

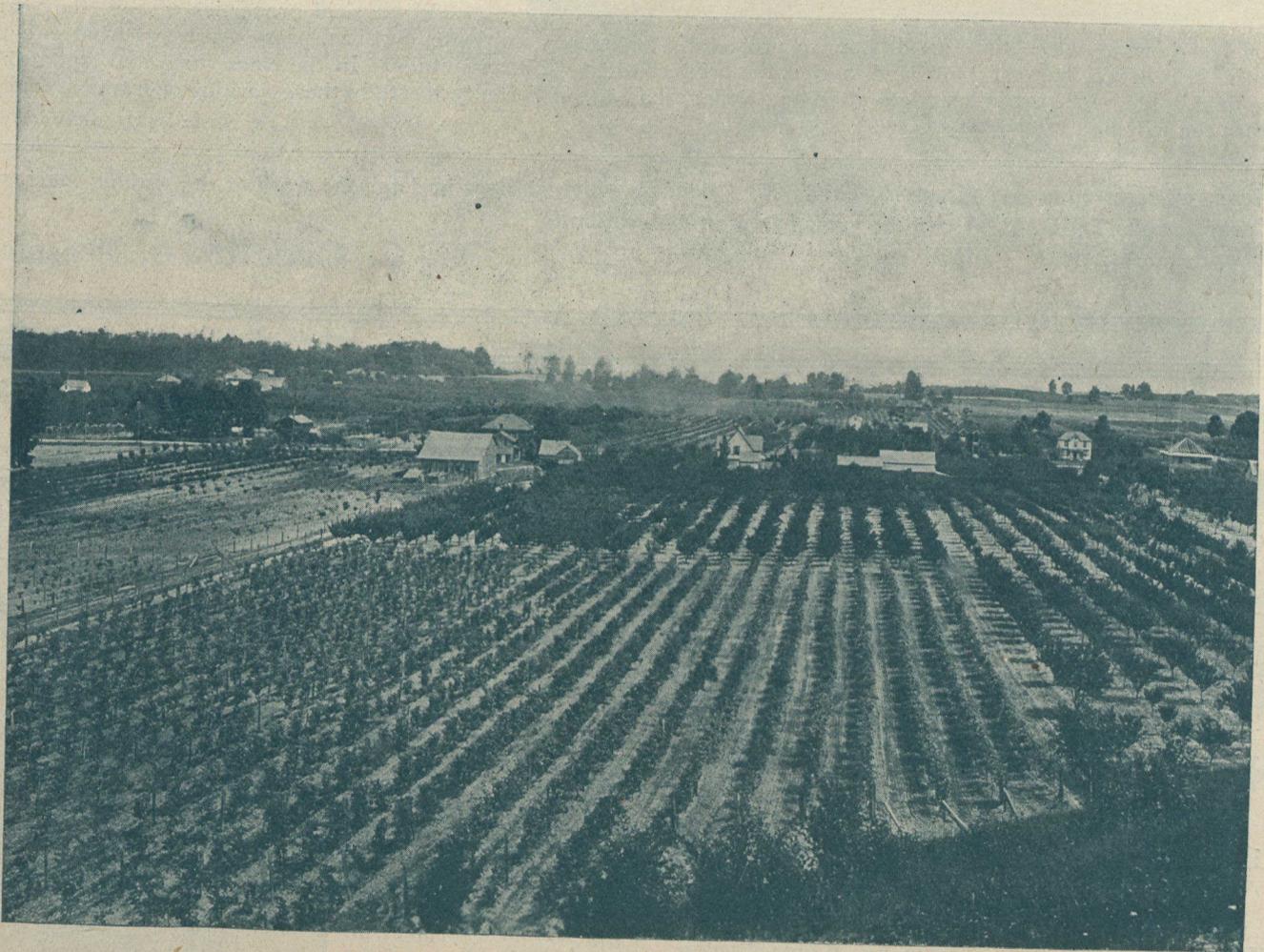
THE CANADIAN HORTICULTURIST

O.A.C.
Revue Rev. C. J. S.

AUGUST, 1910
Vol. 33 No. 8

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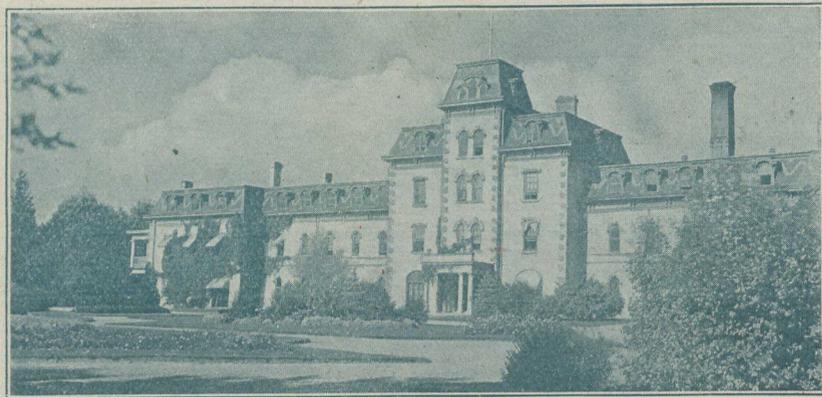


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The Canadian Horticulturist

Contents for August

Scene in the Niagara Fruit District, Ont. . . . Cover

Fruits and Fruit Growing

Fertilizers for the Orchard and Market Garden
A. E. Slater 183
 Cover Crops in the Orchard . . . *Grant S. Peart* 184
 The San Jose Scale and the Fruit Pests Act . . . 185
 Boxes vs. Barrels in the East *Dr. S. W. Fletcher* 186
 Trimming Blackberries 186

Flower Garden and Lawn

An Amateur Flower Grower's Garden in August
W. Hunt 187
 Wild Flowers for the Home Garden 187
 Prepare Your Paeony Beds Now . . . *John Cavers* 188
 Insects on Rose Bushes 189
 Coal Ashes as a Fertilizer 189
 The Perennial Border *C. Watters* 189
 Lawn and Garden Hints 189

Vegetables and Market Gardening

More About Mushrooms *J. McP. Ross* 190
 Hothouse Vegetables *A. H. Walker* 191

General

Editorials 192
 Publisher's Desk 193
 British Columbia's Big Apple Show 194
 Death of H. S. Peart 195
 Notes from The Provinces 196
 Fruit Prospects in the States 200
 The New Assistant at Ottawa 201
 Shipping Strawberries West 201
 Peach Shipments to Great Britain 202

INDEX TO ADVERTISEMENTS.

Apple Press	198
Bank	201
Books	197, 200
Boxes, Baskets and Barrels	193, 195, 196, 199
Building Material	201
Cameras	200
Classified Advertisements	vi
Commission Merchants	194, 196, 197, 198, 199, 201
Exhibitions	ii, 198, 201
Fencing	vi
Fertilizers	iii, 179
Flower Pots	vi
Fruit Lands	vi
Furnaces	202
Greenhouse Material and Supplies	iii, iv, 194
Implements and Tools	196
Insecticides and Fungicides	201, vi
Ladders	195
Mail Order Houses	v
Nursery Stock	iv, 193
Pianos	199, 200
Roofing Material	197
Rubber Stamps and Stencils	201
Safes	198
Schools and Colleges	ii, 200
Seeds and Bulbs and Plants	200, 201
Steamship Companies	vii
Telephones	198, viii
Veterinary Remedies	200
Weedicide	199

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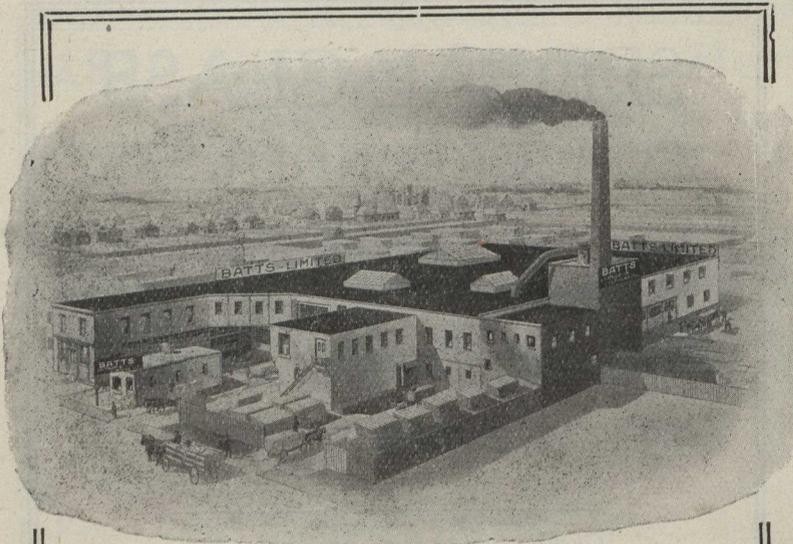
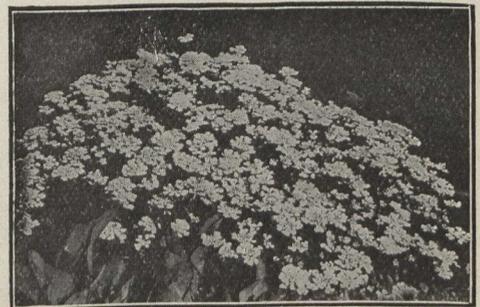
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The Canadian Horticulturist

Vol. XXXIII

AUGUST, 1910

No. 8

Fertilizers for the Orchard and Market Garden

A. E. Slater, O. A. C., Guelph, Ont.

THE use of artificial fertilizers by market-gardeners and fruit-growers of late years has increased very considerably.

It is beginning to be generally recognized that fertilizers yield their best returns when applied to vegetable crops, and unless there be an abundant available supply of farmyard manure, it is a difficult matter to produce the maximum crop on a small piece of land without enrichment of the soil.

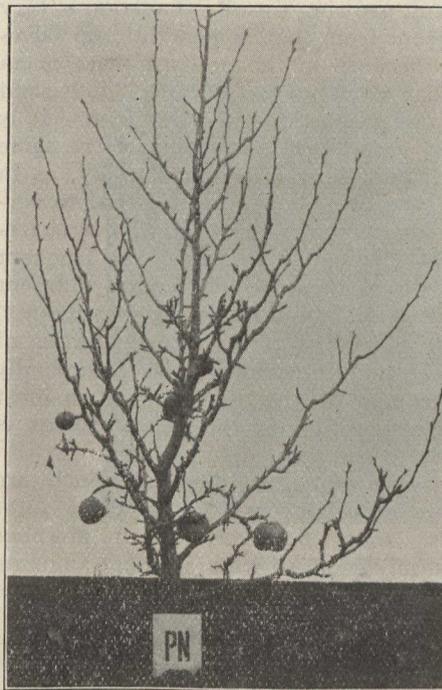
Many successful market-gardeners in the United States look upon artificial fertilizers as a very necessary adjunct to farmyard manure, and use it accordingly. Farmyard manure, while adding humus to the soil, and improving its physical texture and water holding power as nothing else can, does not, however, supply large amounts of fertilizing substances, and what is supplied is in a more or less unavailable form and cannot be used directly by the plant. For instance, there is no better method of

slowly building up the fertility of any soil than through the continued application of barnyard manure, and the ploughing down of leguminous crops, but if we want immediate results, as for instance the quick forcing and bringing to maturity of a crop of lettuce or radishes,

desires to check leaf and wood growth to a great extent and to stimulate the formation of fruit; the gardener desires to stimulate leaf growth, and does all in his power to do so, and further, his crops are harvested in the green or immature state.

THE PARTS THEY PLAY

Let us then look at the part that nitrogen, phosphoric acid and potash play in plant development. Nitrogen forces particularly leaf and stem growth, and thus induces rankness. Heavy applications late in the growing season, therefore, will hinder maturity and check development of fruit. The quickest acting, most soluble fertilizer containing nitrogen, is nitrate of soda. This material should be applied frequently in small quantities, rather than in one application, because of the ease with which it is leached from the soil. It can be applied very profitably to lettuce, radishes, celery, etc., in frequent small applications, but care must be taken to



Pear Tree

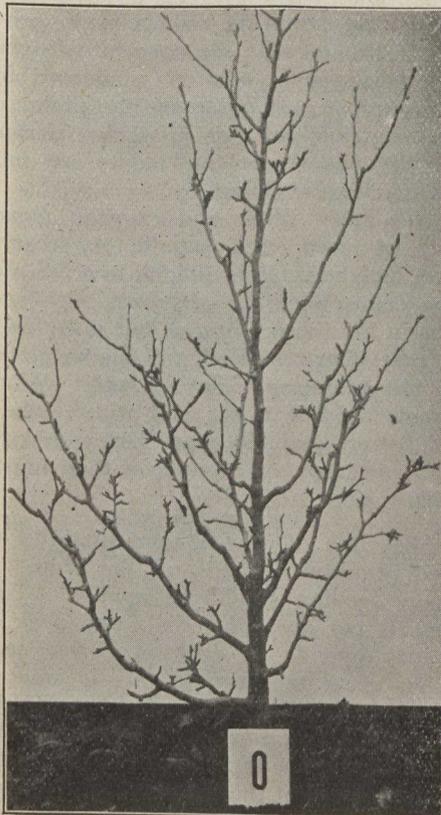
Fertilized with Phosphoric Acid and Nitrogen.

or a good, heavy, well-matured crop of tomatoes, we must adopt other means.

THREE ESSENTIALS

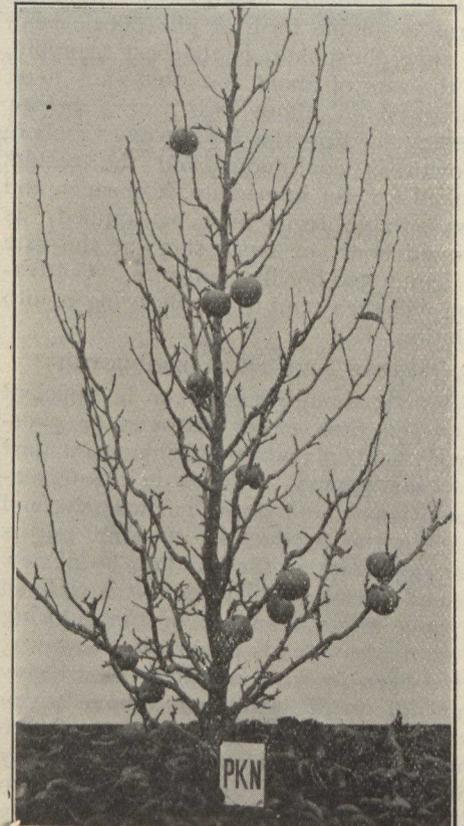
Three substances particularly are needed for the growth of all plants: Nitrogen, phosphoric acid and potash. A man who does not understand the nature of these three substances, or the individual effect each one of them has on the growth of the plant, cannot apply fertilizers successfully.

