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# The Canadian Horticulturist

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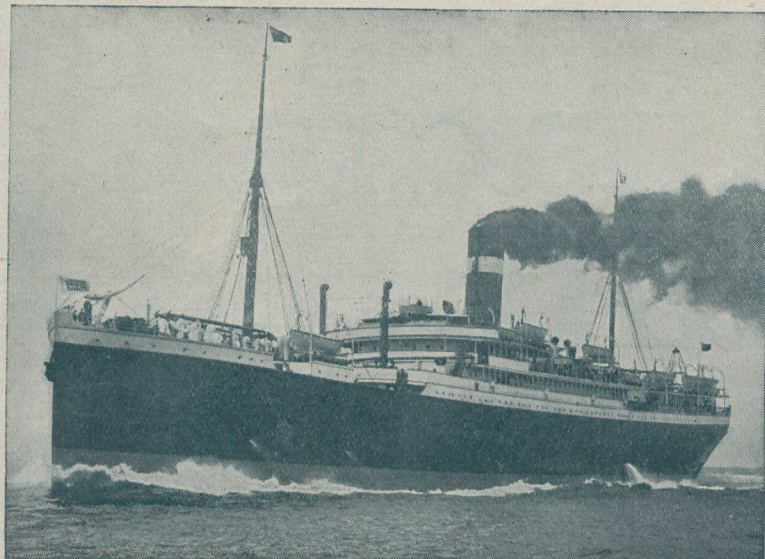
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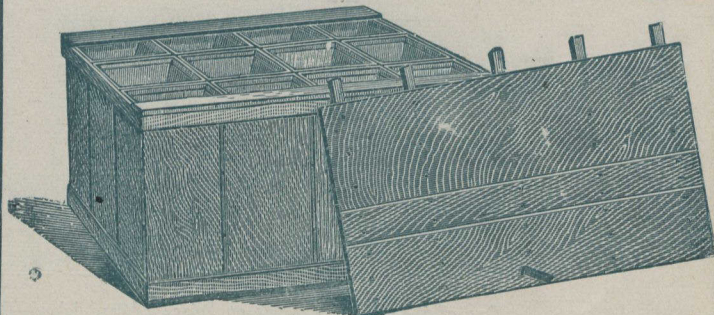
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# The Canadian Horticulturist

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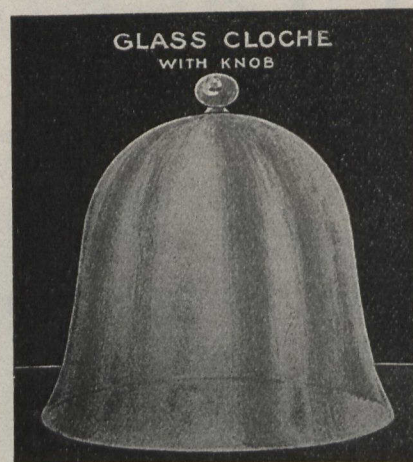
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# The Canadian Horticulturist

Vol. XXXII

AUGUST, 1909

No. 8

## Apple Growing on Prince Edward Island

Theodore Ross, Charlottetown

THE apple industry in Prince Edward Island is yet in its infancy, if indeed it can be said to exist at all. For a great many years apples have been grown, but little progress was made until the introduction of the improved varieties about twenty years ago. Up to that time the agriculture of the province consisted altogether in the raising and marketing of hay, oats and potatoes, and among the more progressive, of heavy horses. Then the apple-tree agent made his appearance, and aided by catalogues, with highly colored illustrations of fruit, sold a few trees to almost every farmer on whom he called. Full instructions were generally given for the planting of the trees, and in most cases followed, but after that the trees were expected to take care of themselves, particularly if a fence were put around the plot to protect them from the stock. As they were generally planted in a potato patch, they did all right for the first two years, but could not make much growth in competition with the grass crops and were injured, if not completely destroyed, by insects. The rapid growing varieties were frequently early bearing and occasionally fruited the second year out, which led to their being better attended to and as a consequence to their giving better satisfaction. The agent is not altogether to blame for recommending early varieties.

There were exceptions, however, to this general condition. In some cases a whole acre, or perhaps two acres or even five were set out, and given as good attention as the owner knew how to give them, and as they were nearly all early varieties, more than fulfilled expectations, as long as there was a ready market for the fruit. These successes led to the general giving of larger orders and at the present time there are whole townships with almost every farmer the proud possessor of from half an acre to five acres of young trees. Most of these were bought on the recommendation of the tree-agent, who generally sold trees that made good growth and fruited early, and then supplied whatever the nurserymen chose to send. The more thoughtful attended the meetings of the Fruit Growers' Association and orchard meetings that were held throughout the province, and which were addressed frequently by experienced fruit growers from Ontario and Nova

Scotia. These men advised the planting of the winter varieties, particularly those that succeeded best in their own provinces, such as the Baldwin, Spy, Ontario, King, Wealthy, Ben Davis, Gravenstein, etc. It did not take many years to find out that some of these varieties were not adapted to this province and, as experiments of this kind are expensive for the individual, the provincial department of agriculture set out eight orchards in different localities for the purpose of ascertaining the best varieties of commercial apples for our people to grow. This question comes up annually at the Fruit

Company, Limited, has been incorporated for the purpose of packing and marketing fruit, with a capital stock of \$10,000 divided into 2,000 shares of \$5.00 each. Already about 150 shares have been subscribed. Stock for 1,000 barrels has been ordered and it is expected that packing will be begun this autumn. The intention of the company is to try to get possession of the home market, and to further extend operations as the business seems to warrant.

This is, as it appears to me, the status of fruit growing in Prince Edward Island. It is as yet subsidiary to the growing of oats and potatoes. Those who have given the most time to it are most enthusiastic over the prospects and believe that Prince Edward Island will yet rival in its fruit industry the far-famed Annapolis Valley.

### For Maritime Readers

At one time, maritime province horticulturists felt that THE CANADIAN HORTICULTURIST was confined in subject matter to Ontario alone. During the past year or so, this feeling has changed, as now we know that it is published in the interests of all the provinces. THE CANADIAN HORTICULTURIST should be in the hands of all persons who grow fruit, flowers and vegetables in New Brunswick, Nova Scotia or Prince Edward Island.—W. W. Hubbard, Secretary of Agriculture for New Brunswick.

Growers' Association. At the last meeting those present were ready to agree on only the Duchess, Wealthy, Wolf River, Ben Davis, Star and Alexander. Everyone, however, seemed ready to agree that the Ontario, Baldwin, Spy, King, Fameuse and Gravenstein cannot be grown with profit in this country.

A large number of trees have lately been planted, and more apples, particularly of the early varieties, have been grown than could be marketed in the immediate vicinity of the producers, so that for the last two years, quite a lot of good fruit has been left on the trees for want of a market, and this notwithstanding the fact that from 3,000 to 3,500 barrels are imported every year.

This led at the meeting of the Fruit Growers' Association in 1908 to the appointment of a committee to devise some means of disposing profitably of the rapidly increasing quantities of fruit. The result is, that the Co-operative Fruit

### Blackberry Culture

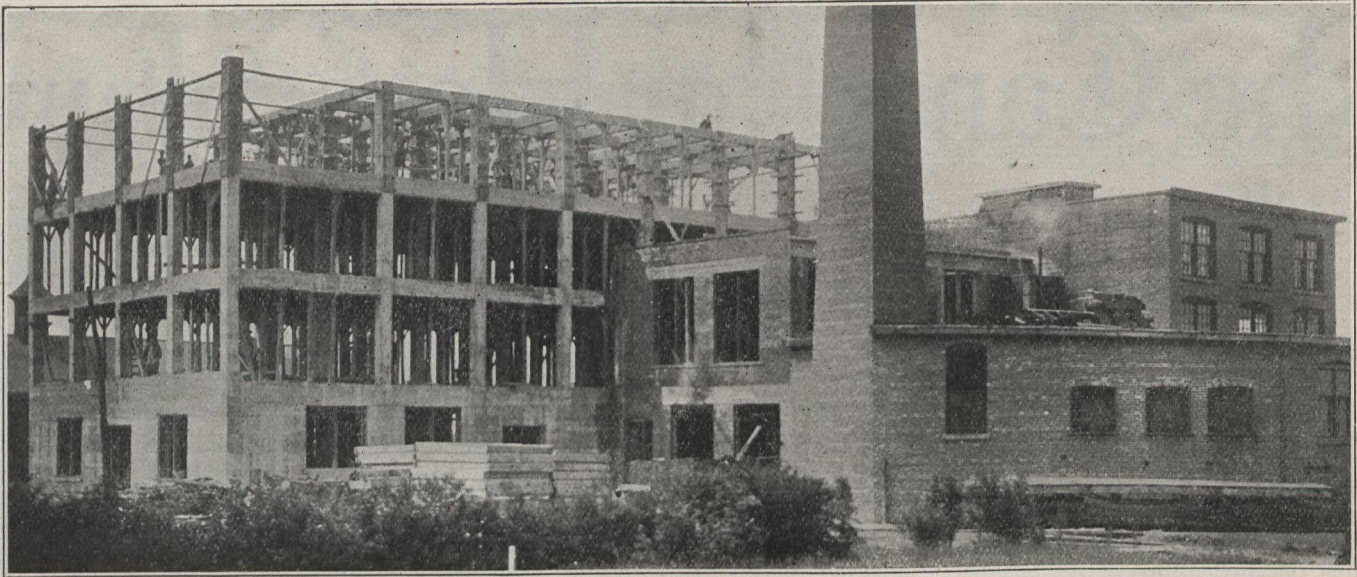
John Ferguson, Murches', N. B.

With the exception of a few late raspberries, the berry crop will be out of the way by the time that blackberries ripen. These should be harvested with great care when intended for market and, if possible, when dry.

As soon as the picking is finished, begin at once the removal of old canes. Cut these off close to the ground with a corn knife, or better yet a short blade fastened into a two-foot handle. Then, the principal canes should be shortened to four or five feet and the laterals to about twenty inches; when pruned in this way, the fruit will be larger, and it will prevent the setting of more fruit than the plant can mature, as is often the case when left unpruned.

When done pruning, gather up the old canes with a fork and burn immediately. Then lift the new canes and crowd them between two wires stretched from post to post along the rows. All suckers which come up between the rows should be treated as weeds.

Blackberry plants increase by means of suckers; that is, plants that start from buds formed underground on the roots. These sucker plants are best taken up and planted in the fall, but they are not so good as those grown from root cuttings, which anyone can make readily; from a few hills one may obtain hundreds of plants by the next fall.



The Four Storey Extension That Mr. E. D. Smith is Making to His Jam Factory at Winona, Ontario

Built of reinforced concrete. First factory was finished only three years ago and now the plant is being more than doubled. The kitchen will be finished in white enamel and all the help will wear white to ensure perfect sanitation. The "E. D. S." brand of jams and jellies have won great popularity in short time, and they deserve it.

## Fruits for the Jam Factory and Cannery

E. D. Smith, Winona, Ontario

THE quantity of fruits used by the jam factories in the Niagara peninsula has become a very large factor in the fruit industry of that district. Four years ago the quantity was extremely small because practically all the jam manufactured in Canada was at that time made of something other than the fruit mentioned on the label. Almost the entire product of the jam factories of Ontario was what is called "compound" jam. The great art in making "compound" jam was to use as little fruit as possible. Some of the manufacturers got it down so fine as to use none at all. The first day that I started my factory, a gentleman called representing a jam factory in the province of Quebec. He said, "I understand you are going to make jam out of pure fruit." I said, "Yes, that is my intention." He said, "I don't see how you can make it pay. How in the world can you compete with us? We make pure fruit jam and we don't use a pound of fruit." To-day there are two factories in the Niagara district making their jam entirely out of fruit as described on the label. In my own factory—a cut of the addition to which, made this year, is shown in this issue of THE CANADIAN HORTICULTURIST—I am using nearly a quarter of a million boxes of strawberries, one-quarter of a million boxes of raspberries and other fruits such as currants, gooseberries, peaches, plums and so forth, in like proportions, although the two chief fruits that are needed for jam are strawberries and raspberries.

### SANDY BERRIES NOT WANTED

Strawberries brought a comparatively low price this year, although I believe a fair margin of profit can be made grow-

ing strawberries even at the prices of this year if gone about in a business-like way, such as is pursued, for instance, by Mr. James E. Johnson of Simcoe, Ont., who never thinks of growing a crop without mulching the vines in the winter. By this means, he is assured of a crop. He draws the mulch from off the vines in the spring, leaving it between the rows where it is tramped down and forms a mulch which holds the moisture and makes it clean for the pickers and provides clean berries and not berries all spattered with sand as is the case in a patch that is not mulched. These sandy berries have to be washed at the factory. This spoils them to a great extent. I would not give for sandy berries more than half the price that I would for clean ones.

### CAUSE OF LOW PRICES THIS YEAR

The low price for strawberries this year is due to two causes: first of all, of course, on account of a large crop, but I think the price would have been at least one cent a box more had the canneries of the country been absorbing the usual quantity of strawberries, whereas, as a matter of fact, the canneries absorbed very few. The canneries, the wholesale merchants and the retail merchants over all the country are pretty well loaded up with strawberries. Canned strawberries have not been in demand by the public as they were a few years ago. This has arisen largely from the high prices that prevailed two years ago.

Looking at it from the growers' point of view it may seem strange that high prices are injurious. Nevertheless, I firmly believe that no greater calamity can happen to the growers of any kind of

fruit than to have extravagantly high prices in a year. The high prices of two years ago for all kinds of fruit, caused the canners necessarily to advance their prices. This not only cut off the consumption, but it caused thousands of consumers over the country to turn their attention to some other line of fruit that would be cheaper and, as foreign fruits, such as prunes, bananas, figs, dates and others, are becoming cheaper each year, consumers, finding this out, bought freely of these foreign fruits and they have stuck to them ever since and will continue to stick to them so long as they can get them at a reasonable price compared to our own home-grown fruits; whereas, had they not been forced to look to other sources of supply by the extravagantly high prices of Canadian canned fruits in 1906, they would still be buying our canned strawberries and other fruits as they formerly did.

### NOT ENOUGH RASPBERRIES

In regard to raspberries, there are not enough of them, in my judgment, grown in this country yet. For two years past neither the canneries nor the jam factories could get enough raspberries; and yet raspberries are the easiest things to grow in the whole fruit line. They grow over a wide range of territory, the plants cost but little and they come into bearing quickly. They are easy to cultivate and they will grow on a fairly wide range of soil. Moreover, in the factories they are easily handled. We can handle raspberries in the factory with one-quarter of the help that we can strawberries.

That the growers are getting remunerative prices may be judged by the fact that I can to-day buy raspberries in Eng-

land, have them packed in bulk, brought out here to Canada, freight paid, and a duty of one and one-half cents a pound which is levied not only on the pulp but on the whole weight of the package, and still get them laid down here at Winona cheaper by at least one-half cent a pound than I can buy raspberries in Canada today, or have been able to buy them for the last three years. If the British grower can make any money at the price that he gets for his raspberries, surely the Canadian grower, with all these advantages of freights and duties in his favor, must be making money, if he is following proper methods of growing the fruit.

#### GROWERS NEGLECT SOIL FERTILIZATION

One thing that the growers in the Niagara district lack more than another, is proper fertilizing of the soil. Taken as a whole, the cultivation of the fruit farms in the Niagara district is excellent but, generally speaking, the fertilization is wretched. Thousands of acres are being planted out in fruits annually and these fruit orchards are drawing heavily from the soil, whether small or large fruits, and little is returned to the soil to compensate for the drainage. Of course, there are scores and scores of exceptions. I am speaking of the general average. If the high standard of quality of fruits for which this peninsula is famous is to be preserved or improved, much heavier expenditure must be incurred by the growers for fertilizing material.

