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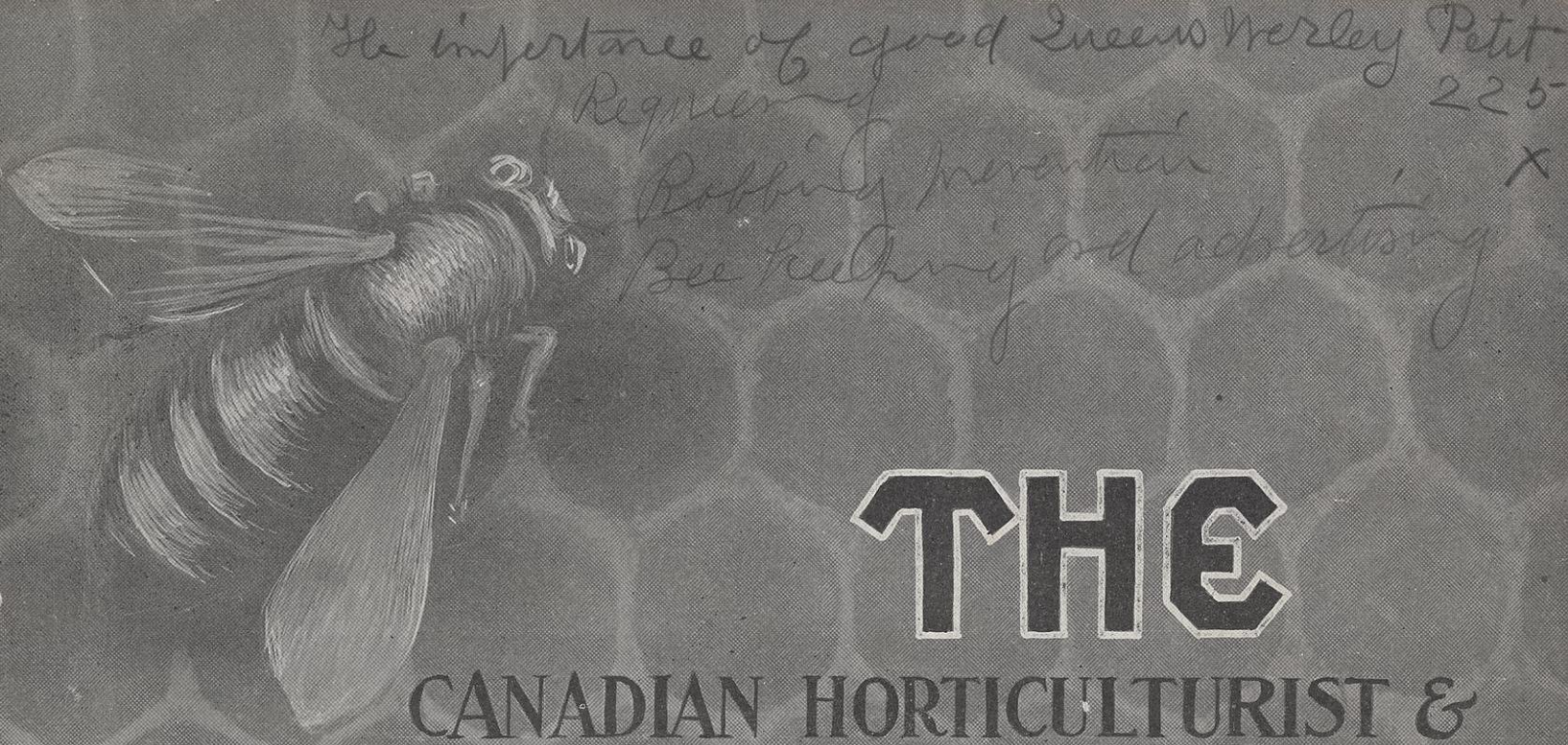
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# THE CANADIAN HORTICULTURIST & BEEKEEPER

Plover 218  
Petunias 219

VOLUME 37. No. 9  
\$1.00 a Year

PETERBORO, ONT.  
SEPTEMBER, 1914



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## The Canadian Horticulturist

Regular Edition

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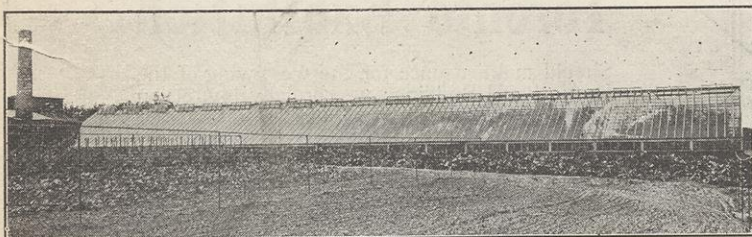
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# The Canadian Horticulturist

Vol. XXXVII

SEPTEMBER, 1914

No. 9

## The Exhibition of Fruits

Prof. T. G. Bunting, Macdonald College, Que., President Quebec Province Fruit Growers' Association

THE successful exhibition of fruit is a study that largely comes through practice and experience. It requires a knowledge of what perfection is in the different varieties, as well as how to exhibit fruit in its most attractive form.

A comparatively small percentage of fruit growers will make any pretence at exhibiting their produce. There are plenty of reasons they may give for not doing so. One frequently heard is that their fruit is not good enough.

There is nothing that will so surely encourage a man to grow good fruit as exhibiting and competing for honors at the various exhibitions. It is largely through our exhibitions that our most prominent judges and pomologists get their experience, as here they can see large numbers of fruits of the various varieties, grown under different conditions, competing side by side. No one man can be expected to grow all varieties, and have them at their very best. Thus his experience will be more or less limited until he comes in contact with the larger exhibitions.

Another reason that is sometimes given by the average man for not exhibiting is,—he would have no chance against the larger exhibitors some of whom have been exhibiting for years on a large

scale. Naturally they have profited by their past experience and know just how to get the most out of their fruits, not only in exhibiting but also in growing it. But this does not in any way preclude the small grower from securing a fair share of the awards.

### JUDGING

Judging is a difficult position for any man, even of wide experience, especially at the larger exhibitions, and it is true judges do not always agree in their decisions. When we consider that judging consists of balancing up the good and bad points of the different exhibits and then placing them in their relative positions, we can see how difficult it would be to obtain at all times the same placing by various judges. Frequently they are called upon to judge fruits which are below the average and which contain many defects. Then it may be a case of choosing the plate with the least or less serious defects, and in such decisions there may be room for dispute.

Our exhibitions have been one means of training our fruit growers and professional horticulturists in pomology and giving them the practice and experience necessary to qualify as judges. Any professional or amateur fruit grower may feel sure that he will be given a fair

chance at our exhibitions even when competing with the largest exhibitors.

To win a prize should be an honor more highly prized than it sometimes is. At some of the fruit exhibitions as many as fifty to a hundred exhibitors may be competing in the same class for some of our better known fruits, and competition must of course be keen. Those who are unsuccessful—if having the right spirit—will make even greater effort the next year to produce the prize winning fruit.

### SELECTING THE FRUIT

The selection of fruits for exhibition purposes will bring out all the finer points of the different fruits, and one cannot really know the number they may possess until he comes in contact with individual fruits in making these selections. A tree of Crawford peaches will have no two alike and when one comes to select five specimens for a plate, he should have some ideal in mind and each should conform as nearly as possible to that ideal. This tends to produce uniformity which should be one of the first things required, even if the plate does not possess some other quality in as high a state as one would like. An unusually large or very highly colored specimen on a plate with others, will



A British Columbia Packing School in Operation. These Schools are conducted in Leading Fruit Districts and have been Productive of much good.





Packing Apples in an Ontario Packing House

## The Prairie Markets

F. C. Hart, Department of Agriculture, Toronto

THE conditions which obtain this fall with regard to the western market for Ontario fruit are without precedent. Nobody knows what is going to happen, and it is impossible to prophesy. We can readily understand, however, that for Ontario the west may be the main market. The difficulty is in forecasting what the consumption will be, and how this consumption will be supplied by apple growing sections other than Ontario. Nova Scotia has a large crop this year and their markets across the water will be seriously curtailed. An endeavor is being made to find a market for some of their fruit in South America. If however, quantities from Nova Scotia are sent west it will have an effect on the market.

Financial conditions in the west are reported not to be of the best. This will have an effect on consumption. A good deal depends on the decreased western crop finding a profitable market on account of the war. A large part of the British Columbia apple crop has been offered to England by the Government. The apple growing sections south of the line however, have a good clean crop, and much of this fruit will, as usual, seek our western market. Various possibilities are open. It may be that the prairie provinces will be flooded with apples from Ontario, Nova Scotia and the United States. This together with lack of money in the west may make this market a very poor one. On the other hand conditions may cause a material increase in the price of all food products, in which apples will have a share, although not to the same extent as the more staple articles of food. There seems to be no doubt that the western grain crop will find a good market this year, and this to some extent will relieve the financial strain that at present exists, so that the market for apples may not be as difficult as might be anticipated.

In view then, of the uncertainty of the western market and of the partial stoppage of our usual export market, Ontario growers should ship only their best fruit of their best varieties west this year, and even then it is likely they will have to be satisfied with lower prices, as the expected prices may not be realized if an endeavor is made to bring up the total returns by shipping inferior grades and varieties. In view of the financial conditions, care should be taken to ensure returns. Credits should be closely watched.

Many customers will buy a box who will not buy a barrel. Boxed fruit is more easily handled.—C. J. Thornton, M.P.

not produce uniformity and will hardly secure the prize unless the other plates are markedly inferior. Uniformity cannot be too greatly emphasized in fact one would make no mistake in placing this point before all others. Uniformity consists in having each specimen like all others on the plate as far as size, form, color, freedom from blemish, maturity, and so forth, are concerned.

Freedom from blemishes should be rigidly insisted upon. Many will pick up a plate consisting of one or more wormy apples which of itself should be sufficient to put the plate outside of first place, because the prize-winning fruit should be at least No. 1, and a wormy fruit is certainly not. Too often this point is not given enough attention. Small scab spots, scale insects, bruises, broken stems, and so on, may be found on the fruits that are sometimes exhibited. These should never be allowed. They have frequently been the means of losing first prize for otherwise good fruit.

### REQUIREMENTS TO OBSERVE

In order to choose good color, one should know what good color is in the variety under consideration. Abnormally high color is not to be desired, but good color for the variety with all other points equally developed, should produce a plate of the right kind of fruit.

Good color in fruits is usually found on specimens grown in the sunlight individually rather than in pairs or clusters. Most fruit have a natural bloom and this should be preserved without any unnecessary rubbing in handling.

Form, which is almost as important as color, should be as nearly normal for that variety as it is possible to have it. One familiar with fruit will know that the majority of varieties have a distinct

form peculiarly their own, and the nearer this form the better.

One will occasionally look for the largest specimens obtainable. These are usually overgrown, coarse and poorly colored and are seldom to be desired. Specimens somewhat above the average in size with a nearly ideal form, high color and free from blemishes, are the most valuable for exhibiting. Just how large or how small they should be will depend on the other factors that go to make the individual. Avoid abnormal specimens. Quality and texture are largely judged by color and finish. Specimens should be mature, or nearly so, at the time of exhibiting, and for this purpose one has recourse to retarding or hastening maturity for the exhibition. Cold storage should be resorted to when necessary to hold the fruit a considerable time. A cool and comparatively dry place will answer for holding the fruit a short time.

The season of the different varieties is a varietal difference and varies somewhat with the different seasons. The fruits on a tree are not all at the same stage of ripeness at one time, and earlier or later specimens can be chosen as required.

In collections one must know the relative value of the different varieties in order to determine what varieties should go in a specified collection. This is largely gained by experience and comparison with the winning collections.

Score cards are excellent as an aid to standardizing our ideas as regards fruit, and can be followed with profit by anyone intending to make his first exhibits. As experience is gained one unconsciously fixes in mind the points that are important and seeks these in making all selections.



