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How Canadian Fruit is Sold in Great Britain

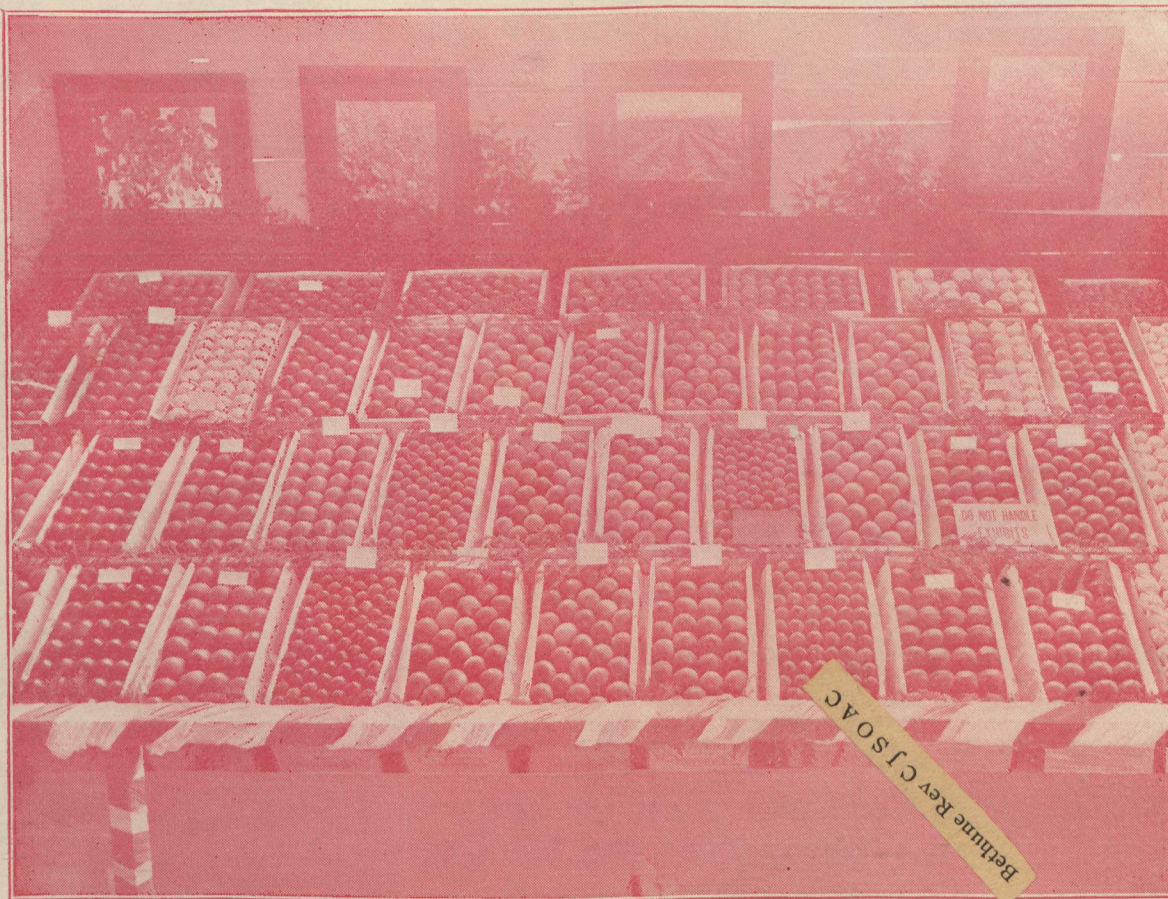
# The Canadian Horticulturist

NOVEMBER, 1906

Volume 29, No. 11

TORONTO

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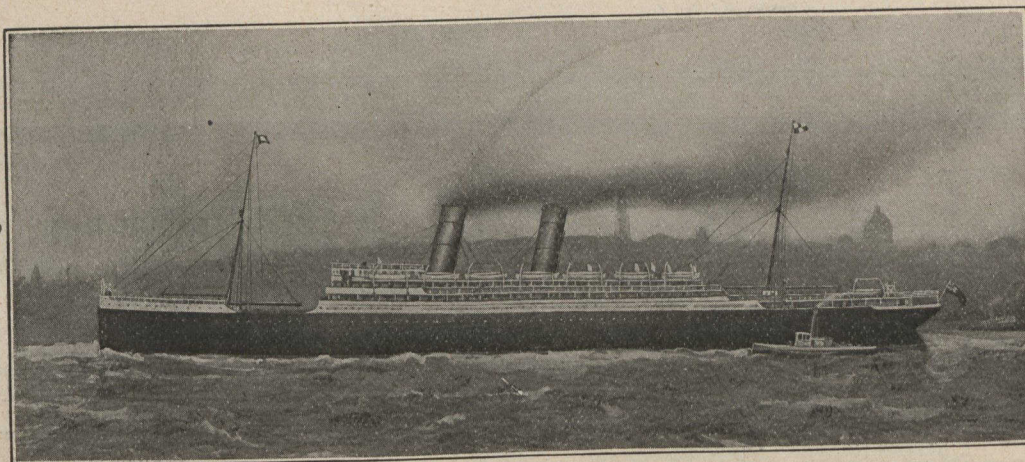
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Fri. " 16	Empress of Britain	Fri. Nov. 2
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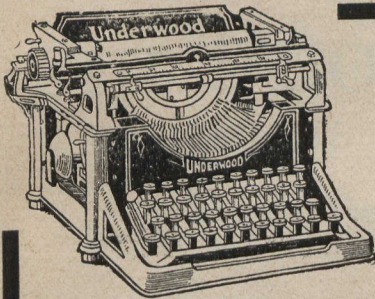
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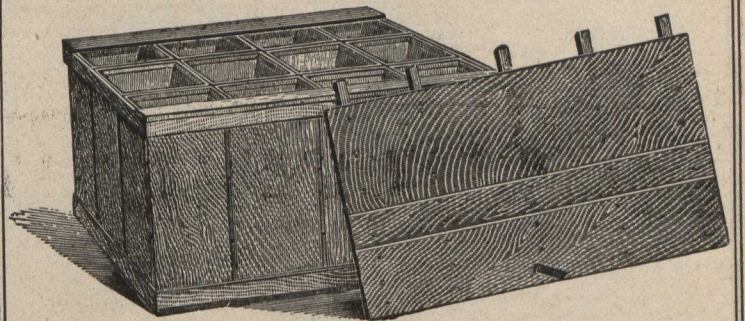
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# The Canadian Horticulturist

Vol. XXIX

NOVEMBER, 1906

No. 11

## How Canadian Fruit is Sold in Great Britain

A MAN should be placed in London, during the fruit season, to represent the fruit interests of the Dominion. This should be done by the Dominion Fruit Division or the various cooperative fruit growers' associations could place a man there on their own behalf. Such a move would benefit the fruit industry in two ways; first, by making it possible to hold and dispose of fruit when the market is most favorable, and second, by lessening the chance of false reports being returned to the growers. By examining the fruit on arrival, the representative could determine the exact condition and report same to the person who made the consignment. The unsatisfactory manner in which Canadian apples are handled and disposed of by the majority of firms in Great Britain would warrant this move. It would be an important step in the placing of the Canadian fruit trade on a satisfactory basis. This was made evident to the staff representative of THE CANADIAN HORTICULTURIST this summer while visiting the Old Country on a tour of investigation along these lines.

The way in which Canadian apples are sold in the cities of Great Britain, where the fruit is landed, is as varied as one could imagine. Only a small percentage of our export apples are sold direct from the grower to British retailers. The larger portion is sold by auctioneers or brokers; the balance is sold by wholesale houses to the smaller dealers. The only claim one class of brokers can make to prove that they are fruit merchants is the business they conduct in importing fruit on consignment from small growers and dealers in Canada and other countries. Later, they turn it over to larger firms to dispose of, but not until they have deducted a liberal commission. In this transaction, it will be seen, the grower has to pay a double commission as well as run the chance that both of the dealers may make false returns.

All fruit merchants are not honest. The green fruit trade seems to offer splendid opportunities for dishonest individuals. When sending fruit to Great Britain on consignment, exporters should exercise great care to ascertain the financial standing of the consignees.

The formation of cooperative associations in Canada is approved by the majority of British fruit merchants. It is believed that these associations will help solve the dishonest packing problem, and lead to a reduction in the number of brands.

Owing to the dishonest manner in which some Canadian apples have been packed, a feeling of distrust exists among the retailers. While anxious to deal direct with the Canadian grower, the retailer will not take the risk. He prefers to buy from the auctioneers or brokers, so that he may examine the fruit before the purchase is made.

Small growers should not attempt to export fruit. A better plan is the

### Leads Them All

I like THE CANADIAN HORTICULTURIST very much. It gives the best value of any horticultural paper in the world. There is no horticultural paper in England or Canada that can touch it. I know this because I have taken, at one time or another, all such papers in both countries.—Francis P. English, Niagara Falls South, Ont.

formation of cooperative associations so that large shipments can be made under one brand. Then send only the best, and that properly packed. Fruit of uncertain quality finds a poor reception on the British market. It affords an excuse, which is quickly taken advantage of, to cut the quoted price. Many cases of fruit that left the orchard in Canada, apparently in good condition, were found, when opened in the auction room, to be slack. A small fault, perhaps, but sufficient to place the consignment among second-class fruit, and thereby reduce the price.

In a previous article it was stated that business arrangements did not permit of our representative being in Great Britain during the fruit season. He got a good idea of the way our fruit is cared for, however, by visiting the various warehouses, and observing the manner in which fruit from other

countries was handled. At the time he was in London, the Tasmanian fruit season was nearing an end; the last cases in the different warehouses were being sold.

The larger portion of the fruit sold in London is disposed of by auctioneers or brokers in the vicinity of Covent Garden. There they have a large building erected for use as a fruit market. Each of the many firms represented there announce on blackboards, placed in front of their booths, the quantity and variety of the fruit they have for sale and the hour of the sale. The booths are arranged around the walls inside the hall. Above the booths are the offices, and in front is the auctioneers' stand. Sometimes rival firms conduct sales at the same hour, which has a depreciating effect on the prices realized for the fruit.

When the sales commence, the stand is usually surrounded by representatives of wholesale houses, large retail firms and small fruit dealers. These buyers are ready to purchase anywhere from one to 100 cases of fruit, according to the size of the business they represent. Unknown or unreliable parties must pay cash when the fruit is knocked down, others are given 30 days' time. Samples of the fruit are placed on the stand for inspection. In many instances, the entire lot is within a short distance of the auctioneer, and may be inspected by prospective purchasers before the sale starts. Immediately after the sale the fruit is removed to the purchasers' warehouses or stores. The whole transaction often is completed within 48 hours after the arrival of the ship.

The commission charged by auctioneers varies from 2½% to 10%. It is safer to trust the man who charges 10% than the man who is content to deduct the smaller figure. Experience has shown that 2½% is not enough commission to enable a broker to make an honest living, and as he has to live, the extra amount generally is made up by means of false returns to the grower. Instances are known where brokers have realized a handsome price for the fruit, and when the returns were made to the grower, they reported the fruit as being in bad shape on arrival. The grower, not be-

ing able to prove the contrary, has to be content with the amount remitted.

All firms engaged in the trade are not dishonest. This is a redeeming feature. During an interview with Mr. Lowe, of the firm of Notard & Lowe, of Fooley St., London, he said that his firm handles nearly 85% of the Nova Scotia apples that go to London. He intimated that his firm was anxious to secure more Ontario fruit. This firm does not dispose of their fruit by auction, but by private sale. They have been in the fruit business a long time. They know what fruit is worth, and usually they secure good prices. Garcia & Jacobs, also visited, are extensive importers of Canadian apples. Both of these firms have representatives in Canada.

In company with Mr. Bigrave, the London manager for the Thomson Steamship Line, the staff representative of THE HORTICULTURIST interviewed the secretary of the Surrey Dock Co., who promised the cooperation of his company in the establishing of a market of this nature. Most of the steamers from Canada dock with this company. If the fruit growers wish to make any suggestions in regard to the remodeling of a part of their warehouses for storing fruit, he will be pleased to receive such and cooperate with them.

In place of rushing the sale of the fruit, it could be held and for the most part sold privately. In some instances, several steamers may arrive on the same day. This means that all the fruit is placed on the market at one time, and thereby bring low prices. London alone can consume all the fruit Ontario can send, and if a man were placed there, much better returns would be the result. At first, much opposition would be met with, but this could be overcome by sending only a high quality of fruit.

The next port visited was Bristol. At one time this port was the leading port of entry for Canadian apples, but owing to carelessness on the part of the merchants, the business gradually decreased to little or nothing. This state of affairs is being rapidly overcome, and as soon as the new docks at Avonmouth are completed, it will rank among the best apple ports in Great Britain. There is a large territory adjacent to Bristol which must receive its apple supplies through this port. Messrs. H. H. & S. Budgett report that there will be a large demand for Canadian apples in that district this year. They are anxious to buy first-class fruit. They are the largest wholesale grocers in that city, and have been established over 100 years. Most of the apples sold in Bristol are handled by wholesale fruit merchants. The practice of auctioning fruit is not as extensively carried on there as at

London and other centres. It may be said, also, that Bristol has a good reputation for honest dealing.

At Liverpool the conditions were found to be different from those in the two places previously visited. The fruit sales are practically controlled by six large firms of brokers. There are some smaller firms who are styled fruit brokers, but they invariably turn their consignments over to the larger firms.

There are two associations there that work together in the buying and selling of fruit; one is the Buyers' Association and the other is the Fruit Brokers' Association. There is an auction room situated in the centre of the wholesale district, where only members of these associations are permitted to enter. Our representative was present at a fruit sale as the guest of Mr. Roddie McFee, of James Adam & Son. Rising from the centre of the room to three of the sides are rows of seats for the attendants who wish to bid for the fruit. On the other side is the desk used by the auctioneer. In the centre of the room, in an enclosure, are two elevators for the bringing up of samples of the fruit for sale. Huge baskets are provided in which the entire contents of a barrel or box of fruit may be dumped, should the purchaser make the request. Each of the brokers take turns in conducting the sale of their fruit; and there is a constant changing of those who wish to buy. Long practice and a knowledge of the audience enables the brokers to dispose of an enormous quantity of fruit each day. Sales sometimes last from early morning until 10 or 12 o'clock at night. The fruit must be sold each day, as there is a similar quantity waiting to be disposed of on the day following.

The opinion was expressed by Mr. James Richardson, of Woodall & Co., that when Canadian fruit is shipped with fewer brands better prices will be realized. So many markings on the cases make it impossible to remember them all. Fewer brands will make more rapid sales possible. The grading and packing would be more uniform; as it is now, each brand has to be disposed of separately; by the end of the day the last lots put up often sell at a sacrifice.

Our representative called on Messrs. Symons & Co., 18 Dean St., who have several large grocery stores in Liverpool. They handle a large quantity of choice apples in boxes, but they buy only from the brokers. Some years ago they tried importing their apples direct. The first year they were greatly pleased with the fruit, but during the second and third years it was of inferior quality. They are not anxious to repeat the experiment until Canadian growers es-

tablish a better reputation for honest packing and good fruit. The Dominion Government should enforce a more thorough inspection of fruit, even than it does now, and the name of every dishonest packer should be published abroad as well as at home.

### Fighting Insects in Fall

Although insects in the garden and orchard seem inevitable, yet they can be largely controlled if proper steps are taken and followed in a systematic manner. The thing is to know what to do and when to do it. It is a well-known fact that many of our most serious insect pests pass the winter months in the neighborhood of the crops upon which they feed during the summer. This, then, is the time and place to get at them. They are to be found under old boards, stones, or other trash lying on the ground; many hibernate just under the surface of the soil; fallen leaves and refuse vegetable matter protect others.

The plow and fire are the best agents of destruction, and the fall is the time to apply them. Plow the fence rows and pieces of unused sod in proximity to the crops. Pile up all the old refuse matter of any description that is lying around, as also all dead leaves, and burn it. And most important of all, gather up all remnants of crops in the orchard and garden and destroy them by fire or in the compost heap. Never leave potato vines in the field after harvest; this is the time that the stalk-weevil matures and escapes from its lair in the stem. Destroy the useless stubs of the cabbage and cauliflower plants; many a brood of lice is born on them while they lie on the ground. Cut-worms, green cabbage worms and the pupæ of many moths also very often reach maturity or pass the winter months on crop remnants.

**Fire Blight in Pears.**—Pear Blight is caused by a bacterial disease for which no satisfactory remedy has been found. It has been discovered that infection takes place through buds and flowers principally. The best remedy known, although not very satisfactory, is to cut off the affected branch about a foot below the diseased part as soon as noticed. As the disease may be carried from one tree to another on the knife, it is a good plan to disinfect the knife after each branch has been cut. Pears usually blight most when they are making strong, succulent growth, and it is best not to encourage too much growth for this reason. Bordeaux mixture has no effect on this disease.—W. T. Macoun, Ottawa.

Fruit for market should be of good size, fair appearance and good quality.



## Fertilize Peach Soils When Trees are Dormant

TO maintain the fertility of peach soils, they should receive applications of essential fertilizers. This work, in some instances, should be done in fall after the leaves drop. For the peach, fertilizers that contain plenty of



Properly Packed Peaches

A common potassium salt used as manure is kainite. It is an impure form of muriate of potash, containing about 13 per cent. of potash. Sulphate of potash is also used by some growers.

Potassic manures should be spread over the ground when the trees are dormant in fall or spring, and worked in with a cultivator. Wood ashes may be applied at any time.

### PHOSPHORIC ACID

Phosphoric acid in some commercial form is essential to the growing of good peaches. The tree, the fruit, and the seed are benefited most decidedly by its application. Peach soils, being light and sandy, are likely to be deficient in this constituent. In heavier soils, it is often present in an unavailable form, and requires cultivation to liberate it. Phosphoric acid is usually applied to the soil in the form of bone meal or superphosphates. Bone meal also supplies a small quantity of nitrogen. Superphosphates are apt to be strongly acid, and should be applied in the fall or winter when the tree is dormant, and at the rate of about 200 pounds an acre. Thomas or basic slag is a form of phosphoric acid that gives very good results on sandy soils. It must be very finely ground, as it parts with its fertility very slowly. Dissolved South Carolina rock is another valuable form of this fertilizer

### NITROGEN

An over supply of nitrogen is ruinous to peach trees. It has been found that "the peach is the healthiest and yields the best fruit on soils which for most

one must be cautious when using nitrogenous fertilizers.

A liberal application of nitrogen is important, however, for young growing trees and for mature trees when the leaves appear smaller than natural, and take on a yellowish color. Although this condition of the leaves usually indicates a lack of nitrogen, it also may indicate an excess of moisture in the soil. Too much nitrogen is indicated by unusually dark green foliage, rank growth, large crops of small, poorly-colored fruit, or no crop at all, and immaturity of the wood in fall.

When nitrogen is required to stimulate early growth or restore impoverished bearing trees, it is most effectively applied in the form of nitrate of soda. Another commercial form is sulphate of ammonium. This, also, may be used for peaches, but it is not so quick in its action as the nitrate.

The most economical method of furnishing nitrogen is by means of tillage and green leguminous manures; the former promotes nitrification, the latter indirectly adds nitrogen to the soil from the air, and it also prevents the leaching of nitrates already in the soil. On poor, gravelly knolls some commercial form of nitrogen may be used with advantage, and it should be applied early in the season, as late applications tend to prevent a proper ripening of the wood for winter.

### BARNYARD MANURE

Barnyard manure as a fertilizer for peach trees is not favored by the major-

potash and phosphoric acid are required, and only small quantities of nitrogen. The proportion and quantity required for a particular orchard will vary with the texture and condition of the soil, and the amount and availability of the plant foods it already contains. The only way to determine the wants of the soil is to experiment and watch the results.

### POTASH

The most essential element of fertility in a peach orchard is potash. It induces fruitfulness rather than excessive wood growth. Chemically speaking, it forms salts of the organic acids in the plant, it is supposed to assist in the formation of starch, and the assimilation of carbon, and it influences the flavor. Also, when abundantly supplied, it causes the fruit to color up better. It is often deficient in peach soils, and must be supplied artificially.

The most economical source of potash is unleached hardwood ashes. These also supply a small amount of phosphoric acid. The potash in wood ashes is immediately available. Forty to fifty bushels an acre is the usual rate of application. Muriate of potash is a form of potash that also gives excellent results with peach trees. It is a definite compound containing about 50 per cent. of actual potash, and may be used at the rate of 200 pounds an acre. This and other references to the amount required are merely suggestions. Local conditions and experiment alone can tell.



A Uniform and Correct Pack for Pears

crops would be considered deficient in nitrogen." Also, that trees suffer from winter-killing when overfed with nitrogen, are more liable to be infected with brown rot, and produce later and poorer crops of fruit. It is obvious, then, that

ity of orchardists. Its use seems to encourage fungous diseases, more so than artificial fertilizers. Mr. J. H. Hale, the "peach king," says that peaches stimulated by stable manure are more liable to yellows than those fertilized by com-

mercial fertilizers. The effect of barnyard manure is similar to that of other nitrogenous fertilizers, and its use may be governed by similar conditions. For

young orchards on poor soil its use is beneficial. Two or three forkfuls of manure spread around each young tree in winter may be of value. Generally

speaking, however, the profitable use of stable manure in peach orchards is confined, as in this case, to the stimulation of early growth in newly-set orchards.