#### LARGE FIRM BERRIES WANTED

As to varieties of strawberries and raspberries for the factories, we want firm sorts of strawberries such as the Williams and the larger the berries the better. One of our chief difficulties in connection with strawberries is the getting of help. I have never had enough strawberries put up yet; not that I could not get the berries, but that I could not get the help. In view of this it is a great hardship when the Ontario government makes severe restrictions as to the age of children who can work at hulling strawberries; whereas a child of any age can pick strawberries in the field with the boiling sun on its back, but they are not allowed to sit in a cool shed and pull the stems off the same strawberries; and the Dominion government throws impediments in our way to prevent us from getting help across the river, which is the only available source of supply. Now, a person can pull the hulls off three crates of large berries while pulling them off one crate of small berries. Therefore, it is extremely important to the jam factories or canning factories to have large berries and, to have large berries, the method adopted by Mr. Johnson of Simcoe, along with plenty of manure, is assured. In raspberries, the chief thing is to have a bright berry. The Cuthbert is the best raspberry that I know.

## Apple Production in New Brunswick

H. B. Steeves, Shediac

IT has been said that the province of New Brunswick is behind her sister provinces of Ontario and Nova Scotia in agricultural productions and methods. If it is true in any one crop more than another, it is in the production of apples; and yet the difference should not be as great as it is. "Tickle the soil, and it will laugh," is not applicable to New Brunswick where fruit is concerned except under certain conditions. The two main conditions that have heretofore been overlooked are proper varieties and proper cultivation.

Time was when the farmer made his selections of varieties with no further information than that given by the nursery agent and by the beautiful illustrations shown. In the spring, the trees were planted and cared for with about the same thought and information. We know the results. Others, with more prudence, planted varieties that were popular and productive in the Annapolis Valley and southern Ontario. The results were not satisfactory. Hence, the idea prevailed among farmers that New Brunswick was not adapted to the production of apples.

#### EXPERT OPINIONS

The impressions are changing, indeed, have changed. Education and experiment have shown that large areas of the province are well adapted to the profitable growing of certain varieties. Such competent judges as Mr. R. W. Starr and Prof. F. C. Sears, reporting upon the exhibit of apples at the Maritime Winter Fair of 1906, had this to say of New

Brunswick apples: "York county had a very fine collection in the one which took first prize. . . The McIntosh, Ontario and Fameuse were particularly fine, and the Emperor Alexander, Fallawater, Bishop Pippin and Spy were good." King's, Charlotte, Carleton and Albert counties showed certain varieties "good." Queen's and Westmoreland counties sent no exhibit but could probably grow just as good apples as any of the counties represented.

Mr. George H. Vroom, Dominion Fruit Inspector, speaking before the New Brunswick Fruit Growers' Association, recently, said: "There are here some of the finest apples I have ever seen. Take, for instance, the Alexanders, Wolf Rivers and Dudley Winters. No better can be grown anywhere in Canada." Again, "No place I know of can grow Bishop Pippins equal to New Brunswick." Some of our Nova Scotia friends may scoff at the Alexander. They have not taken into consideration the fact that the New Brunswick Alexander is of a better flavor and is certainly a better keeper than that grown in the Annapolis Valley.

The growing of apples in New Brunswick is beyond the experimental stage, but our farmers are slow to grasp the fact that apples could easily be made one of their most profitable crops. The St. John River valley, with the possible exception of its two northern counties, gives great promise in the production of fruit. King's, Albert, Westmoreland, and Kent counties



Not Only Apples Grow Successfully in New Brunswick—Pears Do Equally Well in Some Districts  
The Pear Tree Illustrated was Photographed on Farm of Mr. Wm. Cameron, near Fredericton

are also coming to the front. In some instances the results have altogether exceeded expectations. The parts of Kent and Westmoreland along the Northumberland Strait, have not as early nor as

We have access to the neighboring port of Halifax. With the selection of suitable varieties, with the planting of larger areas so that production may be

sufficient to bring in buyers, and with proper attention to spraying and packing, New Brunswick has good prospects for a fair share of the apple export trade.

## Lawn and Garden Hints for August

**I**f the vegetable garden has been well cared for and cultivated, there will not be much to do in August, more than to keep the soil stirred and watered. Some vegetables may still be sown, such as stringed beans, early maturing peas, radishes, early flat turnips, beets for greens and anything that will grow quickly.

Lettuce may be sown and be satisfactory if kept well shaded during the hot weather. To have lettuce for fall use, it may be sown now and transplanted later to a cold frame.

The early crop of celery should be blanched. Use either earth or boards.

There are many excellent vegetables that are little known. Corn salad sown about the first of September and protected when cold weather comes, will be appreciated for salad purposes early next spring. The tuberous chervil is similar in growth and equal in flavor to parsley and grown in the same manner. Sow the seed in late August. They will remain dormant until spring. The tubers have somewhat the flavor of sweet potatoes.

Growing in a cold frame is an easy method of securing home grown vegetables in late fall. Lettuce, spinach, radish and many other things may be grown in them. Make a cold frame if you have not one.

### AMONG THE FRUITS

This is the month for budding fruit trees. Peach trees are the easiest to bud, but the operation may be performed successfully also on apples and other fruits.

Keep the ground stirred between the small fruit bushes. Cut all unnecessary suckers of raspberries and blackberries. Pinch back raspberry bushes that are growing too freely in order to make them branch.

For immediate use, leave tree fruits until well ripened before picking. The best flavor will thus be secured.

### THE FLOWER GARDEN

To secure the most bloom from all kinds of flowers, keep them well picked or cut before they commence to fade. If seed pods have formed nip them off unless it is desired to save seeds.

Pansies may be grown from seed. English daisies may be grown similarly. Old pansy plants may be taken

during August and renewed by cutting off the side shoots and placing these in a rather sandy soil in a shady place. Keep well watered and they will soon make vigorous plants to put in winter quarters ready for next spring.

Dahlias are heavy feeders. Give them plenty of fertilizer while the buds are swelling.

If weather conditions are favorable, some annuals will flower if sown now, such as calendula, calliopsis, sweet alysum, candytuft, larkspur, marigold, mignonette, eschscholtzia, gypsophila, balsam, nasturtium and Shirley poppy. Fairly good results may be expected also from scarlet runner and convolvulus for climbers.

Seeds of hollyhocks, delphinium, aquilegia, campanula, coreopsis, gaillardia, papaver and some other herbaceous perennials may be planted this month and transplanted to the border late this fall or early next spring.

Plant lily bulbs for next summer. Hardy lilies and lily-of-the-valley may be transplanted late in the month. If gladioli are apt to be broken by wind storms tie them to stakes. All plants that are liable to injury should be treated similarly.

### THE LAWN

If you intend to mulch the lawn this fall prepare the material now by securing equal parts of good clean soil and well-rotted stable manure. Mix these together and turn occasionally until October when it will be ready for use.

Apply water to lawns at night or in the early morning, giving a good soaking. Cut the grass about once a week, with longer intervals during hot weather.

Roses may be budded this month. By this means, undesirable varieties may be changed to desirable ones in a short time.

### FLOWERS IN-DOORS

Many plants that have been enjoying a period of rest will have to be re-potted. Read the excellent article that tells how to do it, on page 169 of this issue.

To have freesias for Christmas, start them in August. For directions refer to page 150, July issue. Bermuda lilies for Christmas also must be planted early this month. The same should be done with Roman hyacinths and paper-white narcissi.

In all these operations, do the work as well as you can. If convenient, take snapshots of the various steps that are taken to produce the desired results and send them for publication in THE CANADIAN HORTICULTURIST.



Apple Trees Covered with Blossoms

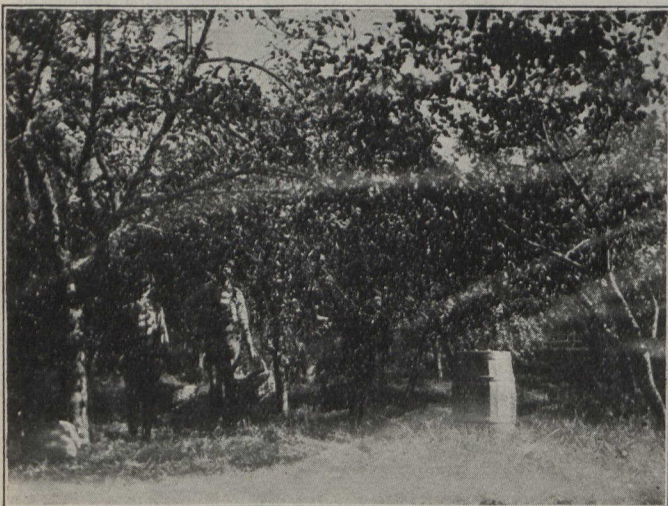
On Grounds of the Misses Thomson, Rothesay, N.B.

warm-growing seasons as the other parts of the province mentioned, but have probably an advantage in not having as severe frosts in winter, and less liable to late frosts in the spring owing to their proximity to the water.

### ILLUSTRATION ORCHARDS

Much good has been done by the planting of government illustration orchards. If these orchards are properly cultivated and cared for, and later, demonstrations be given in orchard cultivation, pruning, spraying, and packing, they should prove a great boon to this comparatively new agricultural industry in this province.

We have a large and well-equipped cold storage plant at our own port of St. John.



Scene in "Sunny Brae" Orchard at Shediac, New Brunswick  
Owned by Mr. H. B. Steeves



# Preparing for the Winter Window Garden

Wm. Hunt, Ontario Agricultural College, Guelph

THE month of August is a comparatively leisure month with the plant and flower lover. The lawn, vegetable and flower gardens will not require as close attention as during the growing



How to Grasp Pot to Remove Plant

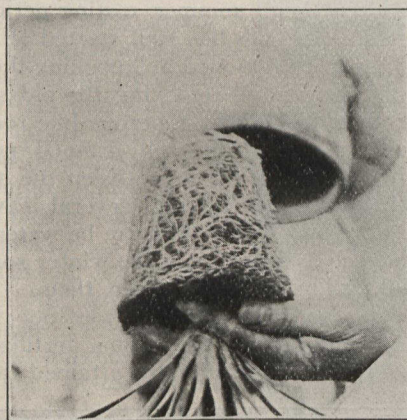
months of spring and early summer, thus giving a little more time to attend to the potting of plants from the house and window that have been enjoying a comparative period of rest; or possibly in some cases plants that have been started specially for the decoration of window or greenhouse for the coming winter and spring months. Plants such as palms, aspidistras, different varieties of decorative asparagus, dracenas (cordylines), rubber plants, Boston and lace ferns, anthericums and similar decorative plants that have been enjoying a season of partial rest in some shady out-of-door nook will, in all probability, require repotting to give them fresh life and vigor for the coming winter season. Old plants of geraniums in pots and winter flowering begonias such as *Begonia incarnata* (Christmas pink begonia), *B. Paul Bruant*, *B. Argentea guttata*, *B. manicata* and *B. manicata aurea* (a conspicuous variety of this thick fleshy-leaved type of begonia and very enduring as a window plant) are some of the most popular window and house plants that will need repotting at this season of the year. Callas also should be repotted as early in August as possible if they require it, to secure early flowers. Chrysanthemum and salvia plants, also coleus, iresine (achyrantes), and ageratums that have been planted out in the border, can also be taken up and potted for stock or for decorative purposes, towards the end of the month.

The tendency on the part of the amateur plant grower, as a rule, is to overpot plants, which means putting them into a larger pot than is necessary. Overpotting plants, especially for winter decorative plants, should be avoided. The

plants not only require more space, and the pot also being out of proportion to the size of the plant, but oftentimes the soil becomes soddened and sour from the large amount of water needed to keep the soil moist before root action and growth commences after re-potting. Soil for repotting at this season should be carefully prepared, and should be of a friable, open nature. Good drainage is another important factor towards success.

## HOW TO PREPARE THE SOIL

Good fresh loamy potting soil from a compost heap of three parts sod and one part cow manure or well rotted barn manure, that has become well decomposed, is the best basis for all potting soils. One part of clean fine gritty sand and one part of leaf mould mixed with seven or eight parts of the loamy soil, will make an ideal soil for almost all of the plants mentioned. For potting chrysanthemums and geraniums the leaf soil (or black soil from the bush) may be omitted. The soil should be put through a three-quarter



This Plant Requires Re-potting

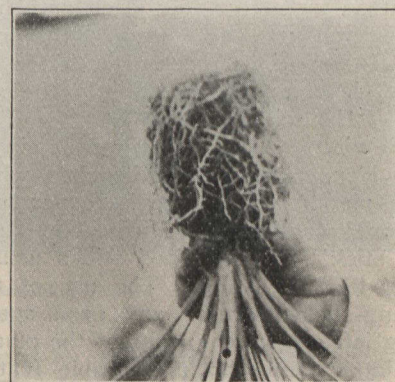
inch sieve and all dead pieces of wood and stones removed. The fibry part of the soil, unless too coarse, should be left in the soil.

## HOW TO RE-POT PLANTS

First of all, see that the soil around the roots of the plant to be re-potted is well moistened but not too wet and soddened. Then knock the plant from the pot it is in so as to examine the roots, to see if it requires re-potting. To do this successfully, invert the plant and pot, at the same time placing the fingers of one hand across the surface of the soil, so that the plant cannot fall and be injured. Grasp the bottom of the inverted pot firmly with the other hand, and knock the edge of the rim of the top of the pot on the solid edge of a table or bench. If the plant does not at once loosen itself from the pot, turn the pot partially around and knock it in another place a few times until it becomes loosened. If on removal the pot is found to be well

filled with roots so as to have exhausted the soil, it should be repotted. If it has not done so, the pot can be carefully slipped on over the ball of earth again, the plant reverted to its natural position and settled firmly in the pot by striking the bottom of the pot on the bench or table. It should then be watered at once. An examination made in this way will not hurt the plant if the soil and roots are not disturbed very much.

If the plant requires re-potting, first of all remove the old pieces of drainage at the base of the roots. Then scrape off the top surface of the ball of earth about a quarter of an inch in depth, as well as trimming in the top edge of the ball of earth just a little. In some cases, too, a little of the soil around the ball of earth may be picked out carefully with a pointed label or piece of stick or a skewer, or the ball of earth may sometimes be pounded with the hand, or on the bench, so as to loosen up the network of roots in cases where the roots have become very dense and matted, the idea being to remove all the old stale earth possible without disturbing the roots too much. All dead and decayed leaves or growth should also be removed. The plant can now be laid on its side carefully on the potting table or bench. Then select a clean plain pot one or two sizes larger than the original—one size larger will do if the soil has been trimmed down much as described—but usually a pot two sizes larger should be used. Now place a concave or hollow piece of broken flower pot over the hole at bottom of pot inside hollow side down sufficiently large to well cover the hole, place a few more pieces also around this in the same way, so that the bottom of the pot inside is well covered. An inch deep of drainage material



Ready for Re-potting

The Roots Have Been Loosened and a Small Portion of Soil Removed

is not too much to ensure good drainage in large seven- or eight-inch pots. Coal cinders, coarse gravel or lump charcoal can also be used for drainage material. Over this material a thin layer of the fibry

part of the soil may be laid, if practicable. When the drainage is fixed properly, put in a layer of soil about half an inch deep. On this a little well-rotted barn yard manure or dry cow or sheep manure may be placed, or a sprinkling of bone meal. Fill in a little more soil on this, then place the plant in the pot, see that the base of the stem or stems of plant are in the centre of the pot, and the surface of the ball of earth on the plant about an inch below the top of the pot, when a large sized pot is used. A little less than an inch below will suffice for five- or six-inch pots, the diameter across the centre of the pot gives the size in inches. When the plant is properly in its place, fill in some of the prepared soil about an inch in depth all around the ball of earth. Then get a thin piece of wood of the thickness required and about a foot in length—a piece of shingle one and one-half inches wide will do—with this pack the soil fairly firm around the ball of earth. Continue the filling in and packing until the



Plant in Position Ready for Filling in Soil

surface of the soil is about half or three-quarters of an inch below the top of the pot and just covering the surface of the ball of earth slightly. Then lift the pot about an inch from the bench with both hands, and give the bottom of the pot a slight bump on the bench to settle the soil down, level and loosen slightly the surface of the soil.