# Modern Marketing Problems—How we are Meeting Them

R. M. Winslow, B. S. A., Provincial Horticulturist, Victoria, B. C.

**F**RUIT growing in British Columbia has in it many of the elements of a liberal education. One can hardly hope to succeed without a practical mastery of the problems of marketing as well as of culture and packing. Thus the members of our large cooperative organizations, who pay capable men to handle their marketing must constantly be studying changing problems of market demand and competition, if they are to continue to give confident support to the men they employ to sell their fruit. Many kinds of British Columbia fruit do not lend themselves to cooperative sale and for these lines the individual grower must be his own salesman.

Practically ninety per cent. of all British Columbia fruit that is sold goes to consumers at least four hundred miles away. Probably not more than five per cent. of our fruit is marketed within ten miles of the point of production. Ten per cent. of our apples are marketed from six hundred to twelve hundred miles from home. Such conditions require some study of geography and trade routes, to say nothing of the study of human nature at long range. Because of the long distance from markets and the varying climatic and soil conditions, British Columbia fruit growing lends itself to specialization and, on the whole, requires highly perfected organization for its success.

## A PRESSING PROBLEM

One of the most pressing of marketing problems is that of increasing production. In 1900, British Columbia had 8,000 acres in fruit; in 1910, this was increased to 33,600 acres, and in 1913 to 38,200 acres. Of the total planting, not twenty-five per cent. is yet in bearing, but the total production increased from the value of \$200,000 in 1903, to \$1,030,000 in 1913. The 1914 fruit crop on the whole will be 20 per cent. to 25 per cent. greater than in 1913, but the total value will also increase, though not quite in proportion.

The values given are not nearly as great as credited to the crop of 1910 by the Dominion census officers, but it represents only the product handled in recognized commercial channels, and the values are on a f.o.b. basis.

This increasing production, in view of the large market for high class fruit, would be more of a pleasure than a problem if it was not for a steadily increasing production in the north-western states of Oregon, Washington, Idaho and Montana. In these four states, which had practically no fresh fruit industry twenty years ago, there are now over 280,000 acres planted in fruit, which have every reasonable prospect of

commercial success, and an almost equal amount of orchard which is not likely to do so well, but will still add materially to the production. The north-western states moved only about 2,000 carloads of fruit in 1912, but in 1913 they had 16,000 carloads of apples alone, and in 1914 they will have about 15,000 carloads of apples, about 4,000 carloads of peaches, pears, plums and prunes, and over 200 carloads each of apricots, strawberries and cherries, and over 300 carloads of raspberries, in all of which lines British Columbia growers must face formidable organized production, capable of shipping straight carloads of fruits into our markets just as our own crops are coming on.

## WHAT COMPETITION NECESSITATES

Increasing production and increasing competition will compel our growers, with a new industry on their hands, to be constantly on the alert and to cut cost of production as low as possible consistent with efficiency. Over the whole of the province, cooperative organizations for the purchase of fruit growers' supplies and for the sale of their products have developed. Many of these handle flour and feed, spray materials, and other similar commodities, while in some cases fruit growers are operating highly successful retail businesses in household supplies. Both in the markets of the coast and the prairies, the principal factor in determining our prices and even the entry of our products into these markets, is competition from the north-western states, and the continuous adjustment of British Columbia fruit marketing to meet competition is the most important consideration.

We are being compelled in a multitude of ways to meet American competition.

Most important is the constantly rising standard of perfection in grading, packing, and particularly in the matter of the weight of fruit per package, on all of which our markets are very critical.

The British Columbia packages are, in general, very closely copied after those of the north-western states and California, but changes in their particular styles have to be followed more or less closely by us to meet their competition. Taking a striking and fresh instance: It is generally known that the United States Government has finally passed a law creating two standard boxes for berries, a full pint holding 33.7 cubic inches and a full quart holding 67.4 cubic inches. The Canadian standards are two-fifths of a quart, which is 27.7 cubic inches, and four-fifths of a quart or 55.5 cubic inches. North-western strawberries were shipped into western Canada in dozens of car loads packed in the full pint crate. The consumers made practically no distinction in price between the American full pint and our four-fifth quart, which held one-half more berries. The fact must be said that the consumers took very kindly to the full pints as against our four-fifths. The Dominion Inspection Service do not require it to be marked short in the regulations and in consequence our growers must in 1915 adopt the full pint.

The full pint is also used for American raspberries as against our two-fifths quart, which holds about nine ounces as against ten and a half ounces in the pint. The advantage in this case was on our side, but the trade handling American berries objected strongly to handling our hallack of less capacity, and it is likely if not next year, the following year, we will be compelled to come to the full



Fruit Packing on the Fruit Farm of J. W. Smith, Winona, Ont.



pint for raspberries. It will be used experimentally next year by the Department of Agriculture in cooperative experiments.

All apples from the north-western states are marketed in a box  $10\frac{1}{2}$  by  $11\frac{1}{2}$  by 18 inches, that has practically the same cubic capacity as our own, which is 20 by 11 by 10, but it has the favor of the trade and the consuming public to such a degree as to warrant our adopting it for our Canadian business. Over one-half of the British Columbia apples this year have been marketed in the so called American box to

meet the demand, and it is found to be facilitating sales considerably.

I am of the opinion that, generally speaking, where the trade favors American practice, as to packages, grades, packing, and so forth the most effective way of meeting competition is to adopt the American standards. Because of the fact of our Federal law governing many such matters and of the natural conservatism of British Columbia fruit growers, we do not as quickly arrive at conclusions with respect to trade practices as do our north-western competitors.

*(To be continued.)*

## Packing Fruit for Exhibition and Market

E. F. Palmer, Assistant Provincial Horticulturist, Toronto, Ont.

THE box package has been rapidly gaining in favor throughout Ontario during the past few years because of its superiority as an apple package only. It is reasonable to expect too, that it will continue to gain in favor until a large percentage of Ontario's No. 1 apples, at least, are marketed in this way. And, in the face of competition with western box packed fruit together with the fact that the markets for our best fruit are gradually coming to prefer the box package it is certainly no mistake to begin to use, or continue using, the box.

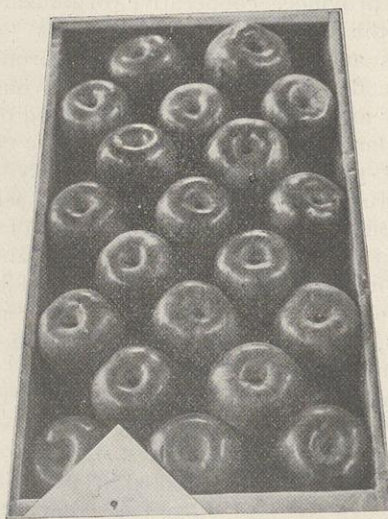
It would seem also that if the present European War is long continued, only the best fruit, the most attractive, will find a ready sale for this season at least. Prices on necessities are already going up rapidly at the time of writing (13th August), and this will mean that many people who, under normal conditions buy considerable fruit, will be unable to afford any. Fruit must be regarded as a luxury, not a necessity, and while the price of one goes up the other must go down in proportion. It must also be borne in mind that Europe and particularly Germany, is a large consumer of American apples. If this market is cut off this year, as seems likely, there will be much more fruit to be disposed of on the home markets. In the face of these last conditions, it is evident that fruit growers should make every effort this year to put out only a clean, honest, attractive pack, whether in boxes or barrels.

### STYLES OF PACKS.

Of the three common styles of packs, the straight, the diagonal, and the offset, the diagonal has much the most to recommend it, and is used far more than either of the others. With the straight pack each apple rests directly on the one below it and there is, therefore, great danger of bruising. With the diagonal pack, no one apple rests directly on another, but cushions in between the apple below, thus greatly reducing any

chance of bruising. The diagonal pack lends itself to a much greater variety of sizes and shapes of apples. It is far easier to make a good commercial pack with it and more weight is secured to the box as the apples fit more into the crevices, making less waste space.

The third system of packing—the off-set—is generally considered inferior to



3-2 Diagonal; 5 Layers—100 Apples

the diagonal. However, it is sometimes desirable to use it with inexperienced and unscrupulous packers, as any defect in the pack is easily detected. With the diagonal system it is much easier to vary the size of the fruit in the bottom and centre layers without materially spoiling the appearance on top. Again, in the off-set pack the spaces show at the sides, giving the box an unfilled appearance, whereas, in the diagonal, only small spaces occur, and these at the ends of the box. Another point against the off-set is that it contains from four to twelve apples less than the diagonal, making the box light in weight.

The term diagonal comes from the fact that the rows do not run straight across the box, but go at an angle. It includes the commonly called 2-1, 2-2,

and 3-2 packs. In beginning the 2-2 pack, an apple is placed in the left-hand lower corner of the box and another midway between the cheek of the first apple and the right hand side of the box. Two spaces of equal size will then be left. Into these spaces two apples are placed, it being understood that the apples are too large to fit across the box. The spaces left by the last two apples placed are then filled, and so on, until the layer is completed. The second layer is packed in the same manner, except that it is started in the lower right hand corner for the half-tier packs. This throws the apples of the second layer into the pockets formed by the first layer. When completed the third layer will be directly over the first layer and the fourth over the second.

In the straight packs the rows run straight across the box and parallel to the sides. It is very neat in appearance, but as stated above, it is rather severe on the fruit, as each apple presses directly against surrounding apples rather than into the crevices. As the straight pack should be discouraged on account of its several faults, no description of how to pack will be given here. It is necessary to remember only one thing; the apples must fit snugly across the box lengthwise and in height. It is quite apparent then that a comparatively small percent. of an orchard run of apples will be of right size to pack properly in the straight pack. If the accompanying illustrations are studied, the idea of the different packs can be seen and understood far better than from any descriptions that can be given of them.

The off-set pack, with ordinary sized apples, is started by placing three apples firmly together cheek to cheek in the lower end of the box with the first of the three in this row against the left hand side. The space then left is all on one side of the box. In this space the first apple of the three constituting the second row is placed. When the remaining two are in, the space will be on the left hand side. The layer is thus completed, the space alternating from side to side of the box. The second layer is started in the right hand lower corner by placing the apples into the crevices formed by the apples of the first layer. In the completed box the alternate layers will then be directly over one another. For this pack, as in the diagonal 2-2, it is necessary to have apples too large to fit four across the box. Similarly the 3-2 diagonal requires apples too large to go five across.

In the straight pack, before the lid is nailed on, the apples at either end of the box should come up a little better than flush with the top. With the diagonal the ends should be a little higher—about



one-quarter of an inch to three-eighths of an inch in all. Then from either end there should be a gradual bulge amounting at the middle of the box to about one and one-half inches. Thus, when the lid is nailed on thoroughly, there will be a bulge of practically three-fourths of an inch each on top and bottom. Less bulge is desirable with the straight packs on account of their unyielding nature. There is no settling of the apples into the crevices as in the diagonal.

The proper bulge is obtained, in the straight pack especially, by selecting apples that are a trifle smaller for the ends. With apples that are being packed on the cheek, it sometimes becomes necessary to turn the end rows flat to ensure the desired bulge, and at the same time have the ends low enough.

In the diagonal pack the small spaces left at the ends of each layer aid materially in securing the proper bulge. This, and pulling the apples tighter towards the centre of each layer, is sufficient to give the necessary bulge in wrapped fruit. By packing closer in the centre you close the pockets between the apples more, and the next layer will not go so deep down in, and therefore builds up the centre. The ends being left a little looser, the pockets are opened a little more and the apples drop in further, and therefore do not build up so high. Practice alone will give the knowledge of just how tight to pack the centre or how loose to pack the ends.

Then unwrapped, of course, this difference in firmness cannot be made

and the packer has therefore to take advantage of the small irregularities and differences in the sizes of the apples. The difference in size must not be so great as to attract attention. It is essential to begin the bulge with the first layer of fruit and to pack each layer with the same end in view, placing the slightly larger or higher apple in the centre rows of each layer.

The bulge should form an unbroken arch when the box is finished, so that the pressure of the lid will be equally distributed over the fruit. A bulge high in the centre and dropping off to the sides will not be held firmly in place by the cover, causing the whole pack to become loose.