The first essential is to distinguish between the method of fertilizing used by the market-gardener and that of the fruit-grower. The market-gardener usually wants to raise a leaf crop, as for instance lettuce, radish, cabbage, cauliflower and so forth, or a tuber crop, as potatoes, carrots, beets. The fruit-grower, on the other hand, is continually aiming towards the production of fruit, particularly fruit of early maturity. He



Pear Tree

No fertilizer applied.



Pear Tree

Fertilizer: Potash, Phosphoric Acid, Nitrogen.



Apple Tree
No fertilizer.

avoid sprinkling it on the leaves, as burning may result.

Phosphoric acid aids particularly in the formation of the fruit, and, it is thought, tends to produce earliness also. If phosphoric acid is deficient in the soil, any fruit or grain crop will invariably be found to be poor and light. For the market gardener looking for rapid returns a soluble form of phosphoric acid, as superphosphate, is the best to apply, at the rate of about 200 lbs. an acre, harrowed in about two weeks before seeding. For the fruit-grower, where growth is continuous and the results looked for not immediate, a cheaper and less soluble form may be applied, as ground bone, or basic slag, at the rate of about 500-600 lbs. an acre. Cultivation will then tend to slowly bring it into solution.

POTASH AIDS FRUIT PRODUCTION

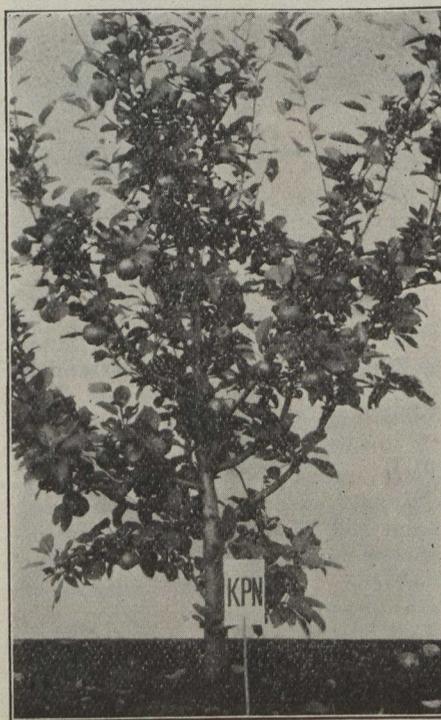
Potash, though less apt to be deficient in a soil than either nitrogen or phosphoric acid, plays a more important part in plant growth. It aids in the formation of sugar and starch particularly, and thus in the production of fruit. It is also important in the building up of new tissues and wood. By some it is claimed to have some influence in the coloring of fruits, but this is doubtful. However, it has been shown conclusively that heavy applications of wood ashes have given excellent returns in the orchard and are one of the best forms in which to apply potash to the soil. The commercial form is muriate of potash, which is usually applied at the rate of about 200 lbs. an acre before seeding, and harrowed in. It must be remembered that maximum

crops can never be raised unless the three fertilizing substances, nitrogen, phosphoric acid and potash, are all present in sufficient quantities for healthy and normal plant growth. If any one of these be wanting, growth is checked. Therefore, to land which is poor and unproductive, the application of all three will usually give good returns, no matter whether the crop be grown for leaf or fruit. But if the land is rich and productive then production can be pushed to its maximum limit, by applying the one which the particular crop grown stands most in need of, and the foregoing suggestions have been offered as a guide.

DEMANDS ON SOIL DIFFERENT

In the fertilizing of orchards it must be remembered, also, that the relation of fruit growing to soil exhaustion is very different from that in general crop farming, because in the orchard there is an annual demand for specific kinds and definite proportions of plant food. It is really a continuous cropping of the same kind, and there is no opportunity, as in the case of ordinary farm crops, to correct the tendency to exhaustion by a frequent change of crops, or the frequent growth of those which require different kinds and amounts to plant constituents. By the sale of fruit, large quantities of potash and phosphoric acid are annually being sold off the orchard, and in most cases no return of these constituents is made to the soil.

In the matter of berries, which are crops especially well adapted to light soils, soils, however, which are not naturally supplied with sufficient amounts



Apple Tree
Complete Fertilizer: Potash, Phosphoric Acid,
Nitrogen.

of the essential plant constituents, proper fertilizing becomes even more important than for the tree fruits, which are usually grown on heavier land richer in plant food. They are, as a rule, crops which require a shorter preparatory season, and have a shorter period of bearing life, and therefore the more quickly available materials should be applied, as nitrate of soda, or dried blood, superphosphate and muriate of potash.

In the case of vegetables, the soil must always be kept up to its highest productive capacity by the liberal use of farmyard manure, supplemented with fertilizers. With the high cost of labor, clearly the most profitable results should be obtained by placing the soil in the best possible condition to raise large amounts from small areas. A small market-garden, well cultivated and liberally manured, here, as in Europe, should yield better returns than a larger acreage carelessly handled through lack of help.

Cover Crops in the Orchard.

Grant S. Peart, Burlington, Ont.

Sowing cover crops in orchards, where clean cultivation is practised, is one of the essentials of successful fruit growing. Not the apple orchard alone is benefited by it, but all the tree fruits, including the vineyard. We have practised growing different sorts of cover crops in orchards with excellent results. Our experience indicates that leguminous crops are preferable, especially where growth of wood is required; in other words, where soils are poor in nitrogen. The field pea is admirably adapted for this purpose. It possesses the power of growing quickly, thus producing a rank growth, and is not confined to any particular climatic change.

The hairy vetch and crimson clover may be used with satisfactory results also, but the vetch is difficult to eradicate. The crimson clover is grown with success in Southern Ontario, but is confined to that district. Red and alsike clover do not make sufficient growth. When cereals are sown, rye and winter wheat are better qualified than barley or oats as cover crops, on account of their hardiness.

DATE OF SOWING

The time of sowing and quantity of seed required depends on the crop. A heavy seeding should be applied. Two bushels per acre of cereals and peas or twenty pounds of crimson clover seed is an accurate estimate. It is well to harrow and roll the land after sowing the clover. The crimson clover should be sown during the latter part of July; oats, peas, and wheat the last week of August; and rye the first week of September.

All orchards with cover crops should be ploughed early in the spring. It will

be found necessary to use a chain on the plough, and in addition a rolling coulter when ploughing clovers and peas. Also, when cover crops are grown in young orchards, the trees should be protected from the attacks of mice. The advantages of a cover crop include the following: 1, It protects the roots of trees from frost during the winter months. 2, It

tends to develop and mature the fruit by drawing the excessive moisture from the soil. Apples seem to take on a better color and quality. 3, By adding humus to soils it increases their moisture-holding powers and makes them more fertile. 4, It is a cheap way of fertilizing the soil. This can be done at about one half the cost of applying stable manure.

consolidates the various pests, namely, San Jose Scale, Yellows, Little Peach, Black Knot, Pear Psylla, and Pear Blight, under one act, and gives power to the Lieutenant-Governor in Council to add any other disease to the act. It provides that the provincial government shall pay one half of all the moneys paid to inspectors under this act. Formerly this provision only extended to the San Jose Scale.

The San Jose Scale and the Fruit Pests Act

By "Weary Worm" Winona, Ont.

AS far as the Niagara District is concerned, the San Jose scale is fairly well under control. It is not spreading to any great extent; indeed, in the western end of the peninsula it is much less prevalent than it was a few years ago. In some of the outlying districts, however, especially where fruit growing is not the main industry, it is spreading rapidly.

Legislative efforts to control this pest have been far from perfect. In many respects, however, the new act of the Ontario Legislature, which has recently come in force (this act supersedes the old acts known as The Yellow and Black Knot Acts, the Noxious Insect Act, and the San Jose Scale Act) is a distinct improvement. In others it still repeats some of the old weaknesses.

The following are the chief reasons why scale control is difficult: From the beginning a considerable number of fruit growers have been either bitterly hostile or else careless and indifferent to the enforcement of any stringent regulations in this matter. This spirit is largely dying out, but there are still a certain number of such persons left; and, indeed, many of the large and most up-to-date fruit growers are utterly indifferent as to whether their neighbors treat the scale or not. "We are going to spray all our trees every year with lime and sulphur anyway, and if they do not spray they will have to pay the penalty," is what they say.

One of the chief causes of failure has been that persons occupying the office of local inspectors have not been sufficiently well posted to have the full confidence of the fruit growers. Great responsibility rests upon these men. It is absolutely necessary for them to be thoroughly posted in all the symptoms of scale, yellows, little peach, and so forth, so as to educate the local fruit growers up to the point of appreciating the vast importance to themselves of a proper inspection of their orchards every season. Too often such appointments have been made from a political standpoint chiefly, and not from the standpoint of efficiency, whereas efficiency should be the main consideration. These remarks apply to the provincial inspector as well.

The provincial inspector should be so

thoroughly qualified in all these matters as to be able, before sending his staff out to work in the beginning of the season, to instruct them thoroughly in all the different symptoms of the various diseases and insects, and he should allow no man to go out as a local inspector unless he can satisfy him that he is so

Power is given to the reeve or mayor, upon the report of the local inspector, to have diseased plants sprayed—after ten days' notice to the proprietor—and the cost charged on the lot and collected as a special tax by the municipality.

Local inspectors are subject and subordinate to the head inspectors appointed by the Minister of Agriculture. In case of any neglect of duty such inspectors



Interested Farmers Learning How to Spray and How to Prune

In each of the six demonstration orchards in the Georgian Bay District, Ont., that were described in the July issue of *The Canadian Horticulturist*, practical demonstrations were given for the benefit of those who wished to learn. The illustration shows those who attended the meeting in the orchard owned by Mr. W. Hamilton, Collingwood, Ont. The Ontario Department of Agriculture should extend this work next year to a number of the other best orchard sections throughout the province. Photo by I. F. Metcalfe.

qualified. But if the chief inspector is not thoroughly qualified in these respects himself, how can he instruct his subordinates? This has been a fatal cause of weakness in the past, for to my certain knowledge men have been appointed as local inspectors who did not know the San Jose scale from any other scale, who were totally unacquainted with the symptoms of "Yellows," and who did not even know there was such a disease as "Little Peach."

THE SALARY QUESTION

The new act, as did the old, leaves the question of payment entirely to the municipality who appoints the inspectors. Too often municipal councils want to pay the lowest possible price, instead of paying an amount large enough to secure good men. A remedy for this would be for the provincial authorities to fix the rate of remuneration at a rate sufficiently high to secure such men.

In the following respects, however, the new act is a distinct improvement. It

are subject to the penalties prescribed by this act.

The following are two of the chief weaknesses of the act. It provides that the appointment of inspectors remains in force only for the calendar year in which it is passed. It should not be necessary to set the whole machinery in motion every year. Careless and indifferent townships are apt to neglect the renewal of appointments till too late, and then the inspectors have no legal status and these townships go uninspected. Local inspectors should be appointed for longer periods, ample provision being made for new appointments, as also for removal if necessary. Where the local inspectors report that trees should be destroyed there is not sufficient provision made for prompt action. It is all left to the municipality notifying the Minister. In practice this is a great source of weakness. A certain time should be allowed (say 10 days) for the owner to appeal either to a board or

to a special inspector appointed for this purpose, in default of which the inspector should have power to go on and destroy the trees, and the cost should be a special tax upon the lot to be collected by the municipality. I have known of many cases of orchards, rightly condemned for "Yellows," where the trees have been left standing for months, a deadly source of infection to the whole neighbourhood.

After all it is the fruit growers themselves upon whom the whole matter depends. The township of Saltfleet, in which I live, is one of the best inspected townships in Ontario. Why? Simply because the fruit growers are fully alive to the importance of the situation, and insist on the municipality making proper provision for the inspection. Several attempts have been made to reduce the pay of the inspectors, etc., and they have always been overwhelmed by public opinion. The cost of efficient inspection need not press much on the individual

taxpayer. But the inspectors should be well paid for the work they do. In the township referred to the total amount paid out for inspection for the year 1909 was \$517.65. Half of this is now paid by the provincial government, leaving only about \$260 to be paid by the taxpayers, or considerably under \$1.00 each.

Most of the fruit growers could not possibly inspect their own trees for the money. When they are properly educated, as they are here, they are only too willing to have it done. That is why the inspectors require not only to be men of firmness in doing their duty, but also men of tact and information as well, who can command the confidence and respect of the growers, and educate them up to be willing and eager to have their trees inspected. Where such a class of men are appointed, the present act—its weaknesses notwithstanding—will work fairly well, and where such men are not secured, it will be more or less of a failure.

Boxes vs. Barrels in the East*

Dr. S. W. Fletcher, Director of Virginia Agricultural Experiment Station

The drift is all towards the use of the box as against the barrel package. This is in keeping with the trend of the times with respect to other commodities. The box package, or at least the smaller type of package, will some time entirely supplant the barrel. The smaller package will not necessarily be made of wood. We can expect the wooden package to be replaced, eventually, by paper, celluloid, or some other cheap material. Even now some very substantial paper boxes are on the market. When speaking of the box type of package, therefore, we refer to the size and shape of package, rather than to the material.

While the box type of package is the ideal towards which we are rapidly working, it by no means follows that every eastern fruit grower should begin packing in boxes at once. He should begin only when he is ready; and nine-tenths of the growers are not ready. To be ready for box packing means that the grower can get good boxes about as cheap as barrels, bushel for bushel; that he is able to grow a crop of fruit, preferably of high quality varieties, at least 90% of which is fancy or No. 1; that he is able to command skilful and experienced packers; that he is able to put a large quantity of box fruit on the market, not one year only, but year after year, so as to win a reputation for the brand; and that he ships his fruit to markets that are already familiar with the box pack and take kindly to it. At the present time not one apple grower out of ten

in the east is able to meet these conditions.

With respect to the market, the fruit grower must recognize the different demands of two entirely different types of markets. One of these, the common or general market, will pay a fair price for good or common stock. The other, the special or fancy market, will pay a fancy price for fancy stock. The box package supplies the special or fancy market almost exclusively, while the barrel package supplies both, but more especially the common or general market. These two classes of markets will always exist, or as long as some people are more successful in accumulating money than others.

The demand for cheap or common fruit, at a fair price, will continue to be very much greater than the demand for fancy fruit at a high price, because there are many people who are able to pay fancy prices for fruit. The proportion of fruit growers who are able to grow fancy fruit is as small as the proportion of consumers who are able to pay fancy prices. Location, soil, and the varieties best adapted thereto may make it more profitable to grow staple varieties for the common market. This cheap fruit—the main supply of the great middle class of people—will be marketed in barrels to best advantage for many years to come.

The successful marketing of apples in boxes depends so much upon skilful grading and packing and upon the possession of a large quantity of fruit so packed, that it seems likely that very little impetus will be given to box packing in the east except through co-opera-

tive shipping associations. Here and there an exceptional grower may find it profitable to pack his fancy grade of certain varieties in boxes; but it does not seem probable that box packing will make much headway in the east except through the co-operative shipping association, with its trained business manager and its crew of trained packers.