The piece of wood mentioned is always in evidence on potting benches where large plants are handled by expert professional plantsmen, and is called a "potting stick", several sized sticks usually being kept on hand. The use of this potting-stick prevents any open spaces being left around the roots of the plants, the latter being an undesirable feature for the well-being of the plant re-potted. Chrysanthemums especially should have the soil packed firmly around the roots when being potted or re-potted.

#### WATERING

Water the plants re-potted well once, so that the water runs out from the bottom of the pot. Then avoid

too frequent and copious waterings until root action and top growth has started. This is an important point as oftentimes, if the plants wilt or wither a little, the over-anxious plant-lover gives more and more water until the soil is thoroughly soddened, a condition that retards root action and growth, and injures the plant and may possibly have fatal results. Keep the soil moist but not soddened, for newly-potted plants especially.

Give the plants a sprinkling or spraying overhead once or twice a day with clean water, especially if the weather is hot, and place them in a partially shaded, sheltered place not exposed to sweeping winds, for a week or so. This is far preferable to soaking the roots of the plants all the time with water at a time when root action has been checked and the plant is not in a condition to absorb or take up much water from the roots. Good potting soil, good drainage, soil packed moderately firm, partial shade, and not too much water are the main points in successful re-potting.

#### RE-POTTING CALLAS

These plants should at this season of the year be in a dormant or semi-dormant state after their summer resting period. Unless the growth has well started all of the soil can be removed by knocking them out of the pot and removing the old soil altogether. The fleshy tuberous like roots should be potted in well drained pots in good rich potting soil. Keep the soil moist, not soddened, until several leaves have developed when they can be watered more freely. Later on in the winter some liquid fertilizer can be given them. By using a moderate sized flower pot for callas and giving them some fertilizer, better flowering results are attained than



Using Potting Stick for Packing Soil Around the Roots

by using too large a pot for them. Shade the plants from hot sun at all times.

#### TOP-DRESSING PLANTS

Plants that do not require re-potting can be top-dressed to advantage. Remove about an inch of the old soil and fill in with a compost made of half potting soil and half well rotted barnyard manure or dry cow manure or bone meal. This plan often helps the plants materially when they do not actually require re-potting.

When following the foregoing instructions, photograph each step if convenient and send prints for publication.



Park Lands that Slope in Graceful Undulations to a Pond Surrounded by Willows  
Mount Allison College, Sackville, N.B., Crowns the Eminence. Photo by The Pridham Studios. Reverse the Illustration and Note the Effect.

## Some Aster Troubles

C. M. Bezzo, Berlin, Ontario

THE aster, owing largely to its high breeding, seems to have an unusual number of troubles. Time and space prevent us from entering into details regarding all of them. Wireworms, white grubs and cutworms are the larvæ of various kinds of bugs or beetles, and are among the worst enemies of the flower garden. No means has yet been found of poisoning them and the only remedy seems to be the thorough and frequent tillage of the ground. The cutworm may be destroyed by the use of poisoned bran.

The "aster bug" is a name given in different localities to the blister-beetle, red-headed flea-beetle and garnished plant bug or "brown-fly." These may be destroyed by the use of insecticides. Paris green in the proportion of one ounce to eight gallons of water and used as for potatoes, is very effective. If a spray is used, arsenate of lead is preferable to Paris green. Mix one ounce of arsenate of lead paste in one gallon of water. Hellebore, diluted with five parts of ashes or air-slaked lime may be used dry with a bellows or sifter. If used as a spray, mix one ounce to three gallons of water.

Root lice cause the plants to have a wilted, sickly appearance. An examination of the roots will reveal the presence of hundreds of bluish lice. These may be destroyed by freshly made tobacco water. Steep one pound of stems of tobacco in two gallons of water and when cool pour about the roots of affected plants. Tobacco dust worked into the earth around the roots is also very effective. But better than all the remedies is a preventive. A good coat of hardwood ashes dug into the ground early in the spring will insure against root lice, but it must be put on early in order that the lye may be extracted before planting out time or it will burn the plants.

Stem rot is a fungous disease that enters the outer bark of the plant and frequently has its inception in the seed bed, although not manifesting itself until the plant is ready to bloom when it is found wilted and dying. The preventive is frequent stirring and drying of the surface soil about the plant at all stages of its growth, good drainage and the avoidance of low, damp and sour soil. Flowers of sulphur, dusted freely about the base of the stems is considered by some to be a preventive.

The yellow disease of the aster, the cause of which is still in doubt, is characterized by a yellowish, bleached appearance of the affected plant. If the plant blooms, the flower is of the same color as the leaves. Sometimes one side of a branch will be normal and the other diseased, the same effect being noticeable in the flower at the end. There is no evidence that the disease is contagious

among plants; but as this point is still in doubt, and as there is no known remedy, we would advise the removal and destruction of all plants affected with the yellows.

## Clematis Paniculata

J. McPherson Ross, Toronto

All varieties of clematis are desirable for planting as climbing plants, but the *Clematis paniculata* is particularly so.

Wherever grown, it is exceedingly popular and gives every satisfaction from its hardiness and freedom of growth. In good situations it will easily grow from fifteen to twenty-five feet in a season. Its bright green glossy foliage is exempt from insects, while its flowers coming in late summer when other flowers have passed is a valuable characteristic. The flowers are small, star-like and fragrant but larger and whiter than the *Clematis Virginiana*, which it resembles in many other respects.

That it is just the plant for growing on trellises, verandahs and porches goes without saying, or for any place where a climbing plant is required. It makes a charming lawn plant when tied up to a stake and treated in the bush form. It should be cut back to the ground each spring. In many ways it may be termed a valuable climbing perennial plant, hardy as an oak, while its magnolia fragrance makes it more attractive as a plant for verandahs.

## Propagating Peonies

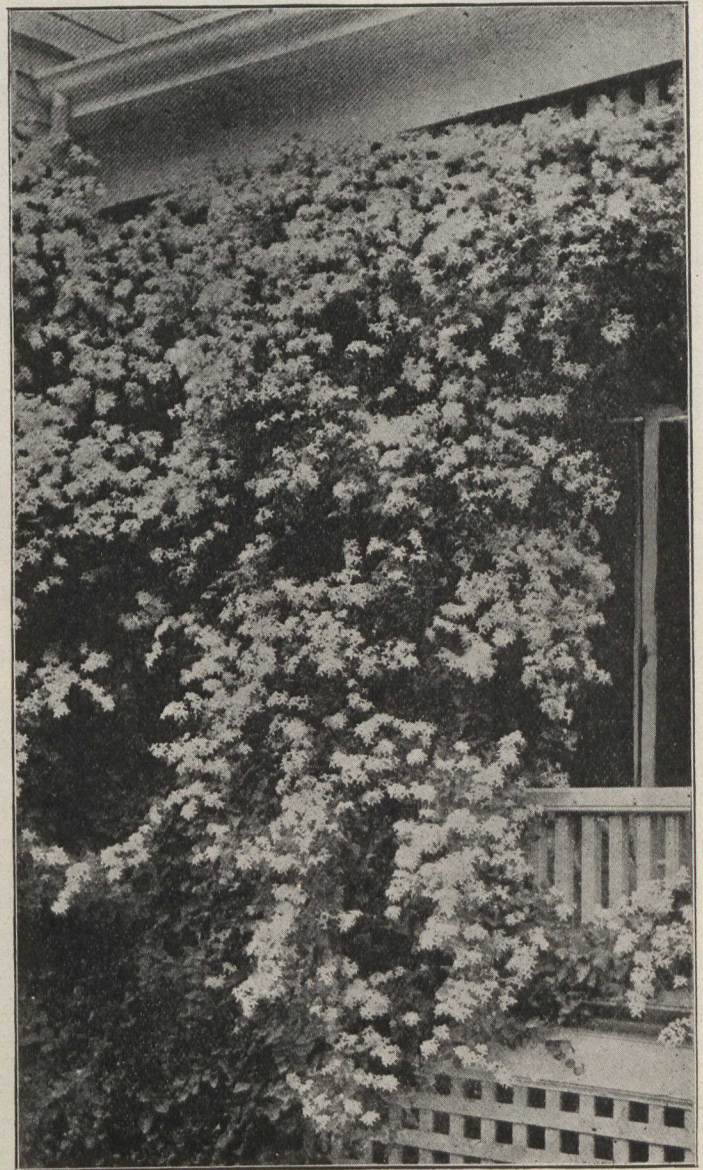
Rev. Andrew B. Baird, Winnipeg

Peonies may be propagated by budding or by division of the roots. The former method involves some skill and trouble but anybody can multiply his plants by dividing the roots. All that is necessary is to see that each new root

has one or more eyes from which the stems of the new plants grow. Plants differ greatly in the rapidity with which the roots multiply; some varieties will furnish half a dozen roots if taken up after two years, but most kinds increase more slowly.

New varieties are originated from seeds. The new plant does not come true to the parent. In most cases it is single, or otherwise inferior, but now and then one finds a gem.

Photographs of attractive entrances to home grounds, orchards or gardens are



*Clematis paniculata*

Cut kindly loaned by Canadian Nursery Co., Montreal.

wanted for publication in THE CANADIAN HORTICULTURIST. Whether or not the entrance or gateway is made of stone, brick or wood, covered with vines or other plants, or not planted, it will be equally interesting and acceptable.

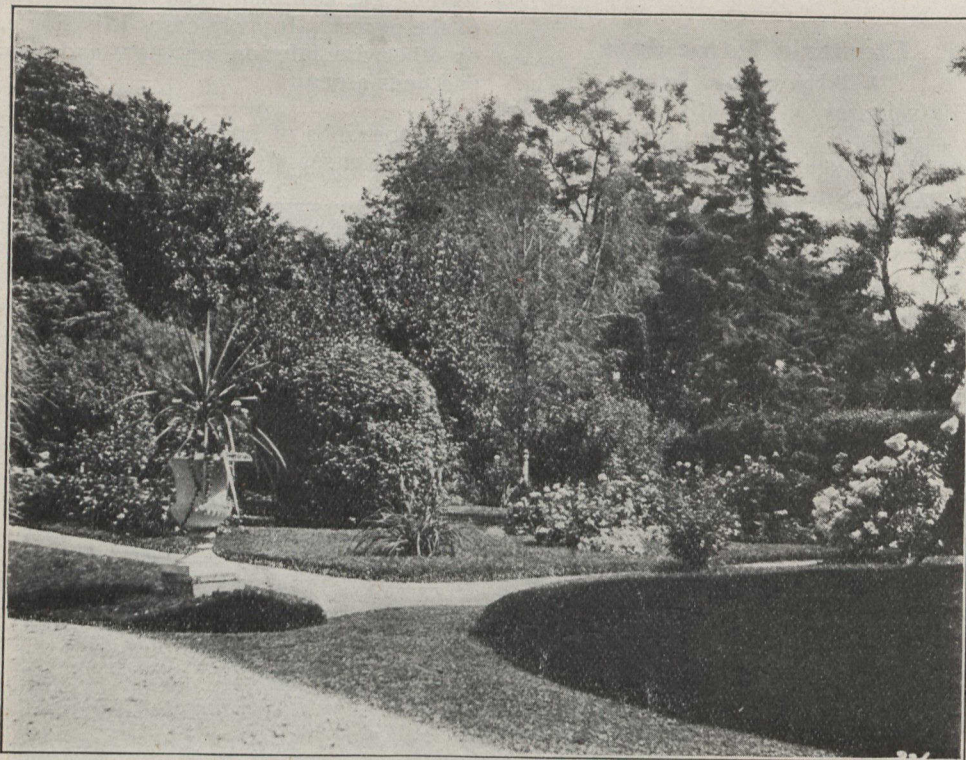
Let us hear oftener from amateur gardeners in Nova Scotia, New Brunswick and Prince Edward Island.

## Small Home Gardens

By "Spectator"

**A**MATEUR gardeners are often disheartened when they see the beautiful results obtained in flower gardens under professional care and sometimes think, from photographs of others,

where two paths meet, or in a circle of sward around which they bend will form a centre, permanent in character but capable of infinite variety. One year for its centre there may be the palm-like effect



A Beautiful Garden Spot, Well Arranged and Cared For

At "Dunnin", residence of Mr. Barlow Cumberland, Port Hope, Ont.

that considerable expenditure and much space are required to produce the effects represented. Photographs are, of course, always taken from a favorable point of view, and it is the preparing of these points of view for the onlooker that is most requisite in the laying out of amateur gardens. These must, necessarily, be small, for amateurs can only devote a small portion of their time to cultivation and care. Results may be obtained not so much from the quantity and colorings of the shrubs and flowers, as from their being so placed as to give their best display.

As a first requirement in a small garden, the paths instead of being laid out in straight rectangular lines, should be laid out in easy curves. These are no harder to make or to maintain, but are more restful to the eye, give an enlarged idea of distance and, by their projecting bends, enable the flowers to be better seen and fewer to be used. The plants show themselves in distant contrasts instead of in continuous close contact, to be seen only when one comes opposite to them along the straight pathways. Each outward curve and inward hollow lends itself to contrasts of coloring and foliage.

For a distant effect, an iron vase set upon a section of a tree trunk at a point

of a dracæna, another year a geranium or a fuchsia each combined with the fronds of lobelias, nasturtiums or other trailing plants—few flowers to be attended to but much grace to be obtained.

Small groups of flowers, geraniums, giant poppies or peonies and a few flowering shrubs alternating along the curves give adequate results without many plants or much weeding or watering.

Another interesting centre may be made by a Virginian creeper trained up a cedar pole with laths nailed together at the top like an open umbrella. A little trimming of the hanging branchlets gives waving lace-like results.

For a boundary at one side of the garden, nothing is more easy or more effective than a perennial, or ever-growing border of plants selected from the lists so often given of those which flower in successive months—in its first year, a hope; in its successive years, a glory; and one which, with very little attention to prevent the flowerings from getting too rank, takes care of itself.

If a background is needed, a line of farm wire fencing stretched on posts painted green and planted at intervals with Virginia creepers, will soon give a permanent hedge of close rich greens in

the summer and carrying its autumn tints far into the close of the year.

The amateur gardener who will devote his or her first thoughts to the lay out rather than to the quantity and variety of plants, will be able to get in a small garden an effect pleasurable to the eye, producing wider effects and within the time and expenditure they can accord to its care. The home is made more of a home by a small garden about its living side.

