Improvement

Mr. Maxwell Smith, Dominion Fruit Inspector, Vancouver, B. C., is one of the best informed men on British Columbia fruit matters in that province. He is constantly in touch with the growers and dealers and knows the status and the possibilities of the industry. According to the *British Columbia Saturday Sunset*, Mr. Smith finds considerable improvement in the way fruit is packed and marketed, although he claims there is room for further improvement in the way in which some of the fruit is handled.

There seems to be no difficulty in growing the fruit, but education is badly needed from a commercial standpoint. Unless the fruit-grower can market his fruit in such a condition that it will compete with all other fruit, the fruit-grower's labors are in vain, for he falls down at the most critical period of the industry. It is noteworthy that Mr. Smith took several of the fruit-growers

aside and give them a few pointers. It is to be hoped that these pointers will in turn bear fruit, as it has long been felt that education along commercial lines was required and if the conditions in this respect can be remedied even to a slight extent, Mr. Smith's efforts will be worth while.

### Cooper's Fluids

In all the leading fruit districts of Canada and the United States, Wm. Cooper & Nephews' fluids, V1 and V2, have been tested during the past season. That they have stood the test and have proven themselves to be just what fruit growers and gardeners need is shown by hundreds of testimonials received by the firm. The following are typical ones:

A. H. Crosby, Markham, Ont.:—"I used the V1 Fluid only for bark-louse. My trees were alive with the louse. There may be an odd louse left but the V1 cleaned them up beyond my expectations. I am convinced that your Fluids are all O. K. and I intend using them entirely in future. They are so easily prepared."

V. Robin, Oakville, Ont.:—"I take pleasure in informing you that the V1 Fluid which I applied as a spray to my trees, has absolutely killed the oyster-shell scale, wherever it has come in contact with it. The V1 Fluid has certainly done all you claim for it."

H. B. Fullerton, special agent, The Long Island R. R. Co.'s Exp't. Station, Huntington, Long Island, N. Y.:—"It gives me pleasure to tell you that we have knocked cabbage louse out with V2 Fluid when tobacco tea and kerosene emulsion, the best known remedies, failed. Mr. Francklyn had quite a sale and, as this is the worst attack Long Island has ever known, it certainly

was a generous opportunity to establish a remedy, which against aphids is the best I have ever seen. I am now making experiments on fruit trees. The island is notoriously San-Jose Scale infested and as the young appear in time to catch all the fruit a safe remedy will meet with tremendous sale. I congratulate you and wish you tremendous success."

It is reported that the Dominion Minister of Agriculture is considering the matter of establishing a fruit experiment station on Vancouver Island.

I think THE CANADIAN HORTICULTURIST is a splendid paper for all farmers and fruit growers, especially for young men just starting in the business. It contains many timely and sensible articles on the cultivation of fruit, and anticipates in a remarkable way what the growers would like to get advice about.—Louis P. Hubbs, Hillier, Ont.

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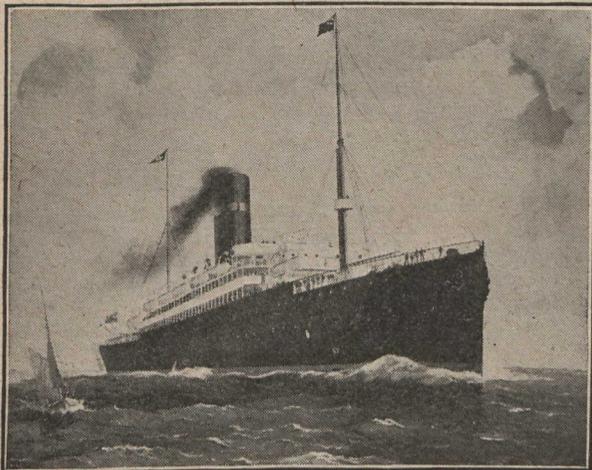
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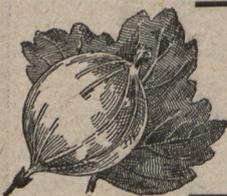
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## FRUIT CROP SITUATION