These conclusions indicate that the eastern fruit grower should be conservative on the subject of the box apple package. The drift is towards the smaller package, but for many years to come, apple growers who are so situated that they must produce apples for the general or common markets—which means a majority of the growers—will find the barrel more profitable.

Training Blackberries

Tying up blackberry canes makes cultivation of the berry patch easier, and facilitates all the labor that has to do with the management of a blackberry plantation. Instead of using two wires along which to train the canes, Mr. W. H. French, of Ontario County, Ont., uses only one. "I place my posts about sixteen yards apart in the rows of blackberries," said Mr. French to an editor of THE CANADIAN HORTICULTURIST, who visited his plantation, "and between them stretch only one wire, to which the canes are tied with stout cord such as binder twine. I have used other methods of tying the canes but prefer this one, as it is more quickly performed than staking and requires less labor and work than where two wires are used. I use barb wire so that the twine will not slip.

BIENNIAL IN HABIT

Growers should bear in mind that the canes are biennial in habit while the roots are perennial; that is, the canes grow one year without fruit and bear the following year. They should then be removed to give space for younger wood.

Mr. John Ferguson, of Sunbury County, N. B., writes that he removes the old canes as soon as the picking is finished. The canes are cut down close to the ground with a corn knife, or, better still, with a short blade fastened into a two inch handle. Thus the principal canes are shortened to four or five feet, and the laterals to about twenty inches. By pruning in this way, Mr. Ferguson has found that the fruit is larger, and that the setting of more fruit than the plant will bear is prevented.

The old canes are gathered up immediately after the pruning has been completed and burned immediately. Mr. Ferguson uses two wires stretched from post to post. The new canes are lifted and supported on these wires. The suckers which come up between the wires are treated as weeds.

* A portion of a paper read at the conference of the American Pomological Society at St. Catharines, Ont., last September.

The Amateur's Flower Garden in August

Wm. Hunt, O.A.C., Guelph, Ont.

DUTCH hyacinth and tulip bulbs that were dug up from flower beds or borders in May, to make room for summer bedding plants, and heeled in temporarily to dry off and ripen, should now be lifted or dug up, and dried ready for fall planting. It is best to dig the bulbs early in August before they commence to root, which they often do if the weather is not very dry. When bulbs have once started root action it is not advisable to disturb them, hence the necessity of lifting them up from their temporary quarters now and drying them.

Dig the bulbs carefully and remove any top growth there may be—which will be very little, if any—and any soil adhering to them. Spread the bulbs out in shallow boxes or flats one layer deep. The boxes should then be placed in a dry airy shed or room for a week or two until fairly dry. Then place them away in a rather dry, cool cellar or room until planting time in October.

THE BULBS TO PLANT

To ensure the best results with bulbs

treated in this way, only the large, sound bulbs should be planted. These will give good results for three years as a rule. The small offsets or bulbils will not produce flowers the first season. It is better to plant them in October in groups thickly in the permanent border where they may grow on into flowering bulbs in a year or two if left undisturbed. Considering the low price of bulbs, it is scarcely worth the trouble to bother with the small bulbs or offsets.

HARDY ROSES

Rose lovers should watch their rose bushes closely to see if there are any suckers or spurious growth of briar or manetti growing up among the bushes. The manetti or briar growth can easily be recognized from the growth of the rose proper from the fact that the leaves are much narrower and often differ in color to the foliage of the rose growth. These suckers should be removed at the point where they spring from the stem or root of the briar or manetti. It may

be necessary to partially remove the soil in many cases to do this.

Cutting off the tops of this spurious growth is only a temporary remedy and induces even a stronger and more profuse amount of this growth. If left undisturbed, this growth of briars will eventually kill out the rose proper, as has often happened, leaving the rose lover a plant that will produce nothing but briar growth or at the best only a few wild briar roses. This spurious briar growth is, of course, only produced on roses that are budded or grafted on briar or manetti stocks as most hardy roses are.

Rose bushes on their own roots raised from cuttings do not have this objectionable feature, as all the growth produced is real rose growth, the same as the original rose. Roses on their own roots with some varieties may not be as vigorous as budded or grafted bushes, but they are more enduring. I know of rose bushes of the General Jacqueminot that I rooted from cuttings in 1883 that still produce a profusion of roses every year, whilst budded and grafted varieties



Trillium Grandiflorum

Anemone Pennsylvanica

The desire to have wild flowers growing around our homes is a natural one, and its gratification is quite feasible. The right time to transfer such varieties as the beautiful trilliums and anemones from their native woods to the garden is not when they are in bloom, but when their year's growth is perfected which is about this season. Care must be taken not to be reckless in digging up so many as to practically exterminate them in any one locality. The White trillium, sometimes called the Wood Lilly, is so well known that little need be said about it. If the tubers are dug up in late summer or early fall and planted in a soil with plenty of rotted leaves or humus in it a good crop of flowers will delight you. Nearly all of them like a partial shade. Next spring and the year after they will increase in number and size. All these early wild flowers are most satisfactory when several are planted in a group. In a circular space two feet in diameter ten or twelve tubers might be planted. The Pennsylvania anemone is found growing at the borders of woods and on the sides of railway embankments and ditches. It makes a very showy addition to the hardy garden. It spreads by underground runners, and if allowed will soon monopolize the surrounding area. It blooms for two or three weeks. These as well as several other varieties of wild flowers, if planted as indicated, will be a source of pleasure for years to those interested, and will be admired by all flower lovers.

grown near them have been replaced two or three times during that period. Own root roses will become more popular than they are at present for this reason.

The haws or seed pods on rose bushes should be cut off at once, if not already done, as they tend to weaken the plant and prevent the best results being obtained in the production of good strong growth for next season's crop of roses. This should be done on both bush and climbing roses as soon as the roses have dropped.

Some of the weaker shoots or young canes of climbing roses may be thinned out a little if they are very dense and numerous. This will give more chance for the young canes that are left to grow and ripen before winter sets in. Do not remove too many as winter killing must be allowed for. Only the small, weak canes should be cut off. These should be cut off close to the ground or close to the older growth.

Black spot and mildew may perhaps appear on the leaves of roses. A spraying with Bordeaux mixture will keep down the black spot fungus that often causes the leaves to drop off at this season of the year. For mildew dust the plants well with flour of sulphur and do not water or spray the bushes with water on cold, chilly evenings.

A mulching of well-rotted barnyard manure an inch or two in depth spread around under the bushes will prevent them drying out, and assist the growth of the young wood. The mulch should not be placed close to the stem of the bush.

PAEONIES

The seed pods of paeonies should be cut off if not already done. It is best to do it as soon as the flowers have dropped their petals. A mulching of manure as suggested for the roses will not hurt the paeonies, although it is not as beneficial to them as for the roses, especially if the ground they are in is fairly rich in fertilizers.

The seed beds of gladioli should be removed so as to help the lateral or side spikes of bloom.

PANSIES

Seeds of pansies should be sown about the second or third week in August for early flowering re-

sults next spring. Sow the seeds in rather light rich soil, one part leaf mould, one part sand, four or five parts of good loamy soil well enriched with dry cow manure. Sow in a shallow, well-drained box or flat out of doors. Transplant into larger or other boxes in September, or plant out in a cold frame in soil similar to that mentioned. Pansies should be shaded from very hot sun at all times, especially in the seedling stage.

SWEET PEAS

Sweet peas should be well watered in dry weather if they are expected to continue in flower until fall. The ground must be thoroughly soaked. Mere surface waterings are useless, as sweet peas root very deeply. Make a small trench about two inches deep with a hoe a few inches from the stems and let the water run into it from a hose if possible. A thorough watering once a week is better than surface waterings every day.

A little weak liquid fertilizer could be given them to advantage sometimes. Dissolve an ounce of nitrate of soda in two gallons of water and apply to the roots only. Two gallons of the solution would be sufficient for every ten or twelve feet of the row. A liquid solution made from fresh cow manure could also be given to advantage. This can scarcely be made too strong or too much applied if only applied about once a week. Keep seed pods and flowers constantly picked off.

Prepare Your Paeony Beds Now

John Cavers, Oakville, Ont.

There is no plant that will yield such magnificent results in annual bloom and increase of plant growth for eight to ten years for the cost of the investment and the annual care required as the paeony. But some requisites are necessary to secure these results.

Do not buy merely "Paeonies." One paeony is not as good as any other. Select varieties as carefully as you would varieties of fruit trees. If you want a good, reliable, early white the old favorite, *Festiva Maxima*, will give satisfaction. If you want a late white "Couronne d'Or" will please most people. If a pink be wanted, then one, "Achille," a flesh pink, and "Edulis Superba," a violaceous pink—both at moderate cost.

PLANT IN SEPTEMBER

It is contrary to all experience in this latitude to say that the best time to plant is the spring. The ground for planting should be prepared now, without delay, in order that it may become firm before planting. The deeper and richer the soil is made with well rotted manure the better the results will be in the years to come. Tubers of any sort should not be planted in contact with manure.

It should be remembered that the plant is to remain undisturbed for eight to ten years; that the drain on the soil to produce the luxuriant annual crop of foliage and stem and bloom is exhaustive; and that there is no source of unproductive-



"A lily cup was growing, where the streamlet tide was flowing,
And rich with grace and beauty there it bent,
And passed the whole day long, in dancing to the song,
Each gurgling rivulet murmured as it went."

ness so common as poverty or exhaustion of the soil in the case of plants that have not been moved for many years.

In addition to making the soil rich and



Three-Year-Old Paeony "Edulis Superba."

deep before planting annual dressings of manure should be given. Give each plant a space of at least ten square feet. The planting may be singly or in groups in the hardy plant border, in full sunshine or in partial shade; or in beds specially laid out and prepared. What can be finer than the bloom in June, or the luxuriance of plant-growth from the earliest stages until the time of killing frosts in the fall, of a bed of say twenty-five "Festiva Maxima?"

Insects on Rose Bushes

"I have a rose bush covered with green lice. Have used Paris green and kerosene with no results. Will you kindly recommend a good spray?"—P. V. G., Stirling, Ont.

The best remedy for green aphid or green lice is to spray with strong tobacco solution. Sulpho Tobacco Soap and Rose Leaf Extract of Tobacco are both good and are sold in small quantities at seed stores. Spraying the bushes with water or soapy water under pressure will also dispose of a great many of the green aphid. —W. Hunt, O.A.C., Guelph.

Coal Ashes as a Fertilizer

What effect will coal ashes have in a garden? The soil is a clay loam.—M. F. C., Ailsa Craig, Ont.

Coal ashes do not contain any of the fertilizer constituents in appreciable quantities, with possibly the exception of lime. Lime is always beneficial to clay soil as it acts as a liberator of potash. Coal ashes will be slightly beneficial to the soil and will not be detrimental in any way unless applied in very large quantities; however, they are of so little value that I would not advise their use in the garden. I would rather get good lime and add it than depend upon the lime of the ashes.—Prof. R. Harcourt, O.A.C., Guelph, Ont.

The Perennial Border

C. Waters, Port Hope, Ont.

The formation of a perennial border necessarily takes the shape of a slope or bank, caused not by the soil, but by the different heights of the plants themselves. Although this is requisite from a spectacular point of view, it has the disadvantage of the low growing varieties in the front flowering in the spring, while the taller growing sorts flower in the summer and autumn months. To obviate this, and to soften the formality, it is well to have sufficient space between the perennials in the front of the border to sow or plant some one or more of the showy hardy annuals, such as nasturtiums, Shirley and French double poppies, marigolds, and others.

The border shown in illustration has as a background Golden Glow, alternated with spirea palmata in front of which come delphiniums, liliun candidum, phlox, German iris, hollyhocks, in front again are paeonies, aquilegias, and oriental poppy. The edge is composed of daffodils, narcissi, polyanthus, for-

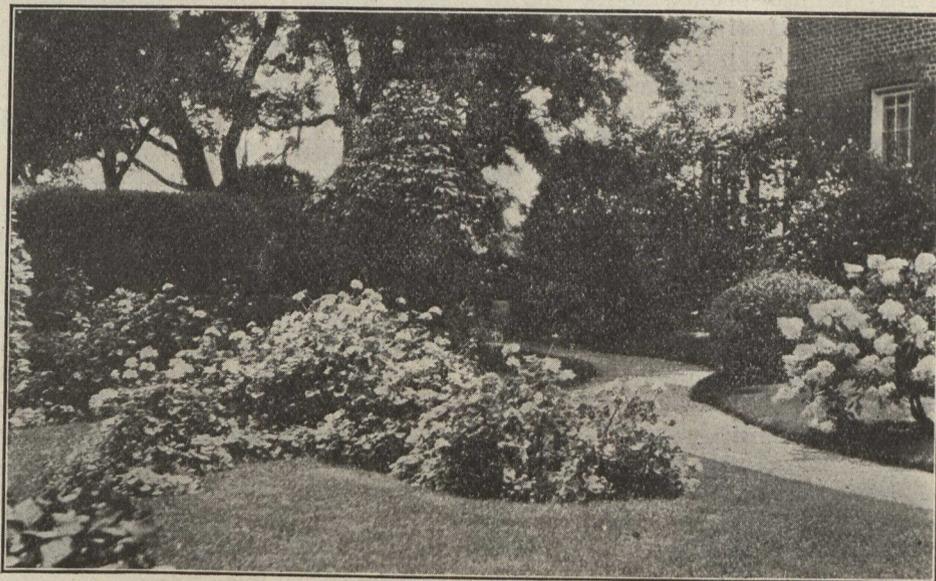
It was strongly manured and dug over before being planted.

The hedge having become overgrown has now been cut out and replaced by a 4.6 foot wire fence with virginia creepers planted at intervals of four feet. These are now covering the wires, giving a background of green in the summer and a glorious variegation of color in the fall.

Lawn and Garden Hints

A little attention to the flower garden at this time of the year will be well repaid by the increased quantity of bloom which may be secured. Keep all seed pods picked off of annuals, except any which you may desire to save for seed for next year. A great deal of vitality is required to develop seeds, and where these are allowed to form the flowers soon stop blooming. Antirrhinum or Snapdragon will be encouraged to yield a second crop of flowers by keeping all seed pods picked off.

Keep sweet peas and all annuals well watered. Do the watering in the evening if possible. Never give overhead



Flower Bed and Perennial Border in Garden of Mr. Barlow Cumberland, "Dunain," Port Hope, Ont.

See article on Perennial Border on this page.

get-me-not, and campanulas of different varieties. A border arranged in this manner will give a succession of bloom from early spring until late fall.

The great advantage of a bed of this kind is that the perennials re-appear year after year, and require but little attention beyond thinning out. In the late fall a protection of straw and leaves is placed over the bed to prevent winter frost. The removal of this and an early weeding in the spring constitutes the work.

The bed illustrated is planted along a straight privet hedge, from which it spreads outward in a low curve from four feet deep at the ends to sixteen feet in the centre, and bordered by a path in front.

watering to sweet peas during the heat of the day, especially if they are suffering for want of water. Keep the ground well cultivated where possible after a rain, to conserve moisture.