## Some Dahlia Pointers

C. M. Bezzo, Berlin, Ont.

Dahlias succeed much better when planted out in the open than in the shelter of a wall or building. If a perfect individual specimen plant is desired plant four feet apart. This allows plenty of room for a free circulation of air and sufficient space from which to draw sustenance. If put in rows they may be planted from two to three feet apart in the row.

Do not allow more than two shoots to grow up from the one root; pull all the others up or break them off as fast as they appear. Some growers leave only one stalk, and this they pinch back as soon as two or three set of leaves appear, thus making the plant branch out instead of growing tall. Stake the plants early. Where a robust growth is expected, inch and a quarter stakes should be used, tying the plant with raffia, strips of cotton or anything that will not cut the stalk.

If a plant is found wilting after all the cultural directions have been followed, examine the stalk for the stalk-borer. If you find the hole take a piece of wire and pull the worm out, or cut it out with a sharp knife. If the stalk is not much injured it will heal, otherwise there is nothing to be done but cut it off and burn it. A good plan would be to examine the plants occasionally for signs of the destroyer.

There is also an insect which blasts the buds before they open and they drop off by the dozen. Spray with soapsuds or sprinkle with pepper. In dry hot weather, if the plants are allowed to get dusty the red spider will make his appearance. Sprinkle the underside of the leaves with water from the hose or with soapsuds, and he will soon disappear.

## Worms and Aphids

How can I destroy worms in the soil of house plants, and also aphids on the plants?—A.J.P., Brampton, Ont.

For the worms use lime water. Slake one pound of fresh lime and mix it with two gallons of water and allow it to settle. Two applications usually is sufficient. For the aphids, spray the plants or dip them in a solution of tobacco water.

## Cabbages on Prince Edward Island

D. J. Stewart, Aitkin's Ferry

TO produce cabbage, like those illustrated, which weigh from twelve to twenty pounds, in the short space of time of three and one-half months, one must understand the needs of his crop, and supply those needs, and these are food, water and cultivation. For food, I use barnyard manure and lobster offal or fish waste with nitrate of soda and muriate of potash when necessary. While we cannot supply water, we can do much to preserve what we have by plowing down the manure and finishing off the field when the ground is damp, and afterwards keeping the surface fine by frequent cultivation.

Use a cultivator with finer teeth than those generally sold by dealers, as the object in cultivating is to kill weeds and stir the soil—not to open trenches for drain tile, as many cultivators do. A cultivator with five or seven teeth taken from a spring tooth harrow is the best I have ever used. When your rows are only thirty inches apart, you will have to use the hoe to remove weeds after the cabbage begin to head if you want clean land the following year. No definite number of times for cultivating or weeding can be stated as soils, weather and time must determine these for each.

The three most dreaded enemies of cabbage in the province are club-root, root maggot and green worm. The first of these is the only one that gives me any worry and the only way to avoid it (*avoid*,

Examine your plants before you set them out and if they show any signs of maggot, wash the roots thoroughly. I have set out badly infested plants after washing without losing five per cent. For green worm, spray with Paris green and water, one pound to about eighty gallons,

as soon as the worm appears and if you keep them down until the cabbage begin to head, you will not have much trouble then. Much depends on the number of cabbage grown. A row or two in a turnip field will have as many worms as an acre and, of course, will have a good chance of being ruined. I have tried salt, hellebore, and other things, and found them useless.

## Mulching the Garden

A. V. Main, Almonte, Ontario

THE mulching of vegetable crops in summer is a method of very good manuring that is not practised to any extent. The term "mulching", is simply a top dressing of manure, straw, lawn mowings or a like material to act as a food and manurial agent to the plants treated. We can not discuss the question of its merits, for it is decidedly a great assistance for good crops, and that is what we all want,—bumper crops.

What are the chief benefits of mulching? Firstly, it prevents the rapid evaporation after rain, and conserves the moisture to the plants' benefit; secondly, keeps heavy clay or clammy soil from getting parched, dry and cracked; thirdly, when rain arrives, the nutriment from the manure is washed down to the roots—plants assimilate manurial feeding and grow rapidly during a rain and immediately after it. We take half-decayed manure or the material from the hot-beds, that have done their work in spring, can

cover for mice, and is unsightly in the garden.

The manure can be spread out thinly and evenly and cultivation need not halt either, for the manure can glide through the cultivator. In regard to cultivators, I recommend the "Bucco" for small gardens, and even gardens that run up to several acres. It is light and very effective to run between rows of onions, beets, carrots and parsnips, in fact all crops in rows of a foot or more apart. It is quite an advantage over a hoe or other heavy cultivators. With the "Bucco" you loosen the ground and leave no foot marks on the cultivated section.

The period for the application of mulching is about the first of July, when the crops are generally well advanced, all thinned out and weeded, and have been well cultivated. The plants at this date are in good shape for mulching. Vegetables that respond to this form of manuring in our garden are tomatoes, grown in single-stake fashion, onions, cucumbers, melons, beans, beets, cauliflower and particularly broad beans that suffer so much from drought. It is advantageous to all vegetables; however, potatoes, corn, cabbage and squash are not deserving of it, for their own foliage soon covers the space allowed them. A couple of inches is a sufficient covering. With successive dry summers and the grower handicapped for a want of water supply and probably a stiff soil in the garden, mulching is a good substitute to sustain the plants.

## Soil for Palms

What kind of soil is best for palms?—  
W. M., Oshawa, Ont.

Palms require a moist soil with ample drainage material at the bottom of the pot. Water standing at the roots is injurious. The best soil for most palms is one that is composed of well-rotted sod, leaf-mold and a little sand.



Under Good Management Cabbages will Grow to Perfection on Prince Edward Island

not cure, is the word), is not to plant cabbage on land that has had cabbage or any of that family for at least five years, and not use manure from cattle that have been fed club-rooted turnips.

now be utilized in another form. I have not found straw or lawn mowings to be worthy of the term, "beneficial mulching." Straw is void of plant food, is not suitable for a rooting substance, and is a

If you are trying any novelties in vegetables, keep a record of their growth and behaviour and send a few notes for publication in THE CANADIAN HORTICULTURIST.

# The Canadian Horticulturist

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## The Only Horticultural Magazine in the Dominion

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ISLAND FRUIT GROWERS' ASSOCIATIONS

H. BRONSON COWAN, Managing Director  
A. B. CUTTING, B.S.A., Editor

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January, 1908.....	7,650	January, 1909.....	9,456
February, 1908.....	7,824	February, 1909.....	9,310
March, 1908.....	8,056	March, 1909.....	9,405
April, 1908.....	8,250	April, 1909.....	9,482
May, 1908.....	8,573	May, 1909.....	9,172
June, 1908.....	8,840	June, 1909.....	8,891
July, 1908.....	9,015	July, 1909.....	8,447
August, 1908.....	9,070		
September, 1908.....	9,121		
October, 1908.....	9,215		
November, 1908.....	9,323		
December, 1908.....	9,400		

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## EDITORIAL

### DARWIN

The recent celebration of the centenary of the birthday of Charles Darwin and of the jubilee of the publication of the "Origin of Species" acknowledged on behalf of mankind the debt which is owed to the great naturalist. Men from all parts of the world assembled at the University of Cambridge to honor the memory of the man who most firmly established the science of biology, the study of living things.

To Darwin, horticulture owes much. His was the mind that told us the story of evolution, that gave us a rational theory of plant distribution, that increased our knowledge of the means of seed dispersion, that showed that classification is founded on descent, that pointed out that "flowers are adapted to be crossed, at least occasionally, by pollen from a distinct plant" and that "nature abhors self-fertilization," and that gave innumerable other facts and theories that form the basis of present-day horticultural science. Some of these have been modified and enlarged by later study but Darwin laid the corner-stone and constructed most of what is known. As we are prone to accept and forget, it is well that the name of Darwin has received in this celebration the recognition and the respect that is its due.

### PROGRESS IN NEW BRUNSWICK

The great extent of the lumbering interests in the province of New Brunswick, has resulted in retarding the progress of agriculture to such an extent that the impression has gone abroad that conditions there are not favorable to farming and, in particular, to fruit growing. Even among the people of New Brunswick this feeling has prevailed and the many abandoned farms which one sees in a day's drive in the country certainly would not correct the error. Attention is now being drawn, however, to the advantages of that province for mixed farming, and the next decade will show a marked advance in that industry. It is still very much the habit, however, to regard the sister province of Nova Scotia as the source of supply for apples, while for plums and more tender fruit the fruit growing sections of Ontario are depended upon.

This must all be changed, and will be so soon as the people of New Brunswick get their eyes open to the fact that in many varieties of fruit they can equal, if not excel, the other provinces. Already large and successful orchards exist along the valley of the St. John river and in some other sections, and the illustration orchards established by the government of the province in nearly every county will soon arrive at a stage where they will demonstrate that an apple orchard properly cared for will prove a profitable investment.

Very few farms at present are devoid of apple trees. In some cases, they are simply wild trees that have been set in rows and left to bear such fruit as they will. In other cases, unscrupulous agents have forced upon the farmer such trees as they could and these have been set in the grass field where the grass is cut every year and the trees left to do what they can on such sustenance as is left in the soil. As the trees in most cases made no proper growth, they were entirely neglected and apple growing pronounced a failure. In cases where proper care has been given this fruit, however, it has proved a wonderful success. Many var-

ieties of apples can be raised in the province to as high state of perfection as anywhere in Canada.

Elsewhere in this issue a number of articles tell what can be done in the St. John valley and in other parts of the province. Note the following letter that was received from Mr. C. N. Vroom, of St. Stephen: "In the valley of the St. Croix River, we can raise Red Astrachans which, so far as I can learn, cannot be excelled or perhaps equalled on the continent, and in their perfection they are a most attractive and saleable apple. Such varieties as William's Red, Wealthy, Gravenstein, Duchess, Fameuse, Bishop Pippin (Yellow Bellflower), R. I. Greening, N. W. Greening, Golden Russet and many others will reach a high state of perfection here and can be successfully and profitably grown. Of course, in setting an orchard the choice of varieties is all important. It is better to grow a good Astrachan than a Baldwin that is far inferior to those grown in Massachusetts, or it is better to grow a Wealthy than a Ben Davis whose sole merit is that it will keep for a year or two. In my boyhood days, plums grew here in abundance. The advent of the black knot killed out the old trees and discouraged re-planting. In planting an orchard of a few acres, I am setting plums as a filler one way in the rows and intend to keep up a continuous planting of this fruit. We have an excellent market for fruit and an intelligent setting and care of orchards will prove a profitable investment."

To hasten the development of fruit growing and other horticultural pursuits, the report of the New Brunswick Agricultural Commission recommends the appointment of a provincial horticulturist. Such a man could promote general horticultural work, teach practical horticulture at fruit meetings short courses and so forth, oversee the illustration orchards, plan and conduct experiments and encourage fruit growing, truck farming and ornamental gardening in many other ways. This suggestion should receive the favorable consideration of the provincial government. The opportunities for horticultural development are many. The government, the provincial fruit growers' association and the individual should make the future more productive of accomplishment than the past.

### PRINCE EDWARD ISLAND

In various issues of THE CANADIAN HORTICULTURIST reference has been made to the splendid outlook for fruit growing on Prince Edward Island. In apples, autumn and early winter varieties are the most profitable producers. Mr. Alex. McNeil, Chief of the Fruit Division, Ottawa, has said that the finest box of apples that he ever saw grown and packed in Canada was a box of Baxters grown in Prince Edward Island and exhibited at the annual meeting of the provincial association in 1905. The early and midseason varieties of pears do well. The European class of plums grows successfully. Cherries of the Kentish type and some others yield good crops. Small fruits thrive luxuriantly in all parts of the Island. Some varieties of all these fruits are grown to perfection. There is no question about the possibilities. It remains for the Islanders to take full advantage of them.

The provincial fruit growers' association is younger than that of Nova Scotia, but it is fully alive to the demands for intelligent practice in the industry. It has done good work in disseminating knowledge about what to grow and how to grow it. There is opportunity for further effort in this direction. The majority of farmers are indifferent to the needs of the orchard. The "model" orchards that are being managed under the

provincial government will do much to demonstrate the value of proper orchard practice and to show what varieties of fruit to grow in the various districts. There should be an orchard on every farm in the province and it should be given proper care. Prince Edward Island can produce enough fruit for her home market and have a big surplus for export.

As the Niagara District Horticultural Exhibition will be held during the time that the American Pomological Society meets in St. Catharines, the growers of the district should do all in their power to make it a great success. The management invites exhibits of fruits, flowers and vegetables from every person. The exhibition should receive the combined support of the growers of the Niagara peninsula.

## PUBLISHERS' DESK

Our cover illustration this month shows a part of one of the "model orchards" in Prince Edward Island. It is owned by Mr. John Annear, Lower Montague. Photographs of other model orchards in the maritime provinces will be welcomed for publication. To make their appearance in these columns of greatest value, send us also a short description of the scene.

In this issue are published many articles that are of special interest to our friends in New Brunswick and Prince Edward Island. Last month Nova Scotia received particular attention. We want our readers in the maritime provinces to feel that THE CANADIAN HORTICULTURIST is published in their interests as much as in the interests of any other section of our great Dominion. Every issue contains practical and up-to-date information on orchard and garden management. Except occasionally, no one province is favored at the expense of the others. We have contributors and special correspondents in all parts of the Dominion, and we want more. Every reader is invited to contribute articles and letters for publication. Tell your experiences in orcharding, growing vegetables, flower gardening, managing lawns, shrubs or anything else that has to do with horticulture. Send photographs if you have them.

A number of special articles will be published in our September issue. They will be of much value and general interest. An article on "The Better Judging of Fruit," by Mr. Chas. Webster of Kelowna, B.C., will tell how the exhibits were judged at the Spokane Apple Show last December; many suggestions for adoption at our Canadian fairs and exhibitions will be given. "The Pre-Cooling of Fruit for Shipment," will be discussed by Mr. J. A. Ruddick, Cold Storage Commissioner, Ottawa. "The Fameuse Apple" will be dealt with by Mr. R. W. Shepherd, of Montreal. Mr. G. H. Carpenter, of Fruitland, Ont., will give some pointers on "Marketing Early Grapes." Diagrams and a description of improvements being made in Queen's Park, Barrie, Ont., will be an important feature; every person interested in the making and management of pleasure grounds and in the beautification of our cities, towns and villages should read this article. These are a few of many valuable articles that will appear. It will be a strong number and should not be missed.

## Apple Growing on Prince Edward Island

Alex. McNeill, Chief, Fruit Division, Ottawa

IN the series of orchard meetings which were held under the auspices of the Prince Edward Island Department of Agriculture, it was particularly noticeable that an increased interest and enthusiasm had lately been developed in the matter of orchard planting. There was a very large attendance at the first meeting in Mr. P. N. Pate's orchard at O'Leary. Of these, many were about to plant orchards for the first time and were very anxious for information with reference to varieties and methods of culture.

The Springfield meeting was held at one of the model orchards, on the farm of Mr. D. N. McKay, where there was a splendid object lesson in the matter of varieties. The conditions on the island are such that only the hardier trees can be depended upon. In the earlier planting of the model orchard, many varieties were included about the hardness of which there was a doubt. Those that were too tender for the situation were beginning to show the effects of the severe winters and not a few had died outright; but the varieties which have been recommended for Prince Edward Island by the Fruit Growers' Association were all doing well, and there was a splendid promise of a strong vigorous growth that would develop good bearing qualities.

In the neighborhood of Hazelbrook, about six miles from Charlottetown, orcharding is by no means an experiment. There are several fine orchards in the neighborhood, though all have made the mistake of planting some tender varieties, and few have yet learned to appreciate the value of clean culture.