## Protect the Strawberry Plants

**T**O protect strawberry plants from the cold of winter and from the disastrous effects of alternate freezing and thawing in spring, it is necessary to give them some protection. This is best done by means of mulching. Besides being a protection against severe weather, a good mulch should enrich the soil, and if skilfully handled, it will delay the ripening of the fruit in spring as much as a week and more.

While it is desirable in most strawberry districts to secure earliness in fruiting, there are some sections in Canada where the profits of the strawberry patch would be materially increased if the crop were to ripen a few days later than is usual. It is important then for growers to consider carefully the possibilities of mulching for this purpose, but it must be practised with caution. Although some growers may delay fruiting through personal skill and the effect of favorable conditions, a mulch of sufficient depth to retard vegetation is apt to injure the young plants and, if left too long, it will rot and kill them.

The kind of material to use for mulching depends on what can be obtained most readily. To combine manurial value with protection, strawy horse manure is the most satisfactory. It can be obtained quite readily in most localities. It should not be applied, however, quite so heavily as some of the

lighter mulches, such as clean straw or hay. An objectionable feature in connection with the use of strawy horse manure, particularly that drawn from city stables, is that it is apt to contain a large number of weed seeds. This objection is seldom strong enough, however, to overcome the advantage gained by its use as a fertilizer and for protection.

The time to apply the mulch is governed by the lateness of the season. Usually it is applied soon after the ground becomes frozen hard enough to carry the horses and wagon. The covering should not be heavy enough to smother the plants. Should the winds of winter remove a considerable portion of the mulch during seasons of little snow, it is well, towards spring, to cover these bare spots, if material and time are plenty. Alternate thawing and freezing in spring do more damage than the cold and frosts of winter.

In spring the covering may be removed as soon as danger of frosts is past, or if it is desired to retard fruiting, a few days later. It is best to do this on a dark day to mitigate the effect of a sudden change from protection to light.

Rake the mulch off the plants to the space between the rows where it will serve to keep down weeds and to conserve moisture, which is so necessary to the production of large, high grade

berries. A mulch between the rows in early summer also serves to make clean picking for the pickers, and to keep the berries from being splashed with sand during rains.

### Fall Work With Plum Trees

In the treatment of a plum orchard, Mr. F. G. Stewart, of Homer, gives the following advice: "Spray plum trees in fall after the fruit and leaves are off. This kills the fungus of the Black Knot. The spores of this fungus develop twice a year, in summer and in winter. Spraying in the fall washes down and prevents the spread and development of the summer spores for the next season. Use the sulphate of copper solution, four pounds to the barrel, and apply any time after the leaves fall. This solution also helps to prevent plum rot.

"Plow to the trees about the end of October or first of November, to throw the water away from the roots. This leaves a furrow or ditch between the rows which must be opened at the ends to let the water away. If the plowing is not done until late, the ground should be harrowed so as not to leave it too open and so admit the frost. If the ground is left open, the water goes in and freezes in little pools around the roots. When the soil is packed tightly around the roots, however, the trees always do much better."

## Two Ways of Pruning Grape Vines

Which is the best, cheapest and easiest method of pruning grapes, the fan or Kniffen system?—P. E. K., Halton Co., Ont.

**I**N all grape-growing localities, the Kniffen system is the best and cheapest for strong growing varieties, such as Niagara. It is best because it requires less care and work, and it is cheap. It saves money in time and labor. Only two wires, instead of three or four, are required for the trellis. Slow growing varieties, such as Delaware, are better trained on the fan system, as they must be renewed from a point nearer the ground. When following the fan system the pruner can always cut to good wood; when following a more definite system, as the Kniffen, sometimes he must cut at a loss.

The fan system is briefly as follows: When planting, cut the vine back to two buds; next spring, again cut back to

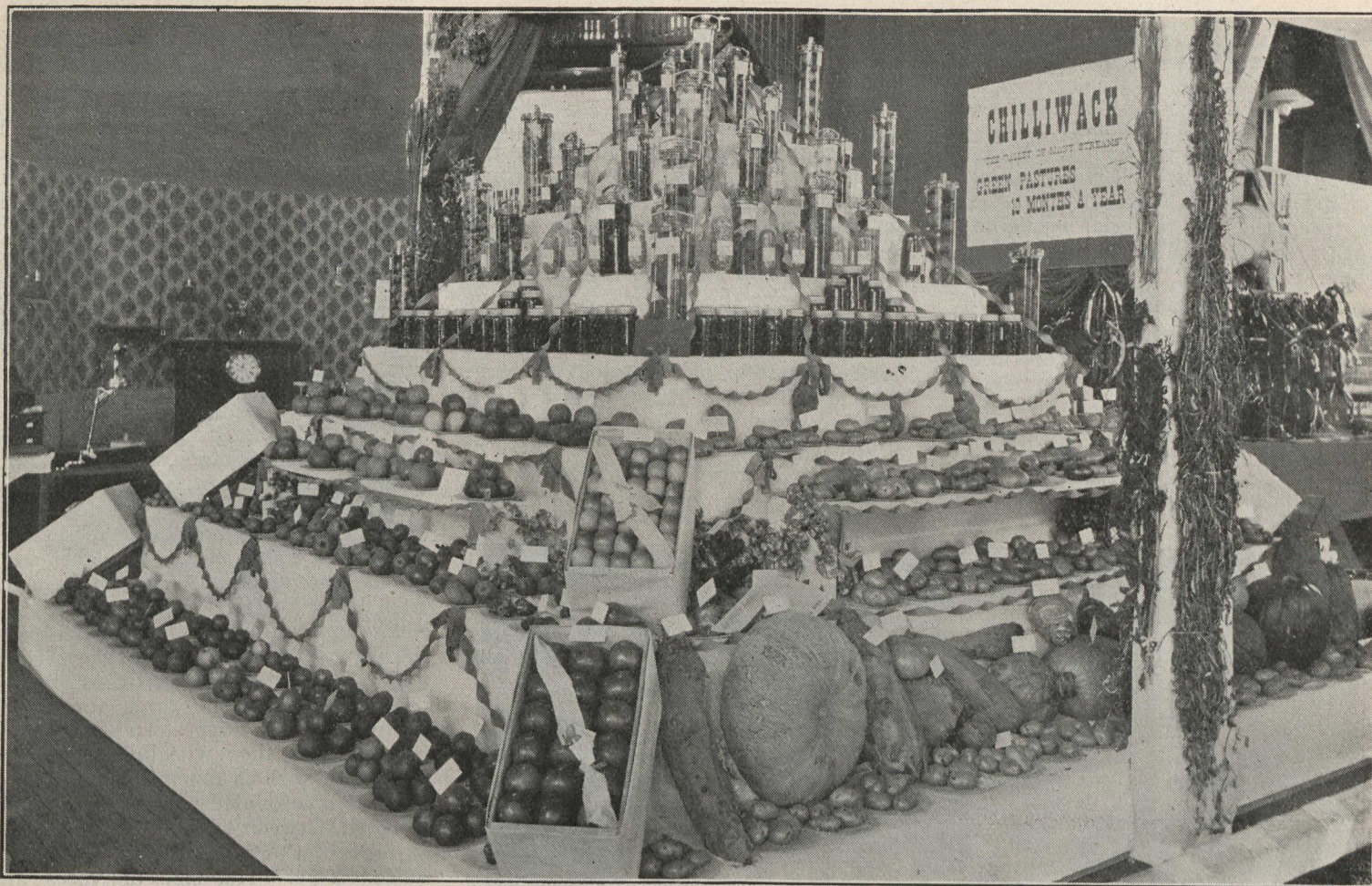
two buds; second spring after planting, if vine is strong, leave one cane about two or three feet long, and tie up to trellis wires. When growth on this is about six inches long, rub off all sprouts below the point on the upright where it is desired to start the fan. Third spring, prune back to six or eight buds the strongest canes that arise from near a central point below first wire; tie about three of these fan-shaped to the wires and remove all the rest. The following seasons, renew the wood from as near the trunk as possible and increase the number of arms to five or more if growth is strong.

A vine trained by the Kniffen system consists of an upright trunk or standard and four arms. To produce this result the young vine is treated similar to the fan system for two seasons. The second spring after planting, select the strongest

cane and tie it straight and firmly to the top wire, cutting everything else away. The third spring, select four arms, two on opposite sides of the standard near the lower wire and two similarly placed near the upper wire, cut these back to six or eight buds according to the length of the joints on the cane, tie them to the wires, and remove all other canes. The fourth and subsequent years renew the arms with wood that arises from a point as near to the central standard as possible.

Apples for storing should be picked, barrelled and placed in a shed, then, when hard frosts come, put in a cool cellar. A slight frost will do no injury, but it is best to keep the apples as cool as possible without freezing.

As a rule the finest and highest priced fruits are the most difficult to raise.



The Chilliwack Exhibit at the recent Provincial Fair in British Columbia

## The Seedless Apple from Another View Point

Prof. John Craig, Cornell University, Ithaca, N.Y.

THE last issue of THE CANADIAN HORTICULTURIST contains the most astonishing, I was almost going to say paralyzing, statement that I have read for some time. I refer to the position of the Hon. John Dryden in regard to this new-old fruit, called the Spencer Seedless Apple. It is almost inconceivable that a man of Mr. Dryden's standing in the agricultural community, and a man who has unquestionably labored unselfishly and sincerely for the agricultural interests of the province, should lend himself to a project which, to the enlightened pomologists of this country, seems to be absolutely indefensible. If Mr. Dryden has seen old established trees bearing in any place, we might have condoned the position he has taken to some extent. If he had any personal evidence that this fruit was good to eat when it was ripe, that it was any advance on the ordinary commercial apple, or any knowledge that it would succeed under our eastern conditions, there might be some further slight excuse for the

position which he takes. Ten-year-old orchard trees, or two-year nursery stock under irrigated conditions in southern Colorado do not furnish an Ontario man with suitable data for making deductions along lines of adaptability to Ontario climate and soil.

### SEEDLESS APPLE NOT TESTED

For many years Mr. Dryden has been associated with experimental work. He realizes the desirability and advantage of it. Otherwise he would not have urged the appropriation of money for the establishment of fruit-testing stations and agricultural colleges. This fruit has never been tested at any station. No sample can be secured by any station. Yet, Mr. Dryden is willing to lend the strength of his name and the prestige of his former position to the exploiting of a variety which is known to be of poor quality and which may be of absolutely no value in this section. This is the position, and I must admit that the explanation given by Mr. Dryden in the recent number of THE CANADIAN

HORTICULTURIST is no sufficient justification for his attitude on this question.

There is no reasonable doubt whatever that this same seedless apple has appeared in different parts of the country over a large number of years. If it had been of such transcendent value, the persons on whose farms it grew would not be foolish enough to allow a good thing to be lost sight of.

The apple was exhibited at the State Fruit Growers' Association meeting in Lockport, N.Y., last winter. I had the privilege of examining the Colorado-grown specimens and of testing its quality in company with a number of experienced fruit growers. The average specimen was medium in size and unattractive in color. The quality was unanimously voted to be poorer than Ben Davis—a New York-grown Ben Davis at that. The reasons for advocating the cultivation of an untried variety of poorer quality than Ben Davis, and at \$2.50 a tree, by a man of Mr. Dryden's judgment and experience, are very obscure.

# Decorating the Dining Table with Fruit and Flowers\*

DECORATION of the dinner table is an art that appeals to every one interested in gardening. No hard and fast rules can be laid down, as so much depends on the size of the table to be decorated, the material available to work with, the likes and dislikes of those whom it is desired to please.

## VASES

The vases or other receptacles for flowers vary greatly in style, form and size; in fact, almost to an endless extent. Many of them are very ornamental as well as useful, and a picture in themselves even when empty. As a rule, the more ornamental the vase the less suitable it becomes for tasteful ar-

When convertible vases are employed and the flowers are to be arranged in tiers; in other words, one lot above the other, they should be sorted according to size, the largest flowers at the bottom or base, medium sized flowers in the centre, and the smallest and lightest flowers on the top. A few medium sized flowers among the lighter ones will give strength and character to the top of an arrangement; and a few of the lightest flowers should be placed among the large ones in the base. This addition generally improves the whole arrangement, giving it a light and graceful effect.

## ARRANGEMENT OF FLOWERS

Flowers should also be sorted accord-

shades of yellow appearing white, or almost white. Bright hued flowers, such as bright shades of red, crimson or pink, always look well under any light. Light blue, or mauve, does not light up well; yet shades of purple are very effective.

## PLANTS TO USE

There are many foliage and flowering plants suitable for table decorations either used alone or in combination with ferns or other green for a base. Plants over 15 inches in height should not be employed. A point could be strained with a tall-stemmed *Cocos Weddeliana*, or some of the aralias, such as *Aralia gracillima* and *elegantissima*, or plants of that description, when the foliage is graceful and yet not too dense to obstruct the view. Small standard plants with a light and graceful head can be used. Such plants must have a slender and clear stem of 20 inches from the table to the lower branches. Tall glass vases with a slender stem can with discretion be employed in the same way. The stems of plants or vases can be improved by entwining them with light and graceful vines such as *Asparagus plumosus*, and so on, provided the view is not obstructed between 15 and 20 inches, so as to prevent the guests seeing each other quite freely. The size of vases and plants must be regulated by the size and form of the table. If the vases are too small, the decoration will appear small and lacking in character, no matter how the flowers are arranged. Then, again, if the vases or plants are too large, the result will be a heavy effect. A very effective arrangement can be had by trailing strings of asparagus, smilax or other vines from the centre candelabra and looping them to candlesticks, provided the work is lightly done.

The following plants are very useful for table work, when symmetrical and of proper size. *Pandanus Veitchii*, *P. graminæfolius*, small, graceful-leaved *dracænas* and *crotons*, *Cocos Weddeliana*, and such ferns as *Adiantum cuneatum*, *A. Farleyense*, and so on. Among the best flowering plants for tables are *Begonia Gloire de Lorraine*, *Primula obconica grandiflora*, *P. chinensis*, *P. stellata*, *cyclamen*, *lily of the valley*, *ericas*, and so on.

Sometimes silver plate is heavily displayed; others use valuable and beautiful china in their table arrangement. In this case small plants are more in keeping than flowers in vases. In order to offset the stiffness, the cloth can be trailed with asparagus or other green, with a few flowers carelessly scattered here and there; or oblong sprays of *Clematis paniculata*, *Euphorbia jacquinæflora*, *Bougainvillea glabra*, *B. Sanderiana*, *tropæolums*, and so on.



Not a Dining Table, but Decorations as Beautiful shown at Brantford

angement of flowers; of course, there are many elegantly shaped vases that show off floral decorations exceedingly well, but much of the design and beauty are concealed. Sometimes special designs or colors are used for special purposes or occasions, which, of course, must conform to the size of other objects on the same table.

There are many beautiful forms of vases suitable for the dinner table; but flowers generally look best when arranged in glass than in vases made of other material. Multiplex, convertible, or any other table vases may be used.

\*A paper read by Mr. Geo. H. Hale before the Monmouth County (New Jersey) Horticultural Society.

ing to form and color. Those of a similar form group much better than mixed forms. Colors must be employed that will harmonize or contrast well, using the darkest shades below and light ones above. Sometimes shades of color are allowed to be of more consequence than size of flowers. Small flowers of a dark shade, arranged in a bold mass at the base of a vase, look well with larger flowers of lighter shades arranged above them.

Some kinds of flowers which look well by daylight are utter failures under electric or other light. Yellow flowers of any shade, for instance, are very effective by daylight; under artificial light they are much paler, some of the lighter

can be used in place of green. The plants should be knocked out of the pots and placed in other receptacles; if the latter are too small or shallow to receive the plants, the balls can be reduced or cut to fit.



A Centrepiece of Fruit and Flowers

If no receptacles are on hand, the plant can be placed on pieces of paper or other material to save the cloth. Mounds of moss can be made around the ball of earth and covered with fern, asparagus, smilax or other green; and flowers of one kind and color placed on the mounds.

#### SOME FLOWER COMBINATIONS

But orchids, such as cattleyas in variety, cypripediums, lœlias, oncidiums, odontoglossums, cœlogyne, calanthes, and so on, make rich and beautiful decorations for the table. Each kind should be used separately and arranged so that every individual bloom will not look crowded and will show to best advantage.

Calanthes Veitchii and lily of the valley, with fern fronds, make a beautiful combination. Small chrysanthemums in their season are much used and are very attractive. Lily of the valley and Richmond, Meteor or General Jacqueminot roses, Roman hyacinths and *Salvia splendens* make rich and very attractive arrangements. Sweet peas are among the best flowers for table work, when properly blended. Sweet peas and *Gypsophila paniculata* and fine fern fronds create a grand effect, especially under artificial light.

Roses are most generally used and they are the most popular; in my estimation, the rose is queen, no matter where or how employed. When roses are used for table work they should be arranged with their own foliage and, generally, one variety or color employed. Carnations are very suitable among the best for table or other decoration, and should

be arranged in one or possibly two colors. The most important point is to see that the color of the flowers used harmonizes as nearly as possible with the dishes or other ornaments on the table. *Primula obconica*, *P. chinensis*, *P. stellata*, the many varieties of narcissus, freesias, tulips, poppies, coreopsis, godetia, *Helianthus cucumerifolia* and *multiflora fl. pl.*, and many other kinds of flowers, are all very useful for table work.

#### THE USE OF FRUIT

Fruit is used very often as a part of table decorations, and if possible should be displayed on glass dishes, as glass seems to show off fruit better than dishes made of other material. Fruit, as a rule, looks best dressed with its own foliage; but when dishes have to be dressed several hours ahead of time, as necessity very often requires, the leaves generally curl and lose their shape. In this case it would be preferable to employ leaves of a thicker texture, such as those of ivy, laurel, aucuba, bay, and so on, as they will keep longer out of water.

Pineapples should be dressed with their own foliage. Maidenhair fern can be used with strawberries and kept fresh by utilizing small glass tubes filled with water inserted among the fruit. Strawberry plants that have good large ripe

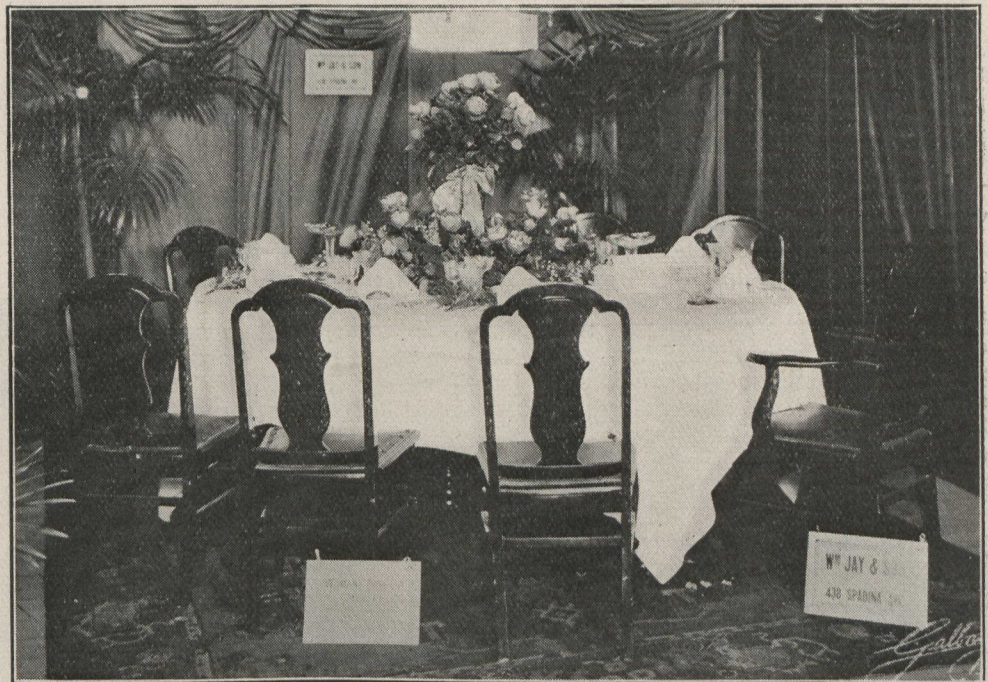
well-arranged centrepiece, and to make every ornament upon the table (whether floral or otherwise) subordinate to the centre one. If the table should be so long as to require three principal pieces, it would be best to use two elegant plants with graceful and finely divided foliage, one at each end; they will set off the central floral arrangement much better than two other floral pieces would.

It is essential that everything on the table should harmonize so that it will please the most critical eye. Strong color contrasts must always be avoided.

#### Trouble With Azalea

About Christmas last year I purchased a fine plant of azalea. After a short time all the leaves fell off; what, probably, caused it?—R. S., Toronto.

This plant most likely has been allowed to become dry at the root. This, with the dry air of ordinary dwelling houses, spoils these plants. When they have dropped their leaves they are of little use. An azalea in full bloom, that is to be used as a house plant, should be thoroughly watered when received and should be kept well watered and in a cool, light place, where the air is as fresh as possible.—Answered by Thos. Manton, Eglinton, Ont.



An Artistic Scheme of Table Decoration

fruits hanging, make a very effective centrepiece for the dinner table. The plants can be turned out of the pots and the balls cut down so that several plants can be arranged in one dish.