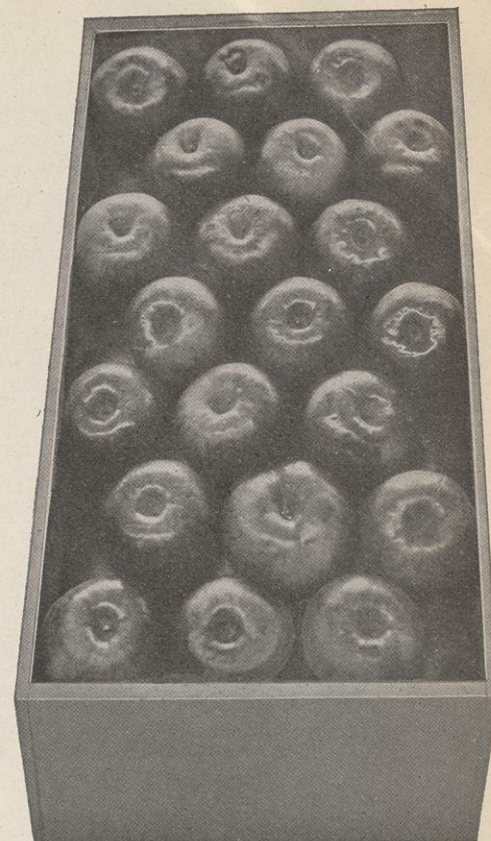
#### GRADING.

Without good grading, rapid box-packing is impossible. To do good work and to do it rapidly, the packer must have before him an even run of apples in point of size and quality. In fact, packing, simplified, is simply grading and sizing, then placing the fruit in the box so that it fits systematically and snugly. Unless the fruit is sized properly, it cannot be made to fit systematically.

#### STEMMING.

To prevent the stem of the apple being bent over by the top and bottom of the box and puncturing the fruit, stemming is practised to some extent. Part of the stem is simply removed by small pincers especially made for the purpose. It is questionable whether stemming is practical in commercial box packing. In barrel packing, where only a small percentage of the apples have to be stemmed, namely, the face layer, it is an economic operation. With boxes however, two layers, the top end and the bottom, or half the apples in the box, are stemmed. For exhibition fruit this may be permissible, but there seems to be a fairly general impression in Ontario that all box packed fruit should be stemmed. It would be far more economical to pack those varieties of apples that require stemming calyx end up or on their side, for stemming must add considerably to the cost of packing. A good packer will pack half a box in the time required to stem the fruit for the top and bottom layers of a box. Thus where he would pack a box and a half when not stemming, he would only pack a box if he were required to stem the fruit. This seems an increase of practically one-third in the cost of packing, which is far too big an expense to overlook.

Wrapped fruit needs no stemming, as the wrappers prevent any puncturing by the stems. The apples give more when the pressure of the lid is brought to bear, tending to obviate any danger. Furthermore, since the fruit is wrapped, it matters very little whether the fruit is packed stem-up, calyx-end up, or on its side.



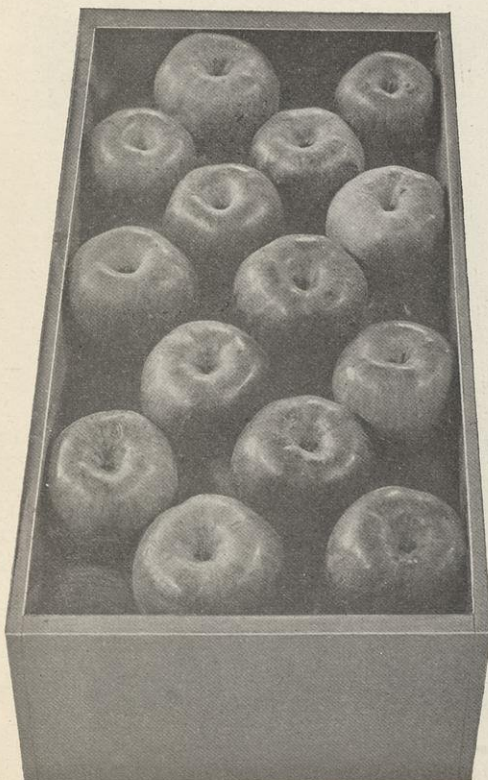
Offset Pack; 4 Layers—84 Apples

In varieties of apples, therefore, in which puncturing is to be expected, the top and bottom layers may be packed calyx-end up or on their cheeks. There is no serious objection to packing apples on their sides even when unwrapped, and there certainly is no objection to packing wrapped fruit so. It is better, however, to pack the apples on their ends whenever possible and use the side pack only when necessary.

**Time to Wake Up.**—On our average Ontario farm the tillage and care of the orchard is the most neglected part of the farm work. Spraying, pruning, cultivating, the sowing of cover crops, the scraping off the old bark of the trees and grafting worthless trees to good fruit, is exceptional rather than general.—W. J. Baker, Warkworth, Ont.

Those who admire our fruits as they see them from day to day in boxes, barrels and baskets or on the trees, should be able to see in them real beauty and inspire their minds to produce something beautiful, yet simple, in the way of a trade mark, that would perpetuate and increase our trade in Canadian fruits from year to year.

A man or an association having only a small quantity of fruit to sell can neither command the attention of buyers nor make an impression on the market.—Prof. J. W. Crow, Guelph, Ont.



2-2 Diagonal Pack; 4 Layers—56 Apples



## The Modern Herbaceous Paeony\*

H. W. Cooper, Ottawa, Ont.

THOSE who have observed the improvements made by specialists in the modern herbaceous paeony, which is the most hardy of all the showier hardy perennials, now concede to it the premier position as the gayest and most brilliant of border plants. In fact it bids fair to outrival the rose as the Queen of all early summer flowers. It gives its wealth of bloom each and every year with scarcely any attention other than to maintain the fertility of the soil. It is perfectly hardy, standing our winters in the most exposed positions without injury and without any protection whatever. In fact it is now conceded that this plant is better without winter protection, the frost-aerating and sweetening the soil.

Paeonies are beautiful from the moment their carmine stems and leaves push through the ground in early spring until flowering time when they are the glory of the garden. Their foliage is ornamental throughout the summer, and again in early autumn when their foliage is changing into rich bronze and red tones as the early hoar frosts begin to ripen them. The fragrance of the modern paeony in some varieties is redolent of the purest attar of roses; others resemble that of violets, and others that of the carnation.

### SOIL AND LOCATION

Any soil or situation suits the herbaceous paeony. They are indifferent as to whether the soil is light or heavy, or whether they be planted in full sun or half shade, in beds by themselves, in the border or in the grass. To get the best results the ground should be dug to at least two feet in depth in plenty of well rotted cow manure or other suitable fertilizer added before planting. Great care must be taken to see that the manure does not come in direct contact with their spindle shaped roots, or the crowns. Growers now agree that this is the cause which promotes the disease they are sometimes subject to.

### PLANTING

This is best done in September after the first frosts, or during October. The plants have then matured their growth and root action is dormant for a short time. This permits them to get established without losing a season's bloom.

Propagation may be accomplished by lifting large plants in the autumn and dividing. Make sure that there are one or more eyes to each piece, and immediately replant in suitable soil. Place the crowns not more than two inches below the surface. New varieties are obtained from seed, which is sown as soon as convenient after ripening. The seeds

are planted in a shallow box or pot and covered about half an inch. The pot or box being placed in some quiet, shady spot in the garden and watered occasionally through the next summer. The seedlings appear the second spring after sowing. Give them attention until the autumn when they may be transplanted into open ground and grown on to flowering size, which is usually four years from the time they germinate. If a few seeds are planted each autumn after the first four years you will have new varieties coming into bloom each season, some with single and some with double flowers. There is a possibility of obtaining a new variety of merit worth naming.

The fragrant blooms are of extreme beauty for room decoration. They should be cut just as the bud is expanding. Their delicate tints are not then faded out by the sun's rays, and they will keep in good condition for about a week.

### VARIETIES

I will not attempt to say what are the best varieties to grow, for this is largely a matter of individual taste; all the named varieties are good. I will, however name a dozen good sorts, and which are easily procurable at reasonable prices from dealers in this class of plants:

Whites—Early, Festiva Maxima; mid-season, Duchesse de Nemours; late, Marie Lemoine.

Pale Pinks—Early, Umbellata Rosa; mid-season, Eugene Verdier; late, Albert Crousse.

Deep Pinks—Early, Rosa Superba; mid-season, M. Jules Elie; late, Livingstone.

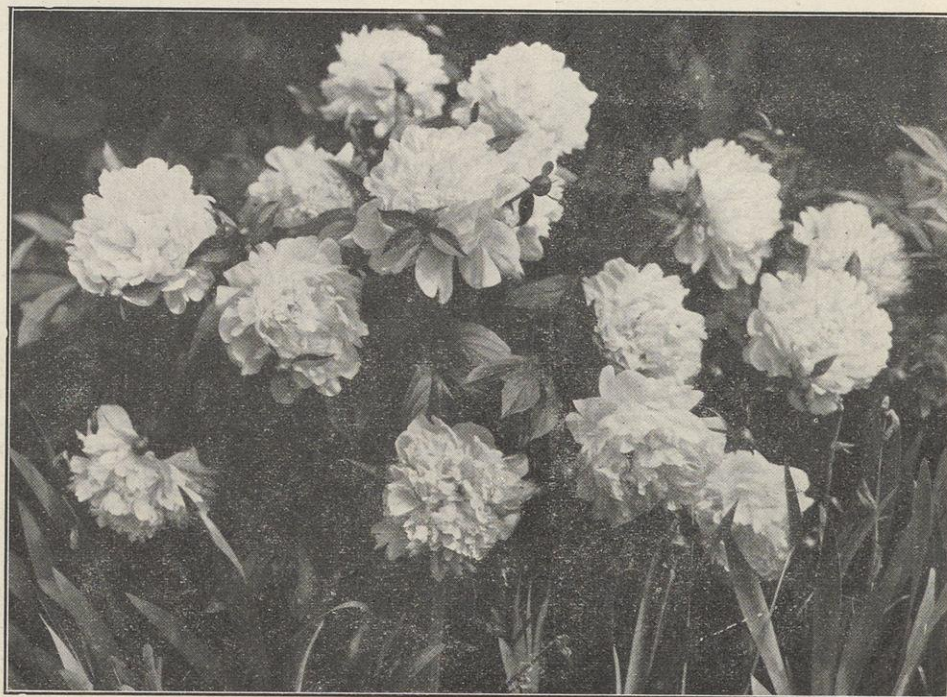
Reds—Early, Adolph Rosseau; mid-season, Felix Crousse; late, M. Krelage.

Anyone cultivating a selection from the above list will be well repaid by the fragrance and the abundance of bloom with which his garden will be filled.

### Garden Notes

R. S. Rose, Peterboro, Ont.

Loosen the earth around each plant. A good tool to use for this purpose is a mason's trowel sharpened at the edges. It gets under the weeds and through the soil easily without disturbing the roots of the plants. Take a section of the bed each day and do it thoroughly. Do not try to do more than you can handle. Do a little at a time, and do it well. It will pay better in the long run than trying to do more and skimping it. In the dry weather it would be a good plan to put around the plants that need more moisture than others the grass clippings before watering in the evening. This will retain the moisture and the plants can drink it in at their leisure. If your garden is a large one it would also be a good plan to water by sections and give each section a good soaking. This is better than watering the whole garden with a light sprinkle, which is worse than not watering at all. The water should reach the roots, and not only go down an inch or two. Surface watering is useless.



**Paeony Festiva Maxima: One of the Finest White Varieties in Cultivation**

This plant, grown by J. R. Thompson, 53 Ontario Ave., Hamilton, had sixty-four buds on it at once. Several of the flowers measured eight inches across.

\*Read before the Ottawa Horticultural Society.



# Fall Notes for the Flower Garden

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

**T**HE first early fall operation for the plant lover is to take cuttings or slips of any perennial plants that are required for keeping over winter. Coleus, salvia, iresine (*Achyranthes*), and ageratum cuttings should be taken early in September before cold, chilly nights



**A Petunia Plant in January**

Prepare this fall to have plants like this next winter. This plant was dug up from the border in October.

appear, as cuttings from these plants do not root successfully after they have been chilled, much less when they have been frozen. Geranium cuttings may be left until a week or so later on, but even these should be taken before the leaves are touched by frost, as they rot much quicker and better.