Perhaps the best kept orchard on the Island was that of Mr. John Annear at Lower Montague. The remnant of the old orchard still growing in sod was there for comparison with the new orchards of the most approved varieties and with the most up-to-date methods of culture. The newer orchard is not yet in full bearing and, therefore, it cannot be said that the evidence is forthcoming in actual production to prove the value of modern methods. Nevertheless, the vigorous growth of trees gives ample promise that the fruit will respond to the generous treatment given them.

At Rollo Bay, the Reverend Father Walker is setting a splendid example by planting an orchard, which may be called a model orchard, on his own grounds. In order to have the very best, he has removed several large trees, has broken up the sod throughout the orchard, and is planting the recommended varieties with more care than is usually bestowed upon apple trees.

### MOST ORCHARDS ARE NEGLECTED

That the orchards of the Island are neglected is apparent to anyone who is able to make a comparison with the orchards of the Annapolis valley. It is the rule to find the Prince Edward Island orchards all in sod and, in most cases, the crop of hay is removed from the orchard. Although the double crop, the crop of hay and the crop of trees, is produced upon the soil, no corresponding fertilizers are used. Indeed, it would seem as if it were expected that the ground required rather less fertilization when in orchard and yielding two crops than it would need without the trees and producing a single crop.

### GROWERS ARE ORGANIZING

Notwithstanding this want of culture, the trees bear some fruit and sufficient to encourage the owners to plant more, were it not for the hopeless feeling that they have

with reference to markets. Almost the first objection that is made to orcharding is that they could not sell the fruit even if they grew it. To meet this objection the provincial fruit growers' association has been instrumental in forming a co-operative association embracing the whole island. The co-operative association has received the patronage of the provincial government, and is organized to meet the needs of the various centers at which fruit can be collected.

Professor Ross, Secretary for Agriculture, is energetically promoting the new association, assisted by a board of managers. They have made arrangements for supplying the patrons with barrels and boxes at the lowest possible cost. They are also considering plans for assembling the fruit with the least possible injury. Their present intention with reference to sales is to develop the home market to the fullest extent. They think it quite possible to supply the greater



Wealthy Apple Tree Five Years Planted

Produced two and one half bushels of No. 1 apples last autumn. In orchard of Mr. John Annear, Lower Montague, P. E. I.

portion of the fruit that is now imported from other provinces. Should there be a surplus after this, they have made arrangements to have it handled at the next nearest market across the Northumberland Strait in the mining district of Nova Scotia.

Their transportation facilities for export are not the best at the present time, but this is in consequence of the lack of fruit. If the quantity were greater there would be no difficulty in procuring facilities quite equal to those of many parts of the other provinces.

The co-operative association will also do a good work in procuring the best grade of nursery stock. Undoubtedly, the effect of procuring nursery stock through a single organization of this kind, composed of the best growers and embracing all the experience that there is on the Island, will be to confine the varieties to a comparatively small number. The varieties that can be confidently recommended for the Island are the Duchess, the Wealthy, Alexander, Wolf River, Baxter, Pewaukee and Ben Davis. The Inkerman appears to be growing in favor, but as there are not yet any large plantations of it, the people have not had an opportunity of seeing it tested in all the conditions of the Island. The McIntosh Red, too, is another apple which many think

is a coming apple for the Island. It is certainly quite hardy, and will always command a ready sale. It is not desirable to extend the varieties much beyond these. Many other varieties can be grown upon the Island, but to grow them would only lessen the value of the whole. What is wanted is few varieties and a large quantity of each of these.

#### SHOULD CULTIVATE MORE.

After having the proper varieties, perhaps the most needful reform is in the matter of cultivation. The orchardist must learn that trees require exactly the same attention as any other plant. As well might they hope to get a good crop of grain without cultivating the soil as a crop of apples without culture. The instructions for the cultivation of the orchard might be summarized by saying that whatever culture is needed to produce a good yield of corn is needed for the trees. A warning must be put in here that along with this clean culture in the early part of the season, should go cover crops, sown during the month of July or not later than the first of August.

#### USE COVER CROPS.

Almost any crop that will germinate easily will make a good cover crop, but by preference something should be sown that will die down during the winter. Common oats and vetches, half and half, make a very good cover crop, but the seed is expensive and it is perennial. Clover may be used but it is difficult to get a catch so late in the season as August that will make any quantity of material before the end of the growing season. If clover is allowed to grow in the orchard, it should be plowed down as early in the spring as possible. No doubt clover is a detriment to an orchard if allowed to grow during the months of May and June.

#### SPRAYING AND PRUNING

The matter of spraying and pruning will very soon follow along the right lines. The sentiment is in favor of both operations, and that they are not done is probably largely the result of carelessness, not of ignorance. When the orchards are larger, and more dependence is placed upon the orchard as a source of revenue, pruning and spraying will undoubtedly occupy a more prominent place than they do now in orchard cultivation.

On the whole, the outlook for orcharding in Prince Edward Island has brightened materially the last two or three years, and it would not be surprising to find that the farmers will in the near future look upon their orchards as a very important source of revenue. A few orchardists now are making as much gross income from 10 acres as their neighbors make from a hundred acre farm.

**For Apple Growers.**—The apple growers of Canada will welcome the appearance of a work entitled, "The Canadian Apple Growers' Guide," that is now in the hands of the publisher, William Briggs, Toronto. Its author is Linus Woolverton, M.A., who for many years was editor of THE CANADIAN HORTICULTURIST, and secretary of the Ontario Fruit Growers' Association. The work covers the whole subject, from the planting of the tree to the harvesting and selling of the fruit; and contains full particulars about pruning, spraying, grading and packing, written in such a clear and concise manner that even the novice should be able to make a success of apple-growing. The book will be reviewed at length in these columns as soon as published.

Items of interest are wanted for publication.

## FRUIT CROP SITUATION

Present prospects point to only a medium crop of apples in Canada. The outlook is not as bright as was reported last month. In Nova Scotia, the crop is much below that of last year. New Brunswick and Prince Edward Island will not have enough for home markets. Quebec expects a crop below medium. In Ontario, conditions are variable. Georgian Bay expects nearly a full crop; Lake Erie and Niagara district below medium; Lake Ontario, medium. In British Columbia, conditions are poor near the coast and fair in inland valleys. It is noticeable that the apple aphid is more than usually injurious this year, being present in all districts from coast to coast. The situation in the various districts, together with reports on other fruits, are given by correspondents of THE CANADIAN HORTICULTURIST as follows:

#### QUEEN'S CO., N.S.

Milton.—Fruit set well but dropped badly as rains have been few and caterpillars are doing great damage. Only two or three are spraying. I have had little trouble as I pick the eggs off and burn in winter. The aphid is a great scourge, the foliage of plum trees especially being eaten full of holes and dropping. Ends of twigs are curled up and dead.—G. H. H.

#### DIGBY CO., N.S.

Bear River.—Fruit set good but is falling now owing to dry weather. Green aphid is abundant. Present conditions would indicate short crops of fruit.—B.C.C.

#### ANNAPOLIS CO., N.S.

Round Hill.—The present outlook for fruit is good. Apples set well and are developing well. Fruit is clean, almost wholly free from black spot. The canker worm did serious damage in some sections and seemed difficult to control by spraying. It is early yet to predict outlook; would say from fair to full crop of clean fruit.—J.H. T.

Bridgetown.—The canker worm has been active in some of our orchards. The apple crop will not be above the average, but the fruit is clean and free from spot.—E. R.

#### KING'S CO., N.S.

Kentville.—The apple crop, as far as can be estimated now, will be only fair, not as much as last year, say 400,000 to 500,000 barrels. Plums are good, especially the Japan. Cherries are also good. Apples are remarkably free from black spot. Apple plum and cherry aphid are much more abundant than ever before. Canker worm is in marked evidence.—R. S. E.

#### HANTS CO., N.S.

Falmouth.—Fruit is not as heavy as last year. The quality of fruit is good, clear of spot at present. Some canker worm has done some harm here.—H.E.D.

#### COLCHESTER CO., N.S.

Truro.—Apples are fairly good. Plums and cherries did not set well and are light crop. Raspberries and blackberries, where not injured by winter killing of the buds, are setting fruit fine and promise well. Currant worm was very plentiful. Aphids have been very bad, worse than for years both on shrubs and trees and require constant care to keep them down.—J. C. B.

#### WESTMORELAND CO., N.B.

Shediac.—Apple crop not as promising as last month. A very dry June or a late frost

caused a heavy drop of apples, most noticeable on Bens. The fruit is now developing well. Aphid is bad on both the bearing and young trees.—H.B.S.

#### QUEEN'S CO., N.B.

Lower Gagetown.—Apples in this locality will not be more than half an average crop, Bishop Pippins, Alexanders and Fameuse being a complete failure. Of plums and cherries, there will not be any at all. There was a green worm about an inch long that stripped the apple trees of their leaves and other trees also in some orchards.—G. Mac A.

Hibernia.—Apples are a medium crop. Pears are good in some orchards. Codling moth and aphid are most troublesome insects. Raspberries promise a good crop. Strawberries are abundant.—J.C.

#### SUNBURY CO., N.B.

Upper Sheffield.—Apple blossoms were hurt by frost and tent caterpillars did a lot of harm to foliage. Cherries and plums are a failure. Strawberries are plentiful.—I.W.S.

Oromocto.—Strawberry crop was good; cherries, medium; other small fruits filling well. Off year for apples and a light crop. Tent caterpillar was very destructive.—H.W.

#### CHARLOTTE CO., N.B.

St. Andrews.—Apples promise a good crop especially fall apples. Owing to the dry weather, a good deal of fruit is dropping off. Trees look healthy. Strawberries, currants, gooseberries and all small fruits are promising.—J. R.

#### PRINCE CO., P.E.I.

Bedeque.—Prospects are not as good as in June, but fruit is developing well. Insects are prevalent, especially aphid. Large fruit will be a medium crop. Small fruits are not up to the average.—C.N.B.

#### QUEEN'S CO., P.E.I.

Marshfield.—The fruit crop looks fine. The fruit has set well on the trees and is growing fine. There are few injurious insects and no blight of any account. Spys are going to be a full crop; Duchess, a full crop; Baldwins, medium; Alexanders and Russets, over medium crop. Plums are a medium crop and look well. Cherries are a full crop and the fruit is set well on the bushes.—W.J.S.

#### KING'S CO., P.E.I.

Aitkin's Ferry.—Summer and fall varieties of apples are a very full crop, while winter varieties are not so heavily laden. Plums and cherries are carrying about 25 per cent. above an average. Bush fruits are a fine crop. Strawberries are about 10 days later than usual but are a good crop. Aphid on trees is very prevalent.—D.J.S.

#### TWO MOUNTAINS CO., QUE.

La Trappe.—The apple crop is very good in our vicinity, but less than bloom indicated. Plums, cherries and small fruits are very scarce.—G.R.

#### ROUVILLE CO., QUE.

Abbotsford.—Apple crop will be below average. The codling moth and curculio are much in evidence and the June drop has been very heavy. Currants and gooseberries are a full crop. Plums are a light

(Continued on Page 182)



NOTES FROM THE PROVINCES

New Brunswick Fruit Growing

In many sections of New Brunswick, fruit growing is past its experimental stage as a visit to numerous orchards or an inspection of fruit exhibits at our various exhibitions will demonstrate. Nearly all the small fruits, many varieties of plums and pears, and all but a very few varieties of apples flourish in the province when care is given to their culture and growth. In the lower part of the St. John Valley the most progress has been made and there all the standard varieties of winter apples grown in Nova Scotia are produced with good success. Such varieties as American Baldwin, King, Spy, Ribston, Bishop Pippin (Yellow Bellflower), Golden Russet, especially if top grafted on native stocks, adapt themselves to the climatic conditions. The Gravenstein also does well top-grafted. The territory to which these remarks refer is known to extend from Oak Point to the Oromocto River, and to stretch back on either side of the River St. John an undetermined distance. Various places along the Belle Isle, Washademock and Grand Lake shores, as also parts of Albert and Westmorland counties, grow good winter varieties.

All these districts as well as many others, especially the St. John River Valley from Oromocto to the Victoria county line, grow the best varieties of late autumn apples such as McIntosh Red, Wealthy, St. Lawrence, Wolf River, Alexander and Fameuse, and this district also has considerable win-

ter fruit. In parts of Victoria county, in Madawaska and on exposed situations along the sea coast, apple growing has not proved successful, but with these exceptions all the best early fall varieties of apples can be grown throughout the province.

The "illustration orchards" might well be extended and more use made of them as object lessons in apple growing. Orchard meetings under the charge of an expert horticulturist have done good work in the past, and can be continued with great advantage.

Experts, competent to speak with authority, tell us that a larger area of first-class apple growing country exists in New Brunswick than is to be found in Nova Scotia. At present but little care and skill is given to the selection and planting of varieties suitable to the various localities, to the setting out and care of young trees or to the necessary care of bearing orchards. Marketing is done very badly, yet there are a number of orchardists who are setting an example and proving that apple growing is a very profitable business.

A great success of strawberry culture is being made by a number of growers, their berries having the highest reputation wherever sold from Sydney, Nova Scotia, to Montreal and Boston. Mention should also be made of the immense crops of blueberries that grow anywhere in the province where a fire has prepared the land for them. They are exported to the United States in large quantities. Wild raspberries in some

sections also form an export crop. Cranberries grow on suitable bogs everywhere. At St. Martins, a variety of cranberry of high quality grows on the upland fields.

The employment of a good horticulturist who would devote his time to the development of fruit interests throughout the Province would be a most valuable and needed aid to the development of what can be made a great industry.—From Report of New Brunswick Agricultural Commission, March, 1909.

Fredericton

Editor, THE CANADIAN HORTICULTURIST: We have noticed in several issues of your paper a request for information regarding our doings in the maritime provinces. In a small town or city of some 7,000 we cannot be specialists in any one thing. We have to be both florists and general horticulturists, with a few acres of land, either owned or leased, near at hand, with greenhouses, hotbeds, sashes and so forth, as a means of producing early flowers and vegetables. During late fall we prepare for winter by marketing or storing the crop of potatoes, celery, cabbage, turnips and carrots. Some of these pay better if kept till spring if stored safely away. We have as the wise man said, "A time and season for everything under the sun." This is true in horticultural matters.

I will instance this by our leading fruit grower in this locality, Mr. J. C. Gilman, who has found that it would be to his great advantage to build a suitable cold storage for keeping several hundred barrels of apples. The consumers, as they have no suitable place for storing, prefer buying in small quantities and thus Mr. Gilman can supply at a few hours notice, a barrel or half a barrel of fruit in fall, winter or



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Department of Agriculture, Experimental Farm of B.C.,  
Messrs. Stone & Wellington, Agassiz, May 29th, 1906.  
Toronto, Ontario.

Gentlemen:—Yours of the 21st to hand. I know that you will be pleased to learn that I have had splendid success with the scions I received from you. Your trade in the Kootenays should increase very rapidly, as your trees are good and being grown in a limestone soil are better constituted than those grown on this coast, where there is no lime in the soil. Yours faithfully,  
(Signed) THOS. A. SHARPE

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spring. So it is with celery, cabbage and other roots. One must have, to do business to his own advantage, a suitable place for storing roots. In fall, the market is glutted with carrots, turnips, cabbage, celery, cauliflower and so forth. It is almost impossible to sell them then but if they were stored until April or March, they would sell readily at your own price; at that time, the people begin to crave for fresh vegetables.