Keep all old flowers cut off your rose bushes. If troubled with green fly spray the bushes with nicotine or a solution of soft soap. The latter may be prepared by dissolving soft soap about the size of a walnut in two or three gallons of water. Roses may be budded this month. In this way undesirable varieties may be converted into desirable varieties.

See that dahlias are well fertilized while the buds are swelling. This will insure much larger blooms.

See that gladioli, hollyhocks, and all tall blooming perennials are staked, if liable to be broken by the wind. 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. Pansy seed also may be sown in shallow boxes to be ready for transplanting later on into winter quarters. A mixture of leaf mould and loam will give good results with pansies.

Tulips which have been planted out in ripening beds after they were through blooming should now be lifted and cleaned off and packed away in shallow boxes until thoroughly dry. Do not expose them to the sun while drying. As soon as dry pack them away in the cellar until time for planting in the fall.

AMONG THE FRUITS

Keep all runners cleaned off of fresh strawberry beds between the rows. If allowed to grow they will tend to weaken the young plants. Plants desired for a new patch should be allowed to root, and may be transplanted at the end of the month. Old strawberry beds which are to be left for next year should be kept well cultivated between the rows.

Do not neglect the small fruit bushes after the fruit is picked off. Keep them well cultivated. The result will be an increased crop next year. Cut out unnecessary suckers of blackberries and raspberries.

Toward the end of the month pinch the growing ends off tomato plants to force all the nourishment of the plant into the growing and ripening of the fruit which has already formed.

VEGETABLES

Where some of the earlier vegetables have been harvested the space can be used again to good advantage for the growing of string beans, lettuce, spinach, radishes, or beets for greens. The early crop of celery should be blanched. Use either earth or boards for blanching. An application of liquid manure, keep them growing. Cucumbers may still be planted in cold frames for a late crop.

Keep onions well fed and watered to previous to blanching, will be beneficial.

THE LAWN

Do not cut the lawn too often or too close during the hot weather. Once in ten days is often enough. Lower the roller of the lawn mower so as not to cut the grass too closely. Always keep a look out for dandelions and other weeds and keep them picked out.

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.

More about Mushrooms

J. McPherson Ross, Toronto, Ont.

BEDS for mushrooms may be made any time now, if for home use. To grow them for profit it would be better to wait till November, so that your crop coming in about February, would meet the best market and highest prices.

If you have had no former experience it would be well to start now, selecting a place, if possible, under cover from the weather, as a shed or outbuilding.

For winter cultivation, it will be necessary to have the bed in a cellar or some place where the temperature can be kept at from 50 to 60 degrees. Of course you may make one outdoors, at the back of the house or in a dry corner. In such an event dig out the soil, say six inches deep, the size you want to make the bed. In this excavation place the prepared manure.

CARE REQUIRED

Too much care cannot be given to preparing the manure. Do not be deterred by the words "too much care," from beginning to collect the droppings of well-fed horses, spreading them out thinly, so as not to heat too rapidly, adding an equal quantity of ordinary clean garden soil, and mix evenly. Turn this daily, as you add fresh manure, till you have sufficient for your bed. The amount you will require will be determined by the size of the bed you are to make. Turning daily allows the rank steam to escape and also prevents the manure getting too dry by excessive heating or burning.

Many persons are under the impression that to grow mushrooms, the manure should be old and well rotted. This is a mistake. Where there is old manure it can be used by adding to it fresh manure to serve for beds, but it pays to have the material carefully saved under cover.

EASILY SECURED

Mushrooms, although a great delicacy and a luxury, can be secured with but a little trouble. They possess in

themselves the same nutritive qualities as beef-steak. In their composition they are analogous to animal life, being entirely different to the vegetable kingdom, inhaling oxygen and exhaling carbonic gas.

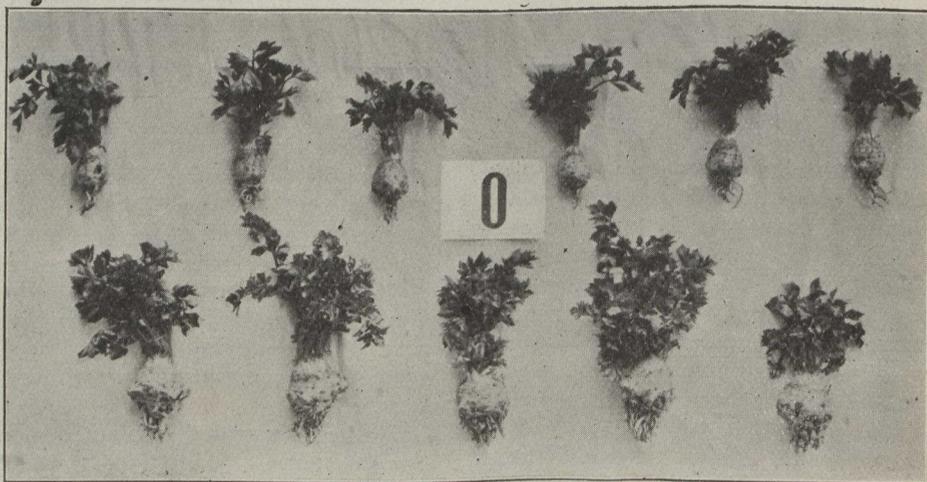
In preparing a bed, the chief care should be to pound the material firmly. This has the effect of retaining the heat much longer and allows the mycelium to travel more rapidly through the mass.

With material properly prepared, it is easy to spawn your lawn or nearby meadows. This is done simply by digging holes at intervals, say eighteen inches deep, and a foot or more wide. Fill them with manure and after some days lay the sod back on top, after inserting a piece of spawn.

The mixing of soil through the manure when preparing, helps to retain the ammonia. It also serves to moderate the heat and to retain moisture more evenly. As a general rule the spawn in bricks is all right so long as the heat of the bed is receding and not over 90 degrees when you put it in. Beds have been spawned at as low a temperature as 60 degrees, and then made good, but my experience proves that 85 to 90 degrees is right.

Do not cover the bed until eight to ten days after it is spawned. It is essential to success never to put on the soil cover before that time elapses. This allows the hot steam to escape which if retained would kill the spawn. Instead of putting loose soil on, a good plan, where you can, is to secure good sods to cover with. When putting them on, lay the grass side down on the bed.

So many persons term good edible varieties of mushrooms toadstools that I would like to say here that the terms are synonymous. There are 112 edible varieties of mushrooms; in fact, they are all edible with the exception of about six poisonous kinds. These were described



Celery

No fertilizer. See introductory article page 183.



Celery

Complete Fertilizer: Potash, Phosphoric Acid, Nitrogen. See introductory article, page 183.

and illustrated in the May, 1907, issue of The Canadian Horticulturist. All the rest can be eaten with impunity.

Two, excellent and delicious varieties are the Shaggy Mane, commonly called around Toronto the "French Morel." gathered in the vicinity of the Don River and eaten with a relish. Its first cousin is called the Ink Mushroom. Bushels of these two mushrooms annually rot in lawns and fields instead of being gathered and enjoyed by the people through ignorance or fear of being poisoned.

The puffball, when gathered in the early stages of growth, makes a pleasant and palatable dish and one which I personally like. There are numerous others, interesting to mycologists, which I will notice later, but our common mushroom, with the pink gills, is so generally well known and its culture is so easy it is not necessary to go after other varieties where this is plentiful. The technical name is "Agaricus Campestris" or meadow mushroom, sometimes called the English mushroom, in much the same way as the potato is called the Irish potato. It is the variety the brick spawn produces, although these sometimes vary, as I have found two varieties—one with a firm, dark fawn colored pileus or cap and the other variety a paler cap, but identical in flavor. Agaricus Arvensis, or horse mushroom, is so termed from its stem and larger size and also from the fact that it is to be found white gilled as well as pink. Agaricus Gambosus or St. George's mushroom, derives its name from appearing in most seasons on or about April 23. It is a compact, short-stemmed mushroom, with irregular or cracked pileus, and with a yellowish, kid-like skin and white gills. Anyone finding these mushrooms in early spring can gather and eat them with serenity.

Hot-House Vegetables

A. H. Walker, Macdonald College, Que.

Experiments have been conducted in the college greenhouses in maturing vegetables during the winter.

Tomatoes, lettuce and radishes were started at different dates during the fall and early winter for the purpose of obtaining some definite information as to the time required for the maturation of these crops during the winter months. The greenhouses in which the experiments were conducted run east and west and are made up of 4-21 feet wide ridge and furrow houses, each separated by a glass partition. The tomato tests were conducted in one of the centre houses. The south bench in this house, especially during the winter, does not receive full sunlight. It is shaded, to some extent, by the gutter, partition wall and north roof of the adjoining house. The north centre benches receive practically full light.

Duplicate tests were conducted with tomatoes on the south and north benches, results of which are here given. The plants were spaced 18 inches apart and the yield and net returns are calculated

per square foot of bench area. It will be noticed that the plantings made on the south bench, Aug. 16th and Sept. 16th, were a complete failure, while those on the north bench planted at the same time and given same conditions, except as to light, gave fair returns. The variety Livingston Globe was used. The crop netted twenty cents a pound.

As light is such a controlling factor in the winter forcing of vegetables, especially in securing a set of fruit on tomatoes, plants were spaced 17, 18, and 19 inches apart on the north bench. The results would indicate that closer than 17 inches is not advisable. It will also be noted that plants from seed started after the middle of August did not give satisfactory returns. The July planting averaging twenty-eight cents, August twenty and a half cents, and the September five and a half cents per square foot of bench area.

It will also be noted that the average of early and late sowings from date of sowing to end of harvest required 190 days, being in the bench 145 days, and the fruiting period continuing for 86 days. The average of the August sowings required 225 days from date of sowing to end of harvest, being in the bench 175 days and in fruit for 91 days. The average of September sowing was 206 days, being in the bench 151 days and in fruit for 55 days.

From plot No. 2, seed sown July 22, fruit harvested for two months. During the first month—November 19 to December 19th—35 lbs. of fruit were harvested against 6¾ lbs. for the following month, December 19th to January 19th.

On plot five, seed sown August 16th, the first fruit was ripe December 28th and continued to March 29th, practically three months, giving a fair uniform supply during these months.

On plot six, seed sown September 16th, the first fruit was ripe February 14th and lasted to April 10th, about two months, giving a very low average yield.

TOMATO EXPERIMENTS AT MACDONALD COLLEGE, QUEBEC.

Plants started at different dates, on different benches, and planted different distances apart.

Location of Bench.	No. of plot.	Distance apart. Inches	Date of seeding.	Pricked off.	Potted	Bench.	First fruit ripe.	Last fruit picked.	No. of days in maturity	Yield per sq. ft. of bench area.	Returns per sq. ft. of bench area.
Centre	1	18	July 4	July 15	Aug. 1	Aug. 24	Nov. 6	Jan. 19	199	1.65	33
South	2	18	July 22	Aug. 3	Aug. 20	Sept. 21	Nov. 19	Jan. 19	181	1.06	22¼
South	3	18	Aug. 16	Aug. 29	Sept. 16	Oct. 5	No fruit set and plants removed.				
South	4	18	Sept. 16	Sept. 29	Oct. 12	Nov. 8	No fruit set and plants removed.				
North	5	18	Aug. 16	Aug. 29	Sept. 16	Oct. 5	Dec. 23	Mar. 29	225	1.09	21¾
North	6	18	Sept. 16	Sept. 29	Oct. 12	Nov. 8	Feb. 14	Apr. 10	206	.28	5½
North	7	17	Aug. 16	Aug. 29	Sept. 16	Oct. 5	Dec. 23	Mar. 29	225	.885	17½
North	8	17	Sept. 16	Sept. 29	Oct. 12	Nov. 8	Feb. 14	Apr. 10	206	.305	6¾
North	9	19	Aug. 16	Aug. 29	Sept. 16	Oct. 5	Dec. 23	Mar. 29	225	1.08	21¾
North	10	19	Sept. 16	Sept. 20	Oct. 12	Nov. 8	Feb. 14	Apr. 10	206	.25	5
Centre	11	18	Nov. 6	Nov. 26	Dec. 15	Jan. 19	Apr. 27	June 21	227	1.42	28

*A paper read before the Montreal Gardeners' and Florists' Club, July 4, 1910.

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H. BRONSON COWAN, Managing Director

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CIRCULATION STATEMENT.

The following is a sworn statement of the net paid circulation of The Canadian Horticulturist for the year ending with December, 1909. The figures given are exclusive of samples and spoiled copies, and of papers sent to advertisers. Most months, including the sample copies, from 11,000 to 12,000 copies of The Canadian Horticulturist are mailed to people known to be interested in the growing of fruits, flowers or vegetables.

January, 1909.....	9,456	January, 1910.....	8,925
February, 1909.....	9,310	February, 1910.....	8,967
March, 1909.....	9,405	March, 1910.....	9,178
April, 1909.....	9,482	April, 1910.....	9,410
May, 1909.....	9,172	May, 1910.....	9,565
June, 1909.....	8,891	June, 1910.....	9,723
July, 1909.....	8,447	July, 1910.....	9,300
August, 1909.....	8,570		
September, 1909.....	8,605		
October, 1909.....	8,675		
November, 1909.....	8,750		
December, 1909.....	8,875		

Total for the year .107,638

Average each issue in 1907, 6,627
" " " " 1908, 8,695
" " " " 1909, 8,970

Sworn detailed statements will be mailed upon application.

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

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THE CANADIAN HORTICULTURIST,
PETERBORO, ONTARIO.

EDITORIAL

AN EXAMPLE FOR THE EAST

Fruit growers in Ontario and the east should draw an object lesson from the manner in which the fruit growers of British Columbia are proceeding with the arrangements for what they call the first Canadian National Apple Show. While, for reasons already pointed out in these columns, the show is likely to be more provincial than national in character, it is being planned on a scale that reflects great credit on that province. The prizes will aggregate about ten times as much as those offered at the Ontario Horticultural Exhibition. If the show is as successful as its promoters expect that it will be, and as we would all like to see it, it will make similar shows that have been held in the east look small in comparison.

There is an enthusiasm, aggressiveness and confidence in the future of their industry possessed by the growers of British Columbia that is not so manifest here in the east. We need more of it. The possibilities for development of the fruit industry in portions of eastern Canada are practically unlimited. As yet, however, they are appreciated by only a small proportion of our growers. If leaders would come to the front with plans to boom the fruit interests of Ontario and the Maritime provinces on a large scale they would soon gather an influential and enthusiastic following. There is an opportunity for good work in this direction. In the meantime we may well watch with pride and wish success to our brother growers in British Columbia in their efforts to make their first National Apple Show a success. If any of our eastern growers can assist by arranging to make exhibits it is to be hoped that they will not let the opportunity pass. In the same way steps should be taken to have as much of the western fruit as possible shown at the Ontario Horticultural Exhibition which will follow within about a week after the show in Vancouver.