The best material to root cuttings in is clean, gritty, rather coarse sand, sand that will make good stone mortar. Pit sand, river sand, or rinse sand from the side of a stream or from the roadside will do for the purpose. It should be free from vegetable and woody matter such as leaves, sawdust, or chips. A little light soil with no fertilizer in may sometimes be mixed with the sand but pure sand usually gives the best results. Moisten the sand well and pack it firmly in a shallow box that has holes bored through the bottom for drainage purposes. Empty fish boxes from the grocery store that haddies have been packed in do well for this purpose. Soak these boxes in water before using to dissolve any salt that there may be in them. Flower pots may also be used to start the cuttings in.

Select a healthy growing cutting from a terminal or side shoot. A fairly short jointed cutting is usually best. The base

of the cutting should be cut flat across with a sharp knife close underneath a node or joint of the stem where a leaf stem joins the stem; the texture of the base of the cutting is an important point. It should not be too hard and woody or too soft and pulpy. About the texture of a young tender carrot is about the right texture. Securing the proper texture for the base of the cutting is of far more importance than the size or length of the cutting. Cut off about one-half of the lower leaves close to the stem. Remove all bloom buds and blossoms where possible. The stem of geranium cuttings should be about four to five inches in length; coleus iresine, salvia, and ageratum cuttings about an inch shorter than the geranium cuttings.

## SETTING AND CARE OF CUTTINGS.

A hole or drill should be made in the sand deep enough to set about two-thirds the length of stem upright in the sand. Water the cuttings well and set the box in a temperature of sixty to seventy degrees Fahr. Shade them from the hot sun and keep the sand well moistened until cuttings are rooted, which should be from four to six weeks or longer after setting. Pot the cuttings when rooted, singly, into two or two and a half inch pots, or put them in shallow boxes about two inches apart in rather sandy potting soil. The rooted cuttings may be kept in the sand all winter and potted in the spring if the sand is not kept too wet.

## KEEPING OLD PLANTS

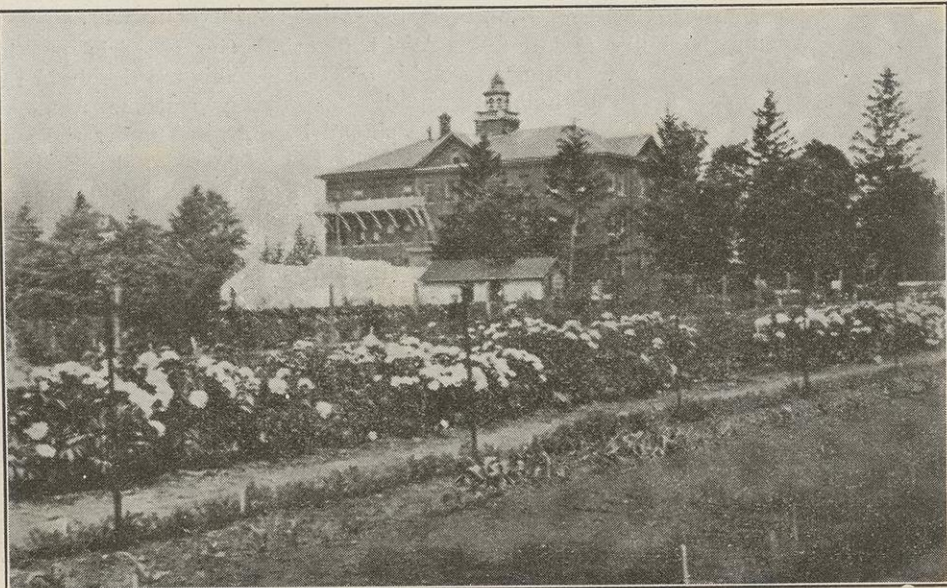
Dig the plants about the end of September before the stems are frozen. Cut the tops well back, about one-half the

growth, and shorten the roots about one-third their length.

Plant the roots in sand or sandy soil in pots or in shallow, well-drained boxes about four inches deep. The plants may be set quite close together. A box four inches deep and twelve inches square will hold sixteen or eighteen good-sized plants when tops are cut off. Water them well once and set the box in a cool window, temperature about fifty-five degrees. These plants may be potted after five or six weeks' time singly into three or four inch pots when rooted and starting into growth. Or the box or pot may be placed in a light basement or cellar in a temperature of forty to forty-five degrees, and the sand kept only barely moist. These may be brought out into the window in a temperature of about sixty degrees later on, watered and started into growth, and potted singly into four or five inch pots in good soil. Plants treated in this way will usually make splendid plants for the window in spring and for setting out in the border in early June.

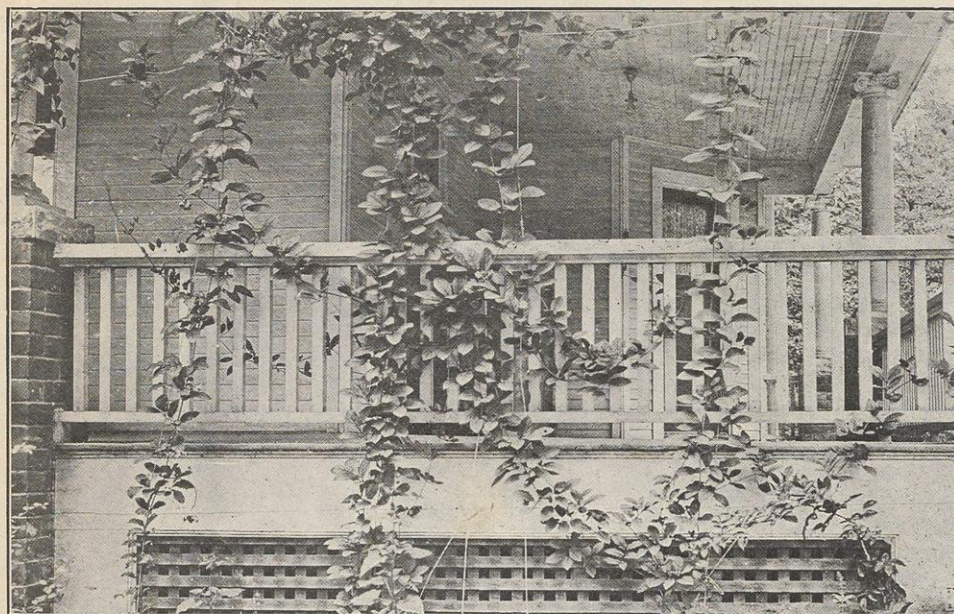
## OLD PETUNIA PLANTS.

If you have an extra fine double or single flowering plant of petunia growing in the border and wish to save the plant, the top growth can be cut down early in September to within about eight inches of the ground, leaving any young new shoots of growth at base of plant. After a week or so, dig the plant up carefully with all the roots and soil possible attached. Pot the plant into a not too large-sized flower pot, a four or five inch pot, in good soil. Water it well and set it in the window and keep the soil well



**Experimental Paeonies at the Ontario Agricultural College, Guelph, Ont.**





**Cobea Scandens Growing on a Toronto Verandah**

moist (not too wet). When well rooted in the small pot which should be in five or six weeks from the time it was first potted, repot the plant without disturbing the root system into a two size larger flower pot. Put some broken pieces of flower pot in the bottom for drainage, and use good, rich, loamy potting soil for this second repotting. Keep the plant in a sunny window in a temperature of fifty-five to sixty degrees, not too near the radiators. The young, non-flowering shoots of petunias will root readily in sand the same as other cuttings mentioned if taken before they are frozen.

#### FREESIAS.

Six or eight freesia bulbs put into a five-inch flower pot before the end of September will usually produce their sweet-scented blossom by Christmas or New Years. Water the bulbs and put them into the window as soon as potted. A great many people pot these bulbs and put them in the cellar the same as Dutch bulbs to root. This is a mistake. They should be put in the window as soon as potted and kept there until they flower. The plants must be staked and tied up when about eight inches high.

#### CALLAS.

If callas have not already been repotted in July or August, it would be best now to dig out about an inch or a little more of the top soil and fill in (top dress) them with a good, rich compost of about half dry cow manure and good loamy potting soil mixed together. A little sand or leaf mould or both, about one-sixth part, may be added to this if the soil is at all of a heavy nature. This method of top-dressing, as it is technically termed, is very often better than repotting callas. Many other bulbous

rooted plants can often be treated in this way rather than to repot them, especially when they have passed their regular season of repotting. Callas should be taken into the window before frosts. Do not place them too close to the heat radiators.

#### FALL PLANTING.

All border plants having thick, fleshy rhizomes or root stocks, such as paeonies, German iris, *Dicentra spectabile* (Bleeding Heart), Funkias or Day Lily, or the *Hemerocallis flava* (Lemon Lily) or the later flowering *Hemerocallis fulva* (Tawny Lily), lily of the valley should be planted or transplanted late in September or early in October. Bulbous rooted lilies such as the Madonna, Tiger and Elegans type of lilies are best planted or transplanted early in September.

Avoid planting German iris or the Funkia or *Hemerocallis* too deeply in the ground. The fleshy rhizome roots of these should be only just under the surface of the soil when planted. Bulbous rooted lilies such as the Madonna and the other varieties named should be planted four to six inches under the surface. In light soils plant fully six inches deep, in clay soils a little shallower. If the lilies are doing well every year, it is best not to dig or disturb them, as they often do not do so well after having been removed or transplanted. It is best to "leave well alone" in connection with the culture of lilies.

After an experience of several years in garden work, I should feel it an irreparable loss to attempt to teach in either a rural or city school without the inspiration which a garden affords.—Harvey Gayman, Jordan Harbor.

## Cobea Scandens

J. McPherson Ross, Toronto, Ont.

*Cobea Scandens* has long been grown as a greenhouse or conservatory climbing plant and under glass is a perennial. Outdoors wherever known, it is one of the most popular of annual climbers.

Being a remarkably free grower and the ease with which it attaches its tendrils to anything convenient to cling to after once established you can almost see it grow. The foliage is a delicate green—leaves oval, regular and free from any known insect, it is to be recommended as a useful plant for covering arbors, trellises and verandahs, while the permanent creepers of slower growth are making headway, such as roses, aristolochin and honeysuckle.

Besides being a rapid climber with nice foliage, *Cobea Scandens* blossoms very freely in tulip-like purplish or greenish-white flowers set in a saucer-like corolla, hence the name cup and saucer plant. It is grown readily from seeds by florists, or anyone for that matter, by sowing early in March or April under glass. Seedsmen usually direct growers to place the seed on edge when planting in seed box or pot, but this is unnecessary. It is a great favorite with city dwellers.

## Garden Notes

Lawn grass may be sown early in September, provided the ground is moist enough.

Geraniums and other plants that are to be kept in the house this winter must be taken up in September.

As soon as the leaves fall make hardwood cuttings of the currant about eight inches long and plant them in the garden. They should become well rooted by winter.

## Some Uses for Fallen Leaves

Ruby A. Tillett, Hamilton, Ont.

In districts where gardeners have command of or easy access to plenty of recently fallen leaves, they are advised to make the best of their opportunities to get together as large a heap as possible. Unlike stable manure, even a large mass of leaves may be stored quite near the dwelling house without causing any inconvenience. Whenever possible an open shed or other protection should be provided in order to prevent the leaves being constantly wet. These leaves will be found of great value later on for mixing with equal parts of freshly-gathered horse manure when making up the earliest hot beds for forcing bulbs into flowers or such highly-appreciated forced vegetables as asparagus, sea-kale or rhubarb, or such popular flowering plants as begonias, gloxinias, petunias and lobelia.