I have led you to spring. Well, there is lettuce and radish which are always in demand for spring salads. Rhubarb is the same. There is money in them if you have the proper facilities to produce them. When the ground is ready, in addition to the hotbed stuff the very earliest piece of dry, well drained, sunny land should be selected for beets, carrots and onions. These should be got in as soon as the ground is dry enough, the land being cultivated in the fall, if possible. As soon as the seedlings are big enough, thin, cultivate and encourage them in every way possible to get the first bunches on the market as early as possible for "It's the early bird that gets the worm." Keep your supply equal to the demand for it will not last forever. Later, the other men will be trying to be first too. Make all you can while the demand lasts. When the market gets glutted stop. It is better to feed your produce to cattle if they will eat it than to waste your time and team trying to sell it at less than cost, such as cucumbers at 50 and 75 cents a barrel, and so on.

There is a time to sell and a time to cease selling. Another example of this. In May and June, 1908, we could not supply the demand for lettuce. In July, the people wanted something different, perhaps strawberries. The same may be said of cucumbers. In June and July the demand was good but in August there was a glut, I said, "Don't

lower your dignity by offering what people don't want." About the end of July and the first of August, we offered nice, medium-sized cauliflowers. The demand was good. The grocers and hotels wanted them as fast as they matured and by the first or second week in September, our crop was sold and then our second crop was ready. But, alas, the demand was supplied. The time had come to cease selling.—J. Bebbington & Son, Fredericton, N.B.

### Lunenburg County, N. S.

H. T. Herb, Bridgewater

Commercial orcharding is yet in its infancy in Lunenburg county, N.S. We raise fine apples but too few of them.

Clean cultivation is practised in only a few cases. Those who practise it can be counted on the fingers of one hand. Spraying is a little more common. Spray pumps have been purchased to use on potatoes and some use them on their orchards as well. The general idea is that it does not pay to waste time on the orchard. "What is the use? You cannot sell the apples anyway." are expressions frequently heard.

The model orchard planted here is doing well but the farmers say, "What is the good of it? There are more apples raised here now than we can sell." They smile when I tell them that the more apples we raise the better chance we will have to sell them.

"You have nursery stock to sell," they say. Yes, there are three nurseries of apple trees near here, as fine stock as can be grown, offered at from 10 cents to 15 cents a tree and cannot be sold. "No, I have too many trees set out now," the farmer says when asked to buy. One nurseryman near here burned 1500 trees last spring.

I planted 300 or 400 this spring, but I know of no one else near here who is

planting an orchard. I have about 1400 set now. Some of them are commencing to bear. I shall demonstrate to others that orcharding pays. I think I can within five years.

The most of Lunenburg county is just as good a place to grow apples, I think, as the Annapolis Valley, except that it costs more to break the land as we have some stone. We are not nearly so liable to frosts, spring and fall, as the valley. The soil is richer and for that reason requires clean cultivation even more so than the Valley, as the grass grows ranker and stronger and takes more moisture from the soil that otherwise should go to the trees. Underdraining is more needed here than in the Valley but we grow a little better flavored apple and a better keeper.

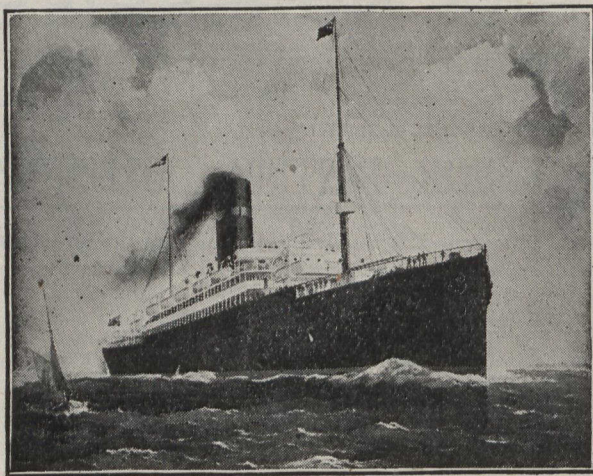
What we need most is a few settlers to purchase some of the farms that are lying idle all around. Nine out of every ten are idle or nearly so, and can be bought cheap. We should wake the people up and show them the chances that they have here, which are second to none in this naturally favored Canada of ours.

### Annapolis Valley, N. S.

Eunice Watts

Although the apple blossoms were exceptionally full, the fruits are not equal to the display of flowers, but the general impression through the valley is that the crop will be a good one. So far, the season has been very dry and unless the cultivator is kept going, crops will suffer. With some growers the pea crop is a failure, and the drouth has halved the strawberry yield; complaints of mis-shapen berries and nubbins are numerous.

The green aphid (*Aphis mali*) is not only



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attacking the nursery trees, but the old orchards also. We found that an application of Nico-soap had the desired effect, but they curl the leaves in such a manner that it is difficult to apply a spray to the under side of the leaves.

A small reddish-brown beetle, called *Gal-erucella cavicollis*, is for the first time in this district, attacking the wild and cultivated cherries, also peach trees by skeletonizing the leaves.

[NOTE.—Spraying with Paris green or arsenate of lead will control this insect.—Editor.]

Greenhouse cucumbers were being sold in July for three cents each. All out of door produce is backward. Strawberries dropped to 10 cents but began to rise again.

Tomatoes with good cultivation are doing well. Experiments in planting prove that plants from the same batch planted early, are much more forward than those transplanted to the ground later.

### Quebec

W. S. Blair, Macdonald College

The small fruit crop as a whole has been an average one. Strawberries came through the winter in good condition. Last season being unfavorable for plant growth, the crop was not up to the average. We find that unless our plants make good development of root and crown the crop will not

be large no matter how favorable the season at time of ripening. It is very important to give the strawberry patch the best of attention during summer and fall.

Currants both red and black are about average. The fruit is generally of good quality. Too little attention is given to the pruning of these fruits. They as a rule are seldom cultivated as they should be and little intelligence is usually displayed in keeping the plant in condition suitable for the development of first class berries.

Gooseberries are a medium crop. With English varieties the mildew destroyed the crops generally. American varieties in some cases show the disease present. We have tests with various strengths of lime-sulphur mixture for the control of this disease in progress on a badly infected patch, and hope to be able to report something definite as to its value for this purpose by this time next year.

Raspberries came through the winter without much injury and are giving a crop above the average. Seasonable showers are helping to swell the fruit and the quality is generally good.

Plums and cherries as a general thing are a light crop.

The apple crop will not be large but the fruit is much in advance of last year at this time. The fruit generally is quite free from scab and the apple worm has apparently not been so bad as usual, so a generally good class of fruit will be expected.

### L'Islet County, Que.

Auguste Dupuis

In the county of L'Islet, the crop of apples, summer, autumn and winter, promises to be very good; plums, light; cherries, very light; gooseberries, currants and raspberries, abundant. Curculio is increasing and causing much damage to plums. Black knot is spreading in cherry orchards from which it had been eradicated for several years.

Trees both fruit and ornamental, are making a very strong growth and their foliage is very fine. Nursery trees are growing well. The aphids multiply enormously on apple and plum tender shoots, and are very hard to destroy. Garden vegetables are growing luxuriantly.

### Manitoba

George Batho

The horticultural exhibit at the Winnipeg Industrial has never been a very important feature, and this year it was no more prominent nor no better than usual. Owing to lack of competition, the prize list has been pretty well shaved down, and so the competition is confined to a comparatively few sections. There were only a few cut flowers. Mrs. O. Lundgren, Winnipeg, won first in the class for 12 distinct varieties of sweet peas; Mrs. J. O. Boyle, Winnipeg, was first in the class for 10 varieties, also in the

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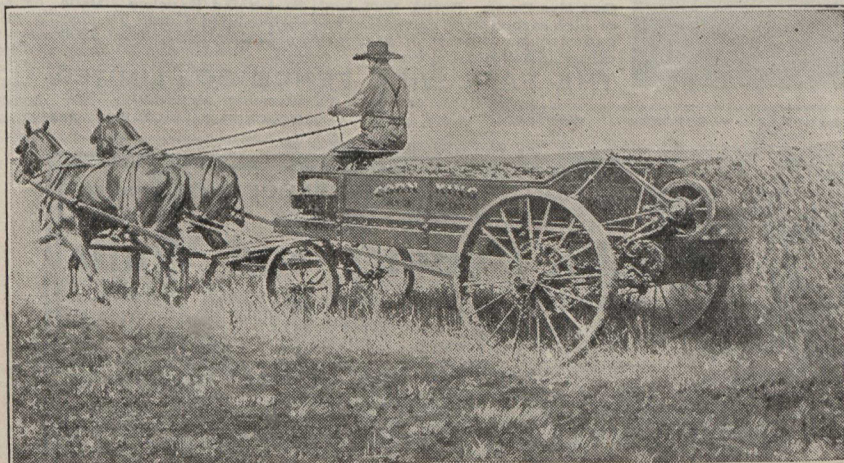
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class for 20 varieties. A. H. Dangerfield, Winnipeg, won first for collection of pansies.

Among the exhibits not for competition, the best was the large fruit display sent up by the Ontario Department of Agriculture. This attracted a great deal of favorable attention and should help to popularize Ontario fruit on the western market. For years the British Columbia government has sent a fruit exhibit, but this year none was present. The board of trade at Nelson, B.C., put up a nice exhibit which included a good deal of fruit.

An exhibit of Manitoba-grown roses and peonies as well as bottled home-grown fruits was sent in by the Buchanan Nursery Co., of St. Charles. The Elmwood Cemetery Co., Winnipeg, filled a corner with some choice ornamental stock.

The dates for the coming provincial horticultural exhibition to be held in this city have been fixed for August 25, 26 and 27. This event, a year ago, was a great success, and there is every reason to expect a better show this year. The Brandon Horticultural Exhibition will be held in that city on August 24 and 25.

### Alberta

Arrangements have been made to have a spectacular flower parade through the streets of Calgary in connection with the Horticultural Exhibition on August 12th. The idea is to have all the districts in Alberta represented in the parade, the fruit, flower and vegetable products of each district to be exhibited on floats. It is expected that this will be a feature of much interest.

At the exhibition, it is expected that there will be a grand display of horticultural products. All kinds of flowers, fruits and vegetables grown in the province will be shown in separate classes. Awards will be given, also, for the best kept and laid-out gardens, lawns and borders, best cultivated trees, window boxes, bouquets of wild flowers and collection of native flowers. The

secretary of the exhibition is Mr. H. G. Burrows, Calgary.

### British Columbia

YALE-CARIBOO, B.C.

Keremeos.—Apples, cherries, plums and pears, good; peaches, failure.—J. E. A.

Salmon Arm.—Apple crop will be good; plums and prunes, fair; cherries, good; pears, light; raspberries and blackberries, full crop.—J. C. B.

KOOTENAY CO., B.C.

Crawford Bay.—Apples promise to be plentiful. Some orchards are affected by canker, but we expect to control it.—R. B.

NEW WESTMINSTER CO.

Sardis.—Cherries, light; plums and prunes, medium; raspberries and blackberries, good. Apples will be medium. Canker is prevalent. Aphis of all kinds have done much damage. Black spot is showing on apples that were not sprayed.—J. B.

Agassiz.—All fruits are a very light crop. A little brown rot is in plums. Insect pests are not serious this season.—T. A. S.

Hammond.—Fruit crop is slim this year. Raspberries and blackberries are showing well. Tree fruits are light and poor in quality. Much fungous disease is showing and tent caterpillars were bad. Markets for small fruits are bad, as American fruits are flooding the prairie towns.—J. B.

The manager and secretary of the Okanagan Fruit Union, Limited, that was organized this spring, are respectively, Mr. E. E. Samson and Mr. Cecil H. Oliver, both of Vernon, B.C.

The dates for the second National Apple Show to be held at Spokane, Wash., have been changed from Dec. 6-11, to Nov. 15-20. The management is looking for a big showing of fruit from British Columbia, Ontario and the other provinces of Canada. Intending competitors can secure any information and prize lists from the secretary, Mr. Ren. H. Rice, Spokane, Wash.

### Kootenay Valley, B.C.

Edgar W Dynes.

For the past few weeks, the growers have been busy harvesting the strawberry crop. On the whole the crop appears to have been lighter than in some previous years but the returns have been much more satisfactory.

There are a number of reasons for this, among them being that the growers are learning to grow the varieties of berries that ship best; a second is that the establishment of the Kootenay Jam Factory has provided a local market for all the second grade fruit which would otherwise have gone to waste; and thirdly, the Dominion Express Company made special provision for the transportation of the berries by fitting up a barge especially for the purpose.

Perhaps, a more definite mention of these various items might be of interest. As to the transportation facilities afforded it might be well to contrast the methods adopted in previous seasons with such ill success to the methods adopted this year with such splendid results.

In previous years the berries were all gathered by the outgoing steamer leaving Nelson in the morning and reaching Kootenay Landing about noon where a connection was made with the Crows' Nest Line. This meant that the berries were loaded into the cars in the middle of the day, and, despite the fact that cars were always iced and re-iced in transit, the berries did not ship well. This year, a barge was fitted up with a temporary top, and instead of leaving Nelson in the morning, left at six o'clock in the evening, gathering berries along the lake en route, reaching Kootenay Landing early in the morning and giving plenty of time to have the berries properly cooled and carefully loaded before train time. In this way the berries have all shipped well and the returns have been satisfactory, netting the growers from \$2 a crate and upwards and in instances as high as \$3 a crate.

The importance of the establishment of the Kootenay Jam Factory can hardly be overestimated. The *Kaslo Kootenayan* in a recent issue reports that one grower sold \$400 worth of berries to the Jam Factory off three quarters of an acre after the selected berries had been shipped.

Mr. Gaunce, of the McPherson Fruit Company of Calgary, which purchased the bulk of the strawberry crop this year, expresses himself as well pleased with what he saw and commented very favorably upon the quality of the fruit sold to him and also upon the excellent manner in which it was packed by the growers. In only one instance, he said, did he have to send a crate of berries back because of poor quality or careless packing. The present indications are that a very much larger acreage will be planted in strawberries this fall than in any previous year.

### The Express Company Incident

The fruit growers of the Niagara peninsula protested to the Board of Railway Commissioners, on July 7, against the raising of express rates on fruit shipped from Queenston and neighborhood to Toronto. After hearing the evidence, Judge Mabee ordered the Canadian Express Company to restore its rates on fruit from Queenston to Toronto to 30 cents as the company had agreed that the rates in effect when the Railway Commission undertook an investigation of express rates, would be maintained while the matter was before the Board. The Canadian Express Company had raised its rates from 30 cents to 40 cents despite this agreement. According to the company this was done because the business did not pay at the lower rate but, as remarked



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by Judge Mabee, it is a "peculiar coincidence" that the Canadian Express Company raised its rates immediately after the Dominion Express Company had gone out of the fruit carrying business in that locality.

The decision of the Board was a victory for the fruit men, who in many cases besides this have been held up by the express companies, and it reflected much credit on Mr. W. H. Bunting of St. Catharines, who presented the case for the growers. In a recent letter to THE CANADIAN HORTICULTURIST, Mr. Bunting sums up the situation as follows:

"The complaint against the express companies for having arbitrarily raised the rate on fruit from Queenston to Toronto from 30 to 40 cents per 100 pounds was not lodged with the Railway Commission on behalf of the Queenston and Niagara shippers alone, although they were interested to the extent of hundreds of tons of fruit from these points each year, but more especially because there was an underlying principle at stake which affected the whole fruit growing community throughout the entire province.