THE WEAKNESS OF THE ACT

The inherent weakness of the provincial act dealing with the control of the San Jose Scale in Ontario lies in the fact that it leaves too much to be performed by the local municipalities. There are some municipalities, in which the fruit interests are important and where the growers are sufficiently wide awake to see that the act is enforced. There are others, however, where this is not the case and where in consequence it is next to impossible to induce the township councils to incur any expense to combat the scale. Then, also, the provincial inspector has not the authority he should have over the local inspectors and thus unity of effort is often conspicuous by its absence.

As long as the provincial government left the enforcement of the sanitary laws relating to cheese factories and creameries in the hands of the members of the local boards of health the regulations proved but little more than a farce. Conditions finally became so bad that the government enacted new legislation and placed its enforcement in the hands of provincial officials. The improvement that has followed has been wonderful. The enforcement of the criminal laws has been improved in the same manner by taking it largely out of the hands of county officials and investing it in one of

the departments of the provincial government.

Not until the Ontario government gets over its timidity and assumes the full responsibility for the enforcement of the San Jose Scale Act will the act be generally enforced. The importance of the fruit interests of the province requires that this should be done.

REGULATE THE BILL BOARDS

Our Canadian towns and cities still freely permit what should be attractive portions of their streets and parks to be disfigured by all forms and descriptions of unsightly bill boards. What should be handsome, scenic effects are often practically ruined by visions of ballet dancers, patent medicine bottles, household utensils and other similar obtrusions as presented in glaring colors on adjoining billboards. The worst feature of this class of advertising lies in the fact that the business enterprise of its supporters impels them to select the most prominent positions possible for their announcements. The finer the view they partly obstruct the greater is the probable value of the advertisement.

As a result of the agitation that has been conducted against this nuisance the promoters of bill board advertisements are striving to effect improvements. In this connection they are endeavoring to prevent the posting of advertisements of an undesirable character. Much, however, still remains to be done.

While it may not be advisable to do away with this form of advertising entirely, towns and cities should have the power to regulate the size and location of all billboards and the nature of the advertisements they carry. Bill boards should be restricted in size and their location should be approved by the authorities. In this respect our cities might well follow the example that has been set by European cities and derive a revenue through establishing municipal bill boards and charging for their use.

In Hamburg a company entered into a thirty year contract with the Hamburg city government for the sole right of erecting pillars for advertising purposes. In 1901, upon the expiration of the contract which called for 52 pillars, afterward increased to 100, it was renewed for another thirty years, with the provision that in 1911 the right be reserved by the city of Hamburg of demanding upon one year's notice the removal of the existing pillars. The location, size and nature of the bill boards are specified in the contract with the government. They have to be constructed in such a manner that the interior may be used by the city as receptacles for gravel, sand, tools, fountains and waste paper. As a remuneration for the license and use of these pillars the company is required to turn over to the Treasury of Hamburg twenty per cent. of its annual gross profit.

The appearance of many of our towns and cities could be vastly improved were this question dealt with by them as it should be. The Ontario Horticultural Association should arrange for a thorough discussion of this subject at its next convention. A report should be presented showing what other countries have done in the regulation of bill boards and thus public sentiment could be created and guided in Canada.

Splendid work is being done this year in Ontario by the various horticultural societies as well as by the Ontario Fruit Growers' Association in the matter of arousing a greater interest in the growing of fruit and flowers. One evidence of this is shown by the success that is attending the efforts

of these organizations to increase their membership. Large organizations which it was thought had about reached the limit of their possibilities as regards membership are showing a gratifying increase this year. Last year the membership of the Ontario Fruit Growers' Association was less than 800. Already this year it is creeping close to the 900 mark. The Toronto Horticultural Society has increased its membership from 315 last year to over 700 this year. The Hamilton Horticultural Society, which had a membership last year of about 350, has this year reached almost the 500 mark. Proportionate increases have taken place in the membership of many of the smaller societies. This evidence of increased interest in horticultural matters is gratifying and indicates that the improvement that has been especially noticeable during the past couple of years, has been natural and therefore may be expected to continue.

The minister of agriculture for Ontario has been made the subject of unfavorable criticism recently by Mr. J. W. Flavelle, of Toronto, a supporter of the government and a large dealer in farm products, on the ground that the department of agriculture is not doing nearly all it might to promote the agricultural interests of the province. There are numerous ways in which the fruit industry in Ontario could be assisted with profit to the province.

The Ontario Vegetable Growers' Association has again commenced the publication of monthly crop reports. The sending out of these reports should never have been discontinued. All manner of crop reports are prepared under various auspices, including those of the Census Division of the Dominion Government, and of the Bureau of Industries of the Ontario Government, as well as those by banks and railway companies in

the west but in every case little or no attention is paid to the gathering of authentic reports covering the condition of the leading vegetable crops. There is room, therefore, for good work in this direction by the Ontario Vegetable Growers' Association. The Association is to be commended for recognizing this fact and taking advantage of this opportunity.

The practice of planting trees to commemorate public events is not as common as we might wish. It should be revived. What are now handsome trees were planted in Canada by our present king when he visited Canada as a youth. These trees now have considerable historical interest. We should revive this means of celebrating important public events.

PUBLISHERS' DESK

Some Questions Answered

Every little while we are asked why we do not publish more reports in THE CANADIAN HORTICULTURIST about the meetings of local horticultural societies, fruit growers associations and vegetable growers organizations. One of our readers recently suggested that we should have a list printed in each issue of the paper of the names of the presidents and secretaries of the different horticultural societies, so that, those of our subscribers who might wish to get in touch with these societies would be able to do so. The same reader suggested that we should devote a page or two in each issue to the doings of the horticultural societies.

At one time THE CANADIAN HORTICULTURIST did conduct a department for horti-

cultural societies. After giving it a thorough trial it was finally discontinued. We found that the great majority of our readers were not much interested in meetings, or exhibitions held by societies other than their own. The local papers invariably printed full reports of the doings of their local societies. Thus, these reports by the time they appeared in THE CANADIAN HORTICULTURIST were of no news value and of but little interest to those of our readers who should have been most interested in them. We found further, that owing to the fact that THE CANADIAN HORTICULTURIST circulates in all parts of the Dominion there were so many events of this kind taking place each month throughout Canada that it was an utter impossibility to report them at all fully, and nothing else was considered satisfactory, in the limited space at our disposal.

The majority of the readers of THE CANADIAN HORTICULTURIST prefer to see articles dealing with the culture of fruit, flowers and vegetables, to reading a large number of reports of meetings in which they are not directly interested and largely similar in nature. Whenever we hear of a horticultural society or other organization undertaking work that is out of the ordinary we endeavor to describe the departure for the benefit of our readers generally. In the same way we endeavor to give full reports of all meetings of provincial organizations, such as the provincial fruit and vegetable growers' associations in different provinces, and the Ontario Horticultural Association, which are of more than local interest.

Each month columns of interesting reading material are crowded out of THE CANADIAN HORTICULTURIST through lack of space. This makes it necessary that we shall endeavor to publish each month only such items as are likely to be of the greatest interest to the greatest number.

NORTHERN GROWN NURSERY STOCK

All Standard Varieties and Leading Novelties in Fruits, Ornamental Trees, Shrubs, Vines, Roses and Herbaceous Perennials—well-rooted, free from scale and disease, true to name—grown in our Nurseries. Stock grown in this latitude is exceptionally hardy, and can be relied upon to give the Best Satisfaction for All Purposes, and under All Conditions.



Scene in Assinaboine Park, Winnipeg, where our stock has Proved its Hardiness

—BEAUTIFY YOUR GROUNDS—

We have the finest and most complete stock of ORNAMENTAL PLANTS in Canada from which to secure your needs. Consult our Landscape Gardening Department for Pointers on Planning and Planting. The results will please you. Sketches and Estimates FREE.

LET US KNOW YOUR NEEDS.

The Canadian Nursery Co., Limited
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Nurseries at Pointe Claire, Que.

FRUIT

BOXES

OF EVERY DESCRIPTION

APPLE BOXES A SPECIALTY

Up-to-Date Fruit Packers
Use Our Goods

MADE UP AND IN SHOOKS

WRITE US

The Firstbrook Box Company
Limited
TORONTO

British Columbia's Big Apple Show

Arrangements for the big apple show that is to be held in Vancouver, B.C., during the week beginning October 31, are progressing rapidly. The management announces that \$20,000 will be offered in cash prizes and \$5,000 in special prizes, such as orchard land, nursery stock and so forth. The show will be held in the Vancouver Exposition buildings. Efforts are being made to make it the greatest show of the kind that has ever been held.

The manager of the show, Mr. Maxwell Smith, has been touring the fruit districts canvassing for exhibits. Transportation facilities have been arranged so that car load exhibits may be shipped direct to the exposition grounds, and there transferred by truck into the buildings preparatory to being placed on display.

FEATURES OF THE PRIZE LIST

In the carload exhibits alone \$10,425 is being offered in prizes, while those offered for the box exhibits will total more than \$5000. The plate displays will receive a little more than \$1,000.

To carry out the national scope of the exposition, it has been decided to eliminate competition within districts and to offer prizes for districts exhibiting against one another. A province, state, or a specified locality within a province or state may compete for what is known as the district prize, which will amount to nearly \$1,000 in cash.

Prizes will also be awarded for limited displays artistically arranged: for best pack in boxes of three and one-half, four, four and one-half and five tiers; and for home made by-products and factory-made by-products of the apple. Special sweepstakes prizes will be awarded, amounting to \$450 cash and covering the entire exhibition.

To demonstrate the size to which apples can be grown regardless of commercial value, \$300 will be offered for the best collection of large apples arranged on a space six by six feet; \$185 in prizes for the largest and most perfect apple, and a special prize for the greatest freak apple exhibit.

\$8,500 FOR CAR LOAD EXHIBITS

In the contest for the best car load exhibit comprising 600 boxes or 200 barrels, the following prizes are offered:

	1st.	2nd.	3rd.
No. 1—Northern Spy	\$500	\$250	\$100
No. 2—Gravenstein	500	250	100
No. 3—Fameuse	500	250	100
No. 4—Spitzenburg	500	250	100
No. 5—Yellow Newtown	500	250	100
No. 6—Grimes Golden	500	250	100
No. 7—King of Tompkins	500	250	100
No. 8—McIntosh	500	250	100
No. 9—Jonathan	500	250	100
No. 10—Mixed carloads			

(varieties for sweepstakes, mixed carload to govern) 500 250 100

DISTRICT DISPLAYS.

The rules governing the displays by districts are as follows:

Any number of varieties may be entered; any size, color or colors, any shape may be packed in boxes, barrels, baskets, or jars, or shown on plates; arranged in any style desired; decorated as wished. The only restriction will be a space limit for each exhibit of 10 by 20 feet.

The displays will be scored as follows: Best artistic arrangement of exhibit 20 points, quality 15, color 15, condition 15, pack 15, size 10, uniformity 10.

First prize, \$500 cash; second prize, \$250 cash; third prize, \$100 gold medal; fourth

prize, \$50 and solid silver gold-embossed medal; fifth prize, \$25, and solid silver medal.

LIMITED DISPLAYS.

To encourage artistic arrangement in the displays for exhibition purposes, \$375 cash and \$85 in solid silver and bronze medals is offered for the best two boxes, two barrels, two baskets, two jars and two plates as follows: First prize, \$250 cash; second prize, \$125 cash; third prize, \$50 solid silver gold-embossed medal; fourth prize, \$25 solid silver medal; fifth prize, \$10 bronze medal.

The contest is open to individuals, districts, counties, states and provinces. Each exhibit must contain two boxes, two barrels, two baskets, two plates and two jars, but no box, barrel, basket, plate or jar may contain more than one variety. The exhibitor is allowed his own choice of varieties, and may decorate the exhibit as he desires in a space six by 12 feet on an incline. This makes possible 10 varieties which may be exhibited in this contest. The exhibitor may select one variety or the possible 10, but in no case shall he have more than 10 separate packages of apples. A box in this contest may contain not less than 40 pounds or more than 60 pounds. A barrel must contain not less than two and a half bushels and not more than three bushels. A basket must contain not less than 25 pounds and not more than 32 pounds. A plate must contain five apples. A jar may be made of any material and any size not to exceed 60 gallons. Either preserved or natural fruit may be exhibited in the jars.

PACK AWARDS.

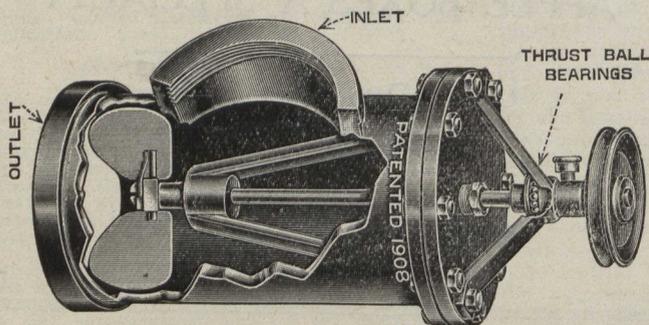
To encourage the best methods of packing the following prizes are offered for box packed apples:

N. 1—Best three and one-half tier pack

"Ideal" Hot Water Circulator Saves 25% to 40% of Fuel

Returns the water hot to the boiler, thus ensuring an even temperature in every part of the system. It is simple in construction, easy to operate, and can readily be attached to any hot water heating system.

"It is remarkable the small amount of power required to operate this Circulator, and the even temperature it is possible to maintain in all pipes throughout the system. Another point not to be overlooked, is when the Circulator is in use an even distribution of heat can be maintained with great saving in fuel cost."—Pease Heating Co., Ltd., Toronto.



Sectional Cut of Improved Circulator No. 6

Write to-day for illustrated circular telling why you should install one on your heating system.

A. E. Crowhurst

Phone Park 1947 HUMBER BAY, ONT.

IMPORTANT TO EXPORTERS OF APPLES

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Shippers would do well to consign their apples to our care.

Highest Market Prices Guaranteed Prompt Returns and Settlements

A Trial Solicited, for further information please apply to

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and 21 VICTORIA STREET, LIVERPOOL.

CABLE ADDRESS: Flewitt, Liverpool Manchester.

CABLE CODES: { Scattergood, Part II,
A, B, C, Fourth Edition.

CANADIAN REFERENCE—Dixon Bros., 66 King Street East, Hamilton, Ont.

ENGLISH REFERENCES—Williams Deacon's Bank, Limited

five boxes: First prize, \$75; second prize, \$50; third prize, \$15; fourth prize, bronze medal.

No. 3.—Best four-tier pack scored against any other four-tier pack of not less than 10 boxes: First prize, \$100; second prize, \$50; third, \$25; fourth, bronze medal.

No. 3.—Best four and one-half tier pack scored against any other four and one-half tier pack of not less than ten boxes: First prize, \$100; second prize, \$50; third prize, \$25; fourth prize, bronze medal.