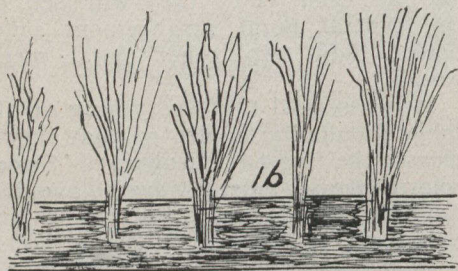
#### CENTREPIECES

For a table set for not over 16 persons, it is advisable to have only one large

I have been a subscriber of THE HORTICULTURIST since 1890, and hope to be for a great many years to come. Your magazine has given me much pleasure. I have recently acquired all the back volumes, except two, which, as yet, I have been unable to secure.—Chas. R. Hext, Brantford, Ont.

## The Fall Care of Roses

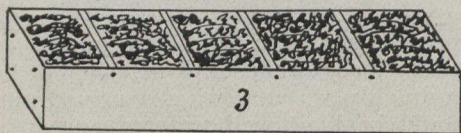
WINTER protection for roses is a necessity in a climate that is severe. The accompanying cuts illustrate how it is done by Mr. W. G.



A Little Work Will Protect Them

Black, of Ottawa. In his own words the operation is described as follows:

'It is said that an ounce of illustration is worth a pound of talk. Adopt-

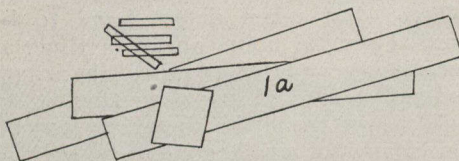


Ready for the Cover

ing that idea, I have made some rough pencil illustrations of the various stages in the work of protecting roses as prac-

tised by myself for five or six years with satisfactory results. Roses put away in this shape can be taken out in spring with canes as plump, green and fresh as the day they were put down. The experimental farm at Ottawa recently adopted the same system of keeping roses and with similar results.

"The teaching of the illustrations is as follows: No. 1b represents six roses planted in a row of 12 feet long. In cut No. 1a there are three boards and two pieces for ends to make a box, some small sticks to hold the roses down and some dry leaves. No. 2 shows the two

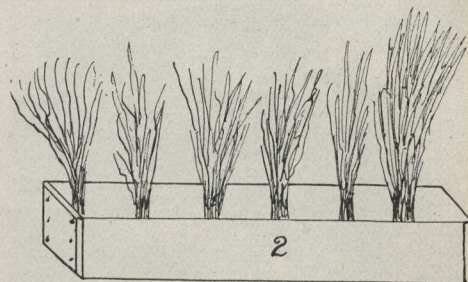


The Material

sides of the box with ends nailed on around the six roses. No. 3 shows the roses bent down, and held there by the little braces that are held in place by nails driven through from the outside and the box filled up with dry leaves. In No. 4 the cover is on ready for the severest kind of a winter.

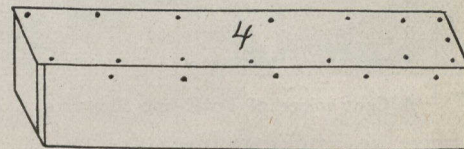
"Before the cover is put on it is best

to dust a little powdered sulphur and red pepper, mixed together, into the box. The powdered sulphur prevents mildew, and the red pepper prevents



The First Step

mice from harboring in the box or among the leaves during the winter. It is hoped that these illustrations will con-



The Job Done

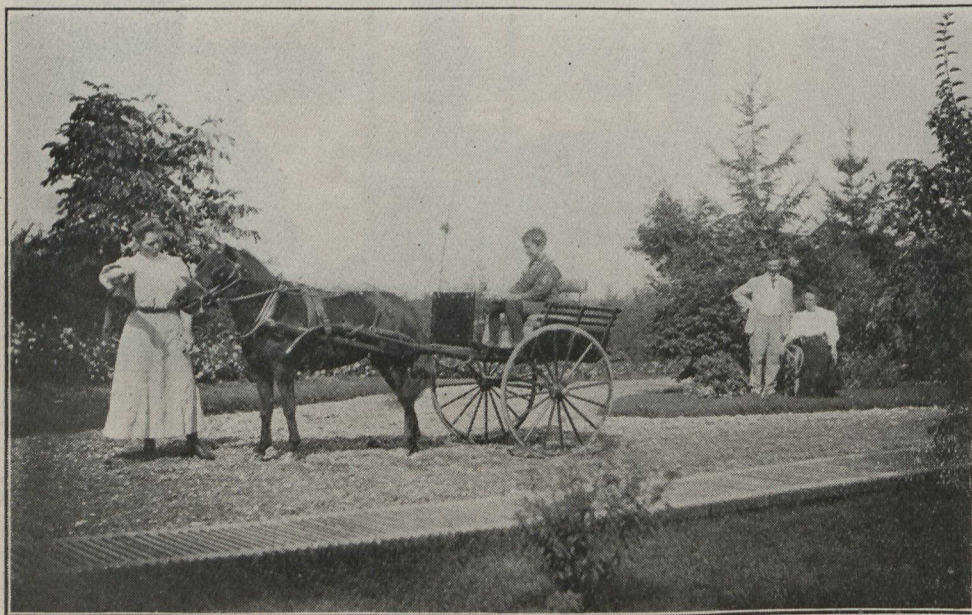
vey to the amateur rose grower a method of winter protection for the finest flower that grows."

## The Driveway

RURAL grounds in Ontario are too often neglected—a place should mean something. The fall is the ideal time to begin a plan of improve-

ment. The home ground should be home-like, retired, cozy.

Think of your driveway this November and its effect from the house and



Driveways are Important Factors in the Landscape

from the road. Have you a border planting of trees for foliage effects? Have you against these, long flower beds for decorations? Study the beautifying results obtained with shrubs of long and lovely lives that are native to the soil and quite as satisfactory as any foreign bush. The cut shows a driveway laid out in 1897, on the beautiful grounds of Mr. A. K. Goodman, of Cayuga, Ont.

**Prune Raspberries** by cutting out all old canes that have fruited, and small or weak canes of the present season's growth. These are burnt so as to destroy any insects or disease that may be lurking there. Early in the spring we go over the rows with the hedge shears cutting back the fruiting canes, removing six to 10 inches of the tips. In that way stronger laterals or branches will be thrown out, and the fruit will be of better quality. This method of growing raspberries is termed the hedge-row system.—A. E. Sherrington, Walkerton, Ont.

Have any readers of THE HORTICULTURIST had any experience in growing apricots? If so, kindly give best varieties, best kind of soil, how to plant, and general cultural directions.

# A Civic Enemy: The Tussock Moth\*

Prof. D. P. Penhallow, McGill University

THE past year's discussion in the press of Montreal, Toronto and other cities, relative to the appearance of the Tussock Moth, has directed attention to a matter of very great interest to all cities where shade trees are regarded as of essential value. Among the many insect enemies of our shade trees, the Tussock Moth is one of the worst, since it multiplies rapidly, and the very large number of insects produced by a single brood leads to the rapid defoliation of the trees upon which they occur. Fortunately, as pointed out by Dr. Fletcher, the danger here is not so great as farther south, since with us there is only one brood each year, while in the northern states there are two broods and in the southern states probably three broods in a season. This difference is due to the fact that we are situated near the northern limit of distribution, and it is therefore a much less difficult matter to control the insect or even to exterminate it if proper measures are adopted. As an aid to human endeavor in this direction, birds and natural parasites constitute an important element, but even under such conditions it is possible for the insect to get beyond control and to cause the most serious damage to one of the most valuable assets a city can have.

That the Tussock Moth is not regarded with indifference or allowed to be controlled by its natural enemies, is evident

by cities in the United States, for its extermination. As the female does not fly, the distribution is effected either by the migration of the caterpillars from tree to tree in search of food, or by their transport on vehicles, animals or people upon whom they may fall from trees. It therefore follows that when the insects are found in a restricted area, it is possible to confine them there, if prompt and efficient measures be taken.

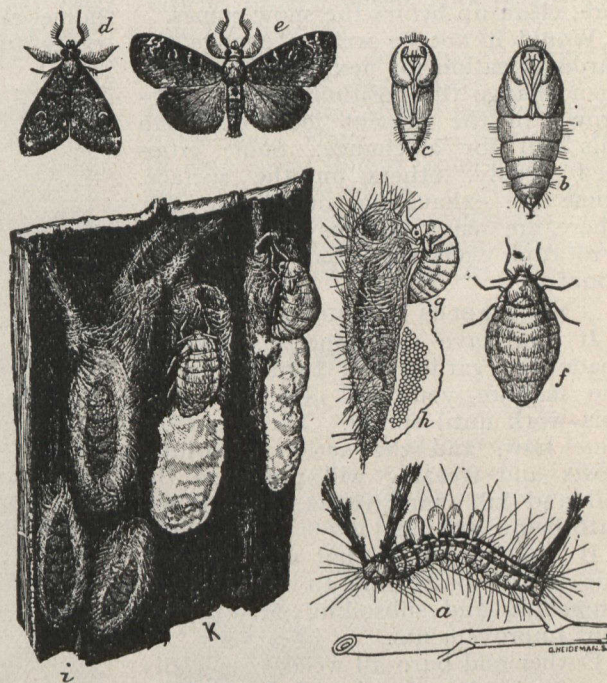
In winter and early spring the eggs may be readily detected and destroyed either by picking and burning, or by the use of creosote oil which is far more expeditious and economical. But if the eggs are allowed to hatch, which they will do about the first of May, the situation becomes a much more difficult one to deal with, as then the only effective remedy is to be found in spraying, a process which will not only involve expensive apparatus but the expenditure of much time and labor, with the result that extermination will not be as effective and complete.

There is only one way to deal with such a problem, and that is to take prompt and efficient measures at the time when a minimum of labor and expense will be demanded. The indifference which leaves such matters to the natural course of events in the hope that the difficulty may right itself, is not justified by any policy of good municipal government.

Shade trees are among the most valuable assets a city can have. They not only add a great element of beauty and general attractiveness to otherwise barren stretches of pavement and dwellings, but they contribute to the actual health and moral tone of the community in ways which are too

numerous and too well known to require restatement here. The mere fact that in all the most cultured and enlightened communities of the world, streets are provided with trees at great cost and maintained with great care, is in itself sufficient proof that they are esteemed beyond the ordinary standards of pecuniary value. But from a

merely monetary point of view, a well-grown tree is worth anywhere from \$100 to \$500 according to its kind and size.



The White-Marked Tussock Moth

*Orgyia leucostigma.* a, larva; b, female pupa; c, male pupa; d, e, male moth; f, female moth; g, same ovipositing; h, egg mass; i, male cocoons; k, female cocoons, with moths carrying eggs.

It is, therefore, not inappropriate to urge in the most insistent manner, that our cities should take efficient measures for the better care of its trees, and that it should not allow such pests as the Tussock Moth to work unchecked.

## Protect the Birds

Our birds deserve protection and encouragement. Some birds, the robins, for instance, do destroy some few small fruits during a short season in the year, June and July; but the amount of fruit they save, in the destruction of insects throughout the whole year, is of infinitely greater moment. The robins' appetite for insects is never satisfied; and the fruit grower should ignore his slight depredations on cherries and other fruits in the light of his greater benefits.

However, there is an easy and desirable means of saving even this small amount of fruit that the birds eat, and that is to supply them with something still more desirable in their eyes. The Russian mulberry tree looks well and bears heavily, while the birds prefer the berries to any of our small fruits. If these trees were liberally planted throughout the country, the fruit would be saved for commercial purposes, and the birds for insect destroyers.



Silver Maple Leaves Eaten by Larvæ.

In successive stages of growth from a (newly hatched larvæ) to f (full-grown larvæ).

from the great care taken, and the large amount of money annually expended,

\*THE CANADIAN HORTICULTURIST has received a number of requests for information regarding the Tussock Moth, which has done much damage to shade trees in various Canadian cities during the past summer. We have pleasure, therefore, in reproducing this article with cuts from and by permission of *The Canadian Municipal Journal*.

## Lawn and Garden Notes for November

NOVEMBER is the time to make things snug and secure for winter. No diseased roots or leaves of plants should be left on the garden to carry spores over for next year. Rubbish of all kinds serves as hiding places for insects during the winter. Therefore, clean up before the snow comes.

Would it not be well to change the garden location for next year? If not, then change the positions of the crops grown in the present location. Plan this fall for a change. Some crops feed deeply, others on the surface. Some are exhausting, others are not. There are many reasons for practising a rotation even on a small plot. Think about it.

### VEGETABLES OUTSIDE AND IN

If you have not done so, plow or spade the garden and turn under all the manure you can. Do not leave this work until spring. There is more time now, and the action of winter frosts and freezing will pulverize the soil and kill many insects that hibernate below ground.

If the garden is not well drained, this is the best time to make it so. Trenching and subsoiling are permanent improvements.

Gather and burn all weeds, especially those that bear seed pods. Did you sow seeds of prickly or winter spinach in September? If so, the plants should be protected on the approach of winter with a covering of coarse straw.

Perhaps that asparagus bed has not yet been attended to. Break down the tops, remove and burn them, and then apply a dressing of manure.

There is plenty of time to start a mushroom bed. It is interesting work. Do not be discouraged if the first attempt is disappointing. It won't be if you do not forget the details. Mushrooms are sensitive to lack of attention.

Rhubarb for winter use may be grown in the house cellar. Take up some roots, leave them two weeks in a cold frame or in a corner, and then place them in the cellar. Pull the stalks as soon as they are ready. When the crop is about done, throw the old roots outside or they will decay and become ill-odored.

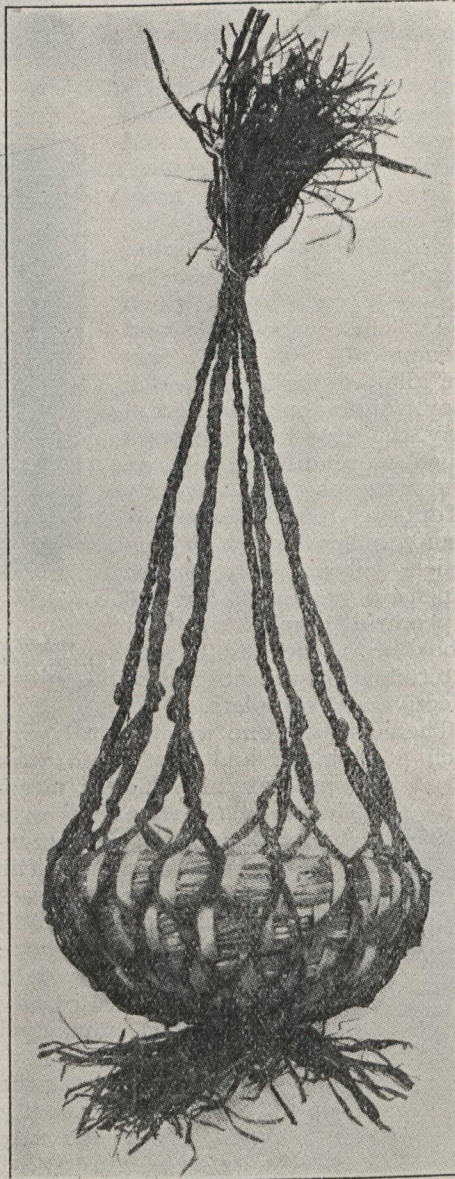
Celery should be dug now and stored in the cellar. Pack the stalks upright and close together with the roots in sand. Should the tops show signs of wilting, apply water to the roots. Never sprinkle the leaves or stalks, as it induces decay.

### FALL WORK WITH FRUIT

Mulch the strawberry bed but not until the ground is frozen to a depth of four to six inches. Apply clean straw or hay. Manure will do, but it is apt to contain weed seeds.

Place a few forkfuls of manure around the raspberry and blackberry bushes.

Currants and gooseberries are the hardiest fruits we have. They may be planted in November. Buy good plants of the best varieties. For the home garden excellent varieties of currants are: Red Cherry and Fay's Pro-



A Home-Made Hanging Basket

lific; white, White Grape; black, Naples. Two good varieties of gooseberries are Pearl and Downing. The best English gooseberry is Whitesmith, but it is troublesome on account of mildew.

If you have some old bushes of these fruits, would it not be interesting to propagate new ones yourself? Take cuttings of the past season's growth. Make them about eight inches long. At the bottom, cut clean and square just below a joint; the top may be cut off obliquely and between the joints.

It would be better to store these for a time to allow them to callous. Place the cuttings in sand or sawdust, butts uppermost, for a couple of weeks. Then plant in a row in the garden. In a year's time, the new plants may be transplanted to permanent quarters.

Gooseberry and currant bushes may be pruned any time after the leaves fall. There are different ways of doing this. Perhaps the best method is to follow the bush form, allowing about six branches to the bush. A renewal system of pruning is best, whereby one-third of the bush is renewed each year. Cut out two of the oldest canes and allow two new ones to take their places. The ends of the new growth should be shortened.

Do not leave any grass or rubbish around the base of your fruit trees for mice to nest in. If the trees are young, it is advisable to wrap the trunks with building paper and throw a small mound of earth around the bottom.

### THE OUTDOOR GARDEN

Certain kinds of plants require protection in winter. While this is true, do not do it too soon. Plants often are injured by being covered too early.

Protect the roses. There are various ways of doing it. Read the article on another page.

Dwarf shrubs may be protected by placing a barrel over them and filling with leaves. Bore holes in the barrel for ventilation. If barrels are considered unsightly, cover them with evergreen boughs.

Gaillardias, campanulas, peonies, and many other border plants that may require protection may be covered with leaves and a little stable manure. Do not apply a heavy cover.

Hardy bulbs may be planted yet. Do not expect as good results as from those planted earlier in the season. Late planted bulbs require protection; early planted ones, also, but not so much. Most bulb beds are benefited during severe winters by having a mulch of straw manure, three or four inches deep, spread over them. If leaves and spruce boughs are easier to obtain, they will serve just as well. Do not cover the beds until after the ground has frozen solid.

### WINDOW BOXES INSIDE

A serviceable way to winter tender plants is in a box placed inside the window and about one foot from the glass. Have the box eight inches wide, six inches deep and of sufficient length to fit the window. Bore several holes in the bottom for drainage. A tin tray of similar size should be provided to catch the water that soaks through. Between the box and tray should be small blocks of wood, so that they will



not fit tightly together. Support the box with brackets. In it put some broken flower pots or other material to facilitate drainage and fill with soil.

If the weather is open and no hard frosts prevail, some of the hardier perennials may be planted this month. Among those that succeed well, if planted at this time, are German iris, some varieties of peony, dielytra, and lily of the valley. With the exception of the iris, these plants should be mulched later on with long strawy manure.

Now is the best time to make new walks and driveways, flower beds or borders.

#### BULBS FOR THE HOUSE

Bulbs for house culture may be potted from September until late in fall. Some growers say that November is the best month.

Make sure that the bulbs in pots are well rooted in the cellar or some cold, dark place before being brought out into the window or greenhouse. Securing good roots to hyacinths, tulips and narcissi is the most important point to be considered in successful bulb culture. Bulbs that were potted in September may now be brought to the light.

Pots of freesias should be placed in a semi-light place until started, then given the benefit of the sun and sufficient moisture to keep the soil moist, but not saturated. Do not give liquid manure to freesias. They do not like it.

Try some Chinese sacred lilies and hyacinths in water bowls.

If you start bulbs of Roman hyacinths early in November, you can have the bloom for Christmas.

Why not try a few "pips" of lily of the valley? They are rather hard to grow in the house—unless proper care is exercised. They require a temperature of 75 degrees. Some amateurs grow them near steam pipes from the house furnace, and even near the kitchen range. If you have a greenhouse, so much the better.

Gloxinia, tuberous begonia, and fancy caladium bulbs should be kept dry and stored away in the pots; or, the bulbs may be taken out, packed in dry soil, and placed in a cool temperature not lower than 45 degrees.

#### THE WINDOW GARDEN

If you have not arranged for potting soil for use later on, do so now before it is too late.

Every fine day give your house plants a draught of fresh air, but do not have the draught come directly across the plants. Open a window or door some distance from them.

As the weather grows colder, the heat must be increased. This will result in an increased dryness of the at-

mosphere, and this induces a visit from insect pests. Look out for aphids and red spider. The latter is most to be feared. Sprinkle often with cold water. For aphids, use tobacco water.

Remember the mistake that often is made by amateurs in regard to the watering of house plants. Do not give water every day. That is wrong. Water the plants only when they need it, and then do not delay. Plants need water when the surface of the soil is dry. This can be learned by tapping the pot with the knuckles and getting a ringing sound for dryness and a dead sound when the soil is wet enough. Dryness may be determined, also, by rubbing the surface soil with the finger; if it sticks to the finger, it is moist enough, but if it feels dry, it needs

water. When watering, apply enough to penetrate the soil to the bottom of the pot. Do not allow plants to stand in saucers or pans of water.

When potting plants, water well the first time. Procure new pots if possible. When old pots are used, wash them inside and out. Be sure and put a layer of small stones or bits of broken flower pots in the bottom for drainage.