"In the first place, the companies had given an undertaking to the Commission that there would be no interference with the rates in the way of advancing them while the whole question of the express companies' relations with the public was under consideration by the Board of Railway Commissioners. The present instance was the second time that this undertaking was violated and the chairman expressed in plain terms his views of these repeated attempts of the express companies to get away from their contracts.

"In the second place, the Fruit Growers' Committee, in proposing last January, what they considered would be a fair and equitable adjustment of express rates on fruit, took as a basis the existing rate to Toronto from the farthest point in the Niagara peninsula by way of the Canadian Express Company, as a fair rate for the entire section as far as Hamilton and, with this rate as a starting point, suggested a schedule of rates on mileage over the entire system of the two companies operating out of this district, which contemplated a general reduction of from 10 to 25 cents on existing rates, which for many years have been felt to be exorbitant and a burden to the fruit industry. This feeling has obtained to such a great extent, that wherever it has been at all possible, the growers and shippers have been forced to avail themselves of the freight service as the only alternative. This situation has resulted, however, in depriving many of the smaller towns and villages of their just proportion of the fruit grown, and has at times congested the larger centres.

"The main object of the whole agitation against prevailing conditions as far as the express companies are concerned is to obtain through the Railway Commission, such an adjustment of rates in part, and such improvements in the service, as will enable the fruit growers of the province to place their commodity in the hands of the public in a speedy manner, in good condition and at a reasonable cost. Up to the present time, however, I regret to say that we have not had the co-operation of the companies in this laudable object as fully as the situation warrants.

"A concrete example of the efforts of the fruit growers to open new markets and effect a better distribution of fruit may be found in the case of a carload of strawberries sent by Dominion Express from St. Catharines to Winnipeg upon which the Company exacted a total charge of \$510 and for which, largely owing to the fact

that the car was not delivered on schedule time, the net returns to the shippers was some \$74, barely enough to pay for the packages in which the fruit was shipped.

"We anticipate however, when the whole situation is considered by the Board, that a measure of relief will be ordered that will remove many of the difficulties under which the industry is now laboring."

**Notice to Fruit Growers**

J. A. Ruddick, Department of Agriculture, Ottawa

Last year this Department arranged to have one cold storage chamber reserved on four steamers sailing weekly from Montreal to London, for shipments of early apples and tender fruits, the Department guaranteeing the earnings of the whole space. Similar arrangements have been made for the present season, with the exception that the steamers will sail from Montreal alternately to Glasgow and London. The steamers and sailing dates will be as follows:

Steamer	Line	Sailing Date	Destination
Hesperian	Allan.....	Aug. 21	Glasgow
Cairnrona	Thomson..	" 28	London
Grampian	Allan.....	Sept. 4	Glasgow
Hurona	Thomson..	" 11	London
Hesperian	Allan.....	" 18	Glasgow

One chamber on each of these steamers will be available for shipments of fruit at the regular rate of freight, to be paid to the steamship companies in the usual way. A proper temperature will be maintained in these chambers regardless of the quantity of fruit which may be offered for shipment. In each case these steamers will sail on Saturday morning so that shipments should reach Montreal not later than Friday morning of the same week.

The Department of Agriculture will assume no responsibility in connection with these shipments but there will be the usual supervision by the cargo inspectors at Montreal and at port of destination. There-

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mographs will be installed in these chambers so that a complete record of the temperature on each voyage will be secured.

As the space in these chambers is limited shippers who intend to take advantage of the facilities offered on these five steamers must notify the Dairy and Cold Storage Commissioner, Ottawa, before making shipments, and freight will be accepted in the order in which the space is booked. Applications for space should state the number and size of the packages which are to be shipped.

In connection with these sailings the Department has arranged with the Grand Trunk Railway Company to run an iced car weekly from St. Thomas to Montreal to pick up whatever shipments of fruit may offer at the different stations between St. Thomas and Hamilton, via. Jarvis, the car to be sealed at Hamilton and forwarded to Montreal by fast freight without any extra charge for the icing or for the special service. This car will leave St. Thomas at 7.20 a.m. on Wednesday of each week, commencing August 18 and ending September 15. Following is the proposed schedule for this car showing the time it will be due at the different stations named. Freight, however, will be accepted at any station on the route between St. Thomas and Hamilton.

	Station	Time	Train	Day
Lv.	St. Thomas	7.20 a.m.	72	Wed.
"	Aylmer...	8.05 "	"	"
"	Tillsonburg	8.50 "	"	"
"	Delhi.....	9.45 "	"	"
"	Simcoe....	11.15 "	"	"
"	Jarvis....	12.15 p.m.	"	"
"	Hagersville	2.00 "	Way-freight	"
"	Caledonia..	4.00 "	"	"
Arr.	Hamilton..	7.00 "	"	"
"	Montreal..	3.00 a.m.	94	Fri.

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**BUSH FRUITS**  
By Prof. Fred W. Card.  
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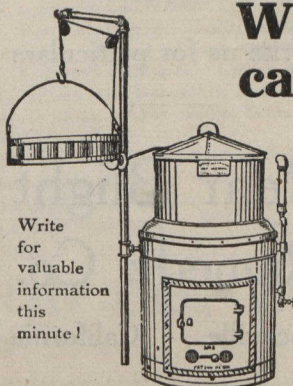
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## Fruit Crop Situation

(Continued from Page 176)

crop. Cultivated red raspberries are nearly a failure while the wild ones are O.K.—J.M.F.

CHATEAUGUAY CO., QUE.

Chateauguay Basin.—Raspberries are late but a fair crop; plums, and cherries, nil. Apples are developing well, but badly marked by curculio.—P.R.

CARLETON CO., ONT.

Ottawa.—Raspberries, gooseberries, currants and grapes are over the average crop while plums are very light and apples under the average. Insect and fungous troubles are much less than usual.—R.B.W.

GRENVILLE CO., ONT.

Maitland.—Apples are growing well and keeping very free from fungi. There are very few insects of any kind and everything is favorable for a fair yield of good fruit.—H. J.

HASTINGS CO., ONT.

Belleville.—Present appearances indicate

a medium crop of winter apples and the apples show a nice clean appearance.—F.S.W.

ONTARIO CO., ONT.

Oshawa.—Summer, fall and winter apples will be a medium crop this year. The apples appear to be clear of fungi and insects so far.—R.M.G.

DURHAM CO., ONT.

Newcastle.—Prospects are for a fairly good crop. Apples are not as good as the blossoms promised. The drop was heavy because of the early drought and apples do not need thinning this year. Good rains have saved the situation and we look for a fair quality of good sized fruit. Buyers are offering \$1.00 on the tree.—W.H.G.

PEEL CO., ONT.

Lorne Park.—Raspberries will be a full crop and good samples. Apples will be only a medium crop. Much fruit has fallen and trees are badly infested with a leaf-curling aphid. The strawberry crop in this district

was a full one but prices were low, averaging about 5½ cents for the season as against 7 cents last season. Raspberries will probably not average much higher. Melons are late. The cut worm has been busy.—L.A.H.

NORTHUMBERLAND CO., ONT.

Colborne.—Medium crop of apples expected. Pears are light. Grapes promise a good crop and other small fruits are plentiful.—W.E.

HALTON CO., ONT.

Burlington.—Apples are fair to good crop; pears, light; plums, fair to good; cherries, good; peaches, light; currants, fair; raspberries, fair; blackberries, good; strawberries, light to fair; gooseberries, fair to good. The codling moth is beginning to show.—A.W.P.

LINCOLN CO., ONT.

Queenston.—Bountiful rains have saved many thousands of dollars for the fruit growers. The prospects are for a full crop of peaches, a fair crop of plums and a very light crop of pears. Grapes promise a full crop. Raspberries are doing well although somewhat injured by the drought. Blackberries should be a full crop. There are practically no apples in this section.—H.S.F.

NORFOLK CO., ONT.

Simcoe.—The apple crop is about 60 per cent. of last year's crop. Aphid has done considerable damage.—J.E.J.

LAMBTON CO., ONT.

Forest.—The apple crop promises fair. The dry weather is causing the fruit to drop considerably.—D.J.

SIMCOE CO., ONT.

Orillia.—Apples are not as numerous as last report seemed to indicate. The June drop was heavy. Not enough are left to make a good crop but they are looking well so far, not being troubled with either insect or fungus pests. All bush fruits are good.—C.L.S.

BRUCE CO., ONT.

Walkerton.—Raspberries promise well if weather is favorable. Gooseberries and currants are good; cherries, light; plums, medium; peaches, good; pears, light; early apples, light; winter varieties, medium to a full crop. Quality is good at present.—A.E.S.

GREY CO., ONT.

Clarksburg.—All kinds of fruit have made wonderful progress since last report. Apples set very heavy and are staying on well. Unless there is a lot of thinking done, there will likely be a lot of inferior fruit on the orchards that are not under cultivation. The trees that were sprayed well are pretty free from worm and scab. There is a very good crop of cherries but a lot of rot where trees were not sprayed.—J.G.M.

YALE-CARIBOO, B.C.

Vernon.—There will be an average crop of apples, plums and prunes. The past hard winter followed by late spring frosts seriously affected the pear, cherry and peach crop, which will be much less than usual. Raspberries and blackberries are a good crop. This has been a bad season for insect and fungous pests so far.—A.T.B.

Gellatly.—Small fruits are a good crop. No peaches or cherries. Apples and prunes are a good crop and plums light. Grapes are very poor. The small fruits are in good condition now. Aphid of all kinds are quite numerous.—D.G.

VANCOUVER ISLAND, B.C.

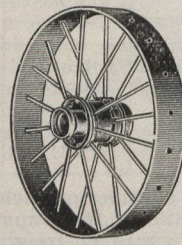
Victoria.—Apples and pears, only fair, plums, good; raspberries, fairly good; logan berries, plentiful. Some aphid showing.—A.H.J.

(See also Page 180)

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Mention THE CANADIAN HORTICULTURIST

**About Cooper's Fluids**

Considerable interest has been taken in Cooper's Spray Fluids since they were introduced into Canada last year. As is the case with all new spray mixtures, most fruit growers have been waiting for accurate reports of their value in this country before using them for more than experimental purposes. Caution has been practised and rightly so. Various reports on tests with these fluids have been received by THE CANADIAN HORTICULTURIST, some of them strongly adverse. As they have been tested by a large number of orchardists in Oshawa, Bowmanville and Newcastle, an editorial representative of THE CANADIAN HORTICULTURIST, who visited that district in June, made some enquiries regarding the results that have been secured there.

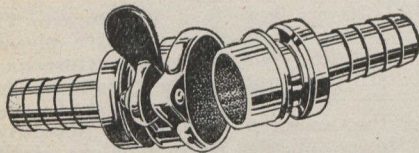
Mr. E. C. Beman of Bowmanville said that he had used V.1. Fluid with no satisfactory results. On investigation, however, our representative was told that Mr. Beman's men had sprayed the same trees with some other mixture and covered the V.1. A definite report on the fluid therefore could not be given. One other grower, who had tried V.1. only twice, also stated that he did not consider it of much use.

At Bowmanville, Mr. Hamley has an orchard that two years ago was dying from infestation by the orchard-shell scale. Many of the trees had to be cut out wholly or in part. In the spring of 1908, they were

sprayed with V.1. Fluid and again this spring. The orchard was inspected by THE CANADIAN HORTICULTURIST last month and appeared to be in excellent condition, barring the evidence that it gave of past injury. The trees were healthy and none of the scales that still adhered to them and that were examined were alive. Mr. Hamley is much pleased with the results and attributes the change to the use of this fluid.

At Newcastle, Dr. Robt. McIntosh also told our representative that his trees were dying two years ago from the scale. He used V.1. Fluid in the spring of 1908 and also this spring and is now using V.2. "My trees were becoming worthless," said the doctor, "as can be seen by the limbs that have been pruned away and by the markings of scale that still can be seen on the bark. The trees were completely encrusted. This year they are looking fine. I am perfectly satisfied with V.1. and think that all growers should give it a fair test accompanied by V.2. and extending over two seasons at least before condemning something that they have scarcely tried, if at all."

Both V.1. and V.2. were used last year and this by Mr. J. K. Allen, of Newcastle, who told our representative that he considered them the best mixtures that he had ever tried. "Although my orchard was in bad shape before using them," said Mr.



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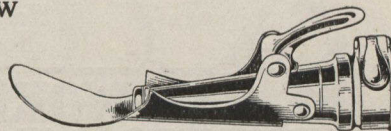
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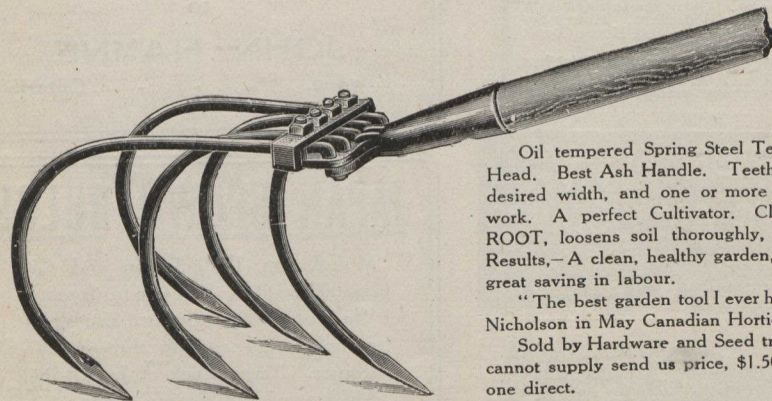
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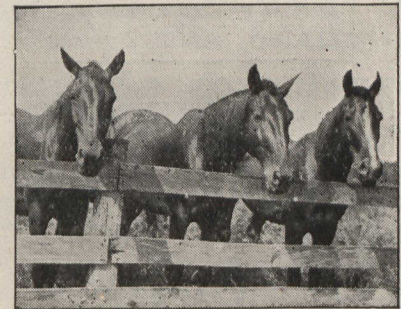
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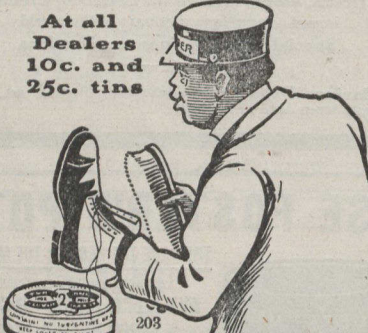
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Allen, "the trees never looked better than they do this spring. The growth has been exceptional and has been remarked about by my neighbors. These fluids will control oyster-shell all right. I used V.I. in November last year and intend in future to give one spraying in the fall."

### Benzoates as Fungicides

W. F. Van Winckel, Toronto

During the last two or three seasons, Mr. Herbert H. Dow, general manager of the Dow Chemical Co., of Midland, Mich., has been experimenting with benzoates as fungicides on his orchard. Having had considerable experience with benzoates as food preservatives, Mr. Dow concluded that benzoates should also kill any fungi or bacteria on unripe fruits; consequently, during the season of 1906, when a crop of plums began to rot when only about two-thirds grown, sodium benzoate was sprayed, and although the spread of the rot was entirely stopped, the sodium benzoate being exceedingly soluble was so easily washed off as to necessitate spraying after each rain. This led to experiments with the more insoluble benzoates, and the calcium salt was found more satisfactory.