No. 4.—Best five boxes commercial varieties packed five tier scored against any other five tier: First prize, \$75; second prize, \$37.50; third prize, \$15; fourth prize, bronze medal.

The chief judge will be H. E. Van Deman, of Washington, D.C.

OFFICERS.

The officers of the show include the following:

President—Sir Thomas Shaughnessy, President of the Canadian Pacific Railway.

Vice-President and Chairman of the Executive and Board of Management—J. N. Ellis.

Treasurer—G. F. Baldwin, Vancouver City Comptroller.

Manager—Maxwell Smith, formerly Dominion Government Fruit Inspector of British Columbia.

Secretary—Mr. L. G. Monroe, late Secretary of the Spokane Chamber of Commerce, of Spokane, Wash., and Secretary of the Washington State Horticulture Association.

Further particulars may be obtained from the secretary, whose address is: Room 7, Winch Building, Vancouver, B.C.

I look anxiously forward each month for your valuable paper, The Canadian Horticulturist.—Mrs. J. B. Potts, St. Thomas, Ont.

The Late H. S. Peart

The Horticultural interests of Ontario and of Canada have suffered a loss through the death, which took place recently, of H. S. Peart, B.S.A., the Director of the Horticultural Experiment Station at Jordan Harbor, Ont. The late Mr. Peart was born at Nelson, Ont., near Burlington, and was a son of Edwin Peart, a well-known general fruit grower of that locality. Mr. A. W. Peart, Provincial Fruit Experimenter for the Burlington District and a Director of the Horticultural Publishing Co., Ltd., is a cousin. Mr. H. S. Peart lived on the fruit farm of his father until 1899 when he undertook a course at the O.A.C., Guelph, specializing in horticulture and graduating in 1903. Immediately after graduation he was appointed assistant in horticulture at the same institution which position he filled with credit until his appointment as Director of the Jordan Harbor Station, on June 1, 1907.

When Mr. Peart assumed charge of the station the land had been only recently acquired for such a purpose. For the most part it was in very rough condition. In the brief interval that has elapsed the station grounds have been transformed. Handsome buildings have been erected and the planting of different varieties of fruits has been conducted extensively with the result that the Station has already reached a position where fruit growers are beginning to better realize and appreciate its value. The work already accomplished under Mr. Peart's direction, has been important, although many of his plans cannot be perfected for years to come. Additional sadness is lent to the circumstances by the realization that the Grim Reaper in this instance

has cut off this useful and promising young life just as it was entering upon an era bright with possibilities for still greater valuable public service. The family of the late Mr. Peart has the sympathy of an unusually wide circle of friends.

The Canadian Pacific Railway has a force of men at work on two large tracts of land in the East Kootenay District, one at Yahk and the other at Curzon Junction. The land is being cleared and planted in fruit trees. It is the intention of the company to dispose of this land in 10 and 20-acre lots to bona fide settlers.

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LYTLE'S
PURE ARSENATE
OF LEAD**

In 10, 50, and 100 lb. Kegs

**WEED-KILLERS
INSECTICIDES
SHEEP-DIPS, Etc.**

Full Particulars on Application

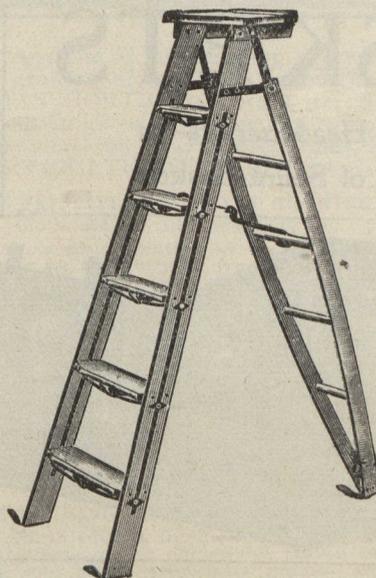
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Cranmer St., LIVERPOOL, ENG.

APPLE BARRELS

WE can furnish you with Staves, Hoops and Heading of the best quality for making Barrels, or arrange with our cooper friends to supply you with the Barrels ready for packing. All our stock is standard grade, warranted up to the requirements of the Fruit Department.

The Sutherland-Innes Co.
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CHATHAM -- ONTARIO

**THE PERFECT FRUIT
STEP
LADDER**



Every fruit grower should have this Ladder for fruit picking. Can be used on uneven ground with perfect safety. By turning the pointed portion of the ladder up it rests among the branches, and makes easy the gathering of fruit. Each step has an iron rod with diamond washers holding the rods rigidly in position.

Made in three Lengths: 6, 8 and 10 feet.

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England, Germany and Western Canada

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NOTES FROM THE PROVINCES

Annapolis Valley East N. S.

Eunice Watts, A. R. H. S.

So far, the season has been one of perpetual showers and sunshine—ideal growing weather. Orchards look a nice healthy green but owing to the late frosts, the crop seems to be chiefly leaves in low lying orchards. The cranberry growers are not expecting a big crop. Strawberries and other small fruits have turned out well. The blueberries are going to be large and plentiful, which will in a measure, make up for the shortage in other fruits.

Corn, cucumbers and other vegetables are growing rapidly, especially where the hoe and cultivator are kept moving. Cutworms seem to have been extra troublesome but their season will soon be over.

In spite of the fact that the frost cut down many tomato plants, there are still a quantity which will supply local markets. Nova Scotians have yet to learn the art of getting these vegetables to ripen as soon as they would. The mistake made is, that the young plants are allowed to remain too long in the flats; if they were transplanted into individual pots or strawberry baskets, one in each, they would develop into sturdy plants, which could be turned out at the time of planting without breaking the ball of earth, which gives a set-back. True, the cost of raising tomatoes in this way is more, but the profit on early ones makes it well worth the trouble.

Summer pruning, that is, pinching back

the side shoots, is now the chief work in the nursery. The young trees are making a splendid growth.

Quebec

Auguste Dupuis, Director Fruit Experiment Station Village des Aulnaies

Tent caterpillars have been very numerous. The aphids and bud moths have made their appearance. The black knot on cherry and plum trees is increasing. Clean trees have caught the disease through infested trees in neglected orchards in their neighborhood.

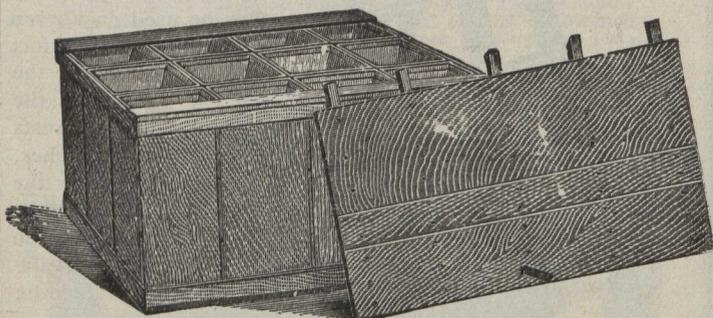
The orchard area is increasing. Better varieties are planted, the soil is prepared and cultivated with more care; planters follow the advice of the Horticultural Societies and of the Journal of Agriculture and Horticulture. THE CANADIAN HORTICULTURIST is becoming more and more popular, it is so instructive, practical and interesting.

Honorable Jos. Ed. Caron, Minister of Agriculture, a practical farmer, evinces the greatest solicitude for the development of the fruit industry. Several new experimental fruit stations have been created by his order where most needed.

Mr. Albert Verreault has greatly enlarged his nursery at Village des Aulnaies. Several cars of fruit and ornamental trees sold by him this spring show that proprietors of farms and villas are taking more interest

BASKETS

We are Headquarters for all kinds of Splint Baskets



Vegetables supplied for the protection of trees from mice during winter

FRUIT PACKAGES A SPECIALITY

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The Oakville Basket Co., Oakville, Ont.

Mention The Canadian Horticulturist when writing

GARDEN IMPLEMENTS AND TOOLS

THE dependable quality of the garden tools we sell makes them worth double their price. Their actual cost is just a trifle more than the cheap kind offered for sale at bargain prices. The use of well made tools and the knowledge that they will last for years, gives a satisfaction that cannot be experienced in using inferior tools. We carry in stock everything necessary for use in large or small gardens, from Planet Jr. implements to garden labels, and every article sent out has our personal guarantee of its high quality.

Lawn Mowers and Rollers, Hose Rakes, Sprayers Trowels, Wheelbarrows, etc.

A complete list of prices is contained in our catalogue. Write us for quotations.

Steele Briggs Seed Co.

Limited

HAMILTON

TORONTO

WINNIPEG

than ever in the fruit industry and home adornment.

The cherry crop, which was very promising in June will be a failure. The cherries are abundant, but unsaleable as they are full of worms.

The plum crop in L'Islet Co. is the best we ever had and the fruit neat and large for the season. Several car loads will be shipped from this county.

Montreal

E. H. Wartman, Dominion Fruit Inspector

Montreal as a consumer of fruits and distributor far excels all other cities in Canada. July 14, 14 cars of bananas arrived. On two auction days of this week 20 cars of various fruits were sold. Before our own strawberries arrived from Ontario, 79 cars from the United States were handled by our auction commission men.

Buyers got a surprise July 14 by seeing a car of Colorado boxed apples nicely displayed on the floor of the auction company. They were Ben Davis and Wine Sap and wonderfully well preserved. The fruit was not wrapped, there being only a sheet of oiled paper on four sides of the box. These apples had been picked ten months.

Some of the less posted buyers thought that they were this year's apples—as cars have been arriving from Tennessee and New Jersey. Three dollars per bushel box was asked for them by private sale. New apples from California sold at auction at \$3.05 a bushel box. The trade is paying good prices for well graded and preserved fruits. Ungraded, unsightly packages generally sell for but little over transportation charges.

Renew your subscription now.

Niagara District, Ont.

The death on July 18 of Mr. H. S. Peart, the director of the experimental farm at Jordan Harbor, has been the cause of deep regret by the fruit growers of the Niagara District in whose interests he had been working indefatigably and capably for the past few years. Mr. Peart was looked up to, respected and beloved by the fruit growers. His administration of the farm has been eminently successful. In losing at an early age a young man who has already accomplished so much, the Province of Ontario has sustained a distinct loss.

The rains followed by cooler weather have helped the raspberries wonderfully, indeed were the saving of the crop; they also helped gooseberries, black and red currants and blackberries. All these fruits are a good crop and bringing good prices. Cherries are in demand and by no means plentiful.

The following was the range of prices on the Hamilton market on July 19th: Gooseberries per 11 quart basket 75c to \$1.00; red raspberries per crate, \$2.00; black raspberries, \$2.75 to \$3.00; red currants, \$1 to \$1.40; black currants, \$1.00 to \$1.25 per 11 quart basket. English cherries, \$1.25 to \$1.50 per basket; scur cherries, 85 cents to \$1.00.

On July 20th the buyers at Winona were paying as follows: red raspberries, crate, \$1.90 to \$2.05; sour cherries, \$1.00; black cherries, \$1.20; gooseberries, 75c a basket; red currants a crate \$1.00; black currants, \$1.25 a basket.

On July 14th tomatoes made their first appearance on the Hamilton market and sold at \$1.75, on the 19th they were still selling at \$1.50 to \$1.75.

The outlook for this crop in the Niagara district is not very good, especially in the St. Catharines district, the vines have not

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Fred Barker
25 Church St., Toronto, Can.

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ANDREW CHALMERS

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Commercial Bank Bazaar, Glasgow

Cables: Bananas, Glasgow. Codes: A.B.C. 5th cd,

BOOKS FOR FRUIT GROWERS

Any one of the following practical books, dealing with the growing of fruit may be purchased from THE CANADIAN HORTICULTURIST for \$1.50 (by mail \$1.68), or will be given as a premium to any person who secures three new full year subscriptions to THE CANADIAN HORTICULTURIST at 60 cents each:

THE PRINCIPLES OF FRUIT GROWING. By L. H. Bailey.
Cloth, 516 pp., illustrated, 12 mo.

A complete treatise on the practice of fruit growing, comprising an inventory of fruits and a full discussion of the tillage, planting and fertilizing of fruit lands, and the protection of fruit plants from disease, frosts and other dangers.

BUSH-FRUITS. By Prof. Fred W. Card.

New edition, cloth, 537 pp., illustrated.
A Horticultural Monograph of Raspberries, Blackberries, Dewberries, Currants, Gooseberries, and other Shrub-like Fruits.

The aim of this book is two-fold—to give all necessary instruction on the cultivation of the bush-fruits, and to provide a cyclopaedia of reference to varieties, species, insects and disease.

THE PRUNING HOOK. By L. H. Bailey.

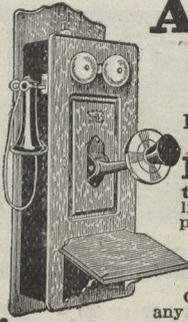
Ninth edition, Cloth, 537 pp., illustrated.
It treats of the philosophic reason for pruning fruit-bearing trees and plants (especially grapes) and of the practical results obtained.

THE NURSERY BOOK. By L. H. Bailey.

New edition, cloth, 365 pp., illustrated.
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HIGHEST PRICES PAID

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"CARY"

FIRE PROOF SAFES AND VAULT DOORS

ALL SIZES

Ford & Featherstone

Hamilton, Ont.

W. J. SHERWOOD, Representative

set their fruit properly owing probably to the cold wet weather followed by drought. Some growers complain of a sort of blight affecting the vines at the time of setting.

Peaches are looking very well and will be a good deal better crop than was anticipated earlier in the season. Generally speaking, however, Elbertas are somewhat light.

Plums are going to be a fair crop of the chief varieties. Lombards are not as heavy as usual.

Pears in all varieties are good except Duchess which are inclined to be light; apples, early varieties, such as Astrachan and Duchess are good. Fall and Winter varieties a moderate crop. The Codling Moth, although somewhat late in making his appearance, has made up for lost time, and is very bad in orchards not carefully sprayed.

The aphid is apparently not going to be much trouble this year. There are plenty to be found, but they seem nearly all to be dead, whether killed by the lady bird beetles, which are very plentiful this year, or by climatic conditions, is a question.

Grapes are looking well; but Concord and Niagaras on old vineyards are not nearly as heavy as for the last two years. Young vineyards are well loaded. Generally speaking, red grapes are a good crop. There are no complaints of rot as yet, and spraying is being carefully done.

Yellows, as far as we can yet tell does not seem to be spreading much at the Western end of the Peninsula. The same, however, can hardly be said of "Little Peach," which is bad in some orchards. More will be known by next month regarding these two diseases, as the inspectors are just starting upon their rounds.