The apple crop of Ontario is disappoint-  
ing. The ravages of codling moth and  
fungous diseases have done much to dimin-  
ish the yield and to lessen the percentage of  
high grade fruit. Prices have not been as  
favorable as expected but are stiffening. It  
is feared that the exceptional weather condi-  
tions that have prevailed have interfered  
with the keeping qualities of the fruit. Ex-  
port apples have been going forward in  
moderate quantities. Some of the shipments  
from Montreal have not been altogether  
satisfactory in quality. Considerable fungi  
apparent. Spots showing only slightly when  
put in the barrels increased rapidly and, in  
some cases, pink rot had set in. The apples  
were deeply pitted, making them unsightly  
and very wasteful. Growers should be careful  
in grading if highest returns are expected.  
Among the many reports received from crop  
correspondents of THE CANADIAN HORTICUL-  
TURIST, the following indicate the situation  
in general and give an idea of the prices  
being paid:

### HASTINGS COUNTY

Belleville.—Apples are scarcely a quarter  
of a crop. Prices in orchard range from 75  
cents to \$1 for firsts and seconds.—F. S. W.

### DURHAM COUNTY

Orono.—Apples are only one-third of a  
crop but will run 80 per cent. No. 1. Prices  
have been 75 cents for fall and \$1 for winter  
varieties, on the trees, for apples bought out-  
side of co-operative association.—E. J. H.

### ONTARIO COUNTY

Oshawa.—Prices have moved upward.  
Buyers paid \$1.25, on the tree for a few lots.  
The average price was \$1.—E. L.

### HALTON COUNTY

Oakville.—Apples picked in orchard sell for  
\$1.25. The crop is short.—W. H. M.

### WENTWORTH COUNTY

Fruitland.—There will be a lot of cull  
apples owing to the codling moth. I never  
saw them so bad. Growers who did not  
spray thoroughly and often, lost over half  
their crop.—G. H. C.

### LINCOLN COUNTY

St. Catharines.—Apple prices are stiffen-  
ing. No. 1's are bringing \$2.50 and No. 2's,  
\$2.—R. T.

### BRANT COUNTY

New Durham.—The crop is 25 per cent. of  
last year. One dollar a barrel has been paid  
on all sides.—B. J. P.

### OXFORD COUNTY

Ingersoll.—Buyers are paying \$1, picked  
in orchard, and want only the best colored  
fruit. Apples are disappointing, both in  
quality and quantity.—J. C. H.

### MIDDLESEX COUNTY

Ivan.—Apples are only one-fourth of a  
crop. Have sold 800 barrels for \$2 f.o.b.  
Outside buyers are paying 80 cents to \$1 for  
No. 2's and No. 1's, picked.—T. T. C.

### NORFOLK COUNTY

Simcoe.—Apple crop is short of early ex-  
pectations.—J. E. J.

### ELGIN COUNTY

Sparta.—Fall apples consigned to Liver-  
pool netted me over \$1 a box, f.o.b. here.—  
J. A. W.

### LAMBTON COUNTY

Forest.—Sold our crop for \$2.50 for No. 1's  
and \$2 for No. 2's, f.o.b. here.—D. J.

### KENT COUNTY

Chatham.—The quality is not good. Prices  
are ranging about \$2.75 for No. 1's and \$2.25  
for No. 2's, f.o.b. here.—W. D. A. R.

### BRUCE COUNTY

Walkerton.—The crop is light. Prices  
have ruled mostly at \$1 in orchard, except  
for Spys, which have brought 50 cents  
higher.—A. E. S.

### GREY COUNTY

Owen Sound.—For fall fruit, we realized  
\$1.60 to \$2, f.o.b. here. Will handle about  
7,000 barrels of winter apples at prices rang-  
ing from \$1.85 to \$2.75, f.o.b.—A. B.

## New Brunswick

A. E. McGinley

"The apple crop in New Brunswick is  
very short and it is doubtful if half a car-  
load for export or sale could be found in the  
whole province," said a member of the firm  
of A. L. Goodwin & Co., fruit buyers and  
exporters, of St. John, when asked as to  
market conditions. The few apples that  
have been grown by the farmers have been  
so quickly disposed of that none remain for  
the fruit buyers. The Goodwin firm have pur-  
chased a few barrels of Wealthys, packed, at  
\$1.65 and \$1.75 a barrel, but generally there  
are very few New Brunswick apples on the  
market.