Where the interior of the house is not suitable for making up a hotbed in the usual way, or other reasons exist why this should not be made up, it will be



# The Beekeeper

With which has been Incorporated The Canadian Bee Journal

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## The Status of European Apiculture

**A**T the National Field Day Meet held at Forks-of-the Credit in May, a most instructive address was that delivered by Mr. C. P. Dadant, of the American Bee Journal. He told of the impressions that he gained from an extended trip through Europe last summer. Following is a resume of his address:

The prime object of my trip was to compare at first hand the methods of beekeeping and the races of bees in Europe. Sightseeing was a minor consideration. To visit my birthplace and the relatives of my wife, who accompanied me, was, of course, a pleasure. Wherever we went we were given a hearty reception, as my father was well known to European beekeepers. When he came to America he took up with the Langstroth system. He was the means of introducing this system into France and Switzerland, and incidentally into Italy. It is followed, too, in Belgium and Russia. We also translated Langstroth's Bee Culture into three languages.

### FRENCH METHODS

Two styles of movable frame hives are used in France. One has thirty frames, twelve inches deep, and has only one storey. It is simple to manipulate, but difficult to extract from. The other style is the Quinby hive with our system of one-half storey supers. Many still stick to the skep, because, they say, they get more honey. The reason for this is that they do not properly manipulate the frames. In many parts of Europe straw skeps are more numerous than frame hives. Very little comb honey is sold, as the honey is mostly extracted by crushing the combs. This often makes a dark honey because the brood comb is also pressed.

In Southern France methods are very backward. Most of the bees are kept in willow baskets covered with cow dung. When honey is wanted the bees are smothered, the combs are crushed, and the hive thrown away. The people believe that the swarm is the young bees, so the old colony is the one killed. By this method a very low grade of honey is produced, which is shipped to Holland, where it is used to make adulterated products.

Switzerland, I believe, leads the world

in progressive beekeeping, the United States and Canada not excepted. All the Swiss beekeepers are practical men; no straw skeps or box hives are used in the country. I saw some very fine apiaries; a lot of time and labor is expended to have things looking neat. Great interest is taken in organization, there being twelve thousand members in the various beekeepers' associations.

I was particularly careful to compare the Swiss and Italian races of bees. The Swiss claim that their bees are better. My visit convinced me that the Italian bees are too good for Switzerland—they get up too early and stay out too late. It is not the fault of the Italians that they are too eager for work; the fault lies rather with the Swiss climate. In Switzerland the sun may be shining and yet the air be quite chilly. Thus the bees that fly too early or too late get chilled.

### ITALIAN BEES VERY QUIET

The bees of Italy are mostly of an average color and not bright golden. They are very quiet. I believe it is a mistake to breed for one character only, such as color. In doing so, other more

important characters may be overlooked.

The beekeepers' associations of Italy are composed mostly of doctors, lawyers, nobles, and people of the higher classes. They instruct the peasants in the keeping of bees. The president of the Italian association is descended from the rulers of Milan. The Mutual Association of Beekeepers sold last year, I believe, six million dollars' worth of honey. Honey is cheap in Italy, too—seven to eight cents a pound wholesale.

The largest and finest apiary in the world, I think, is that of Count Penna. He is a wealthy man who has gone in for the raising of queens by scientific methods. His system is the same as the Doolittle, only better. The hives furnish the larvae, but the cells are kept in a specially equipped laboratory, where ideal moisture and temperature conditions are maintained.

### EXPERTS IN THE BUSINESS.

So expert have he and his help become that they can take the larva right from the cell without paring down the cell or injuring it in any way. Count Penna does not in-and-in breed and raises the drones in separate hives. Last



Apiary of Mr. I. M. Dodd, Clinton, Ont.

Mr. Dodd maintains about 50 colonies, mostly Italian. As with most other beekeepers, this season has been a poor one for him. In the centre foreground may be seen a box with glass sides that Mr. Dodd uses for holding sections in the store. It presents an attractive appearance when displayed in the store window, and keeps the honey clean.



year he raised five thousand queens. In spite of the fact that he employs five helpers and spares no expense, he is making money.

There are some very good queen raisers in Italy who follow American methods. There is an Italian movable frame hive, but it is clumsy to operate. These hives are fitted into the walls of the bee house, and the combs are taken out from the back. There is no way of getting into the hive from the top, so in order to get at the front frame, all the frames must be taken out. Still, the Italians are very much in favor of this

system. They say, "You Americans must run around among your hives out of doors, and if it rains you can't work with them; ours are always under cover." One thing can be said for this method—feeding can be done quickly.

The Italians are slow at uncapping. I showed some of them how we did it with one stroke of the knife. They seemed interested, but went right ahead their own way, taking off the capping with little dabs.

Italian honey is largely dark, the most of it being gathered from the heather and from the tula, a kind of clover.

## Prevention of Robbing

Chas. S. Brown, Peterboro, Ont.

THE honey bee is like some human beings in one respect: it likes to gain all the wealth it can with as little exertion as possible. This is the main cause of robbing. When one considers that a bee may take an hour, and often two, to gather its load, we cannot wonder when they try easier methods of securing supplies.

As soon as the heavy flow from clover and basswood is over, the entrances of all colonies that are of medium strength should be partly closed. This applies particularly to nuclei, as they are probably the most liable to attack.

It is easy to tell robber bees. They approach their intended victim with a kind of sneaky manner, flying up to the entrance, then darting away and keeping this up until they muster up enough courage to light. If they once get in without being checked, secure a load and come out, they do not leave the hive in the sameway that an unloaded bee does. After taking wing they often fall in the grass owing to their heavy load. Often times, instead of rising off the alighting board, they will crawl up the side of the hive in order to get a good start. It is easy for a beginner to recognize them by their peculiar actions, and by the uproar which they usually create around the attacked line. As soon as they are noticed immediate measures must be taken to bring them to their senses.

In the case of a nucleus, contract the entrance so that only one bee can pass, and cover up the small opening with wet grass. Any robbers that are inside will crawl out through this and won't likely try to get back. If one has a small bee tent fixed with a bee escape it can be put over the colony. The robbers will get out through the escape and be unable to return. Some apiarists use a robber trap, which is simply a Langstroth super with the frame out a board nailed on over the bottom and a double wire cloth screen placed over the top. Three inch holes

are bored in the sides near the bottom, and a wire cloth screen with a small opening at the apex placed on the inside of each hole. This is placed, with a comb inside, out in the apiary on the place of the weak colony, the robbers are caught, held until evening, and may then be let go, when they will return to their respective hives. Next day they will usually know enough to keep quiet. Some robbers have the habit of following the bee smoker around and attacking every hive as it is opened. If the bee trap is set up with the smoker on top they will soon be all inside, and should be killed. Bees that make a practice of this are of little use.

Just after the fall honey flow is one of the worst times of the year for colonies to develop this pernicious habit. If a frame is left out for a few minutes while the beekeeper is taking off honey, it is pounced on by a few score robbers. If any vessels containing honey are left in an exposed place while extracting is going on, their contents will soon become less. Sometimes, unless the honey house is completely bee-proof, they will crawl in through small openings and make things interesting inside.

### PREVENTION BETTER THAN CURE

In any of these cases prevention is better than cure. When taking off honey it should be taken to the honey house as soon as possible. All pieces of broken honey should be picked up at once. If any vessels or supers full of empty frames, are put out to be cleaned up, they should be placed a long way from the apiary. Stack the supers six or eight deep, leaving several small openings. I have done this year after year without any bad results. If one has a large apiary, he should build a small "bee-proof" honey-house with a bee escape arrangement over the doors. Any bees that are brought in on the supers will get out here, and be unable to return.

The only bad case of robbing that I have had happened one Sunday morn-

ing. I put on some bee escapes on Saturday afternoon, intending to take off the honey on Monday. About ten o'clock Sunday morning I looked out, and the whole of my small apiary was in an uproar. A couple of the covers were put on tight and the robbers were making havoc in the supers of a few colonies, fairly tumbling over one another in their wild attempts to get the forbidden sweets.

### EMERGENCY REMEDIES

I had no time to consult my old friend the bee-book. I put on a veil, grabbed a couple of bottles containing some coal oil, crude carbolic and machine oil; in fact anything that would make a bad smell. I daubed every possible crevice with this stuff, bunged up one or two holes with rags saturated with it, and stood back to watch events. In about half an hour all was peaceful, the robbers having had enough.

Since then I have kept all holes closed, and contracted the entrances as soon as the flow is over. Robbing may be cured by putting tobacco in the smoker and giving five or six strong puffs into each colony. This would probably work better if a weak colony or a nucleus were in danger of being overpowered.

## Re-Queening

Prof. M. Pettit, O.A.C., Guelph, Ont.

Two of my hives came out of the cellar queenless. I united them and after a while gave them a frame of eggs and brood, thinking they might re-queen themselves, but they failed to do so. I tried them again with the same result. I then gave them a frame of brood with an unsealed queen cell on, containing a healthy looking grub. Three days after, the cell was empty. I now propose to give them a sealed queen cell and protect it with a cell protector. Do you think they would accept the queen when she comes out?—W. J. Dixon, Shellmouth, Man.

It is always difficult to requeen a colony that has been queenless for some time, but usually they will yield to the treatment of giving a comb or two of young brood, especially if there is hatching brood in it so that the colony will be stocked with some young bees. I am not surprised at their not accepting the queen cells you gave, because these, taken from strange colonies, will often be torn down unless placed in a queen cell protector. It may be that the cell which you afterwards gave them in a cell protector would be accepted all right. The "Smoke method of introducing queens," has been found most successful in these stubborn cases of colonies long queenless or having fertile workers.

I have worked too large a farm to enable me to spend as much time with my bees as I should have done but in spite of this they have paid me as well as any other branch of my farm. I have had bees continuously for sixty years.—J. B. Stone, Norham, Ontario.





The Apiary of Alpine McGregor, Inglewood, Ont.

Mr. McGregor has about 120 colonies of three banded Italians, mostly of the Moore strain. An article by him, dealing with American Foul brood, appears in this issue.

## Fighting American Foul Brood

Alpine McGregor, Inglewood, Ont.

**M**Y first experience with American Foul Brood was about thirty-five years ago, about the time I began beekeeping. A neighbor had bought a colony of bees which died, and the honey which I secured, was fed to my bees, and this started the disease. I communicated with the late D. A. Jones, Beeton, who sent his assistant, Mr. Geo. Lang, of Milton, to cure them. We found five colonies affected with the disease, and these we cured by the starving method, leaving them in the cellar five days. The next spring only one more colony showed any signs of disease and this was allowed to swarm several times, hiving the swarms on starters. The old combs were then destroyed, and that ended the disease in my apiary for more than twenty years.

My next experience was about twelve years ago, when a beekeeper brought some sixty pound cans of honey here which he had bought from another beekeeper, not knowing that his apiary was rotten with foul brood. The honey was left beside my bee-yard while we were at dinner and when we returned the bees were thick around the honey which had leaked from the cans. Soon after this I noticed the disease in a number of colonies, and it has been in my apiary ever since. It was a black day for me, for it has caused the loss of hundreds of dollars and needless work and worry, has robbed beekeeping of all its charm and all its pleasure and reduced it to a business which is only continued for the profit which can still be made. I mention these two cases as a warning to other beekeepers.

The question may be asked, "Why have you not cured it promptly as you

did years ago, when a mere novice in beekeeping?" That is a fair question. My answer is that in the first case I used the Jones hive, which had no supers—all extracting was from the brood chamber. Therefore when the brood chambers were free from disease my apiary was cured. But now with practically two supers of combs for each colony, the disease may be found in a colony after the supers have been removed and stowed away for winter, just as they come from the extractor. As it is impossible to find these supers they are placed on the hives in the spring indiscriminately, and some of the honey remaining on the comb may be taken down by the bees and fed to the brood—that is the best explanation I can give.

But now I hear some one ask (some one by the way who has never had foul brood, and never expects to have), Why don't you melt up your super combs, and cure the disease to stay cured? Yes, just so, glad you mentioned it. Now, my friend, come with me and look over my two thousand super combs, most of them built from full sheets of foundation in wired frames, hundreds of them, white, or so light in color, it can be seen at a glance they are perfectly clean. How would you like the job of melting these over a hot stove, musing the wax, and so forth, to say nothing about the expense? And after you get through (or rather before you start, read what W. N. Randolph says in *Gleanings for July 15th*, p. 532, and perhaps you won't start, especially if you happen to be over three score years of age, and not an ounce of strength to spare.