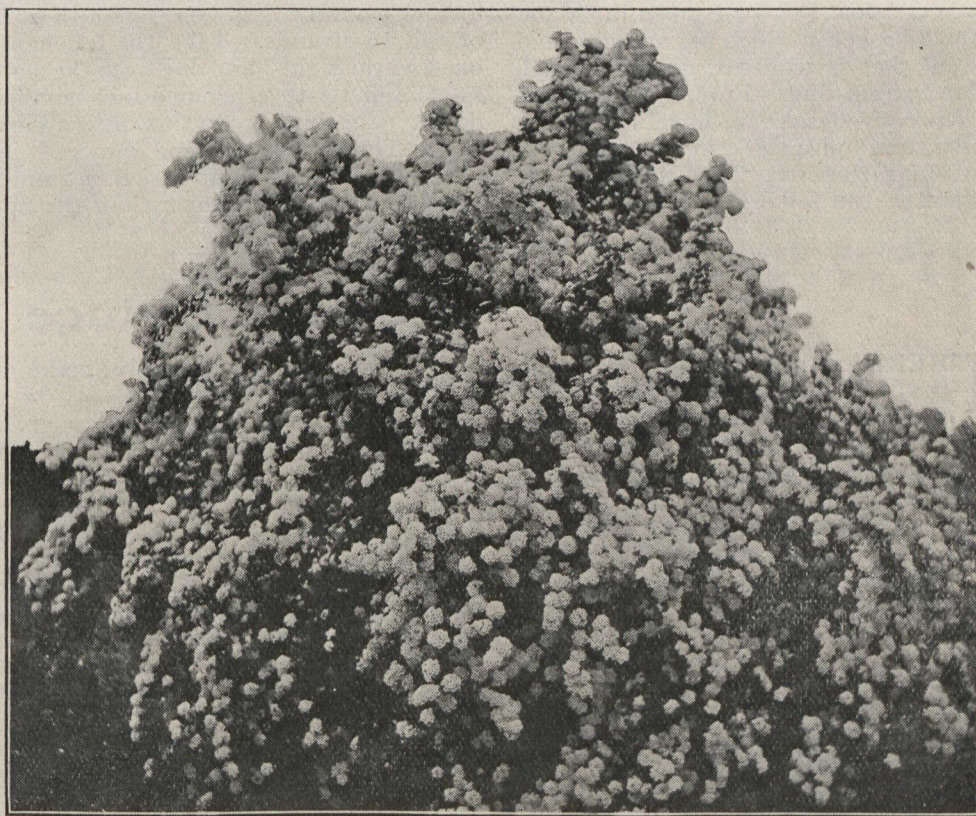
An excellent decorative plant for the window is *Anthericum picturatum*. Give it a warm, shady position and a moist soil. Have you a plant or two of *Impatiens Sultani*, sometimes called the "Patience Plant"? Some varieties of this plant are very attractive. A warm, sunny position gives the greatest profusion of bloom.

## Spiræa Van Houttei

A. K. Goodman, Cayuga, Ont.

OF the many choice hardy shrubs that may be planted in November, none give more satisfaction or greater pleasure than that beautiful,

planted in 1897 and each year its bloom is so striking as to compel attention from every passing flower-lover. The terrace was made from clay taken from



Plant a Shrub Like This for a Similar Effect Later On

free-flowering, white spiræa, Van Houttei. Its season of bloom is June, and though, like other shrubs, it loyally responds to intelligent cultivation you may use it in any place and in any soil with advantage.

The illustration shows one that has been used effectively as a single specimen on the terrace bordering a lawn. It was

a foundation cellar. The shrub was planted simply; it never was cultivated, dug around, pruned, fertilized or watered. It has grown naturally into one of the most perfect specimens of its kind.

Plant your own garden and water your own soil. Consult experts within reach, but work with your own spade.

## Seasonable Work in the Amateur Greenhouse

**G**IVE genistas and azaleas plenty of water at the roots. Azaleas should be syringed daily. Fuchsias may be put away to rest.

Early-struck geranium cuttings should be potted in 2½-inch pots. Cuttings of lobelia, vinca and other plants suitable for window boxes may be taken at this time. These are often left until too late.

If you are growing Easter lilies, examine the tips of the growth frequently for aphid or green fly. Use a little dry tobacco dust or tobacco water as a remedy. Chrysanthemums should now be in their full glory. These and carnations are not easy plants for amateurs to grow. Nevertheless, a few of them are worth trying. The work of propagation

should have been done long ago. If you have some plants of chrysanthemums, watch for the black aphid. Treat them with a weak solution of kerosene (a tablespoonful in a pint of water) or strong tobacco water. The latter is the safest and most effective.

Rubber plants, palms, dracænas and plants of that nature should have their foliage sponged once every two weeks.

### CINERARIAS

This plant requires very careful treatment from the beginning; the most simple neglect may ruin its development. They require a cool atmosphere and plenty of top ventilation. Care in watering is necessary all through the period

of growth. Do not allow the plants to become pot-bound until they are in the flowering pots. The greenhouse should be frequently fumigated to prevent injury to the plants from green flies.

### PRIMULAS

The treatment required by these plants is similar to that of cinerarias, except that they may grow in a temperature a few degrees higher. Primulas, however, should be protected from strong sunlight with removable shading until the plants are hardened. The compost for the flowering pots should consist of good loam, leaf mould, sand and a good proportion of well-rotted cow manure.

## A Home-Made Hanging Basket

**N**EW and novel designs in hanging baskets are welcomed by the amateur window gardener. One that is simple, pretty and inexpensive can be made at home. A little green raffia and a small basket in which figs are imported are all that is required, except a small brass curtain ring. From a recent issue of *Harper's Bazaar* we have taken the illustration on page 276. A writer in that magazine tells how to make the basket in the following words:

"Take 16 long strands of the raffia, double each one exactly in the centre, and after slipping them through the ring, take both strands and tie a single knot about an inch from the ring. Do this with each of the 16 strands. Take the left-hand one and the right-hand one from the next knot, and tie together one inch farther down. Continue to do this until all are tied. Then separate and proceed as before, thus tying your basket net until you have it a little deeper than the fig-

basket. Then leave a two-inch space before you tie again. After this, braid the strands together so that you will have eight braided ones, which you fasten at the top, leaving the loose end for a tassel. Now your net is complete, and into it put first the little straw-colored fig-basket, then a finger bowl inside of that. This is to be filled with water, and hung in a sunny window with a spray of wandering jew or other plant adapted to the purpose." Make one yourself.

## Forcing Lettuce

**T**HERE are three essential points in the forcing of lettuce. First, the soil must be in suitable condition. Second, atmospheric changes must be controlled and obviated as much as possible. And third, the crop must be grown to maturity without a check.

More failures in growing lettuce under glass can be traced to unsuitable soil than any other one cause. A good soil for lettuce should be a rich, mellow, turfy loam of a sandy character. Head lettuce requires a lighter soil than loose or leafy varieties. All heavy soils should be avoided. A good compost for lettuce is composed of three parts of well-rolled sod mixed with one part of thoroughly rotted cow or stable manure, and enough sand to make it loose or gritty.

To grow the first crop, or that which comes into maturity about middle of November, will take about 10 weeks. The crops that follow, or midwinter crops, require about four weeks longer. If more houses than one are planted, or if a succession of crops are wanted, various sowings must be made accord-

ingly. For a steady supply make a sowing every two weeks.

The most profitable variety to grow depends on the market available. It is very difficult to give advice on this point. If a head lettuce is required, Boston Market still holds its own. If loose or leafy lettuce is wanted Grand Rapids is the best. The demand is best and prices highest from January to April, so it will be well to have the heavy crops mature at that time, but growers must be guided by their market demand.

To be of the best quality, lettuce must be grown rapidly, hence nitrogen is needed. This element can be supplied in the form of nitrate of soda, one half ounce to a gallon of water, which will give good results. The temperature of the house should be kept as steady as possible. About 45 degrees at night and 60 or 65 degrees during the day with sunshine, and a few degrees lower in dull or cloudy weather. Air should be admitted on all favorable occasions, but never allow cold drafts to check growth or start mildew. Never allow the atmosphere to become close or

stagnant. A great many failures to lettuce forcing is due to bad ventilation.

Unwholesome soil, insects and fungous enemies should be watched very closely. Green fly is very troublesome. If it once gets a foothold, it is not easy to subdue. If the house is kept too warm, it makes its appearance. Fumigating regularly with tobacco stems affords a good remedy. Look out for the lettuce rot. It appears in houses that are kept too close and wet. Give plenty of air and raise the temperature a little. Mildew can be kept in check with sulphur fumes, by painting the steam or hot water pipes at spaces of 10 feet apart. Mildew is caused by sudden changes in temperature or by drafts, and often by growing the plants too soft. If the soil is stirred frequently, and if there is reasonable care given in watering and in maintaining a uniform temperature, there will be seldom any trouble with mildew.—L. H. W.

To count two white onions where one grew before is evidence of industry and thrift.

# Growing Rhubarb Indoors

Thos. Delworth, Weston, Ont.

**R**HUBARB forcing is a simple operation, provided two or three essentials are observed; first, good, thrifty, vigorous roots not more than three years old; second, the best varieties, which are Linneaus and Victoria; third, propagate by dividing tested roots, as rhubarb varies so much from seed that it does not pay to waste time with seedlings. The writer has a batch now, three years old, containing perhaps 20 distinct varieties, and not one of the lot as good as either of the old varieties aforementioned.

When rhubarb is forced it is not fastidious as to the place it grows in. Under benches in the greenhouse, an empty root house, or a house built for storing celery in the early part of the winter will do, provided the atmosphere be humid and the temperature not less than 45 degs.; it may go up to 75 or 80, but 45 to 60 is perhaps most desirable.

Many growers prefer total darkness. From my experience, I do not think that it is important so long as the stalks are protected from the direct rays of the sun. On the other hand, light is not necessary.

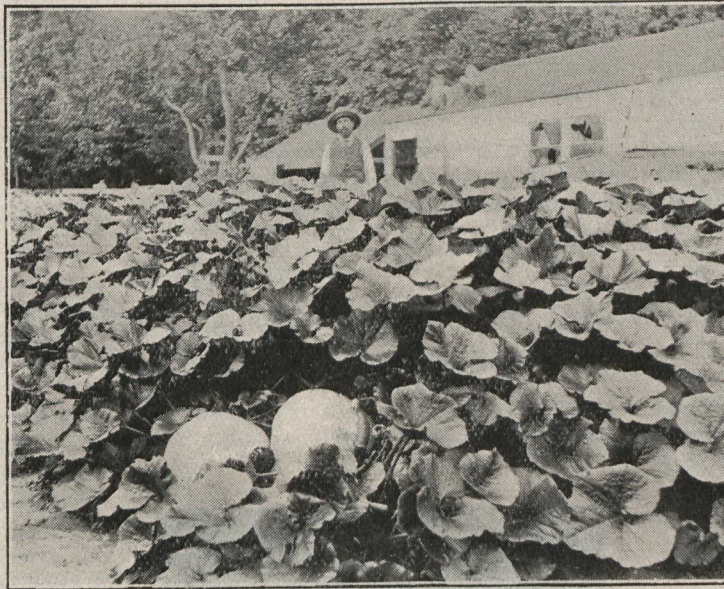
Forcing rhubarb in the cellar under a dwelling house is, perhaps, the latest fad in amateur gardening. "Put a

roots, get a good crop, no expense, and so on." It goes without argument that it would not work while other vegetables were stored there. Conditions that would make rhubarb roots grow would also make other roots, such as potatoes, carrots, and parsnips, grow and spoil them.

I have a poor opinion of the sanitary condition of a house cellar that is "admirably suited for rhubarb forcing" (humid atmosphere and a temperature of 45 degs. and upwards). If I had to live in such a house, I would want to open the windows and ventilators and make it *unsuitable* just as soon as possible.

A cellar for use as a store room for vegetables should be kept dry and cool, to say nothing of similar conditions being necessary for warding off the odor from decaying roots. Rhubarb roots decay quickly when forced. For several years I have forced several thousand roots every

winter. They decay so quickly that I never attempt to make use of them after forcing. I throw them in a heap to make humus. An expensive feature is keeping up a supply of roots.



A Mammoth Squash Vine

A corner of a vine that sprang from one seed and covered about 800 square feet of area. An old standard winter variety, the Large Mammoth Yellow Squash, grown on the trial grounds of J. A. Simmers, Toronto.

few rhubarb roots in your cellar and pull your own rhubarb all winter," they say. Market gardeners also are told, "Your cellar is pretty empty by the middle of February, fill up with rhubarb

## The Value of Selection in Horticulture

T. G. Raynor, Department of Agriculture, Ottawa

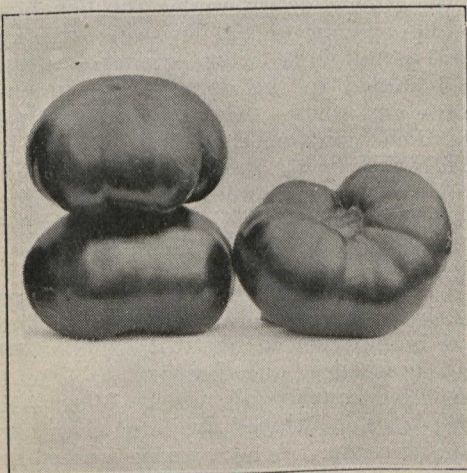
**T**HE accompanying cuts were reproduced from a photograph sent to Mr. C. H. Clark, Seed Commissioner, Department of Agriculture, Ottawa, by Mr. G. A. Robertson, a prom-

inent fruit grower, who lives near St. Catharines in the Niagara peninsula. Mr. Robertson is enthusiastic about the value of selection in seeds as well as in live stock to the farmers of Canada. He believes that much of the farmer's success in future will be based on his ability to select and follow up that selection to its logical conclusion. We are just touching the fringe of discovery in the application of this principle to the development of farm crops, fruits and vegetables.

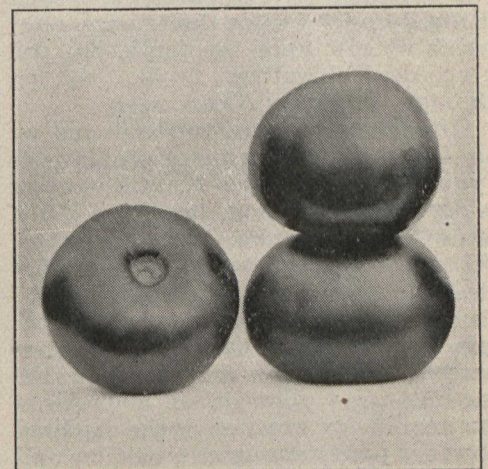
The conclusions of Mr. Robertson are based on his experience in growing tomatoes for a number of years. For commercial purposes he divides tomatoes into two classes, early and late. The late varieties have been well developed; they are heavy yielders and good in type, color and flavor. In these essential points, the late varieties excel the early kinds. The ideal that Mr. Robertson has been aiming to achieve is to secure these virtues in

an early variety, knowing that if this could be done such a variety would prove a money-maker.

It is well known that late tomatoes usually bring 25 cents to 30 cents a



The Ordinary Earliana



Improved by Selection

bushel, while the early fruits of the earlier varieties often sell as high as \$3.00 a bushel. These are usually from the early or first ripening clusters; while the later clusters ripen with the earlier clusters of the late varieties, and on account of their lack of shape and quality are sometimes unmarketable in competition with late varieties that usually are of better quality and more perfect in shape.

For a number of years Mr. Robertson has been trying such early varieties as Ruby, Dominion Day, Chalk's Early, Jewel and Earliana. Of these he has come to favor the two latter. The Jewel embodies most of the desirable

features he is aiming at, but it is a little late in ripening. For the last three years, he has been working with the Earliana. Through careful selection he has secured a strain that has become quite fixed in character, and has most of the desirable features of the Jewel and is much earlier.

The illustrations speak for themselves. The original type of Earliana are those on the left. They show the deep creases, irregularity, lack in depth, and what is not shown in the cut, the unevenness in ripening. Those to the right are the Improved Earliana, the result of careful selection to secure the desirable qualities of smoothness, pro-

lificness, even ripening, firm flesh, and early maturity. Such tomatoes will sell even in competition with the best late varieties.

"Often I have eight and nine good-sized tomatoes growing in a cluster," said Mr. Robertson. "My whole crop this year was much better than in any previous year in that the percentage of rough, flat, unmarketable tomatoes was greatly lessened, many vines having full crops without any ill-shaped fruits." So convinced is he that this work pays, that he is applying similar methods of selection for the improvement of other crops. He is sure to win. Experience counts, doesn't it?

## How to Grow Good Celery

T. Benstead, Strathroy, Ont.

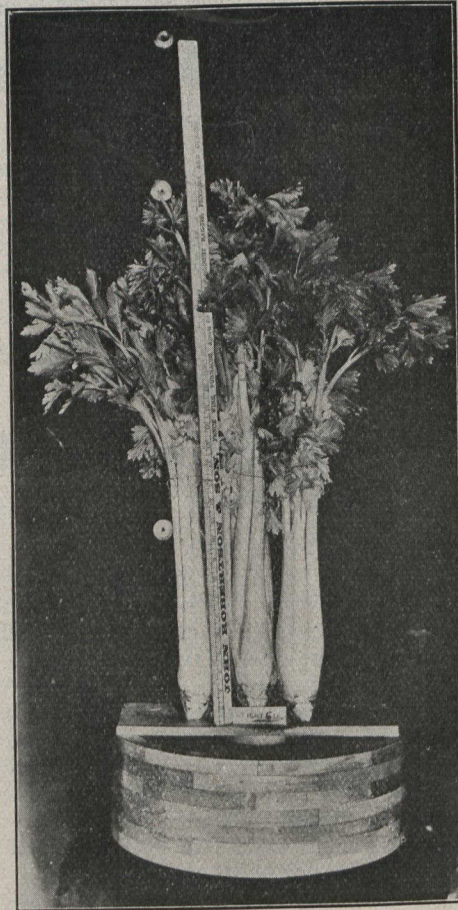
FOR the main celery crop, sow the seed about the middle of April. This is my practice. I have fine stocky plants by June 15. I lay my land out in beds five feet wide, raising them a little, with an 18 inch walk between; and then sow the seed in rows five to six inches apart. Shear the tops of the plants about twice, as that makes them grow more stocky; and plants treated this way do not sucker so badly as transplanted ones do.

We like to have our land manured and in good shape to receive the plants, working it thoroughly with disk and Acme harrows several weeks previous to planting time. We generally plant with a line in rows four feet apart with six inches between the plants. One man, with a boy to drop the plants for him, can plant from 9,000 to 10,000 a day. As to varieties we grow White Plume, Paris and Golden Heart.

A week after plants are set, or sooner if possible, we start to cultivate with a fine tooth cultivator, going as close to plants as we can without smothering them. When they are well established and have made some growth, we put a No. 8 Planet Jr. cultivator on, letting it run deep for two or three times, after which we ease upon the depth, but still keep on cultivating. I like to get through the patch twice a week.

After the celery has got large and we are afraid of too much root pruning, we "rub" the ground; that is, if the weather is dry, we make a tool the shape of the letter A, using planks, two by six inches. We put a bar across the bottom part to hitch whippetree to, joining it near the top with a second cross bar attaching two cultivator handles which are braced. Leave the top open for the earth to pass through. I find this a fine tool in dry weather, as the capillary power is pretty strong at that time and the crop is evaporating a lot of moisture;

so, in keeping the pores of the surface soil closed by "rubbing," we get ahead of capillarity.



Celery 2½ Feet in Height

As soon as I notice any blight spots on leaf, I dust with air-slaked lime and a little sulphur, in proportion of about eight to one. With me, this treatment controls the blight. I use plenty of wood ashes and salt on the soil, which, I think, helps to prevent a bad attack of the disease.

### Rottenheart in Celery

"I think the main cause for 'rottenheart' in celery is in poor selection of seed," said A. McMeans, O.A.C., Guelph. "The seed man himself is not careful in selecting from plants with sound stalks; and the retail buyer does not take proper precautions in selecting seed of good quality.

"I have bought seed from different firms, and planted them on the same soil, at the same time and under the same treatment; and while some of the celery produced was practically free from rottenheart, other portions would run as high as 10 per cent. of diseased stalks. You cannot be too careful in the selection of celery seed."

The decay of a single specimen in the bunch or storage pit may be communicated to and injure the rest.

• If market gardeners would pick out the best potatoes to plant for producing seed for the following year there would be no need to go to New Jersey or any place else for seed potatoes.—Jas. Dandridge, Humber Bay.

We grow rhubarb under the benches in the greenhouse. The roots are dug late in fall before the ground freezes, and hauled to the door of the greenhouse and piled. About February 1 we commence putting them inside. This is continued until about March 15. In three weeks to a month from the time they are housed they will be ready for market.—F. D. Ghent, Burlington, Ont.

I start to prepare the compost for mushrooms about December 1. The bed is commenced about December 10 and finished about January 1. I cut the first mushrooms about March 1. The dates mentioned are later than the usual custom. A bed can be started in November.—T. Delworth, Weston, Ont.

# OUR QUESTION AND ANSWER DEPARTMENT

Readers of *The Horticulturist* are invited to submit Questions on any phase of Horticultural work

## Unhealthy Pewaukee Trees

I have a young orchard of Pewaukee apple trees just starting to bear. This season some of trees look shaky, the leaves have a white, glazy look, and the apples are water-cored. They have been well cared for, but not sprayed. Will you suggest a remedy?—H. C. G., Marchmont, Ont.

The Pewaukee tree is not one of the hardiest varieties, although it is comparatively hardy. In severe winters, this tree is often injured in the colder parts of the country. The white, glazy, or silvery-like appearance which the trees take on is, I believe, the result of certain forms of winter injury. The Pewaukee apple does not often water-core, but the tree being in an unhealthy condition might induce this. Some varieties of apples are much more subject to water-core than others, and in certain seasons, it is more pronounced than in others. At Ottawa, we noticed more of it this year, owing, doubtless, to the extremely dry weather that we had.—Answered by W. T. Macoun, Horticulturist, C.E.F., Ottawa.