Canadian apples, largely from Ontario  
are now being shipped in large quantities.  
The steamer St. John City which sailed for  
Liverpool on October 9th took a very large  
cargo. In former years the individual ship-  
ments to Liverpool seldom exceeded 6,000  
barrels but the St. John City's cargo was  
almost double that quantity. A shipment  
of apples to Glasgow was made by the Lau-  
rentian of the Allan line and the Elder-  
Dempster steamer Canada Cafe has also  
loaded a cargo for South Africa. All the  
shipments have been of particularly good  
quality.

A freak in the way of an apple is reported  
from Hantsport, N. S., which was grown  
on a Bishop Pippin (Yellow Bellflower) tree  
on the farm of Harris Lockhart. One of the

apples was a Bishop Pippin and the other two were Golden Russets. All were grown on one branch of the same tree. The Golden Russets show a slight tinge of white on each apple and the fruit is somewhat larger than the usual Golden Russet but in all other respects it is normal.

**Kentville Exhibition**

That the orchards and gardens of the famous Annapolis Valley of Nova Scotia can and do produce fruits and vegetables equal to and, in some cases, that surpass, the best that can be produced anywhere, was emphasized strongly at the Nova Scotia Horticultural Exhibition held in Kentville last month. In appearance, color, size and quality the fruit was beyond compare. The prize list was large and brought out an extensive display. Over 3,000 plates of fruit were shown and 500 boxes and barrels.

The vegetable show did full justice to the province. Everything was in prime, well-grown condition. The display compared favorably with that of some shows of larger pretensions. The entire exhibition was a credit to the manager, Mr. F. C. Rand, to the other officials and to the province.

**Manitoba**

Max D. Major

It is now two years since I left Manitoba and am now living in the Okanagan Valley of British Columbia. In this letter I will give some facts in regard to fruit growing in Manitoba.

After 20 years experience in that province, I came to the conclusion that only the small fruits were worth bothering with. I made many exhaustive experiments with raspberries, strawberries, currants and blackberries. I found that strawberries could not be made to pay. The quality was good, also the flavor and size, but the yield was not great enough. The spring frosts invariably cut down the yield, sometimes altogether, sometimes more than half, the bud being frozen before it opened. I am convinced that for one's own use, they are well worth growing, but are too uncertain to make a commercial success.

I made a success of raspberries but had to

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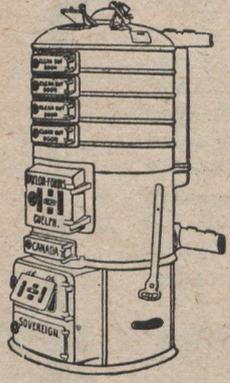
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lay them down every winter. Still they were profitable. I may return and continue to grow them.

Blackberries would not do at all, but dewberries did well when protected. Winter protection is the key to success there.

I also set out a lot of native plums and had several large crops, but they, too, were uncertain, partly on account of frost and partly from the attack of the plum pocket. I would not advise any one to go extensively into these things.

I had two Hibernial apples that came through the winters, then I moved away and don't know how they did. I wrapped the trunks of the trees. One of those winters was so severe that even the crabs died, but the Hibernals stood it. It was all very interesting, but not profitable.

As to the possibilities in Manitoba, if we could get a strawberry that would blossom very late, they could be grown. The native plums are worth growing as they make a beautiful shade tree and you get a crop sometimes. I had two very fine varieties. One had the flavor of an apricot. British Columbia is the country for fruit, but our difficulties are transportation and pickers.

### A New Book on Mushrooms

Prof. Wm. Lochhead, Macdonald College, Que.

The latest work on mushrooms, and one of the best, is "Mushrooms Edible and Otherwise", by M. E. Hard, published by the Ohio Library Company, Columbus, Ohio. This book was prepared by a teacher who studied mushrooms as a hobby, and who became so interested in the subject that he decided to publish his observations and notes in order that other people might be induced to pay more attention to this interesting, and but little understood, group of plants. The book is written "for the beginner and for all beginners", no matter whether they be botanists or laymen. The author writes for "the mass of intelligent people—those who read and study, but who observe more; those who are inclined to commence with nature as she displays herself in the glens and glades, in the fields and forests, and who spend little, if any, time chasing the forms or sketching the tissues that may be seen on the narrow stage of a compound microscope". This work aims to be a guide to the study of mushrooms, with special reference to the edible and poisonous varieties, with a view of opening up to the student of nature a wide field of useful and

interesting knowledge. Nearly all the forms described are illustrated by half-tones from photographs of the fresh specimens, so that the beginner is helped along in his efforts to find a name for the mushrooms he finds. A valuable feature of the book is a key to the genera, by means of which he can, without much difficulty, locate the genus to which his specimen belongs.