I will close with a few notes:

I have tried numbering the hives and

supers, but with two assistants to look after, failed, but may try again.

Have also failed to get the supers cleaned out satisfactorily on the hives without too much work. I believe if this can be done the combs that have been on colonies with only a few cells of foul brood are practically safe.

During the summer I found a few scattered cells of the disease in twenty colonies. Ten of these have been treated on the McEvay plan, and all but one apparently cured. The remainder will be brimstoned and the combs made into wax.

I am impressed that in this stage of the disease, with all colonies strong, there is practically no danger of it spreading in my own yard, much less to any other apiary.

## Inside Wintering Succeeded

John S. Edwards, Rockland, Ont.

Last winter was one of the most successful in my experience of sixty years. I wintered the bees in a house built above ground, the walls of which were perfectly frost-proof. The ceiling, which is eight feet high, I made of rough lumber and covered it with one foot of sawdust. In the centre of the ceiling I left a small opening for an air pipe. Under the floor I ran a pipe with an elbow coming up into the centre of the building.

The hives I placed on a platform in the house and removed the blankets and covers. I then tacked some coarse sack-ing over the bottom of an empty super and placed one of these above each brood chamber. At the bottom of the super I built a one inch frame to fit over the brood chamber. I next filled the supers with dry cut ensilage. This proved to be a good absorbent as it dried up all moisture. I put the covers on top of the supers and left them to their fate. On opening the hives on April 15 I found them literally packed with young brood, clean and white.

As I rear and sell queens, I am determined that foul brood will not get a hold in my yard. For example, I have an order for eleven queens from one man. A short time ago I received a queen from J. P. Moore, Kentucky. Although his instructions for introducing are somewhat different from my usual method, I have followed them out successfully.—R. McLaughlin, Kenmore. Ont.

I enjoy and appreciate *The Canadian Horticulturist and Beekeeper*, and find it most helpful in planning for future work in fruit growing and beekeeping in British Columbia.—R. J. Courtney Milne, Kindersley, Sask.



# The Canadian Horticulturist

COMBINED WITH

## THE CANADIAN HORTICULTURIST AND BEEKEEPER

With which has been incorporated  
The Canadian Bee Journal.

Published by The Horticultural  
Publishing Company, Limited

PETERBORO, ONTARIO

H. BRONSON COWAN Managing Director

The Only Magazines in Their Field in the  
Dominion

OFFICIAL ORGANS OF THE ONTARIO AND QUEBEC  
FRUIT GROWERS' ASSOCIATIONS  
AND OF THE ONTARIO AND NEW BRUNSWICK  
BEEKEEPERS' ASSOCIATIONS.

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#### UNITED STATES

#### STOCKWELL'S SPECIAL AGENCY

Chicago Office—People's Gas Building  
New York Office—Tribune Building

#### GREAT BRITAIN

W. A. Mountstephen, 3 Regent St., London, S.W.

1. The Canadian Horticulturist is published in two editions on the 25th day of the month preceding date of issue. The first edition is known as The Canadian Horticulturist. It is devoted exclusively to the horticultural interests of Canada. The second edition is known as The Canadian Horticulturist and Beekeeper. In this edition several pages of matter appearing in the first issue are replaced by an equal number of pages of matter relating to the bee-keeping interests of Canada.

2. Subscription price of The Canadian Horticulturist in Canada and Great Britain, 60 cents a year: two years, \$1.00, and of The Canadian Horticulturist and Beekeeper, \$1.00 a year. For United States and local subscriptions in Peterboro (not called for at the Post Office), 25 cents extra year, including postage.

3. Remittances should be made by Post Office or Express Money Order, or Registered Letter.

4. The Law is that subscribers to newspapers are held responsible until all arrearages are paid and their paper ordered to be discontinued.

5. Change of Address—When a change of address is ordered, both the old and the new addresses must be given.

6. Advertising rates, \$1.40 an Inch. Copy received up to the 20th. Address all advertising correspondence and copy to our Advertising Manager, Peterboro, Ont.

### CIRCULATION STATEMENT

The following is a sworn statement of the net paid circulation of The Canadian Horticulturist for the year ending with December, 1911. The figures given are exclusive of samples and spoiled copies. Most months, including the sample copies, from 13,000 to 15,000 copies of The Canadian Horticulturist are mailed to people known to be interested in the growing of fruits, flowers or vegetables.

January, 1913	11,570	August, 1913	12,675
February, 1913	11,550	September, 1913	13,729
March, 1913	11,209	October, 1913	13,778
April, 1913	11,970	November, 1913	12,967
May, 1913	12,368	December, 1913	13,233
June, 1913	12,618		
July, 1913	12,626	Total	150,293
Average each issue in 1907, 6,627			
" " " " 1913, 12,524			

Sworn detailed statements will be mailed upon application.

### OUR GUARANTEE

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of The Canadian Horticulturist are as carefully edited as the reading columns, and because to protect our readers we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with any subscriber, we will make good the amount of his loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in The Canadian Horticulturist."

Rogues shall not ply their trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honourable business men who advertise, nor pay the debts of honest bankrupts. Communications should be addressed

THE CANADIAN HORTICULTURIST,  
PETERBORO, ONT.

# The Sugar Shortage as it Affects Beekeepers

IN August a notice was sent to the members of the Ontario Beekeepers' Association drawing their attention to the fact that the war situation had created a very grave menace to the beekeeping industry in Canada owing to the difficulty dealers were having in filling orders for sugar. The honey crop of 1914 in the province having been an almost total failure many colonies of bees, it was pointed out, would soon be in a starving condition, and many thousands more would die of starvation before next spring unless they are fed.

In part the announcement said:

"It is dangerous to feed honey to bees owing to the frequent occurrence of bacteria, which are quite harmless to human beings, but convey the disease known as 'foul brood' to bees. Cheaper grades of sugar used for feed will cause dysentery in winter. Nothing will take the place of granulated sugar.

"It is, therefore, urgent that every person interested in the preservation of the beekeeping industry in Canada at this time should write or telegraph immediately to his member at Ottawa while the House is in special session urging him to see to it that such action be taken as shall be necessary to ensure a supply of granulated sugar to the beekeepers for feeding their bees properly for winter.

"In writing it should be pointed out that human beings and the domestic animals have a great variety of food from which to select—bees have only the one, also that the feeding will need to be done within the next six weeks. For our government to miss making special provision for the bees at this time might result not only in a heavy financial loss to thousands of beekeepers (there are 10,000 in Ontario alone), but in great cruelty by starving to this particular form of animal life. Do not delay to use all your influence to safeguard the beekeepers' interests at this time."

### PROCEEDINGS IN THE HOUSE

There is no means of knowing how many beekeepers acted on the suggestion given in the circular and wrote to their members. One thing, however, is known, namely, that owing possibly to the shortness of the session the matter was given scant attention in the House of Commons. One of the members of the House, Mr. Murphy, called the attention of the Minister of Finance to the fact that he had been sent one of the circulars, extracts from which he read to the House. Mr. Murphy asked the Hon. Mr. White if the Government purposed doing anything in regard to the matter. Hon. Mr. White replied that the matter had been brought to his attention that day, but that he did not think that it had any serious bearing upon the question of the tariff then being discussed. The additional duty the Government purposed placing on sugar would not, he thought, have any important bearing on beekeepers, provided they could get the sugar, and he assumed that they would be able to obtain it.

Another member, Mr. Henderson, said that a beekeeper in his constituency had complained to him about the difficulty of getting a supply of sugar because the dealers in his section of the country refused to sell him more than twenty pounds, although it would require a great many pounds to keep his bees over the next six months. Continuing Mr. Henderson said: "I advised him to go to Hamilton, near which city he lives and to go to a goodly number of dealers and buy his twenty

pounds from each dealer. More than that, I suggested that he might get his neighbors who had no bees to accompany him and buy all the sugar they could get. I have no doubt the man will take advantage of my suggestion and will be able to keep his bees through. I am aware that sugar is being sold in limited quantities. I think that in some parts of this country that is overdone. In Winnipeg, where I was some ten days ago, I was told that you could not buy a barrel of sugar, that the wealthy people had bought up the sugar and were storing it away. That is a kind of panic that will pass off in a week or so. People will come to their senses and will see the impropriety of such a course."

This ended the discussion in the House of Commons. The House did not take any action in the matter.

### SITUATION SOMEWHAT RELIEVED

Since the circular was first sent out the British Government has removed the restrictions it had placed on shipments of sugar to Canada. This is intended to relieve the situation considerably. Nevertheless, it still is difficult to obtain sugar in any large quantity.

An idea of the amount of sugar fed by beekeepers may be obtained from the fact that out of 1,160 beekeepers last winter who reported on the matter, 363 said that they fed sugar to their bees for winter in the fall of 1913. They fed 22,562 colonies, a total of 222,588 pounds of sugar. As there are some 10,000 beekeepers in Ontario, the amount of sugar that will be required in a season such as this may be estimated.

It has been suggested that the officers of the Ontario Beekeepers' Association should appeal to the Ontario Government for assistance in obtaining an adequate supply for the beekeepers of the province.

### The Real Reason

EDITOR, The Beekeeper.—In the last analysis we must realize that there is only one reason why beekeepers buy supplies in United States, and that is because they get better supplies for the money. The very fact that the Root Company sells a beehive made of cypress for the same price as a Canadian firm who makes theirs of pine and in addition makes the hive dovetailed while the latter does not, and both companies sell for about the same price, is enough to prove this statement. Moreover, the frames of the hives of the latter company are not as strong. Taking all these things into consideration it is no wonder the Canadian beekeeper is buying his supplies in the States. I might add that the prices quoted by the Canadian firm on large quantities of goods are much higher than those quoted by firms of our neighbor. By adding the cost of duty to the prices quoted by the latter firm it makes the total cost of goods but little more than that of the former and the quality of the goods more than offsets the cost of duty. I think that this would be the case even if the hives of the latter were made of pine owing to the quality of workmanship being better.

Now, I am very impartial about purchasing my supplies and will certainly not buy in the United States if I can get satisfaction in Canada, but until I do get it I will have to buy more or less there, and I think that this is the attitude of a number of other beekeepers. It seems to me that our Canadian firms will have to increase in efficiency very soon or some enterprising



American firm will step in and put them out of business, although this will never occur if the Canadians get right down to business and strive to give satisfaction.

Mr. Bisbee's idea of boosting Canada is a splendid thing but for him to state this idea and then openly declare that he is buying half of his supplies in the United States this year, seems ridiculous. In other words he advocates one thing and does another, and then expects us to take him seriously. If you want to boost Canada you certainly

do not want to buy half of your goods in the United States.

S. A. P. Stone,  
Fort Erie, Ont.

P.S.—If I may not seem to be ignorant, I would like to ask Mr. Bisbee if he would name the supplies that he buys in such large quantities from the United States, which he is unable to get in Canada. I ask that he tell us in order that Canadian firms may have a chance to introduce these in the future.

## Ontario Honey Crop Practically a Failure

**E**DITOR, The Beekeeper.—The Crop Report Committee of the Ontario Beekeepers' Association, met Friday, July 31. Five hundred and fifteen members reported from all parts of Ontario, showing an average of 16 lbs. per colony. As the average in 1913 was nearly 100 lbs. per colony, it will be seen that the honey crop this year is almost a total failure except in a few places. There is, however, in the hands of beekeepers and dealers quite a quantity of last year's honey, which if it has been properly cared for, should be in good condition for this year's use.

Honey should always be kept in sealed packages in a dry room, preferably warm. Where storage conditions have not been perfect the best of honey will often have a sour odor on opening the can after several months' storing. This and the slightly acid taste which often accompanies it may be removed by placing the can in a vessel of water which is kept hot but not allowed to boil, for about twelve hours. Old honey which has been thoroughly heated and liquified in this way, should be practically as good as new, provided it is never allowed to reach a temperature too hot to bear the hand.

Signed by the Committee,

Wm. Couse,  
H. G. Sibbald,

W. J. Craig,  
Morley Pettit,

Secy.-Treas.