## Planting Small Fruits

Is the month of November too late for transplanting currant and raspberry bushes?—F. P. W., Toronto.

Currant and raspberry bushes may be transplanted in November as soon as the foliage is off. A few years ago we set out a large plantation of currants on November 8 and 9, and did not lose a plant. Raspberries are not so hardy, and I doubt if they will stand this late transplanting so well as currants.—Answered by Prof. H. L. Hutt, O.A.C., Guelph.

## The Apple Maggot

A pest called the "Railroad Worm" is eating the heart out of my apples. In some orchards it is doing much damage, and appears to be spreading rapidly. What is the nature of the pest, and how can it be combatted?—A Subscriber.

The Railroad Worm, or more properly the Apple Maggot (*Trypeta pomonella*), is a serious pest and is becoming numerous in orchards, particularly in Quebec. The maggot is the larva of a fly. It burrows through the flesh of the apple, feeding upon the pulp, and making channels in every direction, causing the fruit to rot or become unsaleable.

The only effectual remedy is the prompt removal and destruction of infested fruit. Windfalls should be gathered and destroyed at once. A complete description of the insect and its

work, with remedial suggestions, may be found in the 1904 and 1905 reports of Dr. Jas. Fletcher, Dominion Entomologist, C. E. F., Ottawa.

## Scale on Palms

The leaves of my palms are covered with little round light colored scales. What shall I do for them? The scale collects more in the axils of the leaves than near the ends or tips.—E.G., Port Dover, Ont.

Dip the plant in strong soap-suds and allow it to remain for about half an hour. Then wipe off the scales with a sponge. When submerging the plant, lay it on its side to avoid having the soap drain into the soil. A method, without dipping, is to rub off the scales with a stiff brush kept moist with soapy water.

## Hercules Club

What is the Hercules Club? Mention its height, habit of growth, hardiness, culture and value.—C. E. V-D., Grimsby.

The Angelica Tree, or Hercules Club, *Aralia hispida*, is a native of the southern and south-eastern states, and becomes a small tree there, the extreme height being about 40 feet, although the average height is much less than that, probably not more than 20 feet. This tree is quite ornamental. It has large compound leaves from two to two and a half feet in length; when the tree is well developed, these give it an umbrella-like appearance. It is a very prickly tree; owing to this peculiarity, it makes an interesting specimen on a lawn. This tree has not proved hardy at Ottawa, but in the warmer parts of western Ontario it might succeed fairly well, although it would probably kill to the ground from time to time.—Answered by W. T. Macoun, Horticulturist, C.E.F., Ottawa.

## Not Poisonous

Recently the Buffalo *Express* stated that the covering of the Tussock Moth cocoon is a deadly poison, and that bits of it, blown about in the air and lighting on the skin, causes annoying irritation. Is this so?—Mrs. T. S. P., Yarmouth, N.S.

I have never experienced any irritation from the Tussock Moth in any of its stages, nor have I heard complaints of the annoyance. I have, however, seen a mention in an entomological work that irritation has been caused to the skin by the hairs of the caterpillars, but no particulars were given.

The Brown-tail Moth, which is such a grievous pest in Massachusetts, is a

very serious trouble in this respect. Parts of the body of the caterpillar are clothed with barbed hairs. These are woven into the cocoons, and when thus removed from the body of the living insect become dry and brittle. The barbed particles, dislodged from the cocoons by wind and weather, are blown about, and when they come in contact with the skin, produce extreme irritation and soreness. These effects are entirely mechanical and are not caused by any poison.

The white covering of the eggs of the Tussock Moth does not become loose or blow about in the air. It is an adhesive covering which remains as a protection to the eggs till the larvæ are hatched. By no means is it a "deadly poison."

In Canada there are one or two other caterpillars, not common species, which are armed with barbed spines. If incautiously handled, portions of these spines may penetrate the skin and produce an irritation similar to that of the stinging nettle.—Answered by Dr. C. J. S. Bethune, O.A.C., Guelph.

## Storing Beets and Carrots

How and where should beets and carrots be stored? Does frost hurt them?—A. H., Collingwood, Ont.

It is advisable not to let frost touch the beets. It takes away the color, and an excess of frost will cause them to rot. Store in a cellar that is dry and cool, and where there is no danger of freezing. Beets should keep until the new ones are ready in the spring.

Treat carrots much the same as beets. If the cellar is not cool, see that the carrots are not piled too deeply or they will heat and rot. In a good cool cellar they can be piled to a height of three or four feet. If the cellar is at all warm, it is necessary to mix sand or light loam with the carrots in the pile.

## Wintering Onions

Can onions be stored in a shed and allowed to freeze?—N. A. S., Burford, Ont.

Onions for winter use should be stored in a cool, dry cellar on slatted shelves, where there is plenty of ventilation. They should not be allowed to freeze. A temperature just above 32 degrees suits them best. Onions for spring sales may be stored in a shed or barn, allowed to freeze solid, and then covered with hay or straw to a depth of a foot. Leave them untouched until the frost is entirely drawn out in spring.

## The Canadian Horticulturist

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GREAT BRITAIN

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### SOMETHING SHOULD BE DONE

It is time the Dominion Department of Agriculture took action to afford greater protection to fruit growers and other producers whose products are sold in the markets of Great Britain. The government has done excellent work in the direction of improving the cold storage facilities on the railway and steamship lines, but this is not enough. Its care should follow the products until they are in the hands of the consumers.

Take the case of apples forwarded to Great Britain on consignment to be sold by auction. Should the steamer carrying the apples reach the market at a time when there was not much fruit on hand, the apples, if in good condition, sell for a satisfactory figure. Should, however, several vessels, either from Canada, the States or elsewhere reach port about the same time, a glut occurs. The result is that the apples are sold at a loss. Some means of regulating the quantity of Canadian apples placed on the market each day is required. Were the government to place a competent man in a market such as London, and give him the assistance he would require, it would be possible for Canadian growers to consign fruit direct to him. This fruit could be turned over to reliable auctioneers immediately, should the market seem favorable, or it might be held in cold storage until any temporary surplus in the auction rooms had been absorbed. In this way many thousands of dollars could be saved for our Canadian growers. It might, even, be possible to arrange for buyers to visit the warerooms, examine samples of the fruit and make purchases at first hand. In cases where growers shipped fruit direct to dealers or commission houses, it would be possible for them to arrange with the buyers that, should they find the fruit in a damaged condition on its arrival, they would have to call in the government representative and secure a report from him to that effect before they would have the right to make deductions in the price agreed on for the fruit.

Were he of the right stamp, such a government official would be able to advertise Canadian fruit to excellent advantage. He could gain the confidence of the buyers in the quality of the fruit

and thus help to increase the demand. These are only suggestions. Some of them may be impracticable. Something of this kind, however, should be done and done soon.

It may be argued that this is a matter for private enterprise. The trouble is our apples are consigned in such small quantities it is not possible for individual shippers to make arrangements such as those outlined. It is encouraging to note, however, that the aims of the recently organized Ontario Cooperative Fruit Growers' Association includes the placing of representatives in the British markets.

What is needed is that our growers shall have some assurance that their fruit when it reaches Great Britain is sold to the best advantage, that steps be taken to prevent growers being defrauded by untruthful reports concerning the condition of their fruit, and that our fruit be more widely advertised in the leading markets of the Old Country. This is a line of work that should be handled by the Markets Division of the Dominion Department of Agriculture, rather than by the Department of Trade and Commerce. The agents of the latter department are expected to look after everything from pig iron to matches. What is required is the extension of the work of the markets division, whose employees now watch the condition of the fruit until it is unloaded from the steamers on the other side, by the appointment of some man in whom fruit growers will have confidence, whose duty it will be to attend to such matters as we have here suggested. Dairy Commissioner Ruddick, who is supposed to look after the interests of the fruit growers, would do much to gain the confidence of fruit growers in his ability to assist them, were he to take action in this matter.

### GET BUSY NOW

There are a number of towns and villages, and even cities, in Ontario where there are no horticultural societies. In almost every case these centres show a civic lack of the love of the beautiful in nature that is seldom evident where a horticultural society exists. While each of them have some citizens who take a pride in keeping their homes beautiful with flowers and shrubs, the proportion of attractive homes is seldom as large in centres without horticultural societies as is the case in other places where these societies play an active part in promoting a greater appreciation of municipal aesthetics.

During the past season a visit to the town of Strathroy, where a live horticultural society exists, revealed the fact that its homes were something of which to be proud. House after house, block after block, and street after street revealed homes with nice lawns and gardens and flower beds. Lovely evergreen hedges in many cases were the only form of fence used. Where lack of ground made a garden impossible, a glance was almost sure to reveal flowers in the windows or on the doorsteps. In the town of Carleton Place, which is about the same size as Strathroy, but which is without a horticultural society, the same conditions did not prevail. While Carleton Place has some lovely homes, and in writing this we hope it will be understood that we are expressing the views of a lover of horticulture to whom even a cottage is lovely if it has flowers and vines—they were the exception rather than the rule. A considerable proportion of the houses had no grounds in front. In the case of others, fences were all that divided lawns and gardens that showed the lack of care. Window boxes were an unusual sight. In a few years a live horticultural society, through lawn and garden competitions, the distribution of plants, flowers and seeds to its members and to the school children, as well as by public exhibitions, could work a wonderful improvement in Carleton Place.

There are many other places like Carleton Place, which need horticultural societies. Pembroke, Arnprior, Alexandria, Cornwall, Mor-

risburg, Brockville and Gananoque, are a few in that one small section of the province east of Kingston. In some of these the formation of horticultural societies has been blocked in the past by the agricultural societies. This source of opposition has been removed in the new act governing horticultural societies, as in future horticultural societies will receive their grants separate from agricultural societies. Surely there are enough lovers of nature in progressive centres such as these, with sufficient public spirit to lead them to take the few simple steps necessary to launch a society.

If you would like to form a society now is the time to start work. A little delay now may make it impossible to do anything for another year. The act governing horticultural societies requires that new societies must complete organization by about the middle of January or they will not be entitled to participate in the government grant. You should, therefore, start work now. Talk the matter over with a few of your friends, interest your local editors, and finally ascertain how many people will be willing to pay one dollar to join the society for a year. If there are more than 200 ratepayers in your town you will have to secure 50 members, but if the number of ratepayers is less than 200, then 30 members will be sufficient. Get these people to sign a petition for the right to form a horticultural society and send it to the Department of Agriculture at Toronto before the first of the year. You will then be given permission to hold a meeting for organization purposes, after which you will have a horticultural society which, if conducted on right lines, will result in untold good to yourself, your fellow-citizens and your town.

### DISSATISFACTION PREVAILS

The manner in which the express companies of Canada have handled the tender fruits during this season is deplorable. The fruit grower in most localities is at the mercy of these companies. On innumerable occasions fruit has been refused for lack of car room and made to lie for hours in the sun waiting for a train. The fruit deteriorated and the grower lost money. In most instances there is little or no chance of redress.

Besides lack of car space at the proper time, the express companies have failed at times to dispatch fruit that was delivered at the stations, even though there was plenty of room. THE HORTICULTURIST can cite cases where fruit, consigned to northern points, lay at Toronto express offices for hours. These companies do not employ enough men. They will not pay decent wages. Employees are forced to work harder than they should. With only half a staff of employees it is no wonder that the companies fail to dispatch fruit. While both companies operating in Canada are lax in this respect, the Canadian Express Company is most at fault. Many complaints have reached this office respecting the carelessness of this company in particular.

This is work for the Railway Commission, through which fruit growers can now take action. Examples of the loss caused growers by neglect of this nature should be brought to the attention of the commission. It will be the quickest method of bringing about an improvement.

### ATTEND THE EXHIBITION

There is no place where a person interested in horticulture can spend a few days early in November to greater profit than at the Ontario Horticultural Exhibition. In no way can he better learn to distinguish one variety of fruit, flowers or vegetables from another, or to get a correct idea of what constitutes a first-class specimen. Those on exhibition are the choicest specimens. They may be considered even better than what is commonly known as first class. The proper methods of packing, also, may be learned. There are many things that are worth seeing and observing.

Besides what may be acquired through observation, visitors have the opportunity of talking with the prize-winners and obtaining pointers on the manner in which they produced the fruit, flower or vegetable that won. By conversing with exhibitors, the grower may gather information, also, in regard to the habits of various varieties, as to whether they are productive and hardy, what their weak points are, and what the strong ones. Attend the conventions, hear the addresses and take part in the discussions. Growers and lovers of horticulture, amateur and professional, should not fail to come to Toronto for the Ontario Horticultural Exhibition. The date is November 6 to 10—five days.

### THE SEEDLESS APPLE

As we feared would be the case, the report of the Hon. John Dryden on the Spencer Seedless Apple, that appeared in the last issue of THE CANADIAN HORTICULTURIST, is being quoted in a manner intended to mislead the unwary. Read this from the *Watchman-Warder*, Lindsay:

"The trees are being introduced into Ontario and are highly recommended by the Hon. John Dryden and other prominent agriculturists. Mr. Dryden, who made a special visit to Mr. Spencer's orchard, says the apples are seedless, the trees vigorous, early and heavy bearers, and in his opinion will do well in Ontario. The apples are sure to command a high price for their many excellent qualities."

A recent issue of *The Glengarran*, Alexandria, said:

"It is a choice apple with a delightful flavor, and has no core or seeds. Hon. John Dryden recently made a personal examination of the trees and fruit and gives a favorable report of the results."

Those who note the reference to a "delightful flavor" and have read the remarks on this point by Prof. John Craig, of Cornell, that appear on another page, will see how misleading the statement is. Again we warn the fruit growers of Canada to be cautious in taking hold of this variety.

The San Jose scale is spreading in Ontario. Evidence of this is furnished continually. The Provincial Government was approached recently by growers in Harwich township, Kent county, and asked for relief. Scale is now found, also, on apple trees in the vicinity of Tillsonburg. Growers in these sections and in others to which the scale has spread have not done their duty. They have not taken steps at the beginning to check the pest. Two government experts are going into the district to conduct spraying operations. Meetings also will be held. These things are all right as far as they go but they are not enough. The growers themselves should make a determined effort to control the spread of this pest. They should not wait until their orchards are almost destroyed before making the effort. This is the cause of the anxiety in Kent county. Growers there devote most of their attention to vegetables, beans in particular, and neglect the fruit orchard. As a result, the scale has made much headway without being noticed. Growers everywhere should be on the watch. There is no reasonable cure for the pest other than spraying. It behooves growers to be up and doing. Every man in scale-infested districts should spray. Those who refuse ought to be made to do so by law. No one should be excepted.

We would compliment the Ontario Fruit Growers' Association on the excellence of the program that has been prepared for the annual convention this fall. The elimination of a medley of topics on cultural directions is a good move. The subjects selected for discussion are of a broader and more general nature. There are just enough addresses on cultural matters to lighten the more heavy features. The details of orchard management are better discussed at

local meetings in the various fruit districts. The convention program this year is the best yet.

As yet there has been no discussion on the manner in which the new experiment station in the Niagara district should be controlled. This is a matter for serious consideration on the part of the fruit and vegetable growers and all factions interested, directly or indirectly, in the future of the new station. A wrong move at the beginning may hamper the afterwork and value of the farm. As a basis for discussion we would suggest that the station be placed under a board of five members, to be appointed, one by the Ontario Fruit Growers' Association, one by the Ontario Vegetable Growers' Association, one by the Ontario Agricultural College, and two representatives growers by the Minister of Agriculture.

The "plugging" of apples in barrels is something for which the fruit inspectors should be continually on the watch. Plugging is the practice of opening barrels that contain apples more or less decayed and substituting sound apples for the bad ones that are found on the face. It is a means of deceiving the buyer and the fruit inspector. In a word it is one form of robbery.

Fakirs usually are caught by their own schemes, some time, some how. Few "get-rich-quick" games can be played forever. The schemers behind them soon expose themselves and from then on are not to be trusted. We have been caught once or twice, and now are taking special care to see that the advertisers in THE CANADIAN HORTICULTURIST are worthy. Readers may deal with them and feel that they are going to get a square deal. Consult the advertising columns in this issue.

### Fruit Growers' Program

Addresses by leading horticulturists in Ontario will be delivered at the annual convention of the Ont. Fruit Grs. Assn. in Toronto, Nov. 7 and 8. It is expected, also, that Mr. Roland Morrill, of Benton Harbor, Mich., one of the most successful peach growers in the U.S., will be present and speak on "Low-Headed Peach Trees." The secretary is corresponding, also, with Mr. R. W. Shepherd, of Como, Que., for an address on "Heading Back Injured Apple Orchards." While other features may still be added, the following is the program as assured to date—it is furnished by P. W. Hodgetts, sec., O.F.G.A.:

#### WEDNESDAY, NOV. 7

9.30 a.m.—"Work of the Association for 1906," Jas. S. Scarff, Woodstock; Appointing of committees; Report of Committee on New Fruits.

2.00 p.m.—Dominion Conference of Fruit Growers; "Immediate Results," W. H. Bunting, St. Catharines; and "Future Work," A. W. Peart, Freeman; "Fruit Statistics," C. C. James, Deputy Minister of Agr., Toronto; Report of Committee on Revision of Constitution.

8.00 p.m.—"Low-Headed Peach Orchards," speaker from the U.S.; "Heading Back Injured Apple Orchards," speaker probably from Que.; "Fruit Laws, Provincial and Federal."

#### THURSDAY, NOV 8

9.00 a.m.—Elections of Directors; "Future of the Apple in Ontario," A. McNeill, Chief, Fruit Division, Ottawa; "Markets of the Northwest"; "Tender Fruits," Robt. Thompson, St. Catharines, and "Apples," A. E. Sherrington, Walkerton.

2.00 p.m.—Report of Transportation Committee; "The Strawberry," W. F. W. Fisher, Burlington; Report of Cooperative Committee; "What the Fruit Shipping Associations are Doing," 5-minute reports from 18 points in the province.

A neat and well-prepared catalogue of bulbs for fall planting is that issued by the Wm. Rennie Co., Limited, Toronto. It tells not only what to plant but also how to do it. Send for a copy.

### Fruit Growers at Oakville

The Oakville Fruit Growers, Limited, one of the enterprising cooperative fruit associations of Ontario, opened its new and substantial fruit house in a pleasant and interesting way. Invitations were issued for a luncheon on Oct. 11. One of the capacious apartments of the fruit house was set apart for the occasion. A judicious arrangement of evergreen boughs about the room and carnations in vases, ferns and asparagus plumosus on the tables made a pleasing effect.

After luncheon was served, an interesting program of toasts and speeches was enjoyed. At the beginning, letters of regret were read from Hon. Sydney Fisher, Hon. Nelson Monteith, Mr. Alex. McNeill, G. C. Creelman, P. W. Hodgetts and others. The president of the Oakville Assn., Mr. W. H. McNeil, graciously announced the various toasts. In responding to "The Fruit Division," Mr. P. J. Carey, D.F.I., contrasted the methods of handling fruits in the past with those of to-day. Then, apples were always bought by the lump, the buyer took everything and the grower got low prices. The packing was bad, the main point often was to make a No. 3 apple look like a No. 1. A fair apple year was then thought to be when there were enough No. 1's to face the ends of the barrels. In the past, it was impossible to trace fraudulent dealings, as fictitious names were the rule. To-day, fruit is picked in season. Good and correct brands are used (in this connection the speaker complimented the Oakville Assn. on having a brand that is almost faultless). Now, the correct name and grade mark must be placed on the barrel. Growers to-day can hold their fruit until the market is favorable. Mr. Carey also spoke of the prospects for trade in the west. He said that there is no chance of apples ever being raised in Manitoba, commercially.

In response to the toast to our "Sister Organizations," Mr. Robt. Thompson, of St. Catharines, spoke of the good work being done by his association and by the cooperative movement in general. He said that the day of the commission man is past, as these associations can hold their fruit and largely control prices. The future of fruit growing is bright. The west wants our fruit if they can depend on the pack; confidence is gradually becoming established between western buyers and Ontario growers. The bad packing of Ontario fruit has been exaggerated. Mr. Thompson said, also, that the railroads of this country are not giving good service. For the western market, U.S. companies do better. If Canadian railway companies will not give the required service, it will be necessary for Ontario growers to ship via U.S. lines.

The toast to "Transportation" was responded to by Mr. H. W. Dawson, of Toronto. He said that the greatest difficulty in the way of success in fruit growing is in the matter of distribution. Fruit men send too much to one market at a time, while others have nothing. This illustrates the value of cooperation whereby the full and empty markets may be located. Mr. Dawson said that he would sooner pay more money for apples packed in a central packing house on the cooperative plan than for those packed in the orchard. He referred also to the dissatisfaction that has been felt this season with respect to the express companies. While the Dominion Express Co. has given the better service of the two, neither has made any attempt to carry fruit as it should be done. Shipping by express is a poor way of handling fruit. It is better to ship by freight whether in carloads or small lots.

Various other toasts were proposed and responded to. In the course of some general remarks, Mr. Herbert Inglehart, of Merton, spoke highly of THE CANADIAN HORTICULTURIST. He advised all the fruit growers present to become subscribers. THE HORTICULTURIST is a paper for Canadians.

Earl Grey and his son, Lord Howick, were so much impressed with the Nelson, B.C., fruit lands that each has purchased a small fruit ranch of about 30 acres.

## Prince Edward Island Letter

Rev. Father Burke, Alberton

The round of exhibitions for this autumn is about complete. It has been wonderfully well sustained. The fruit end of the fairs, however, especially of the earlier ones, is generally disheartening.