It is a healthy sign of the times, and one which shows that an increased interest is being taken in mushrooms, that so many excellent works are available to students of this interesting group of plants. There are, for example, McIlvaine's "One Thousand and American Fungi," Marshall's "Mushroom Book," Atkinson's "Mushrooms Edible and Poisonous." And now we have Hard's "Mushrooms Edible and Otherwise." One or more of these should be in every public library. The reviewer feels sure that many of the readers of THE CANADIAN HORTICULTURIST will be glad to know of the appearance of a good work, upon which they may rely for help. On account of the appetizing nature of the edible forms, mushrooms have been interesting objects of study for many hundreds of years, but the dread of the poisonous forms or toadstools—often so hard to distinguish from the non-poisonous—has prevented the majority of persons from indulging in those delicious, tasty dishes, so tempting to the epicure.

The main portion of Mr. Hard's new book is of course, given over to the description and illustration of the many edible and poisonous fungi found in nature, but a closing chapter is devoted to the growing and cooking of mushrooms, which will be of much value to mushroom-growers and to housekeepers.

### Vegetable Prize List

In addition to the prizes for vegetables published in the regular list of the Ontario Horticultural Exhibition, the following additional ones are offered:

- Prizes given by Township of York. Exhibits to be grown in the County of York. Celery.—4 varieties, 3 of each, yellow, green, red and white plume.—1st, \$4; 2nd, \$3; 3rd, \$2.
- Rope of white onions—not to exceed 3 ft. in length.—1st, \$3; 2nd, \$2; 3rd, \$1.
- Collection of potatoes—6 standard varieties, 5 of each.—1st, \$5; 2nd, \$3; 3rd, \$2.
- Prizes donated by Township of Etobicoke. Exhibits to be grown in County of York. Collection of onions—8 varieties, 5 of each.—1st, \$5; 2nd, \$3; 3rd, \$2.
- Collection of cauliflower—3 varieties, 2 of each.—1st, \$4; 2nd, \$3; 3rd \$2.
- Collection of vegetables—suitable for salads, to include lettuce, endive, mustard, cress, radish, green onions.—1st, \$3; 2nd, \$2; 3rd, \$1.
- Special given by the Steele-Briggs Co.—Three heads "Whitehead" cabbage.—1st, \$5; 2nd, \$3; 3rd, \$2.

Two new subscriptions for \$1.00 will secure for you one 14 kt. Gold Fountain Pen free.

I am very well pleased with the advertisement you inserted in THE CANADIAN HORTICULTURIST, to sell my mushroom spawn. I must have had about 30 orders from the advertisement, inside of two months.—Mrs. E. C. Bennett, Thornbury, Ont.

Take the Hint.—"A copy of THE CANADIAN HORTICULTURIST has been loaned to me by a friend. I should like to become a subscriber. Enclosed please find \$1.00 for two years' subscription.—F. B. Parfett, Reading, England."

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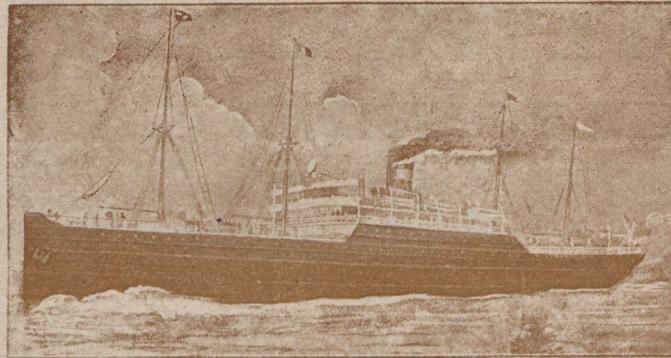
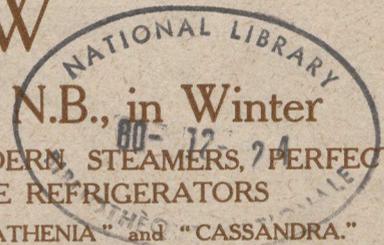
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