### WHITE HONEY CROP RECORD

COUNTY	Number of Beekeepers Reporting.	Number of Colonies Reported—Spring Count	Number of Pounds White Honey	Average Lbs. Per Colony.
Algoma . . . . .	1	52	2100	40
Brant . . . . .	11	640	7960	12
Bruce . . . . .	12	645	6200	10
Carleton . . . . .	10	337	14533	43
Dufferin . . . . .	5	225	3000	13
Dundas . . . . .	3	167	3550	21
Durham . . . . .	6	473	50	..
Elgin . . . . .	22	919	19532	21
Essex . . . . .	5	106	6200	58
Frontenac . . . . .	8	415	8900	21
Glenarry . . . . .	3	157	4400	28
Grenville . . . . .	4	113	200	1
Grey . . . . .	17	1099	15120	14
Haldimand . . . . .	10	419	10850	26
Haliburton . . . . .	No Report.			
Halton . . . . .	10	1239	3550	3
Hastings . . . . .	10	227	6600	29
Huron . . . . .	18	1419	11850	8
Kent . . . . .	8	320	12424	36
Lambton . . . . .	6	3396	21712	6
Lanark . . . . .	8	569	11520	20
Leeds . . . . .	10	720	15040	21
Lennox . . . . .	7	212	1450	6
Lincoln . . . . .	14	1463	32275	22
Manitoulin . . . . .	3	57	1250	22
Middlesex . . . . .	32	2473	53904	22
Muskoka . . . . .	3	63	406	7
Nipissing . . . . .	3	14	610	44
Norfolk . . . . .	8	266	5584	21

Northumberland . . . . .	11	433	10900	25
Ontario . . . . .	12	597	1350	2
Oxford . . . . .	15	739	20150	27
Parry Sound . . . . .	1	16	700	44
Peel . . . . .	12	1074	6430	6
Perth . . . . .	16	665	29278	44
Peterboro . . . . .	9	173	600	3
Prescott . . . . .	7	918	30700	32
Prince Edward . . . . .	8	189	1900	10
Rainy River . . . . .	No report.			
Renfrew . . . . .	4	346	19650	57
Russell . . . . .	5	247	4700	19
Simcoe . . . . .	32	1780	14990	8
Stormont . . . . .	6	530	4850	9
Thunder Bay . . . . .	No report.			
Victoria . . . . .	21	913	4360	5
Waterloo . . . . .	6	149	1600	10
Welland . . . . .	22	742	24574	33
Wellington . . . . .	24	899	7780	9
Wentworth . . . . .	13	1046	40010	39
York . . . . .	34	2125	4972	2

Totals . . . . .515 31786 510264 16

## Importance of Good Queens

A colony with a young vigorous queen is much less inclined to swarm than one having a queen that is beginning to fail. The swarming instinct is stronger in some strains of bees than others.

These two points have to be carefully observed in swarm prevention; the former by requeening where bees are failing, the latter by rearing queens from non-swarming stock. Some of our most successful beekeepers requeen each colony every year towards the end of the honey flow, others keep a supply of young queens on hand to replace those that are found to be failing from time to time. In either case, the careful beekeeper will rear his queens from good stock that does not show an inclination to swarm. One authority, after taking ordinary precautions to prevent swarming, kills every queen that takes out a swarm, and requeens from non-swarming stock.

The loss from poor queens also shows itself in winter and spring. From 10 to 20 per cent. of winter losses are caused by the death of queens which were failing and should have been replaced the fall previous. Another 10 per cent. of queens fail in spring and cause the loss of the colonies which would otherwise have wintered. Many which survive the spring spend the summer superseding and their colonies gather no crop.

A poor queen may be known by the following points: First, by the uneven appearance of the brood. The queen does not lay regularly in every cell, but skips back and forth, producing brood where capped cells are interspersed with empty cells and open brood. Second, more than one egg in the cell when the colony is strong. This condition in summer always indicates either a poor queen or laying workers. The latter will be known by the fact that there are usually quite a number of eggs in the cell,

and these produce only drones. Sometimes in the spring a good queen will place two eggs in some of the cells, because the cluster of bees is so small that she cannot find protected cell enough to hold the eggs she is prepared to lay. Third, a poor queen will leave the worker brood and go down to the corners of the combs to lay in drone cells. A good, young queen will not lay drone eggs at all on the start. Fourth, crippled queens are not usually good. Fifth, old queens are usually shiny and slippery looking. They are often stiff in their movements and slow. Sixth, when bees are cross or do not work well, it is sometimes the fault of the queen. Seventh, drones in worker cells are an indication of a poor queen. Eighth, a queen which goes through the queen excluder is always a nuisance, and, especially if she does this for the purpose of finding drone comb, she should be disposed of.

### A GOOD QUEEN

A good queen, on the other hand, is known by possessing the opposite qualities to those given above, and some others. She will start laying in the middle of a comb and lay in every cell in a circle from day to day, so that, as the brood develops, each comb presents an even appearance. She will fill the combs right out to the end, down to the bottom, and up to the top, not leaving a rim of honey along below the top bar, if there is super room above for the honey to be stored. We do not expect the brood chamber to be used for the storage of honey; we expect the brood combs to be filled from end to end and top to bottom with brood. She will place her eggs evenly, all pointing in the same direction, and only one in each cell. She will leave any bits of drone comb in the brood chamber until the season is advanced, before she starts laying in them. She will have at least eight or ten combs of Langstroth size filled right up with worker brood in the height of the breeding season. She is well developed in appearance, graceful and strong in her movements; not excitable nor easily frightened, but on the other hand, neither awkward nor sluggish.

A good queen is known by the workers which hatch from her eggs. We shall look for a moment at the kind of workers we would expect from good queens. First, they will be industrious workers. There is a great deal of difference in the working of different colonies of equal strength, as we learn by keeping records of the amount of honey produced. Second, the workers are good nurses, that is, they feed the larvae well. This difference can be noticed by examining the unsealed brood. If they are well fed there should be a little milky fluid around each one as it lies in the bottom of the cell. Well fed larvae produce stronger workers and are better able to resist disease. This brings us to the third point, which is, resistance to robbers and disease. Some colonies will defend themselves against robbers and European Foul Brood much better than others. The fourth point is gentleness of the workers. You should always requeen a colony which is particularly vicious. There are gentle bees which work just as well as any savage ones and are much nicer to handle. Fifth, some of our colonies swarm much less than others. There is no doubt that the swarming instinct can be bred out to a certain extent by selecting queens from non-swarming colonies. The selection of breeders that swarm is not wise.—Press Bulletin, issued by Prof. Morley Pettit, Provincial Apiculturist, Guelph, Ont.



## Beekeeping and Advertising

Wm. A. Weir, Toronto, Ont.

This is a subject which impressed itself very vividly upon my mind at the last convention of the O.B.A. as being the most necessary subject for consideration at the present moment. It is but a "chip" of the great problem of marketing, but a good-sized one at that.

Advertising in our profession is listed by many as a "luxurious habit," but a careful analysis of what it means and how it works will perhaps help us to a better understanding. The Standard dictionary tells us that "To advertise is to make known; to publish notice; to commend to the public; to publish abroad facts." If this be true then we must have something to make known or commend, and the ways and means by which this is done are as varied as a coat of many colors.

Personally and almost unconsciously we are making known and recommending every day certain practices, machinery, foods, stock, and a multitude of other lines. This seems to have been "advertising" in its beginning. Our neighbor is out in his yard, and looking over the fence, a fellow-beekeeper sees he is at requeening operations. It is the first experience for the on-looker, and being of an inquisitive turn the following conversation follows: "Hello, neighbor, what are you doing?" "Putting in Italian queens." This is something foreign to his beekeeping knowledge, so he asks, "what will they do for you?" "Why," replied the informant, "the bees will be much better stock to handle and work." Considerable conversation running along these lines will probably follow, but almost without fail somewhere in its course he will ask who supplied him and what they cost. Here is where the man who sold the queens comes in, and with characteristic beeman's "canniness" the learner reasons thus: "Well, my neighbor is a pretty long-headed chap, and he certainly knows something about bees. So possibly the best thing I can do is to follow his example." Result—another sale for the breeder. For the sake of illustration I have adopted an extreme case, but the principle is actively working all the time. Recall if you can any one day on which you have been in contact with men and have not gathered an opinion regarding some man's practice or article. Up-to-date farmers, manufacturers, commercial houses, and stock producers recognize the power that lies in this mouth to mouth or "personal" advertising. They subsequently endeavor to give thorough satisfaction to every customer.

### HOW IT STARTED.

This "endless chain" must have been started some where, and if we trace it out we find that the "advertiser" drew on his own personal acquaintanceship or capital, and enlisted their good offices. He then hired others to develop acquaintances and the immense commercial traveller system of to-day is the result. In the course of time the invention of printing and progress in the arts, the opportunities for making known vital, interesting facts opened up at a rapid rate. Magazines and newspapers sprang up like mushrooms, and by printed appeals to men's reason soon established themselves in the public confidence. Business men were not slow to recognize their opportunities. Here were magazines and papers enjoying in a large measure the confidence of the public, why not increase personal acquaintances by calling attention

through their columns to themselves and their goods. Then to hold the new customers' goodwill, furnish means by which they could prove the advertiser's good faith. From this very simple source, the ever-increasing schemes of attracting and holding the public confidence seems to have sprung and the volume of business increased correspondingly until to-day advertising—both personal and through mediums—has taken its place as an essential feature of successful business practice.

During the phenomenal advance one could only expect to see the most strenuous competition, develop both among the mediums of advertising and among the advertisers. The most novel and attractive methods were adopted and the cost kept going up and up, until it became a serious sum for one or even two men to finance. The cost of conducting business affairs on other lines also increased rapidly. What was the most natural result? Organization and consolidation of capital. This is exactly what happened. Men manufacturing similar lines of goods got together and united on the principle "In unity there is Strength." They were thus able to carry out a programme much more extensive than the combined amount of what each individually might have done. These combinations kept on progressing until to-day we look with astonishment at the immense trusts, mergers, corporations, and syndicates, around us, and against which it takes the whole force of organized State to contend. Yet, in the face of these facts, some of our members ridicule the advantages of organization for marketing and other purposes!

While I do not profess to have given any more than a mere glimpse at the economic position of advertising, I think the reader will admit that advertising through mediums such as magazines, papers, novelties, trade marks, letters, etc., has become an absolute necessity if we are going to progress and develop as we should. He must also admit that individual effort along these lines is much less profitable than combined effort.

### ADVERTISING A NECESSITY

Let us turn now and consider the advertising of honey and see what has been done and what we are justified in doing. So far, honey seems to have occupied a singular position among the manufactured food stuffs of the world.

It seems to have depended almost entirely upon "personal" advertising for its sale while such lines as bread, milk, cheese, fruits, syrups, sugar, molasses, and rolled oats have been widely advertised through mediums as well, and have become established as necessities on the dining-table. True, a few of our more progressive beekeepers have stimulated local trade by a small "ad." in the columns of the local newspaper, but their efforts so far as "boosting" honey have been insignificant when compared to the above-mentioned lines. Brands, trade-marks, and such like of honey are almost non-existent, and the result is that honey is not known to thousands and is not recognized as to its food value by thousands more!

Reasons for this state of affairs are not lacking and may be classed in three divisions—

(1) Productive reasons; (2) Financial reasons; (3) Physical reasons.

The production of honey in sufficient quantities for shipment has been largely in the hands of a few beekeepers. The science of producing at a low cost has only been evolved in recent years. Smaller beekeepers throughout the country were stimulating a larger demand through "personal" advertising than they cared to supply and with the help of the commission man the large beekeeper reaped the profit. Heavy production is dependent upon the season's goodwill and crops ranged anywhere from nothing to excess of demand and a great variation in the quality was also noticed.

Financially, honey has been held back by an improper estimate of its value. Previous to the formation of the O.B.A., honey was sold for prices which would not pay the actual cost of production and even to-day we have beekeepers who "rob" their bees of the "gold" and sell it for a pittance. No work has been put on them and they do not consider it with any more respect than "found money." Competition has thus been exceedingly hard for the large producer and of a "cut-throat" nature. Even yet the cast of production leaves very little margin for extensive work individually.