On the Island we have a later fair than usual. The earlier varieties are therefore not much in evidence; generally they are the chief factor in the attractions. This year the big red varieties of fall apples are multiplied *ad infinitum*. Alexanders, Wolf Rivers and Duchess filled many tables. They made a pretty show.

On account of the peculiar season the late varieties are miniature, not full grown, in many instances, and we haven't many of them. Still, they looked fine on the tables, and give one the impression of a thoroughly fruit-producing country. The bloom on those apples surpassed anything I have ever seen. They were a picture of loveliness.

This is not a plum year either, although we wouldn't know it from the exhibits. The whole range of this luscious fruit was exposed to our admiring gaze. The flavor was surpassingly exquisite.

Mr. R. W. Starr, the veteran pomologist of N.S., was the judge again. Old as he is, and deserving of a rest, he revels in adjusting Island awards, and his judgments are just.

At the show and within the charmed fruit circle, with its apples, its plums, its pears in quantity, and its grapes in rarity, Mr. C. E. Stewart, of Oregon, talked to the fruit men modestly and honestly about packing in boxes; and demonstrated in the art before their interested eyes. He hadn't the proper packages, or wrappers, but did his best. There is always some *faux pas* or other with government-supplied experimenters. The men cost high, and the little, comparatively inexpensive material to work with, is generally wanting. Some day we will strike the provident official and marvel at it.

We found out, however, that Mr. Stewart favors generous inspection. He packs apples even with greater variety than Mr. Boies, and packs the boxes to be opened on the side. "The best side to London," is now anything but the top-side. Something new is learned every time the stranger gets within the gates.

The fruit show at Charlottetown had many defects in its arrangements. Some people have a wonderfully wise way of undertaking things they know nothing at all about. Some exhibition commissioners are marvels in this line; still they handicap important industries awfully by their presuming.

Our Richard Burke, D.F.I., is sick unto death, it is to be feared. He was a faithful friend of horticulture. Who can replace him?

## Fruit Scenes at Montreal

E. H. Wartman, D.F.I.

On September 19, 1906, I noticed some barrels marked No. 1 Spy. "What," said I, "Spys at this early date—can it be possible? They are good hangers, so why not left to mature and color?" The first opened was found to contain 11 specimens, nearly rotten. This proves that apples not properly matured will rot much quicker than those well matured. What did I do in this case? Why, I marked them "falsely marked," of course, as No. 1 Spy means sound specimens.

Another scene comes to mind of a different character: A sling carrying 6 bbls. of apples was elevated; it slipped, the rope was pulled off the bbls. and down the hold of the steamer they went, a distance of 20 ft. Of course they were badly smashed. The man to blame came to me and wanted to know if they could not be repacked. I said it would not be a proper thing to do, as they were too badly damaged.

Scene 3.—On a load of apples approaching a shed, I noticed several bbls. plastered with mud. Ascertaining what had happened I found the

team had got stuck in a mud hole; in starting, several bbls. fell off in the mud, and were rolled around until they were fairly coated. A clean parcel is always preferable in our English markets. "But," you say, "accidents will happen." Yes; but, in many cases, carelessness is at the bottom, and our fruit men have to suffer.

Scene 4.—Several bbls. of apples rolled aside and the heads were broken. The bbls. lacked from a peck to a ½ bu. when the cooper headed them up. Of course he did not know where the apples had gone, but you had only to look around and see the abnormal grown pockets in the coats of the helpers to prove the slackness of the bbls. These scenes are not pleasant or profitable for a shipper; but seems fun for a few, lunch thrown in.

During last season's inspection, 81 varieties of apples came to my notice. As there are at least 81 kinds of people in this world, surely that number of varieties should be sufficient to satisfy the most fastidious as to taste, color, size, etc.

The shipments of St. Lawrence apples, so far, show signs of overripeness and decay in many cases. Snows, showing spot when packed, have also arrived in a condition so bad that 75 cts. would be about the highest bid at our auctions for same. Imagine how disreputable they would look on Old England's markets! To a Canadian, across the water, it would be humiliating to find "Canadian" marked on such poor specimens. On the whole, however, this season, we find many packers putting up a very creditable parcel; and, no doubt, such will meet a quick and profitable sale.

## The Winnipeg Market

The more study is given to the fruit situation in Winnipeg the more it is apparent that a great market is before the Ontario growers. To gain and to hold this market, however, several important essentials must be studied and practised. Good fruit is required and the top price can only be obtained continuously by putting it up neatly and in a uniform package. As one dealer in the city puts it, "They must adhere strictly to the Fruit Marks Act." By adhering to the Fruit Marks Act and sending only the best of their crop it will not be long before Ontario growers will have a very profitable market for all the fruit they can produce.

Frequent discussions with commission men show that they want a uniform package. In the commission business it is desirable, while in the retail windows a much better display can be made if only one style of package has to be used.

Then there is the question of marking the package. California fruit men built up a huge trade and every package bears a bright, clear stamp. British Columbia growers are following suit and find a ready sale for their crops. In some sections of Ontario marking is becoming general. If a man has good fruit he can't mark it too plainly; if the fruit is not good, and he must ship it, by all means keep the mark off, if any regard is held for reputation as a fruit shipper. The commission men like to see a standard brand on packages from a company or an individual. The purchasers, if they get good stock once, recognize the brand ever afterwards, and will pay the top price for it until they run across a lot of cheap grade stuff bearing the same stamp.

In Winnipeg, as in the Old Country, the consumers are after something showy. They will pay high prices for almost any apple if high colored. Russets as a rule bring a low figure. Apples and pears, the dealers claim, should be picked well on the green side, because many of them are held for shipment to towns throughout the west. Ontario peaches go on the market in fair shape if put up properly in small packages, not more than two layers. Those who claim to know say they should be picked slightly greener than for the Montreal market.

Many tomatoes reach Winnipeg altogether too green. Sales during the past season show that more profit can be reaped by packing the tomatoes in trays of 4 bskts each than by putting

them in 11-qt. bskts. The trays hold about the same quantity but sell readily at 12 or 15 cts. higher. Besides selling higher it tends to keep up the price for the 11-qt. basket.

Fruit growers cannot be too strongly impressed with the fact that the western consumers will pay for the right article. The average citizen wants the best and expects to have to pay dear. A little study and a little more cooperation will be sure to result in great things for the fruit growers of Ontario.—J. A. H.

## Vegetables in Alberta

Fred. Bennett, Edmonton

In Alberta, foremost among vegetables is the potato. In a bag brought to my house recently, variety Early Rose, there were many tubers weighing from 2 to 3 lbs. each, and probably considerably more. The skins are soft, and they would have grown much bigger had they been left in the ground. There is no trace of rot or hollow centres in them, and one of the big potatoes is sufficient for a meal. There are plenty of stories going around of tubers weighing up to 8 or 9 lbs. I have never seen them that size, but the reports seem to be authentic. One gentleman told me that he had some even bigger and did not like them as well as the smaller sizes. He told the farmer who brought them that, if he could not supply him with medium-sized tubers, he was not to bring any more. For myself, I may say that the flavor and quality of any of them seem to be all that can be desired.

In one of the local gardens I saw some cauliflowers grown from English seed—some variety of Sutton's, I believe—that measured 18 inches across, and they were as white and as solid as a ball. The big English marrowfat peas are grown here in several places; and, if the size of the pods are an indication of the size of the peas, they are wonders. Tomatoes do not ripen here unless they can be got to a good size before planting.

## Nova Scotia Letter

G. H. Vroom, Middleton

The Gravenstein crop has been gathered and nearly all sold, some going to England and the balance to the local trade. The quality was poor, not more than 20% No. 1. Specimens with black spot are decaying rapidly, clean stock is keeping well. Late fall and winter varieties are clean and well colored and are going forward in good condition. A heavy wind on Oct. 7 blew off a lot of apples. In exposed places 25% of the ungathered crop was shaken down.

Prices for good, clean winter stock range from \$1.75 to \$2.25 a bbl., according to variety for packed fruit, and from \$1.25 to \$1.75 for tree run delivered at the fruit house. Growers and dealers have fallen in line with the amendments to the Fruit Marks Act. The use of X's has been discontinued in nearly every case, and the No. 2 definition is working well. Plums were a light crop and prices ran as high as \$3.50 a bush. Pears were a moderate crop and prices are good. Cranberries are a fair crop and the quality is fine, ensuring good prices.

## British Columbia Letter

C. P. Metcalfe, Hammond

The hort' exhibits at the New Westminster Exhibition were of better quality than last year though somewhat deficient in quantity. The greater part of the upper floor of the agric'l building was devoted to apples, of which the display was very large. The entire space in 2 of the wings, and half that of the third, was allotted to the apples, the other fruits occupying the other 1½ of the wings. There were 12 district exhibits in competition for the Delwar shield, 9 from B.C., and 3 from Alberta. Together they made a magnificent showing of the products of the West. Chilliwack took first place, with Langley (last year's winner) a close 2nd. The competition in the commercial exhibits of packed fruit for the Oscar Brown Cup



was very keen. The cup went to Mr. Thomas Earl, of Lytton. The coloring of the commercial exhibits was considerably better than last year, and the packing was a magnificent demonstration of the art.

The Government has procured 2 of the largest exhibits, Mr. Earl's, of Lytton, and that of the Coldstream Ranch of Vernon, comprising some 120 boxes, to be exhibited at the big exposition to be held shortly at Christchurch, in New Zealand. Mr. A. McNeil, Chief, Fruit Division, Ottawa, has been paying the Pacific coast a visit and assisted Mr. Burrell in the judging of the fruit at the Westminster Exhibition. While here he visited various points throughout the province and held informal meetings with the fruit growers.

### Careful Fruit Packing

A box of Spy apples packed by J. F. Brennan & Son, formerly of Grimsby, Ont., is represented in the illustration. The size of the box shown is 22 x 11½ x 10½, and it contains 60 apples. Brennan & Son did not favor the change in the dimensions of the Canadian box for two reasons: first, they claim that it caused confusion in the minds of customers as to size and number of apples in a box, and second, they could send the larger box to the United



A Box of Spys

States for the same duty as was demanded for the smaller.

Each box sent out by Brennan & Son is neatly labelled. No excelsior is used when apples are wrapped. When packed solidly they ship in good condition. It pays to pack correctly and to pack only the best.

An excellent fertilizer for the orchard and garden is gypsum or land plaster. While not a direct plant food in itself, it has much value in liberating plant food in the soil, particularly potash and phosphoric acid. It may be used with particular advantage for leguminous crops, such as clover, beans and peas. In orchards where cover crops are grown, land plaster is a useful fertilizer. Its incorporation in the manure pile will fix the ammonia and prevent its escape. Gypsum sprinkled on the cut surfaces of seed potatoes is beneficial; it increases the crop; experiments at the O.A.C., Guelph, have shown this. All fruit and vegetable growers should have a supply of this material on hand. The best grade is put up by the Tobique Gypsum Co., Plaster Rock, N.B. It is finely ground. The F. C. Terry Co., 31-41 George st., Toronto, handle the goods in Ontario.

## Horticulture at the Halifax Exhibition

THE fruit exhibit at the Dominion Exhibition, Halifax, was a great success, and reflected much credit on the energetic Supt., Mr. J. W. Bigelow, who has had so much experience with exhibits of this kind both in N.S., and at the large exhibitions in other parts of the world. There were 3,601 plates of fruit shown, and 725 jars and bottles. These made a magnificent display. Interspersed with the fruit were palms and ferns, loaned by the Nova Scotia Nursery Co., and these, with the many flags used by the Supt. to decorate the building, added much to the attractiveness of the hall, and suggested to the writer the advisability of having some similar arrangement at the fall fairs in Ontario where, as a rule, little is done to make the fruit exhibit attractive to the general public.

While the exhibition at Halifax was a Dominion one, with the exception of the province of Ont., there was little competition outside N.S. The writer believes that under the present arrangement the exhibits from the outside provinces at Dominion exhibitions mislead the general public and even the fruit growers themselves, and do not fairly represent the kind of fruit the different provinces can produce. I believe that something should be done in the future by some organization in each province to ensure the exhibition of a first-class collection of fruit, so that the competition for the Canadian or provincial prize would be put on a better basis. This year there were only 2 exhibitors competing for the special Canadian prize of \$50.00 for the best collection of fruits and berries from N.S. and from Ont. The first prize was lost by Ont. partly from the fact that no berries were shown in bottles. Even if berries had been shown, Ont. would have lost as, while the exhibit scored higher than that from N.S. in peaches and grapes, the exhibit of apples was behind that from N.S.; although the individual specimens were good, and the fall varieties of fair color, the winter sorts were off color, and gave the impression of having been picked a long time. Ont. could have beaten the N.S. exhibit which was shown if a greater effort had been made; as it is, N.S. will get the credit, which really belongs to Mr. A. C. Starr, Starr's Point, whose energy in getting the exhibit together was rewarded. The exhibits from the provinces of Que., N.B., and P.E.I., were not what they might have been, there being only 1 exhibit from each of these provinces. There was no private exhibit from B.C., the only exhibit being from the Expt. Farm, Agassiz.

In the class for the best 20 varieties of apples, where there was keen competition, the first prize went to Mrs. Sangster, Falmouth, Hants Co., N.S. This was quite a triumph, as Kings or Annapolis usually takes the first prize in this class. It was generally acknowledged that the best colored fruit came from Hants Co. this year. Some of the varieties of apples which looked particularly well at Halifax were: Alexander, Ribston, King, Baldwin, Stark, Fallwater and Golden Russet. There was a good display of pears and plums, and while a fair proportion of the prizes went to Ont. in these classes, many of them remained in N.S. The Ont. men brought down a good exhibit of grapes and peaches which, with those grown in N.S., made a creditable show of these fruits.

The exhibit of apples in barrels and boxes, while not large, was good. Two special exhibits were made, 1 by the Dom. Expt. Farms and 1 by the N.S. Fruit Grs. Assn., which added much to the interest and attractiveness of the show. In the Expt. Farm exhibit there were 309 varieties of fruits shown, consisting of apples, crab apples, pears, plums and grapes grown on the expt. farms at Nappan, N.S.; Ottawa, Ont., and Agassiz, B.C. The exhibit of the N.S. F.

G. A. was a good one. It was prepared by Mr. C. A. Patriquin, Wolfville, and consisted of fruit of many kinds on plates and in bottles. Here were shown also the 18 medals which have been won by this assn. in the past.

Nova Scotians may well feel proud of the fruit that is grown in their province, and while the people of each province and district naturally maintain that the best fruit is grown in their particular province or district, Nova Scotians have good grounds for maintaining that they can grow fruit which will compare very favorably with the best. Prof. John Craig, Cornell University, judged the fruit exhibit.

The flower show was held during the 1st week of the exhibition, but was not large. In cut flowers, dahlias were particularly good, and in plants, rex begonias and fuchsias.—W. T. M.

### Fruit at B.C. Fair

Jas. A. Grant, Victoria

The Provincial Fair passed into history as a success in all but one department, viz., horticulture.

The failure in the fruit exhibits was not due to failure in crop, but can be attributed to the inrush of Manitoba farmers who have made their pile and are seeking a fairer clime and a pleasant occupation. These did not enter exhibits as did the previous owners of the fruit farms. All those who sold out to them have commenced afresh, with more money and experience than before, the net result being better for all.

The commercial exhibits of packed fruits, although not so large as formerly, were up to anything previously shown in point of skill in packing and quality of product. Plate exhibits, collections of fruit and district exhibits were weak in quantity and quality.

The Chilliwack exhibit was an exceptionally good one. It was made up of all the agricultural products that district could produce, and was the object of admiration and praise from Earl Grey. It merited it. See illustration.

Mr. Martin Burrell, of Grand Forks, was judge, and gave general satisfaction in his awards. This gentleman, it will be remembered, was the popular and energetic chairman of committee of resolutions at the conference of fruit growers held last March in Ottawa.

### Letter From a Life Member

Ed., CANADIAN HORTICULTURIST,—I take great pleasure in the thought that I became a life member of the Ontario Fruit Growers' Association when written to by Dr. Beadle, whom I knew from 1855 until his decease. Sixty years ago I tied buds for John J. Thomas, then editor of *The Country Gentleman*. I knew Barry, Wilder, Hovey, A. J. Downing, Chas. Downing, Berckmans, Cabot, Dr. Grant, Meehan, Vick, Henderson, Parsons, Moore, Powell, Smith, Maxwell, and Dr. Warder—all great horticulturists as well as good and true men.

It may interest the readers of THE CANADIAN HORTICULTURIST to note some of the fruits and fruit prices in this city. On Oct. 11, I saw an orange quince from California that weighed nearly 2 lbs. The best Fameuse apples by the barrel that I ever saw came this year from the Ottawa valley. My grocer paid \$6 a bbl. for them and sold them in one day for 3 cts. each. Comice pears are very fine this year from California. I paid 25 cts. for 2 in Oct. Anjous also are fine—15 cts. each or 2 for 25 cts.—Frances Wayland Glen, Brooklyn, N.Y.

Fruit that is loosely packed is injured in transit. Apples should be packed by experts. For best returns the pack should be guaranteed.—Frank Hamilton, Liverpool, England.

# Do You Wonder We Are Happy

ISN'T it nice? Since Sept. 1, when we dropped the subscription price of THE CANADIAN HORTICULTURIST from \$1 to 50 cts. a year—in other words cut it in half—we have added over 500 new subscriptions to our mailing list. All this in less than 2 months. And the best of it is, this increase has been a result of the work of our friends. We have not had paid canvassers at work except one man at the Toronto Exhibition. Our mailing list was never so large before.

The first evidence of the deluge occurred immediately after the appearance of our Sept. issue, in which we announced the drop in our subscription price to 50 cts. and offered to accept three-year subscriptions for \$1.20. A further special offer to accept 4 new subscriptions for \$1 during the month of Sept. was also made.

The president of our company, Mr. W. H. Bunting, of St. Catharines, was the first of our friends to secure a club of four new subscribers at the new rate. He handed them over with the remark, "I want to be the first." Right after him came a club of 10 new subscriptions from W. M. Orr, of Fruitland, Ont., and after that we began to lose track of the letters, they came so fast. Among our friends in all parts of Canada, and in the United States as well, however, who sent us clubs of subscriptions have been the following: A. McMeans, of Guelph, a club of 13; L. H. Weaver, of Dunnville, a club of 9; Mrs. Frank Rabjohn, of Toronto, a club of 8; Alex. T. Armstrong, of Barrie, a club of 6, and clubs of four from each of the following: J. G. Standish, of Belleville; W. J. Justice, of Barrie; J. C. Metcalfe, of Hammond, B.C.; W. C. Toye, of Hamilton; G. A. Putnam, of Toronto; Harry Allan, of Ottawa, and F. S. Wallbridge, of Belleville. From New York city comes a letter from our old friend Francis Wayland Glen, stating that his little grand-daughter is at work securing a club of 100 new subscribers for us there, and that she hopes to be able to send it soon. With friends such as these working for us do you wonder THE HORTICULTURIST is growing and improving so rapidly?

At the Toronto National Exhibition, THE HORTICULTURIST was given away gratuitously to any one interested, and our representative at the fruit building secured nearly 100 new subscriptions during the exhibition. We intend to be represented at the Ontario Horticultural Exhibition in Toronto this month, in the same way.

#### THEY SAID NICE THINGS

The best of it is many kind words and compliments are often paid THE HORTICULTURIST in letters accompanying remittances and renewals of subscriptions. His Honor Lieutenant-Governor Mortimer Clark, of Toronto, renewed his subscription recently. Among letters received lately have been the following: Mr. A. B. Carman, Iroquois, Ont., wrote: "I will take THE HORTICULTURIST for the coming year, if only for old friendship's sake, as I have taken it too long to drop it now."

W. L. Patulla, of Creemore, had this to say: "Continue my subscription by all means. I am very much pleased with the way the different subjects are treated in THE HORTICULTURIST, and especially so with regard to fruit."

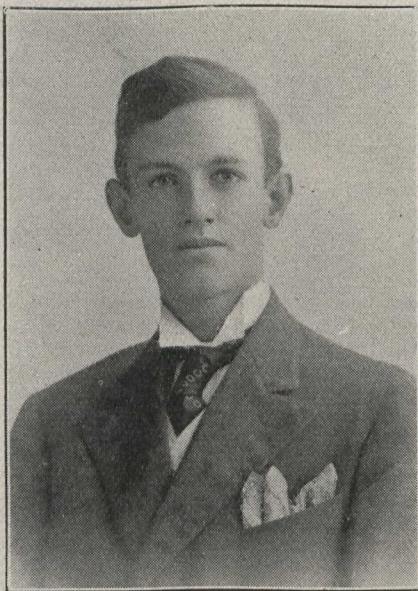
From Manitoba came this from Mr. L. C. Clarke: "It is just a year since I took THE HORTICULTURIST for the first time and now I should not like to be without it."

From Brantford, Mr. Chas. R. Hext wrote: "I have been a subscriber to THE HORTICULTURIST since 1880, and hope to be for many years more. Your magazine gives me much pleasure."

#### A NICE GIFT

If you desire to give a practical gift for the holidays, you could please none of your friends who are interested in fruit or flowers better, than by sending them a year's subscription to THE HORTICULTURIST. Send us their names and 50 cents for each year's subscription, and

we will send them a nice letter telling them that they will receive THE HORTICULTURIST free for one year as a gift from you. The giving of magazines and papers for holiday gifts is fast becoming popular. It is a practice that should be indulged in even more than it is. You can



Mr. Garrett Wall

The new circulation and assistant advertising manager of THE CANADIAN HORTICULTURIST. See notice in the article on this page

send a full year's subscription for 50 cts., or three years for \$1.20. Send us the names on or before the 15th of the month, to insure the names being placed on the mailing list to receive the following month's issue.