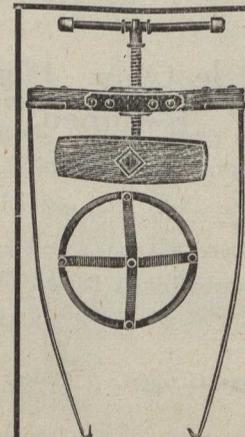
A number of members of the Provincial Cabinet at the invitation of the Minister of Agriculture, the Hon. James Duff, paid a visit to the experimental farm at Jordan Harbor on July 14th. Owing to the very severe illness of Mr. Peart, they were received by Mr. Lopdale, the specialist in plant breeding at the farm. On the way they paid a visit to Mr. E. D. Smith's fruit farm, nursery, jam factory, etc., at Winona.

The party were much pleased over the way things were looking on the farm and with the great improvements that had been made there during the last two and a half years under the able superintendence of the director, the late Mr. Peart.—Weary Worm, Winona.

Islands District, B. C.

The fruit crop as a whole is above the average. Apples heavy, so heavy in fact, that where not thinned, they will be undersized.

Cherries are a rather light crop, especially the sweet varieties.



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Manufacturers
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Canada

Morellos promise well, though if the dry spell lasts, they may be undersized.

Strawberries have been a heavy crop of extra quality, and other small fruits are bearing well, though currants are wormy, and if the dry spell lasts the last of the raspberries will be small. There has been an average crop of hay with us, though light in places. All other crops lock well where good farming is practised.—W. J. L. Hamilton.

British Columbia Notes

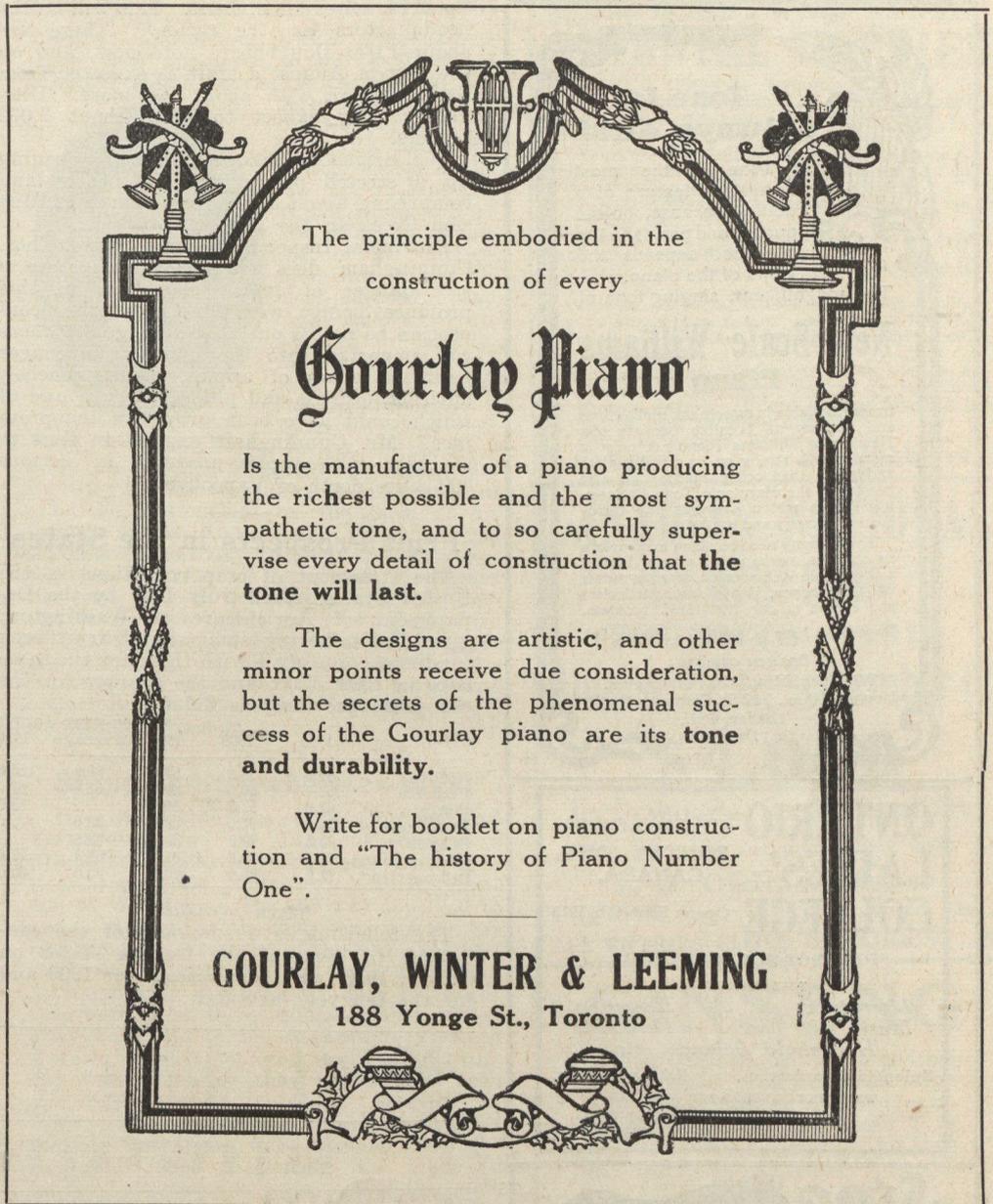
An idea of the rapid growth taking place in the development of the fruit industry in British Columbia is furnished by the report of Thomas Cunningham, Provincial Inspector of fruit pests. This report, as presented to the government, shows that during the first fourth months of this year there were 2,718,056 fruit trees and plants inspected at the provincial inspecting station at Vancouver, as follows: January, 592,000; February, 103,184; March, 767,152; April, 1,255,720. This exceeds the number inspected during the same period of 1909 by 1,122,281, or by 173 per cent. It is estimated by Mr. Cunningham that during the remaining eight months of the year the number of trees and plants that will arrive will bring the total up to about 4,000,000.

In one of his weekly reports to the Department of Agriculture, Mr. J. C. Metcalf, who is visiting the markets in the three prairie provinces on behalf of the fruit growers of British Columbia, states that at Saskatoon there is a better feeling on the part of the jobbing houses and retailers this year toward buying and handling British Columbia fruit. Mr. Metcalf warns our growers, that while all our fruit might be marketed in the provinces of Alberta and Saskatchewan, it will be advisable to market a percentage of our output in Manitoba, not only for the purpose of selling it, but to advertise it as well, thus removing the impression that exists in the minds of some of the dealers, that we are not growing any appreciable quantity of fruit as yet. Our growers are warned that they will have to put up a good product this season for the prairie markets as prices there will be ruled to a great extent by Oregon and Washington competitive prices, which must be met.

The Mission Board of Trade has passed the following resolution: "Whereas the jobbers and wholesale men of the North-west are petitioning the Dominion government through their various boards of trade to further reduce the duty on American fruit coming into Canada, this board of trade calls the attention of the government to the great injustice and hardship this would be to the fruit growing industry, and petitions that in lieu of any decrease being made in the duty the same should be increased."

The Central Okanagan Land and Development Co., near Kelowna, who installed the system of irrigation now in force near Rutland, have purchased about 7,000 acres almost due north of Kelowna and reaching to within one and a half miles of the city. This purchase includes some of the best fruit lands of this district. A system of irrigation is being installed. Water is being conveyed across the valley by a 32-inch steel pipe main to concrete ditches and concrete lateral pipes which convey the water to the sub-division lots.

Near Brilliant, B.C., the Doukhobors, who two years ago bought 2,700 acres of land, have this spring started a colony. Already they have 50,000 fruit trees planted. The work they have done may be judged from the fact that all the land had to be cleared and it was heavy clearing at that. They are taking out every root and are ploughing deep. They intend to put



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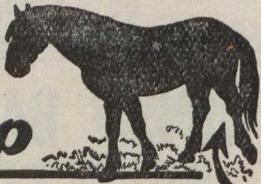
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Port Kells, B.C., June 14th 1909

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the 2,700 acres all in fruit. This will be the headquarters for the society. There are about 1,000 Doukhobers here now, and on the first of August a train is expected from Saskatchewan with about 700 more. Ultimately they expect to have about 7,000 settlers.

The Belgo-Canadian Syndicate is opening up a stretch of rolling and bench land comprising about 6,000 acres, north of Mission Creek in the Kelowna district.

Provincial Inspector of Fruit Pests, Thos. Cunningham, does not believe that there is any danger of fruit production in this province being over done. In this connection he points out that during 1909 there was imported into the city of Vancouver 1,013,163 boxes of apples, pears, peaches, apricots, quinces and plums, every pound of which could have been grown in the province. Mr. Cunningham expects in time to see high class apples produced in sections 500 miles north of Vancouver.

Fruit Prospects in the States

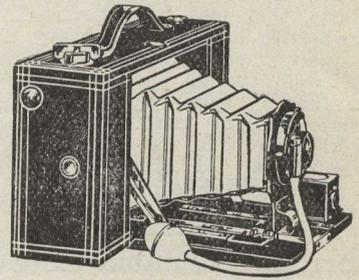
The statement of crop conditions in the United States issued July 15th by the Department of Agriculture of Washington, gives the following summary of fruit crop conditions on July 1 with those for the same date in 1909, 1908, and the average for the ten years previous, as follows:

Crop	1910	1909	1908	Ten-year June 1 average 1910	
				1909	1910
Apples	.49.6	54.6	57.6	61.9	53.0
Peaches	.62.1	50.0	69.7	61.4	62.0
Pears	.61.0	57.5	69.7	....	63.2
Tomatoes	.96.1	91.6	89.4	88.0	....
Grapes	.80.2	90.2	87.9	88.5	....
Watermelons	78.5	80.6	81.4	81.4	77.4
Bl'kberries	77.0	88.8	90.5	90.0	80.0

STATE AVERAGES

The following is a summary of the conditions in some of the leading states on July 1, 1910, with comparisons for 1909 and for the ten year averages:

State Territory, or Division.	Apples.			Peaches.			Pears.			Grapes.		
	1910	1909	av. a.	1910	1909	av. a.	1910	1909	1910	1909	av. a.	
Me.	.83	.77	.80	..	..	..	.85	.88	.86	.87	.89
N. H.	.80	.80	.77	.69	100	.69	.86	.91	.85	.90	.84	
Vt.	.85	.75	.80	..	..	..	.90	.80	.88	.85	.83
Mass.	.77	.75	.78	.65	.80	.65	.83	.80	.82	.89	.85	
R. I.	.56	.79	.80	.67	.70	.66	.78	.80	.85	.88	.88	
Conn.	.64	.65	.80	.82	.90	.68	.91	.87	.90	.79	.80	
N. Y.	.60	.75	.72	.73	.80	.64	.67	.75	.80	.93	.85	
N. J.	.67	.60	.65	.82	.60	.70	.75	.53	.83	.88	.86	
Pa.	.58	.63	.66	.69	.69	.60	.73	.60	.69	.88	.81	
Del.	.80	.50	.66	.89	15	.60	.79	.27	.78	.88	.85	
Md.	.72	.58	.65	.85	.35	.62	.80	.40	.84	.87	.85	
Va.	.72	.40	.56	.86	20	.54	.73	.21	.85	.80	.87	
W. Va.	.55	.44	.50	.61	.45	.51	.55	.40	.58	.82	.81	
N. C.	.78	.55	.64	.85	.55	.62	.77	.45	.85	.85	.87	
S. C.	.81	.50	.60	.85	.55	.67	.82	.50	.87	.81	.85	
Ga.	.68	.50	.55	.88	.50	.69	.73	.45	.81	.81	.87	
Fla.	..	..	..	.81	.60	.77	.82	.52	..	..	..
Ohio.	.32	.33	.53	.40	.40	.47	.39	.44	.50	.85	.84	
Ind.	.39	.38	.52	.38	.67	.51	.37	.45	.50	.86	.85	
Ill.	.8	.35	.55	.6	.54	.49	.6	.49	.20	.86	.84	
Mich.	.45	.70	.70	.44	.70	.63	.47	.71	.55	.87	.83	
Wis.	.17	.75	.74	..	..	..	.36	.85	.36	.87	.82
Minn.	.16	.85	.78	..	..	..	..	..	.59	.90	.85
Iowa	.6	.73	.63	.0	.10	.49	.2	.50	.35	.86	.80	
Mo.	.32	.50	.51	.25	.36	.47	.20	.40	.47	.86	.77	
N. Dak.	..	..	..	..	..	..	..	..	..	..	..
S. Dak.	.15	.84	.80	..	..	..	..	..	..	.91	.84
Nebr.	.26	.73	.65	.10	.35	.52	.14	.42	.56	.83	.81	
Kans.	.64	.30	.53	.59	.15	.50	.55	.20	.76	.75	.75	
Ky.	.49	.55	.54	.36	.60	.55	.40	.53	.60	.84	.86	
Tenn.	.51	.53	.53	.55	.58	.56	.45	.45	.70	.71	.80	
Ala.	.55	.55	.64	.63	.58	.68	.52	.55	.70	.74	.83	
Miss.	.45	.50	.65	.72	.56	.66	.49	.50	.76	.68	.80	
La.	.50	.50	.67	.72	.48	.66	.60	.55	.70	.83	.83	
Tex.	.70	.45	.70	.75	.31	.64	.74	.45	.82	.67	.78	
Okla.	.63	.50	.71	.68	.35	.70	.58	.30	.72	.66	.82	
Ark.	.47	.47	.63	.41	.49	.68	.34	.40	.57	.70	.81	
Mont.	.60	.85	.8968	
Wyo.	..	.85	.70	
Colo.	.55	.80	.76	.27	.55	.66	.39	.65	.50	.90	.83	



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The New Assistant at Ottawa

Mr. T. G. Bunting, B.S.A., who has recently been appointed to the position of Assistant Horticulturist at the Central Experimental Farm, at Ottawa, in connection with the work so ably carried on by Mr. W. T. Macoun, is the eldest son of Mr. Wm. H. Bunting, of St. Catharines, Ont., one of the most successful and best known fruit growers in Canada.



Mr. T. G. Bunting is a graduate from the Ontario Agricultural College at T. G. Bunting, B.S.A. Guelph for the year 1907. In addition to his College course, Mr. Bunting has had considerable experience in practical horticulture on the farm of his father, at St. Catharines. He has also travelled extensively through the fruit sections of the Pacific coast and has spent the past year in connection with the horticultural department of New Hampshire State Experimental Station and College at Durham, N.H. In his present position, Mr. Bunting will have considerable scope and opportunity to further the interests of horticulture in Canada.

Shipping Strawberries West

The St. Catharines Cold Storage and Forwarding Co., on June 24 shipped a Grand Trunk Pacific refrigerator car full of strawberries, the product of fourteen growers, to Winnipeg. The car was expected to arrive at noon on the 29th, but did not arrive until the afternoon of the 30th. The berries were all unloaded the same afternoon. Although they had been six days in transit they were found to be in excellent condition. They were sold to the restaurants at \$3.50 a crate. Had it not been that the following day was a holiday they might have been sold for \$4 a crate.