Experiments during the season of 1907.—Eight have shown calcium benzoate used in conjunction with a very weak Bordeaux to be very effective; also this mixture was found to adhere much better than ordinary Bordeaux. The most effective mixture is made as follows: One pound of copper sulphate is dissolved in 10 gallons of water, and to this is added one pound of calcium benzoate dissolved in 10 gallons of water. When well mixed, one pound of lime is

added and water sufficient to make one barrel (40-42 imperial gallons.)

One very prominent authority (Thorfe) gives the relative efficiency of a number of different fungicides and according to this table one part of sodium benzoate to 2,000 parts of water will prevent all fungus growths, while to accomplish the same results with copper sulphate one part to 133 of water is required. Calcium benzoate would be approximately the same strength in fungicidal value.

For potato scab soaking the potatoes in a solution of one ounce calcium benzoate to a gallon of water (for three or four hours) is highly recommended, and the Michigan Agricultural College reported a yield of 80 bushels to the acre more where benzoate Bordeaux was used as a spray, than where ordinary Bordeaux was used.

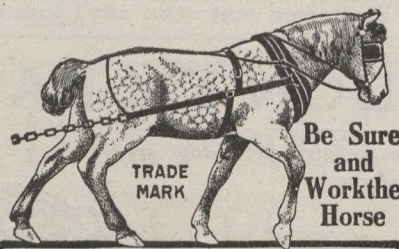
Benzoates are not poisons, and where an insecticide is desired as well as a fungicide, calcium benzoate has been used with lead arsenate and adheres exceedingly well to the foliage, giving splendid results.

[NOTE.—Should any of the readers of THE CANADIAN HORTICULTURIST desire samples of benzoate for experimental work, it is probable that they could get same by applying to the author of the foregoing article. Address, 148 Van Horne St., Toronto.—Editor.]

Buy a kodak and take some photographs of your lawn and garden.

The Ottawa branch of the Ontario Vegetable Growers' Association had a pleasant and profitable outing on the afternoon of July 8th, as guests of the Ottawa Nurseries. Mr. W. J. Kerr conducted the party over the nurseries. Addresses were given by Messrs. W. T. Macoun, Alex. McNeill and others.

The decorative floral display will again be a feature of the floriculture exhibit at the Canadian National Exhibition, Toronto, this year. These immense banks of flowers cover 500 square feet and the premiums total \$1100. Those who saw this display last year will not miss the opportunity of seeing it again.



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If you use Bickmore's Gall Cure your teams can work right along and be cured of Saddle and Harness Galls, Chafes, Rope Burns, Cuts, Scratches, Grease Heel, etc. while in harness. The more work the quicker the cure.

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**COMING EVENTS**

Under this heading, notices of forthcoming exhibitions and meetings of horticultural importance will be published. Send the information as long in advance as possible.

**CONVENTIONS.**

- Oka, Quebec Pomological Society, ..... Aug. 24-25.
- Toronto, Canadian Horticultural Association ..... Nov. 10-11.
- Toronto, Ontario Fruit Growers' Association ..... Nov. 10-11.
- St. Catharines, American Pomological Society ..... Sept. 14-16.
- Victoria, British Columbia Fruit Growers' Association ..... Jan. 28.

**EXHIBITIONS**

- Charlottetown ..... Sept. 21-24.
- Fredericton ..... Sept. 14-23.
- Halifax, Nova Scotia Provincial ..... Sept. 25-Oct. 2.
- London, Ont., Western Fair, Sept. 10-18.
- New Westminster ..... Oct. 12-16.
- Ottawa, Central Canada ..... Sept. 10-18.
- Sherbrooke, Que. .... Aug. 28-Sept. 4.
- Spokane, Wash., National Apple Show ..... Nov. 15-20.
- St. Catharines, Niagara Dist., Sept. 15-17.
- Toronto, Canadian National, .. Aug. 28-Sept. 13.
- Toronto, Ontario Horticultural, .. Nov. 9-13.
- Victoria ..... Sept. 20-25.
- Winnipeg, Horticultural ..... Aug. 25-27.

**An Opportunity**

Editor, THE CANADIAN HORTICULTURIST;—A fortune awaits the man who originates a first-class strawberry, which ripens from July 1st to July 20th. Good Long Island strawberries were selling at retail on July 1st for from 18 to 20 cents a quart-box, and fancy berries brought 25 cents a box.

On the same date, huckleberries sold for 18 cents a quart; medium blackberries, 13 cents a quart; Reine Hortense cherries of local growth, 17 cents a quart; black-caps and red raspberries, 11 cents a pint.

As there are 10,000 retail groceries and retail fruit dealers in this city the consuming market is a large one. If each dealer sells only 25 boxes of strawberries, the total consumption is 250,000 boxes per day.

We receive strawberries from California, Texas and Louisiana, in January and February; from Florida, Alabama and Georgia, in March and April; from Carolina, Virginia, Maryland and New Jersey, in May and early June; and from Long Island, the last half of June.

A strawberry that ripens during the first 15 days of July will have no competitor in this market and will find a ready sale, if of first class quality, at 20 cents a quart.—Francis Wayland Glen, Brooklyn, N.Y.

**Items of Interest**

The cut worm has been very injurious to early sown crops, such as onions, carrots, parsnips and cabbage and to late cauliflower. Some growers have planted the latter as many as seven times before a stand could be procured. Winter celery planting is drawing to a close. The general run of crop is a fair average. The first celery was brought on the Kingston market and also a few ripe tomatoes about July 10.—J. N. Watts, Portsmouth, Ont.

A meeting of fruit dealers and buyers was held in Grimsby on July 20 to consider ways and means of getting the growers to put

the fruit up in better shape. It was pointed out that many growers were bringing in fruit in baskets that were only partly full, that they did not fasten the covers of the baskets properly, that much of the fruit is inferior and that fruit that is picked after shipping time of one day is held over until shipping time of the next day. The dealers stated that unless dishonest and careless growers did not change their ways measures will be taken to force them to do so. The Dominion Government may be asked to send a special inspector to that district.

During the second week of the Canadian National Exhibition in Toronto, a number of important meetings will be held in the tent of the Department of Agriculture. On Tuesday, Sept. 7th, at 2.30 p.m., the directors of the Ontario Vegetable Growers' Association; on Wednesday, Sept. 8th, at 2.30 p.m., the directors of the Fairs and Exhibitions Association; and on Thursday, Sept. 9th, at 2.30 p.m., the directors of the Ontario Horticultural Society.

**It's Military Year.**—Fourteen out of the fifteen bands so far engaged for the Canadian National Exhibition, Toronto, are military organizations. This is in keeping with the military nature of the special attractions and the openly expressed intention of the management to make this Military Year at the Fair. The list of bands engaged to date is as follows: Winnipeg Citizens Band; Royal Can. Regiment Band, Halifax; Royal Can. Horse Artillery, Kingston; Queen's Own Bugle Band; 48th Highlanders Pipe Band; Queen's Own (Exhibition Band), Royal Grenadiers; 48th Highlanders Brass Band; Governor-General's Body Guard; Cadet Battalion Band; 13th Regiment, Hamilton; 91st Highlanders, Hamilton; 38th Battalion, Brantford; 30th Battalion, Guelph; 65th Regimentment Band, Buffalo.

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4 No. 8 Hot Water Boilers**

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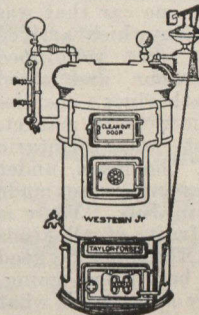
Stock Strictly First Class  
Prices quoted on application and your requirements for the season guaranteed if arrangements made now. Prompt shipment can be made. Act as agent in your locality and get your Baskets right.

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LIMITED  
OWEN SOUND, ONT.

**POULTRY DEPT.**

Conducted by S. Short, Ottawa

Chickens that were hatched early in May, that have been fed at all properly, should now average two pounds each in weight. The sex of each can readily be told. Usually there are half of each. Young cockerels at this stage of their lives are quiet and fatten easily if fed well. It is good management to select now such young males as may be required for the breeding pens and dispose of the remainder. Broiled chicken and green peas are a combination that compensates for a good deal of the care and expense of production and one feels, after enjoying such a dish, that he has not labored in vain. The advantage of removing the surplus cockerels is that it leaves more room for the pullets. When winter comes and eggs are scarce, vain is the effort and lost is the skill if applied to half-grown and



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half-nourished pullets, with hope of getting good egg results. Now is the time to feed generously, to give ample growing room, to keep free from vermin, the pullets, and so bring them to maturity by November that they may go into winter quarters, fit; that is, in the pink of condition, vigorous and ready to bear the strain of the long confinement and to lay.

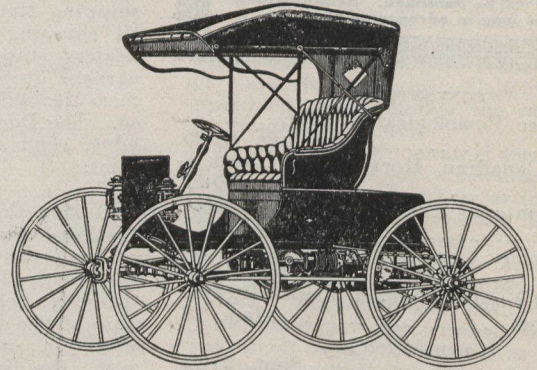
It is becoming a problem just now how to make both ends meet, financially, in chicken raising. Economy in feeding is necessary but also every fowl that is kept must be fed sufficiently or disposed of. That suggests getting rid of the extra cockerels. The old males are now of no further use. Why not turn them out? The hens lay just as well without their company and infertile eggs are nicer, and keep fresh longer. Likewise, the oldest hens will have about laid themselves out and, if not killed off now, will have to be kept till after moulting when the poultry market is glutted with the fall supply.

The strawberries that were shipped to Winnipeg in June by the St. Catharines Cold Storage and Forwarding Co., St. Catharines, Ont., arrived in good condition and sold at fair prices, except one car that was made up at Jordan Station which arrived soft. Some strawberries were re-shipped from Winnipeg to Saskatoon and stood the test well. St. Catharines cherries also turned out well in the western market. "The people of the West want Ontario fruit," reports Mr. Robt. Thompson, under whose direction the shipments were made and who visited the west in July. "There is a big opening there for fruits of all kinds and our fruit, placed in the west in good condition, will bring the best prices going, because it has high quality and that is what the westerners want."

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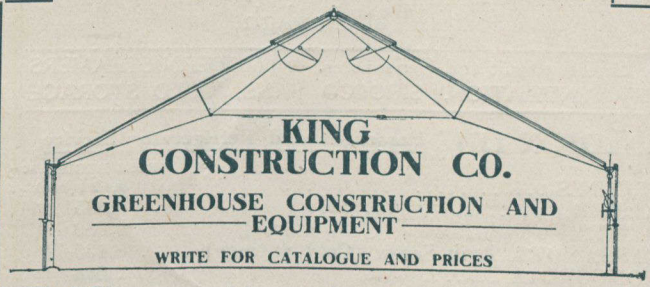
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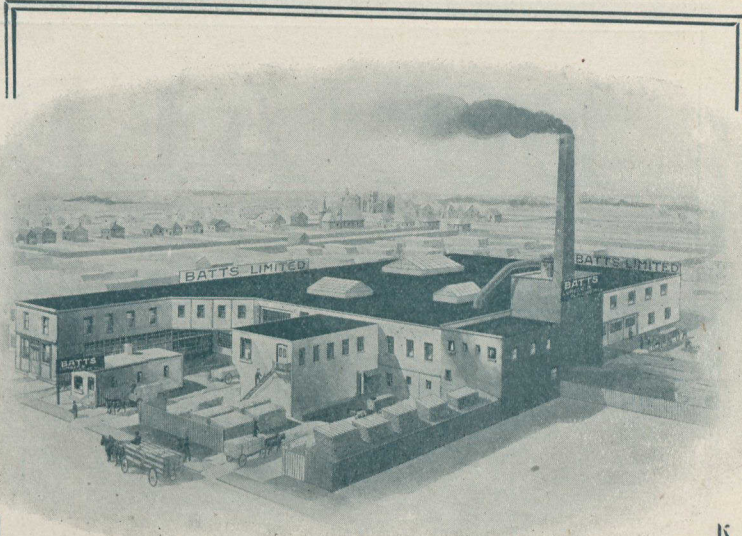
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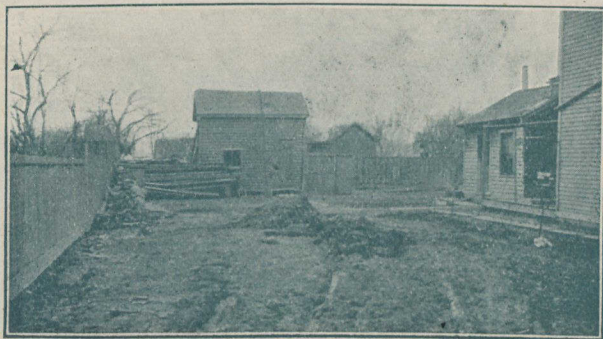
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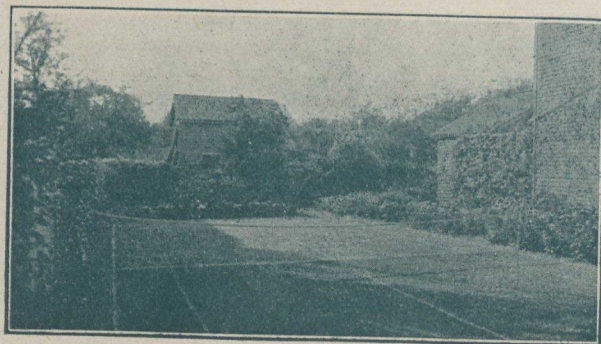
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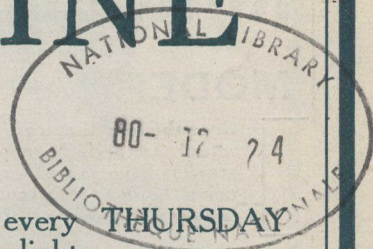
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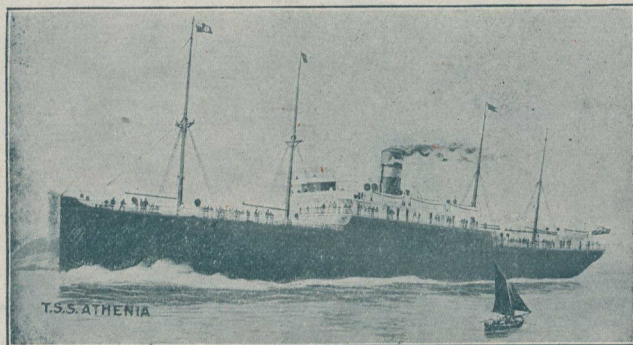


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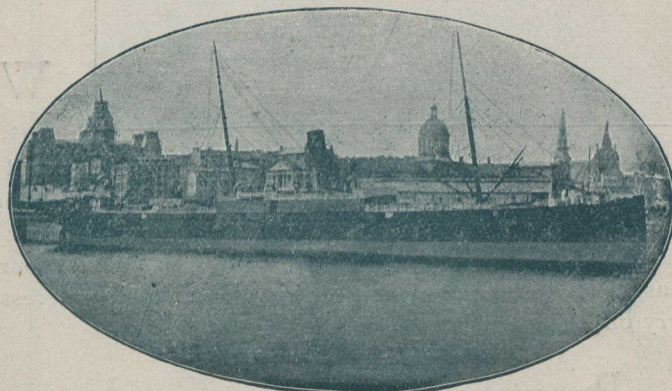
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