#### OUR STAFF INCREASED

The great increase that has taken place in our subscription list and advertising patronage has made it necessary for us to increase our office

staff by the addition of a circulation and assistant advertising manager. For this important position we have selected Mr. Garrett Wall, of Springfield, Mass., whose photograph is here published and who for some six years has been connected with the Phelps and Orange Judd Publishing Companies, one of the largest publishing concerns in the world. Their papers include *American Agriculturist*, *Orange Judd Farmer*, *New England Homestead*, *Farm and Home* and *Good Housekeeping*, and circulate in all parts of the United States and Canada. Mr. Wall has had more or less to do in connection with all these papers, and we expect that he will soon lead the way, with the continued help of our friends, to a great increase in our circulation and advertising patronage. He will assume his new duties with us the first of this month. As Mr. Wall has the happy faculty of making friends easily, we expect he will soon feel at home on this side of the line and become a good Canadian.

#### Our Illustrations

The illustrations on our front cover and on page 271 are views taken at the provincial fair, New Westminster, B.C. Chilliwack won highest honors for district exhibit.

The two cuts on page 269 were taken at the Niagara Dist. Hort'l Exhibition, St. Catharines. The package of peaches showing a uniform and correct pack was put up by Geo. A. Robertson; the box of pears on the left came from the fruit farm of Robert Thompson, and the box on the right was packed in the fruit house of J. H. Brodrick—all of St. Catharines. From a few specimens the paper wrappers were removed for effect and contrast in photographing. These packages are a credit to the district. They are models for less careful packers to follow.

On page 272 is a view of a portion of the Brantford Hort'l Society's flower show. The exhibition was a creditable one.

Two cuts of decorated dining tables appear on page 273. The smaller is a glimpse of the 1st right table at the recent Niagara Dist. Hort'l Exhibition. The larger one represents a table exhibited by Wm. Jay & Son, Toronto, at the Ont. Hort'l Exhibition last year.

## INSURANCE

The very best kind of Insurance—i.e., provision for the future as well as the present, is a Savings Account in

# — The — SOVEREIGN BANK OF CANADA

Interest paid *four times a year.*

\$1.00 will open an account.

Put your money in a place where  
you can get it when you want it

57 BRANCHES THROUGHOUT THE DOMINION

Mention The Canadian Horticulturist when writing.

# Apple Crop Below Medium and Prices Good

**E**ARLY predictions for even an average crop of apples in Canada have not materialized. The crop is below medium. It is not uniform. Some localities report a good yield; others, light. In adjoining orchards and even in individual orchards, trees of the same variety have yielded variable quantities. Storms and insects during the past month have lessened the supply of marketable fruit. The percentage of No. 1 apples has been reduced.

Reports from British markets indicate that both American and Canadian apples for export are moving slowly. So far the shipments total approximately only 60% of the number of barrels that left Atlantic ports up to the same time in 1905, and in 1904. This means that either there is not so large a crop as buyers are talking, or growers are holding and storing larger quantities than ever they did in the past—probably both. It would seem that the apple situation is favorable for the grower.

## A WORD ABOUT PRICES

The fact that various factors have diminished the crop—and this is also true of the crop in many parts of the United States—indicates that prices will be good. Through the failure of the raisin crop in Southern Europe, there will be a shortage in the world's dried fruit supply. High prices will restrict consumption. This will increase the demand for fresh fruits. It will be another factor that will tend to keep up the price of apples. In England prices are strengthening with the absorption of local fall varieties. Good prices are now being paid growers in this country for well-packed stock of the best quality. Among the sales made locally in Ontario is one orchard west of Toronto that was sold recently at \$1.45 a bbl. for Nos. 1 and 2 picked. Many orchards have been sold at \$1 on the trees. A number of orchards have changed hands at \$2 a bbl., tree run, packed. In another locality \$2.35 a bbl. for Nos. 1 and 2 packed in orchard has been refused.

## THE EFFECT OF THE STORM

About the middle of October, snowstorms and frost did some damage to fruit orchards in Ont. and N.Y. state. Press reports, however, were somewhat exaggerated. In a few localities much damage was done; but in other parts of the storm belt, the orchards escaped without much injury. On the whole, the ultimate result will be a slight curtailing of the crop. This will add its quota towards maintaining prices on a firm basis. The crop correspondents of THE CANADIAN HORTICULTURIST state the condition of crops in Ontario as follows:

### ST. CATHARINES DISTRICT

Homer.—The storm of Oct. 10 did great damage to peach orchards between St. Catharines and the Niagara River. One orchard in Stamford is a total wreck: trees snapped off half-way up the trunk. Fortunately the storm centre was not in the peach belt, that being nearer the lake, and at Niagara-on-the-Lake. Peaches are all over except Smocks. Apples are a light crop, the second brood of codling moth doing great damage. Pears, except Keiffers, are over. Grapes have been a light crop owing to wet weather. Prices have been good.—F. G. Stewart.

Port Dalhousie.—The storm of Oct. 10 did much damage. Along the lake, no snow, but considerable wind, which did damage to apples. At Niagara Falls, Stamford, Port Colborne and St. Catharines, the snow did some damage to fruit and ornamental trees; at the latter place one man lost a nice young peach orchard, the trees breaking off at the ground. This has been a peach year. Fruit of all kinds has been abundant, plums excepted, but the high prices received for the latter more than balanced the short crop. The fire at Barnesdale Wineries caused 200,000 gals. of good wine to be lost. Some of it ran into the canal; the fish went on a

spree. We expected grapes to be a drug, but not so. Blues are selling at \$25 a ton. Very little frost as yet; red tomatoes are hurt, but there are lots of green ones.—G. W. McLelan.

St. Catharines.—The fall of snow on Oct. 11 caused no damage except on the ridge and in Welland Co., and there only to peach orchards in which were Smock peaches unpicked. The weight of the fruit combined with the weight of snow broke many trees in that district. The frost on night of Oct. 11 did not injure the grapes in the least. The grape crop has been good; while the quantity to the acre has not been up to the average, the quality has been excellent and prices ruled high. The bulk of the crop was sold f.o.b. here. The fruit season just closed may be summed up as a prosperous one, prices for nearly all fruits running from fair to good. The dry weather allowed it to be gathered without any waste and fruit kept well, very little being lost by rot. Insect pests of all kinds increased rapidly and have caused much damage. Many of the growers are preparing to spray this fall as soon as the leaves fall.—Robt. Thompson.

### LINCOLN COUNTY

Beamsville.—The peach crop in orchards well cared for has been good. Prices ruled 20 cts. a bskt. higher than last year. The canning factories bought late varieties at 2½ to 3 cts. a lb. Apples in sprayed orchards are of excellent quality and a fair crop.—W. B. Rittenhouse.

Grimsby.—Apples are not grown extensively. Some growers have refused \$2.35 a bbl. for their orchards No. 1 and No. 2. The proportion of apples that will grade is small.—J. D. Biggar.

### WENTWORTH COUNTY

Fruitland.—The fruit season now closing has been satisfactory to the producers. The demand has been active and prices good. With the exception of some 10 days or so weather conditions have been favorable. Peaches are finished and pears about done, except Keiffer. Grapes have been an average crop and prices have ruled high. The bulk of the staple varieties (Concord and Niagara) bringing the grower 15c. to 16c. a 6-qt. bskt. The quality has been above average. The cold snap did no harm at Fruitland. Apples are not extensively grown but the sample is good except for codling moth late in the season. The crop was fairly good. High winds stripped the Greening trees and shook down a large percentage of other varieties.—J. E. Orr.

### PEEL COUNTY

The fruit season has been a profitable one. Plums were a failure; pears and grapes, a fair crop. Apples will be about a good ½ crop, and, as a rule, are wormy. Snows are a good crop and very clean. Prices paid by packers this year for winter stock are \$1 to \$1.50.—W. G. Horne.

### GREY COUNTY

Meaford.—The apple crop is variable; Spy, Greening, Snow and Ben Davis, where fruiting, promise good yields that will grade 35% to 50% No. 1, good size and color, and 30% to 40% No. 2. Kings and Baldwins good quality, but not an average crop. The enormous loss due to storms in early Oct. has been partly offset by later rapid growth and by the improvement in color; still, the crop of No. 1 winter fruit in western Ont. has been reduced. The loss in trees in the Georgian Bay dist. is great. In my own orchard \$500 will not pay for the trees destroyed. The prices of winter apples range from \$1 to \$1.50 a bbl. The G.B. Fruit Grs., Ltd., are making better prices for their patrons.—A. Gifford

### NORFOLK COUNTY

Simcoe.—Apples from well-sprayed orchards are all sold. The growers realized from 50 cts. to \$1.25 a bbl., the unsprayed orchards realizing the cheaper price.—Jas. E. Johnson.

### BRUCE COUNTY

Walkerton.—Codling moth is bad. The snow

on October 9 did not do much damage. Growers are holding apples and expect good prices.—A. E. Sherrington.

### ONTARIO COUNTY

Oshawa.—Quality of apples is not as good as last year, but good prices are looked for.—E. Lick.

### DURHAM COUNTY

Newcastle.—West of Bowmanville apples are most all sold at \$1 on the tree. The Ben Davis is the heaviest yielder. Unsprayed orchards are producing poor crops.—W. H. Gibson.

## Apple Trade in Danger

Ed. CANADIAN HORTICULTURIST.—The October HORTICULTURIST published an editorial headed "Apple Trade in Danger." It appears to me that the anxiety shown therein is in a great degree needless. It may be true that several apple dealers have been thinking seriously of bringing New York state apples to Canada and storing them in bond and re-packing and shipping them to Gt. Brtn. This, however, if done at all, which is very doubtful, would be for 2 reasons, one being that the storage in York state has been pretty well cornered by the Americans and the necessary space is not available, and the other that in order to secure experienced export packers they would otherwise have to take them from here to the other side and board them in addition to paying big wages. Should the goods be stored and packed here these men would be living at home, saving needless expense, spending their money in Canada, and besides, be more comfortable themselves.

Noting your remarks re worms from York state; while they are true, the fact remains that many districts in southwestern Ont. are feeling the bad effects of a scourge, which every fruit grower knows is much worse and very prevalent, viz.: the San Jose scale. For a long time orchards were cut down to stamp it out, but it has now got beyond control. More or less of fruit affected with this from Niagara and southwestern districts is stored in Brighton every year, and other places; hence, there is nothing to be feared from apples from U.S. more than from home grown.

In my opinion, the locality has much to do with the spread of disease. In the northern and colder districts we have comparatively little of it. Fruit in the belt from Toronto to Montreal has practically not been affected with scale.

However, you will find that there will not be many York state apples stored in Canada, because freight rates are higher and, with stop-off charges added, it might be unprofitable. There may be some from the central states stored here. Surely it would be a benefit to keep our packers busy all winter, even if on U.S. produce. The fruit would be packed in bond and shipped as "product of U.S.A."

Millions of dollars' worth of U.S. produce are annually shipped from Montreal, which does not prejudicially affect the sale of our produce here; also, Canadian produce in winter is largely shipped via U.S. ports—Boston and Portland.—Eben James, Toronto.

Fruit growers should be careful to purchase their nursery stock from reliable Canadian firms. Buy stock that is grown in Canada and not surplus trees that are dumped into the country by American concerns. In the Niagara and Essex peninsulas growers are now paying dearly for cheap trees bought from unreliable concerns on the other side of the line. Thousands of these trees are so badly affected with scale that they will have to be destroyed. Growers should buy from a nursery that does business on the square. Consult the advertisement of Stone & Welton, Toronto, on another page.

**Strawberry Plant Swindle**

A number of market gardeners and farmers in and about Owen Sound have been the victims of a strawberry plant swindle. A man named S. A. Gordanier, of Camden East, a village near Napanee, canvassed them and succeeded in getting about 50 orders, representing about \$2,000 in value. By false representations, the farmers were duped into paying the high price of \$20 a thousand for plants that ordinarily are only worth \$2, and in this case, nothing—practically all the plants died. Proceedings were taken in court recently. Three test cases resulted in giving judgments to the plaintiffs. Others are expected to follow unless Gordanier agrees to settle the claims privately. The Owen Sound *Sun* makes the following comments:

"It is to be hoped that the exposure made in these cases will have a tendency to put people upon their guard in future when dealing with parties selling and calling for a written contract, especially such a contract as Gordanier put forward in this case and induced innocent and confiding people to sign. No man purchasing plants or nursery stock should be asked to give a note or make payment until he has had an opportunity to satisfy himself that the stock is up to representations, and no reputable person engaged in the business would ask for anything more, and if he does so, then the would-be buyer should promptly refuse to have any business with him."

**Vegetable Growers' Program**

The second annual convention of the Ont. Veg. Grs. Assn. will be held in a committee room, City Hall, Toronto, Thurs. and Fri., Nov. 8-9, in conjunction with the Ont. Hort'l Exhibition. On Wed. Nov. 7 at 2 p.m., a meeting of the board of directors of the O.V.G.A. will be held in the secty's office, Parliament

Bldgs., Toronto. The following is the program of the convention:

THURSDAY, NOV. 8

- 10 a.m.—Chairman's address, F. F. Reeves, Humber Bay, Ont., Pres. O.V.G.A.
- 10.15 a.m.—"Experiments with Tomatoes," Geo. A. Robertson, St. Catharines.
- 10.45 a.m.—"Growing Tomatoes under Glass," C. Gibbard, Todmorden, Ont.
- 11.15 a.m.—"Lettuce Forcing and Bean Growing," Eugene Davis, Grand Rapids, Mich.
- 2.00 p.m.—"Fertilizers in Relation to Vegetable Growing," Prof. R. Harcourt, O.A.C., Guelph.
- 3.00 p.m.—The prize essays entered in the competition for 15 prizes, amounting to \$125, offered by the O.V.G.A. for the best essays on the growing of potatoes, cauliflower, celery, tomatoes, and onions, will be read. Leading growers will start discussion of each paper after it has been read

THURSDAY EVENING

This session will be left open so that members of the assn. may have an opportunity to inspect the exhibits and to hear the famous Black Dike Band at the Ont. Hort'l Exhibition.

FRIDAY, NOV. 9

- 10.00 a.m.—"Forcing Early Vegetables," E. E. Adams, Leamington, Ont.
- 10.40 a.m.—"Onion Growing," E. G. Malcolm, Scotland, Ont.
- 11.20 a.m.—"Celery Growing," T. Benstead, Strathroy, Ont.
- 2.30 p.m.—"Melons and Melon Growing," W. G. Horne, Clarkson, Ont.
- 3.15 p.m.—"A Few Words on Other Vegetables," A. McMeans, O.A.C., Guelph.

The work of the C.P.R. in encouraging horticulture among its employees is to be commended. This fall 150,000 bulbs will be planted at various points along the company's lines.

**Satisfied Advertisers—I.**

Among the many well-satisfied advertisers in THE CANADIAN HORTICULTURIST is Mr. Eben



Mr. Eben James

James, the widely known fruit exporter of Toronto. For the past 9 years he has represented Messrs. Woodall & Co., Liverpool, the pioneers, and several other fruit auctioneers in Great Britain, and has been among the largest handlers of apples in Canada. He has always been in sympathy with anything that tends to promote the interests of fruit growers, was one of the first

to assist in framing the Fruit Marks Act, and has been a hearty advocate of spraying and all other methods whereby our apples can be improved. He is manager of perhaps the finest apple storage in Canada, at Trenton, and is widely known among apple men. He has always advertised in THE HORTICULTURIST, and writes us that the reason he does is because he believes "THE HORTICULTURIST is the best medium in Canada for bringing fruit culture to a higher standard."

An evaporating plant at Napanee, owned by Collier Bros., was destroyed by fire on Oct. 20. About \$4,000 worth of apples was lost.

LARGE

# Juicy Red Apples

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LOTS OF THEM

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And an abundance of other fruits of high quality will be yours when you purchase your Nursery Stock from

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## The Helderleigh Nurseries

E. D. SMITH, WINONA, ONT.

Mention The Canadian Horticulturist when writing

# Export Your Apples

**Woodall & Company**  
Liverpool, England  
The Pioneer Receivers from this Continent

**Boyd, Barrow & Co.**  
Glasgow, Scotland

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Reliable information. Returns day of sale.  
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## EBEN JAMES

CANADIAN AGENT

Phone M. 5735 103 Union Station, Toronto

Mention The Canadian Horticulturist when writing

**Shipping to Great Britain**

During the last few years keen competition between the different steamship lines running out of Montreal has caused them to improve their transportation facilities. The weakest link in our chain of transportation between Canada and Great Britain is not found in our ocean transportation. Apples suffer most injury from heat between the time they are picked from the tree and the time they are loaded in the steamships in Montreal. Apples should be well cooled before they are loaded into the cars.

It is not wise to ship apples in a cattle boat because the cattle deck interferes with the proper ventilation of the holds. Apart from this, there is frequently delay at the other side because the cattle have to be taken off first at a separate dock, and in order to do this, particularly at the port of London, a large steamer is apt to miss the tides and lose from 1 to 2 days before she can be docked and her general cargo is discharged.

It is difficult to recommend any one particular steamship line for the carriage of apples. If apples are shipped by either the Allan, Dominion, C.P.R., Manchester, or Retford lines, they will receive good accommodation. These lines carry advertisements in THE CANADIAN HORTICULTURIST, in which they keep the fruit growers informed on the dates of sailing. When shipping, growers should make it a condition that the apples be stowed in well-ventilated holds.

When shipping to the Old Country it would be well for the growers to advise Mr. W. W. Moore, Chief, Extension of Markets Division, Ottawa, of the different shipments as soon as they are ready to go forward, stating the shipping point, car numbers, name of steamship line and steamer, and port of destination. He would, he told THE HORTICULTURIST, then instruct the inspector at Montreal to look out

for such shipments, note where they are stowed, and as far as possible have thermographs placed in the same compartments with the apples. As soon as the thermograph records were returned from the other side he would furnish the shippers with copies of the charts. He would also instruct the inspector at the ports of Great Britain to report on the conditions of the apples when landed.

The Hon. Nelson Monteith, Minister of Agriculture for Ontario, has intimated by letter to the Ontario Horticultural Association that he favors the giving of a grant of \$100 to the association to assist in defraying the expenses of bringing speakers to the conventions. He said, also, that the department of agriculture would arrange to have printed the proceedings of the annual convention next month for distribution among the members of the horticultural societies of the province. Grants for these purposes will probably be made at the next session of the legislature.

Have you sprayed and had poor results? There must be a reason. Is it because the machine you bought was misrepresented and turned out no good? Then buy one that is guaranteed to give satisfaction—one that can be depended upon. The best line of power sprayers on the market to-day is made by the E. C. Brown Company, of Rochester, N.Y. An advt. on page 292 tells what you want to know.

Growers should profit by the experience of the past season's scarcity of fruit baskets and buy their supply for next year in advance. Buy from a reliable firm. The Oakville Basket Company make all styles of packages. They recognize the importance of turning out good stock and of bringing it to the attention of growers through the columns of THE HORTICULTURIST. Recently they signed a contract for 1/4 page for a year. See advt. in this issue.

**Shipping Pears to England**

At different times Canadian growers have attempted to ship pears to Great Britain. Good results have followed some shipments, and disappointment others. This year several shipments have gone through from Montreal to Glasgow and Liverpool. In each case, according to information furnished THE HORTICULTURIST by Mr. W. W. Moore, Chief, Markets' Division, Ottawa, the reports from the inspectors in the Old Country indicate that the pears arrived in good condition. The following are the particulars of three shipments:

S.S. Athenia sailed from Montreal for Glasgow, Aug. 30, with 641 bxs. of Bartlett pears, carried in refrigerator chamber, which were landed at Glasgow in excellent condition.

S.S. Virginian sailed from Montreal for Liverpool, Aug. 31, with 150 bxs. of Bartlett pears in refrigerator chamber. These were carried at a temperature of from 72° down to 30°, and were landed in good condition.

S.S. Canada, which sailed Sept. 1 for Liverpool, had 301 bxs. of Bartlett pears, which were carried in cool air at a temperature of from 60° down to 44°. These were reported on arrival as of good quality and in good condition.

**Annapolis Valley Apples**

W. T. Macoun, C.E.F., Ottawa

On Sept. 20 and 21, the writer drove from Middleton to Wolfville, N.S., a distance of about 40 miles through the Annapolis and Cornwallis valleys, which are noted for the fine apples that are raised there. This drive afforded an excellent opportunity of seeing many of the well-known orchards of that district.

The Gravenstein apples had been picked, but later varieties were, for the most part, still on the trees. The Gravensteins were badly spotted this year in most orchards, but the

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writer was particularly struck with the freedom from spot on the later varieties all the way from Middleton to Wolfville. Not only was the fruit clean, but there were very few codling moths observed, and the conclusion reached was that, while the crop would not be more than a medium one, the fruit would grade high. The variety which was especially admired was the Blenheim, which we believe will soon take the leading place in the estimation of the fruit growers there.

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Judging by the orchards seen, we should say that this year there is a good crop of Blenheim, Wagener and Baldwin; a medium crop of King and Ben Davis; a light to medium crop of Ribston, Roxbury, Russet (Nonpariel) and Golden Russet. The Northern Spy is not a prominent variety in N.S. The apples generally appear higher in color this year than we have seen them, owing doubtless to the dry season.