Mr. Robert Thompson, the president of the St. Catharines Cold Storage Co., who has done much to develop the trade in tender fruit between Ontario and the west, and who had charge of this shipment, believes that with the experience gained as regards the proper stage at which to pick the berries and the way to load the cars, that next year ten or twelve cars will be forwarded.

About the middle of July a car of red currants, red cherries and gooseberries and some vegetables were forwarded from St. Catharines to the same market. Mr. Thompson contends that if Ontario fruit is properly gathered, packed in the right packages, chilled, and loaded in ventilated cars the western market will absorb all the surplus tender fruit that the eastern markets cannot take.

Canadian Tender Fruit in England

After a trip to England, in the course of which he made careful inquiries in regard to the conditions of the fruit markets there, Mr. J. Lockie Wilson, Superintendent of Horticultural Societies for Ontario and Secretary of the Ontario Vegetable Growers Association has returned with the belief that it is possible to greatly develop Canadian trade with Great Britain in tender fruits. "I believe," said Mr. Wilson, "that the shipment of Ontario peaches to the old country can be made a profitable trade. Peaches have sold in Covent Garden Market

August and September is the Proper Time to plant ORIENTAL POPPIES

(Papaver Orientale). The dazzling splendor of which is unrivalled among flowers. The plants are very hardy and will last many years.

We offer the following Five Varieties, in field grown plants, correctly named and labelled, carriage prepaid:

- Oriental Poppy, Type, crimson scarlet, each 15c; 6 for 75c.
- Grand Duke, crimson-scarlet, very large, each 25c; 6 for \$1.25.
- Menelik, light satiny copper shade, each 25c; 6 for \$1.25.
- Princess Victoria Louise, salmon-rose shading to blush rose, a gem, each 30c; 6 for \$1.50.
- Psyche, rose blush shading to white, each 25c; 6 for \$1.25.

In August and September these plants are dormant, and we pack them to go anywhere in Canada safely. Orders will be filled in rotation as long as stock lasts.

Postal note with order, please.
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at as high as 9d to 18d each. The Englishman wants fine stuff and is ready to buy fine peaches at high prices. It would not do for Canadian peach growers to flood the market with small, inferior fruit. By making a specialty of the trade it can be greatly developed.

"The same is true of tomatoes. I saw tomatoes selling in the open market at three cents a lb. Most of these were grown and shipped from the Canary Islands although thousands of pounds are grown in England under glass at great expense. The tomatoes we grow in Ontario are well suited to the English market. The tomatoes our growers sell at twenty-five cents a bus., would bring four to twelve cents a lb., were they sold in England in good condition.

The Canary Island tomatoes are packed in peat and saw-dust. It takes them seven days to reach London. They keep there without cold storage from one to two weeks. They are packed in twelve pound boxes. I believe that if we packed our tomatoes in peat and saw-dust we could land them on the British markets in good condition."

The Norway, Ontario, Horticultural Society will hold its third annual show, August 19 and 20th. A feature of the show will be asters grown from seed by children of the members. The seed was distributed by the society. Prizes will be offered for canned fruits, jams, jellies, bread and cake.

Peach Shipments to Great Britain

Hamilton Fleming, Grimsby, Ont.

For the last three seasons I have experimented in shipping peaches to Great Britain. I have come to the conclusion that at present there is no advantage in doing so.

The class of peaches grown here, that it is possible to ship, do not compare in flavor or appearance with the British grown or with the best class of South African peaches. Those we now ship only reach the second class market and the small retail shops, and at the prices they bring, judging from my own experience, I am financially ahead when I place my peaches on the Canadian market.

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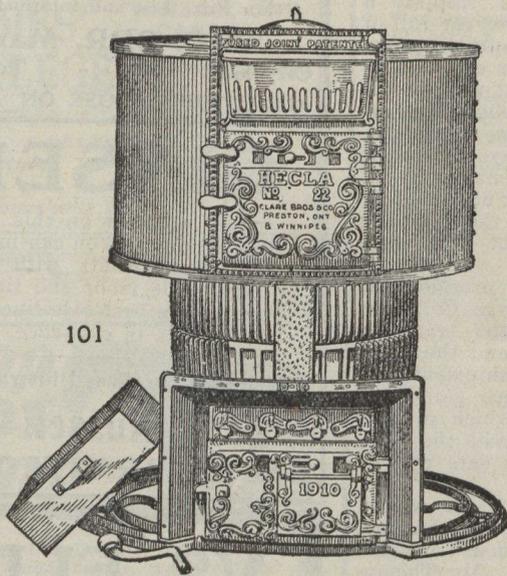
Fused Joints insure "Hecla" heated homes being always supplied with an abundance of fresh, warmed air, untainted by gas or dust.

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Fused Joints are only one of the patented features of "Hecla" Furnace that mean so much to every man who is going to put in a new furnace this season. Our furnace book describes and illustrates them all. Write for free copy.

Send us rough diagram of your home, and we will plan the heating arrangement and give estimate of the cost of installing the right "Hecla" Furnace—free.

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This year I have set out several varieties of nursery peach stock, obtained from Kent, England. They have made a good start, and are popular varieties in Great Britain. I will be glad to report their future progress to THE CANADIAN HORTICULTURIST.

For the present, however, I can only repeat, that judging from my small, but practical experience, and from conversations I have had with some of the most experienced growers in this district, I consider that there

is no financial advantage in shipping our present varieties of tender fruit to Great Britain.

A. Mallinson, 623 Traders Bank Bldg., Toronto, is buying Duchess and Snow apples on a cash basis for shipment to the west. The apples are paid for and inspected before shipment.

Renew your subscription now.

Ottawa Vegetable Growers

The monthly meeting of the Ottawa Vegetable Growers' Association for July took the form of a picnic at Woodroffe, the home of Mr. W. J. Kerr, the secretary. A representative of THE CANADIAN HORTICULTURIST was present and reported an enjoyable afternoon. After luncheon, which was served on the lawn, short addresses were given by Messrs. Alex. McNeill, W. T. Macoun, R.

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The collar is lace trimmed and tucked to match. Sizes 32 to 42 bust. The material used in this pretty waist is the popular all over embroidered dots on Swiss Muslin, has a dainty appearance and will wear and launder to your entire satisfaction. We believe our price is the lowest ever quoted for a high class beautifully tailored all over embroidered waist.

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SALMON ARM, Shuswap Lake, B. C., has the finest fruit and dairy land in B. C. No irrigation necessary, mild winters, moderate summers; no blizzards, or high winds; delightful climate; enormous yields of fruit, vegetables and hay; good fishing; fine boating amidst the most beautiful scenery, and the Salmon Arm fruit has realized 25 cents per box more than other fruit in B. C. Prices of land moderate, and terms to suit. Apply to F. C. Haydock, Salmon Arm, B. C.

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B. Whyte, W. J. Kerr, L. A. Smith and Mr. Nicholson.

Mr. Macoun drew attention to the fact that there was a good market in Ottawa for a good class of vegetables, and strongly advised the members of the association to cater to this market by producing the best possible quality of vegetables, making their name known as producers of a first-class article. He advised the individual growers to make a specialty of one particular variety of vegetables, as this would help them greatly in working up a good class of customers. Vegetable growers in the vicinity of all the large cities would do well to follow such advice.

Later, Mr. Kerr showed his visitors over a large patch of Herbert Raspberries, of which he grows a good many. Although they were planted out late last summer, and were being cultivated more with a view to producing new plants than fruit, many of the bushes were so heavily laden with fruit as to be bent almost to the ground. The Herbert Raspberry was originated in Ottawa some 22 years ago by Mr. R. B. Whyte and has proven itself one of the most if not the most valuable raspberry for all purposes that has ever been originated. It is exceedingly hardy, a heavy bearer, and the fruit is of the very best quality as was shown by comparison with other varieties also grown by Mr. Kerr. Mr. W. T. Macoun, Dominion Horticulturist, states that for the section surrounding Ottawa, the Herbert Raspberry is the best berry he knows.

A short inspection was then made of Mr. Kerr's nursery, where he has a large variety of small fruits and ornamental stock growing, after which Mr. Macoun conducted the party to the Central Experimental Farm and showed them what was there being done in the way of introducing and testing new varieties of fruits, tests with different methods of cultivation and fertilization and numerous other experiments which are being carried on and the results of which are made known to the public through the publishing of bulletins which are issued from time to time. After inspection of the lawns, flower beds and shrubbery borders, propagating beds and shrubbery of the Experimental Farm, the party dispersed, having spent an enjoyable and profitable afternoon.

Conventions and Meetings

The annual convention of the Canadian Horticultural Association will be held at St. Catharines, Ont., August 10, 11 and 12th. The members will consider the advisability of approaching the government to have a reduction made in the tariff on plants and flowers.

The third annual convention of the Greenhouse Vegetable Growers' and Market Gardeners' Association of America, will be held at Grand Rapids, Michigan, September 27, 28 and 29th. The Secretary is S. W. Severance, 208 Walker Bldg., Louisville, Ky.

The annual exhibition of the Montreal Horticultural Society and Fruit Growers' Association of the province of Quebec, will be held in Montreal, September 7 and 8.

No entries will be received later than August 31st. The Secretary is A. J. Bewles, P.O. Box 778, Montreal, Que. Prizes are offered for plants, cut bloom, bouquets, plate fruit, baskets of fruit, outdoor and hothouse grapes, and for vegetables.

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.

Regina, Sask., Provincial.....	Aug. 2-5.
Canadian Horticultural Association Convention, St. Catharines, Ont ..	Aug. 10-12.
Vancouver	Aug 15-20.
Toronto, Canadian National.....	..... Aug. 27-Sept 12.
Sherbrooke, Que., Great Eastern.....	..... Aug. 27-Sept. 3.
Sherbrooke, Quebec Pomological Society (Summer Meeting)	Aug. 30-Sept. 1.
Montreal Horticultural Exhibition Sept 7-8.	St. John, N. B., Dominion Exhibition....
.....	..... Sept. 5-15.
Ottawa, Central Canada.....	..... Sept. 9-17
London, Ont., Western Fair.....	Sept. 9-17.
Charlottetown, P. E. I. Provincial..... Sept. 20-24.

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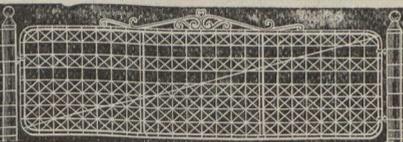
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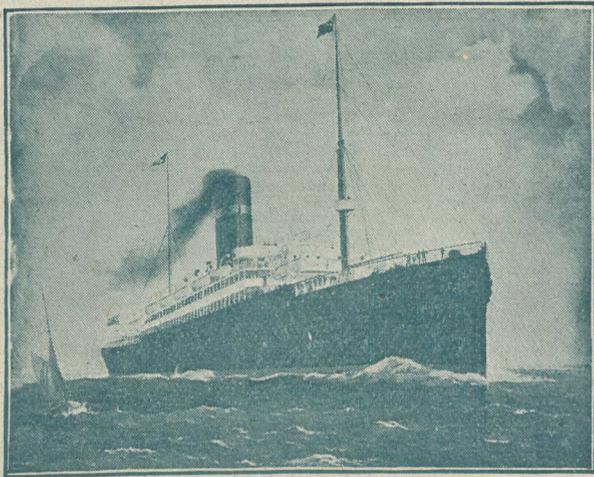
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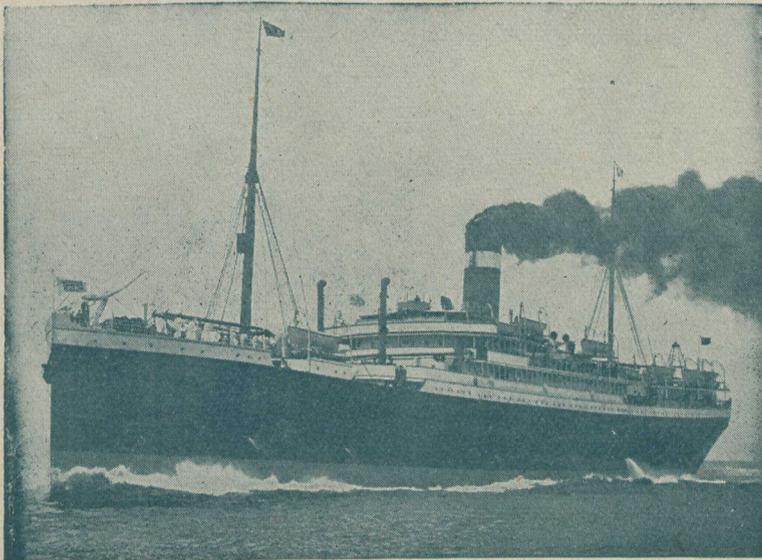
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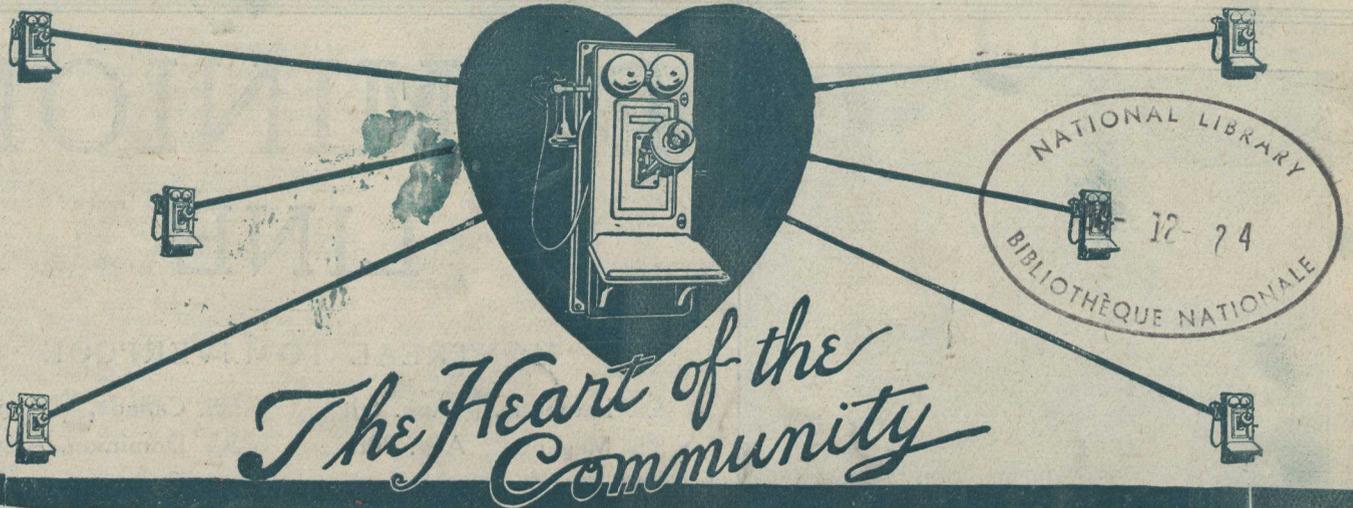
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