## POULTRY DEPT.

Conducted by  
S. Short, Ottawa

Now that severe frosts are beginning, the housing of the fowl through the winter is the important question in the minds of breeders. Some are extending their poultry houses, and others are building new ones. One of the chief parts of a poultry house is the floor. With a view to economy some houses are built without any floor other than the earth. By experienced people this plan is seldom used, especially in the colder parts of the province. While dry sand or earth is desirable for the outside scratching pen, used to give the fowl exercise on sunny days, it has not been found satisfactory for the permanent house floor. The fowl scratch deep holes into the dirt and thereby mix it with the litter, dry leaves or chaff. This makes it impossible to clean out the pen without removing quantities of the earth. This is tedious work, and sometimes it lowers the level of the floor down to the foundation of the building. It thus allows the cold air to enter. It is not always convenient in midwinter to obtain a fresh supply of dry earth to renew that removed in cleaning up.

### CEMENT VS. WOOD FLOORS

Two flooring materials may be used, cement or wood. Cement is a cold floor. It is, also, more expensive than wood. When the outside temperature rises in winter, as it does frequently, the cement retains, for some hours, a lower temperature than that outside, and this causes moisture to form on the surface of the floor. This dampens the litter, which must always be used liberally to keep the fowl from coming in contact with the cold cement. It has one distinct advantage, however, over other floorings: It will keep out the rats, but they get even by gnawing away the lower corners of the doors.

The best flooring is wood. It is dry, warm for the fowl to stand on, and absorbs the moisture from the drippings. The same quantity of litter on a wood floor will last half as long again as on a cement floor. No mistake will be made in putting into the building a wooden floor.

### SCALY LEG

In most pens some birds will be noticed to have scaly legs. It is much easier to treat these birds now than when the weather is colder. The remedies are simple. Kerosene or vaseline applied once a week, giving 2 to 3 applications, is all that is necessary.

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# Vegetable Conditions Indicate Good Prices for Winter

**V**EGETABLE crops are about all harvested and stored. In most sections the weather for this purpose has been ideal. Frosts, early in October, cut off the tender vegetables before their usual time. A general summary of the situation during the last season, as reported by crop correspondents of the Ont. Veg. Gro. Assn., shows that crops have been fairly good and prices above the average. Onions, particularly those grown on light soil, yielded poorly. Dry weather during the latter part of the season prevented other crops from attaining good size.

The potato crop is only medium; in some localities there are not enough on hand to supply the local demand; they have not been stored in large quantities, and this winter it is probable that they will bring a good price. Root crops have been fair to good except turnips, which are slightly under average. Onions, being scarce, will be in good demand, and prices will advance. There has been a poor crop of winter cabbage; they will be scarce and good prices will rule. Cauliflowers are a failure both in crop and quality. Brussels sprouts, also, are scarce. The celery crop is variable; in the Leamington district, it is excellent; in Niagara Falls district, poor; on the whole, the crop is fair, but winter stock will not be over-abundant; prices should be firm. Squash and citrons have yielded heavily and are plentiful. Salsify is a good crop; spinach, fair crop of good quality.

The prospects for winter vegetables grown under glass are good. Many new forcing houses have been built this fall and the old houses will be run to their full capacity, particularly in the growing of lettuce. Were it not for a probable scarcity of stored vegetables

this winter, this increase in the forcing business would indicate the possibility of an oversupply. It is likely, however, that the demand will be sufficient to handle all that will be grown.

## MONTREAL DISTRICT

Lachine.—Owing to early frosts all crops are gathered. The dry weather retarded growth and made the specimens small. The following were the prices on Oct. 20: Cabbage, 35-50c. a doz.; cauliflower, \$1-\$1.50; celery, 35-60c.; lettuce, 75c.-\$1; squash, \$1; marrows, 50-75c.; carrots, a bag, 75-90c.; beets, 75c.; onions, \$1.35; parsnips, \$1; turnips, 60c.; potatoes, 90c.-\$1.25; peppers, \$1.25 a bu.; Brussels sprouts, 75c. a doz. stalks; spinach, 50c. a crate; leeks, \$1 a doz. bnchs.—Chas. A. Smith.

## OTTAWA DISTRICT

Billings' Bridge.—Potatoes are a good crop; turnips, good; carrots, beets and parsnips, short; cauliflower is good and a glut; good cabbage, scarce; celery, good, no heavy losses either by blight or rust. Salsify, a good crop. Herbs, squash, and citrons are good. Onions are a glut, good red selling at 80c.-\$1 a bag. Prospects for winter trade in greenhouse goods indicate an oversupply. Several large lettuce houses have gone up this fall, and the old houses will be run to full capacity. Lettuce, however, is scarce at present.—T. Mockett.

## FRONTENAC COUNTY

Kingston.—On the whole, the past season has been good and prices remunerative. Late varieties are not up to standard. Cabbages are lacking in firmness; cauliflower, not maturing properly. Turnips, not large, also parsnips. Potatoes have yielded better than was expected, the yield being above the average of

the past five or six years. Onions averaged about ½ a crop. Weather for storing has been ideal.—Chas. F. Adair, Cataract.

## LENNOX AND ADDINGTON

Napanee.—Crops are all harvested. Potatoes have been a fair crop, few rotten ones, and prices are ranging high, 90c. to \$1 a bag. Onions are scarce and inferior in quality; price 80c. to \$1 a bag. Cabbages are scarce and selling on Oct. 20 from \$1.50 to \$2.50 a doz. according to size. Other vegetables are plentiful, and are bringing good prices.—E. M. Sherman.

## TORONTO DISTRICT

Humber Bay.—Frost on Oct. 10-11 killed the tender vegetables; it also cleaned the late cabbage and cauliflowers of slugs and worms. Cauliflowers are not heading properly. Late cabbage are not plentiful, and will bring a fair price this winter. Carrots and parsnips, good crop. Late beets, fair. Brussels sprouts are scarce and in good demand. Spinach, not plentiful, but of good quality. Late celery is still growing. Citrons, good crop and large size; not much demand. Squash, heavy crop but low prices. Onions were harvested in excellent condition, but not large in quantity. Outside lettuce, nearly done; greenhouse, now ready.—J. W. Rush.

## PEEL COUNTY

Clarkson.—Crops, on the whole, have been good, except onions that were planted on light soil felt the effect of the dry weather. Onions on heavier land turned out well. Potatoes, early and late, have been good, especially the former. Cucumbers for pickling were not extensively planted, even those that were grown

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were shortened by the drought; good prices were realized.—W. G. Horne.

## HALTON COUNTY

Burlington.—A hard frost on Oct. 8 ended the tomato season, whereas last year they were picked till the end of the month. Late cauliflowers are getting scarce; crop has been good with prices better than last year. Late cabbage, a fair crop and good prices. Onions are being sold at an average of 1¼c. a lb. It is probable that prices will advance. Potatoes only a medium crop, with price on Oct. 20 1c. a lb. Parsnips and carrots not grown extensively, but where raised are a good crop, and bringing high prices; the majority will be marketed later on. Celery has not been a good crop; the price should be firm.—J. A. Lindley.

## ST. CATHARINES DISTRICT

Potatoes, about ½ a crop, are clean and free from rot. Turnips, almost a total failure. Carrots, smooth and a fair crop. Onions, well saved, crop light. Tomatoes, all ripened before frost, were not over ½ a crop. Citrons and squash, very good.—Robt. Thompson.

## WELLAND COUNTY

Niagara Falls South.—Heavy showers during past month improved the growing crops. They produced also a heavy crop of field mushrooms, which were a feature of recent markets. Late cabbage, medium crop; cauliflower, owing to aphids, a failure; celery, small and short crop. Fall lettuce, poor. Onions, all harvested and ½ a crop. Melons, all gone except citrons, were a big crop. Winter squash, a heavy crop with hard ripe shells. Winter radish clean and free from maggots. Spinach and salsify, good. Beets, carrots and parsnips, medium. Swede turnips, a failure. Potatoes are all dug and only 2-5 of a crop. Tomatoes are finished. Frost and snow on Oct. 11 cut off the tender vegetables. Spring onions look

fine. Greenhouses have been started with forcing stuff. On the whole, the past season will amount to only ½ an average crop; still, a good demand and good prices made it a profitable one.—Thos. R. Stokes.

## LAMBTON COUNTY

Sarnia.—Late potatoes, as mentioned in last report, are a light crop, but prices are high, thanks to the local branch of the O.V.G.A., which raised the price to 50c. a bu. There will not be enough potatoes to supply the local demand. Late cabbage, not as large as usual, are a fair crop; there will be a demand for them before winter is half over. Carrots, beets, and parsnips are an average crop. Celery, a fair crop; price is steady at 30c. a doz. Onions, a light crop, were selling on Oct. 20 at 60-90c. a bu. Hubbard squash is plentiful. Cauliflower is scarce and small. Turnips are not grown extensively; the crop is poor. For the season, vegetable crops have been below the average.—W. A. Broughton.

## KENT COUNTY

Chatham.—Heavy frosts caused considerable damage to the celery crop. Potatoes are all harvested; generally they are a poor crop; they are selling at 85c. to \$1 a bag. Onions are rather scarce and are selling at \$1 a bag. Root crops have given a medium yield. Winter cabbage will be scarce.—Fred. Collins.

## ESSEX COUNTY

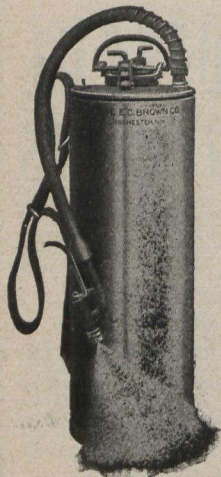
Leamington.—Some growers are well satisfied with the past season's results, not only with the crop, but on account of good financial returns; others, who attempted the growing of vegetables commercially, are tired of it, and say that they will devote their energies in another direction next season. Heavy frosts on Oct. 10 killed the tomato and other vines. Onions have been marketed in large quantities; only small lots are being held for the winter supply; they have been sold at 50c. a bu. in

car lots. Potatoes have not been a large crop; some fields did not pay for the digging; as usual, several cars will have to be brought into the district during the winter and next spring. Owing to tobacco being grown in large quantities, potatoes are not grown as much as formerly, although one season with another they pay fairly well. Root crops, owing to drought, are undersized, and the crop is only medium. Late cabbage is good. Celery is excellent, some claim the best in years. Under glass, lettuce and tomatoes are growing well. The quantity of lettuce may be a little more than last year. One grower is growing tomatoes under glass for winter.—E. E. Adams.

The Toronto Hort. Soc. held a profitable meeting early in Oct. Many questions on various phases of gardening and amateur fruit growing were asked. They were answered by Mr. Thos. Manton, of Eglinton; Mr. E. F. Collins, Allan Gardens, Toronto; and others. A full report of the topics discussed will appear in another issue of THE HORTICULTURIST.

A special prize, to be called the "King Edward Special," will be offered for competition at the Ontario Horticultural Exhibition. The King Edward Hotel, Toronto, is donating a silver set of three pieces—tray, pitcher and goblet—valued at \$25, for the best collection of preserved fruits in glass jars, the collection to consist of strawberries, raspberries, cherries and peaches. The King Edward is prepared to buy from winner a yearly supply for the hotel.

The Ont. Entomological Soc. met in convention at Guelph on Oct. 10 and 11. Among the questions discussed that interest the practical fruit grower were the San Jose scale and the codling moth. Pressure of space prevents a report of the discussion in this issue. It will appear later.



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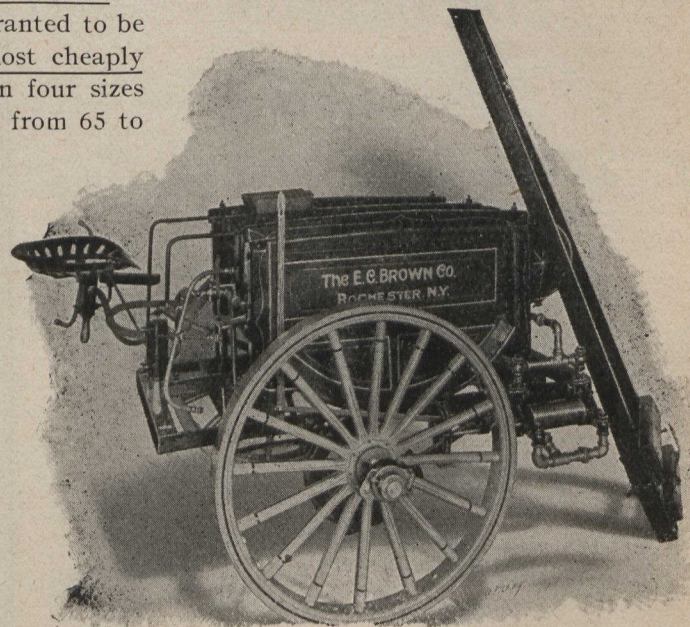
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### Items of Interest

Among the hort'l societies that do much towards the dissemination of knowledge in amateur gardening is the one at Guelph. Bulletins are issued at frequent intervals. The one for October is on "Bulb Culture," prepared by Wm. Hunt, of the O.A.C.

In our next issue we expect to have an illustrated article on growing mushrooms by a lady who has made the business a success, Mrs. E. C. Bennett, of Thornbury, Ont. She has grown single mushrooms that weighed 16 ozs. Mrs. Bennett also grows spawn for the beds. Read her advertisement in another column. It is on page 290.

Early in Oct., the Toronto branch of the O.V.G.A. held its monthly meeting. Many items of business were discussed, and plans were laid for the future. The Nov. meeting will be held on the 3rd inst., when the following subjects will be discussed: "Forcing Radish and Lettuce," "Mushroom Growing," and "The Growing of Early Vegetables." In the course of the Oct. meeting, Mr. Wm. Gilman, of Humber Bay, stated that he had used, for potato beetles, mashed potatoes mixed with Paris green scattered along the rows in the spring. Mr. J. W. Rush stated, in his own peculiar way, that he thought as good a remedy would be cayenne pepper sprinkled at the base of each plant so that the "bugs" would be made to sneeze and break their necks.

Last winter, realizing that in order to be in any way successful in the growing of flowers in my own home, I saw the necessity of using some means other than ordinary. I got some of Arnott's Plant Food. This I used according to directions, and I had splendid results. By its use I was enabled to keep my plants, not only growing, but in fine condition for their summer's work.—E. Culverhouse, Toronto.

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**Changes in Constitution**

The annual meeting of the Ont. F.G.A. will be held in the City Hall, Toronto, on Nov. 7 and 8. During the afternoon session on Wed., Nov. 7, a special committee appointed to consider the revision of the Constitution and By-laws (see page 108-110, Report of 1905), will submit a report recommending many important changes, among which are:

Clauses 7, 8, 24, 25, 26, 27 and 28 shall be cancelled and the following substituted: (7) The election of directors shall take place in Dec. of each year at board meetings of the affiliated assns., as defined in Clause 28 governing affil'd assns. (8) The newly elected directors shall at the first meeting of the board appoint from among their number a pres. and a vice-pres., and from among themselves or otherwise a sec.-treas. (24) Fruit growers in any section of Ont. may form a local assn., which, later, may become affiliated with the Ont. assn. on the condition defined in Clause 26. (25) It shall be the duty of the officers and directors of the Ont. assn. to encourage the formation of such local assns.

(26) Any local assn. may affiliate with the Ont. assn. when it has a membership of 10 upon the payment to the treas. of the Ont. assn. of \$5 for the first 25 members or fraction thereof above 9, and 25 cts. a member for every additional member, which payment shall entitle the members to all the privileges and advantages of membership in the Ont. assn., including representation on the board of directors, upon the terms defined in Clause 28. (27) Fruit growers, who are members of 2 or more local assns., shall be accepted as members of the Ont. assn. from that branch assn. only which is the first to forward their membership fee to the sec.-treas. of the Ont. assn.

(28) The directors of each affiliated assn. shall, during Dec. of each year, appoint a director of the Ont. assn. as follows: (a) Any

assn. having 10 members or over shall appoint one director, whose expenses when attending meetings of the board shall be paid by the Ont. assn. (b) At all board meetings of the Ont. assn. each director present representing any branch shall have the right to cast 1 vote for every 25 members or fraction thereof of his branch who are members also of the Ont. assn.

**Program Hort'l Association**

The Ont. Hort'l Assn. will hold its annual meeting on Friday, Nov. 9, in City Hall, Toronto. The following program has been prepared:

- Friday, November 9
- 10.00 a.m.—President's Annual Address, Mr. W. B. Burgoyne, St. Catharines; discussion led by 1st Vice-Pres., Major H. J. Snelgrove, Cobourg, Ont.
  - 10.30 a.m.—Presentation of committee reports, including the report of the committee appointed to draft a constitution for the Association.
  - 11.10 a.m.—"The New Act Governing Horticultural Societies," Mr. H. B. Cowan, Toronto, Prov. Supt. An opportunity will be given the representatives of hort'l societies to discuss the various clauses of the act.
- AFTERNOON SESSION
- 2.00 p.m.—"City Garden Competitions," S. Short, Pres. Ottawa Hort'l Society; discussion led by R. T. Steele, Hamilton, Ont.
  - 2.45 p.m.—"How to Interest School Children in Horticulture," J. Thos. Murphy, Sec. Simcoe Hort'l Society; discussion led by Mr. J. Walter Brooks, Brantford.
  - 3.30 p.m.—Election of officers. Suggestions in regard to work the Association might undertake during the coming year.

Questions for our "Question and Answer Dept." must be signed by full name of sender. Otherwise answer may be delayed. We write enquirers personally, but publish only initials.

**GOOD HOMES IN VIRGINIA**

Virginia offers fine opportunities to the farmer and investor. Climate is mild and healthful, soil is fertile, and grows all crops and fruits; near the great markets. Land is selling below its value, but increasing in price every year. Many Canadians are living in Virginia. The State Department of Agriculture gives any information. Address G. W. KOINER, Commissioner of Agriculture, RICHMOND, VA.

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- BELL ORGAN**—High back with mirror and music rack, 10 stops, walnut case, panelled, 4 sets of reeds, couplers, vox humana stop, grand organ and knee swells. This is a good Organ and a handsome ornament for a parlor. . . . . **\$46.00**
- THOMAS ORGAN**—High back with mirror and music rack, very handsome walnut case, mouse-proof pedals, lamp stands, etc., 5 octaves, 10 stops, 4 sets of reeds, treble and base couplers, grand organ and knee swells. This is an excellent Organ and would be very satisfactory to a musician. . . . . **\$47.00**
- DOMINION ORGAN**—High back with mirror and music rack. This is an exceptionally handsome case with cylinder fall, 7 stops, treble and base couplers, vox humana stop, lamp stands, mouse-proof pedals, etc. Better see this one, at. . . . . **\$50.00**

- BROWN**—Walnut case, high back Organ with music rack, 6 octaves, 9 stops, 4 sets of reeds, treble and base couplers, grand organ and knee swells, lamp stands, etc. Special at. . . . . **\$61.00**
- KARN ORGAN**—6 octaves, piano case, 11 stops, 4 sets of reeds, including vox humana stop, treble and base couplers, grand organ and knee swells, mouse-proof pedals, lamp stands, etc. A very nice Organ and A-1 value at. . . . . **\$63.00**
- DOHERTY ORGAN**—6 octaves, mahogany case with long music rack, 11 stops, 4 sets of reeds, vox humana stop, treble and base couplers, grand organ and knee swell, lamp stands, mouse-proof pedals, etc. This is a very handsome instrument and with the long music rack should give every facility for a good musician. Special at. . . . . **\$72.00**
- BERLIN ORGAN**—Beautiful walnut case, 6 octaves, 11 stops, including vox humana stop, treble and base couplers, lamp stands, mouse-proof pedals, etc. This is a very nice Organ and one that would be satisfactory to any musician. A-1 value at **\$73.00**

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One-way tickets will be sold on certificate plan on November 2nd to 10th, inclusive, good to return free up to November 14th, 1906. Certificates must be validated by the Railway Representative at the Exhibition, cost for which is 25c. on each ticket. When buying tickets, buy a ticket to Toronto only. Ask your station agent for a standard certificate. Present your ticket at Exhibition in Toronto for signature of the Secretary and validation after which you can return home free.

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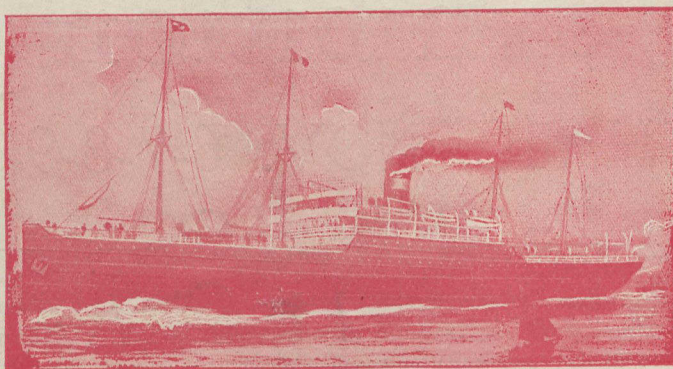
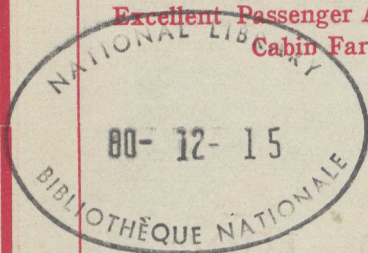
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