The physical properties of honey have placed a slight anchor on its sale. Hotels and house mistresses object to its sticky, mussy effect on their table linen and some people have actually thought its granulation was an impossible feature. They wanted liquid honey and did not know of its easy conversion.

### CONDITIONS HAVE CHANGED

Conditions in the last few years in Ontario have changed the situation, and beekeeping is entering into a new era commercially. Education and research have been teaching and revealing truths in apiculture which in practical application cut down the costs of production. Interest on the "bees on the farm" has been stimulated and farmers who used to "rob" are now keeping the bees and giving them the same attention they would to other stock. Modern machinery for extracting is coming into general use and the final result is a larger crop of marketable honey produced every year—on the average—and a diminished number of "total failure" years. This condition has become so noticeable that the red flag of over-production has been hung out by leading beekeepers. They are realizing that the production, handled by the old system of "personal" advertising and the commission man is tending to "glut" the market. They realize that the variation in quality is gradually growing less and apparently fail to grasp the business possibilities and future hope for honey as an economic article.

The difficulties which stand in the way of individual effort succumb before the strong arm of cooperation. Financially our little "mites" lumped together on the principle that "many hands make light work," would accomplish a great deal toward making known the virtues of honey, and pushing it into the ranks of an everybody's food. The physical properties would become understood and people would look with admiration at the keeping qualities of well ripened honey. The production would gradually become trained to certain definite methods which would tend to raise the grade to the best possible and aid can be provided to assist in the distribution so as to equalize the market.

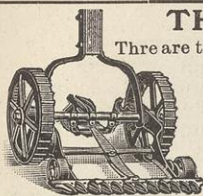


## NEW AND RARE SEEDS

Unique collection. Hundreds of varieties adapted for the Canadian climate. Perennial and perfectly hardy. Own saving. Catalog free.

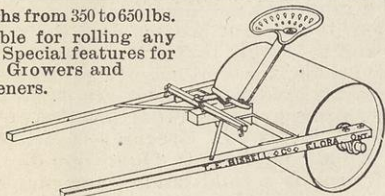
**Perry's Hardy Plant Farm**  
ENFIELD, MIDDLESEX, ENG.

## THE CLIPPER

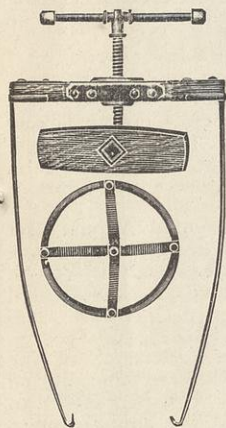


There are three things that destroy your lawns—Dandelions, Buck Plantain and Crab Grass. In one season the Clipper will drive them all out. Your dealer should have them—If he has not drop us a line and we will send circulars and prices **CLIPPER LAWN MOWER CO.**  
Box 10, Dixon, Ill.

Weights from 350 to 650 lbs.  
Suitable for rolling any soil. Special features for Fruit Growers and Gardeners.



Manufactured only by  
**T. E. Bissell Company Ltd., Dept. N., Elora, Ont.**



## Daisy Apple Press

Used by all leading apple packers in Canada, United States and England.

Write for prices and complete information to—

**J. J. ROBLIN & SON**  
Manufacturers  
**BRIGHTON, ONT.**  
Canada



## FLOWER POTS

Hanging Baskets and Fern Pans  
FOR THE FALL TRADE

We make the "Standard" Pot, the best Pot in the world—uniform, best of clay, well burned, in every respect superior to all others.

All our pots have rim on shoulder, thus allowing them to be placed together perfectly and preventing breakage in shipping and handling.

Place your Fall Order NOW.

A complete line and large stock of all sizes kept on hand to ensure prompt shipment.

Send for NEW CATALOG and PRICE LIST

**The Foster Pottery Co.**  
HAMILTON - ONTARIO  
Main Street West

other varieties. In all other sections of Ontario the crop is practically a failure, with a few scattered exceptions in the inland counties north of Lake Erie. Nova Scotia and British Columbia both report a crop between medium and full, although considerable damage has been done to the latter province by Fire Blight.

### PEACHES

In spite of the fact that the peach crop in the Niagara district is practically a failure, some Triumphs are upon the market, and at least in one instance these were purchased at 55 cents for six quart baskets f.o.b. shipping point and retailed in Ottawa at 75 cents. At figures such as these, the few growers who are fortunate enough to have hardy cling-stone varieties in their orchards, will be in an enviable position, at least in the eyes of their less fortunate neighbors. The prices should also be good for the peaches of Essex, Kent and Lambton counties. In British Columbia the apricot season was ended by the first of August, which is two weeks earlier than in the ordinary year. All peaches are reported a good crop.

### TOMATOES

The long spell of hot, dry weather seriously affected the tomato crop in all parts of Ontario, and the chances now are that in spite of the very heavy acreage the total crop will not greatly exceed that of previous years. The crop in British Columbia is in practically the same condition as in Ontario, except, of course, in irrigated sections where the effects of drouth have been largely prevented. In other sections, however, the lack of rain has resulted in a falling off



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To all who ask for our useful illustrated hardy flower book we send with FREE offer of 25 cents worth of Seadons Seeds guaranteed to succeed post free Write today SEADONS, St. Albans, England



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Plant our Top Notch FRUIT, SHADE and ORNAMENTAL TREES this Fall. EVERGREENS, SHRUBS, ROSES, VINES, BUSHES. Ask for Price List (No Agents) at Central Nurseries.

**A. G. HULL & SONS**  
St. Catharines - Ontario

## BULBS

The Quality of our Stock is the Best  
Darwin Tulips, Single Early Tulips, Hyacinths, Chinese Lilies, Narcissus, Daffodils, Paper Whites, Snowdrops, Crocus, Spanish Iris.

Write for our Price List

**GEO. KEITH & SONS**

Seed Merchants since 1866

124 King St. East - TORONTO

## Cold Storage Fruit Warehouse

Finest Apple Rooms in the Dominion  
for Export and Local Trade.

Special Rooms for All Kinds of Perishable Goods.

**THE CANADA COLD STORAGE CO.**  
Limited  
53 William St., MONTREAL, Que.

## Douglas Gardens

OAKVILLE, ONT.

The stagnation in many lines of business caused by the European War furnishes an opportunity for many business men to make improvements in their gardens and home grounds. No line of plants will give such large results for the outlay as Herbaceous Perennials. Of these the Paeony, Iris, Delphinium, Phlox, Helenium and Hardy Chrysanthemum are the best six. We have fine stocks of these and of many others, grown in our own grounds—all described in our Fall Planting List, just issued, which is sent free on request.

We offer 50 varieties of Paeonies at from 30c to \$2.50 each; 30 vars. of Irises at from 15c to \$1.00 each; 5 vars. of Phloxes at 15-20c each; 5 vars. of Heleniums at 15-20c each; Gold Medal Hybrid Delphiniums at 20c each. 10 for \$1.50. 5 vars. of Hemerocallis at 15-20c each; 6 vars. Astilbe and Spirea at 15-35c each; 4 vars. of Campanulas at 20c each; 5 vars. of Heuchera at 20c each, Dicentra Spectabilis at 20c each; 3 vars. Shasta Daisies at 25c each, 10 for \$2.00, and many others.

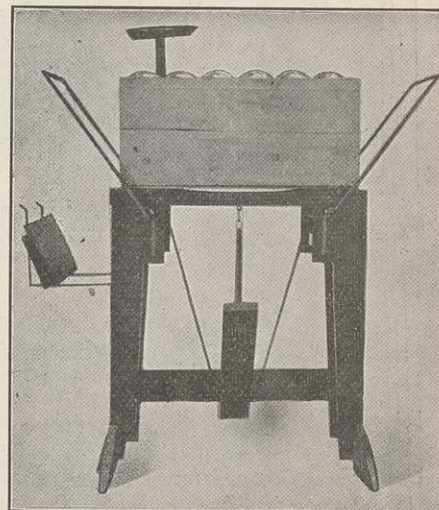
At the hour of writing, it is doubtful whether the usual importations of Daffodils and Tulips can be received because of the war. The best substitute for these is Irises, of which we have a good stock. These should be planted at the earliest day possible in September.

Cash with order, including postage, as per schedule, please.

## JOHN CAVERS

## Quick and Easy

That is the way the DAISY APPLE BOX PRESS works. A simple pressure of the foot brings the arms up over the ends of the box, automatically draws them down and holds them in place while being nailed. The fastest and only automatic press on the market.



Pat. No. 104,535

If you pack apples in boxes, this machine will be a great convenience to you and will save you time and money. Write for prices to

**J. J. ROBLIN & SON**  
Manufacturers - Brighton, Ontario



## The Pick of the Bulb World

All our bulbs are grown for us especially and are personally selected by the James Carter & Co. experts.

Thorough tests, both before exportation, and at the Carter establishment at Raynes Park, London, assure sound, healthy bulbs of the very highest quality. Our Tulips and Narcissus are exceptionally hardy and well suited to the Canadian climate.

# Carter's Bulbs

are unequalled for bowl or bed culture.

The Carter catalogue and handbook—"Bulbs"—illustrates and describes the choicest varieties of Tulips, Narcissus, Daffodils, Crocus, and many others. It lists all well-known favorites and many exclusive kinds not to be had elsewhere. Complimentary copy on request. Write for it to-day.

**CARTERS TESTED SEEDS INC.**

133A King St. East : Toronto



in prospects, and much of the fruit produced, while abundant in quality, will be of small size.

### GRAPES

Reports still point to an almost exceptionally heavy crop in the Niagara peninsula. The average for the district is 85 per cent and from practically no sections have any adverse reports been received. The red varieties are not so promising as some of the others.

### FOREIGN CONDITIONS

United States.—A telegram from Portland, Oregon, dated August 10, estimates the apple production in the four northwestern states of Washington, Oregon, Idaho and Montana at 15,000 cars. Of these, Yakima Valley will produce 5,000 cars, Hood River 1,500, Wenatchee Valley 4,500 and Western Oregon 900.

The crop in New York state promises to be 12 to 15 per cent greater than the crop of 1912 and to double that of last year. In the large producing sections of the states the increase is great. Baldwins are particularly heavy, some growers reporting the crop as the best since 1896. Greenings are light to fair, Kings and Twenty Ounce good. The peach crop is a total failure, and plums are light.

London, England.—Weather conditions favorable for fruit. Apple crop larger than previous estimates. Owing to war and high price of sugar, fruit growers now receiving very poor prices.—Dominion Fruit Crop Report.

Costs less to keep in repair than any other Elevator Digger

## Digging Potatoes with an

# IRON AGE

Saves time, saves labor, gets all of the potatoes, helps you get to an early market when the price is right. Digs, separates thoroughly, drops the potatoes where you want them, and in most cases fairly well sorted. The question is: Can you afford to be without a digger?

Four styles from which to choose the one that suits your conditions best. You pay for and your horses draw only what you need.

We have been making Diggers 10 years and know what to build for this work. Our Booklet "D" tells the whole story in an understandable way. May we send it?

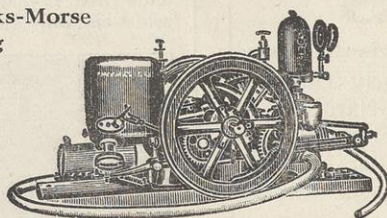
**The Bateman-Wilkinson Co., Limited**

460 Symington Ave. - Toronto, Ont.



Adjustable in every necessary way and easily controlled.

Fairbanks-Morse  
Spraying  
Outfit



The most satisfactory system for every spraying purpose.

It offers you the most convenient and economical means of destroying insects, curing or preventing plant and tree diseases.

Made in many sizes—both hand and engine operated.

Send for free catalogue. It tells you what and when to spray, the best compounds to use, how to prepare them, etc.

Farm Engines  
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**The Canadian Fairbanks-Morse Co., Limited**

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Canada's Departmental House for Mechanical Goods

## Items of Interest

A meeting of the Ontario Ginseng Growers' Association will be held in the Temperance Hall, 1087 Queen St. West, Toronto, at half-past-one in the afternoon of September 9th.

At the annual meeting held August 21st in Morrisburg Ont., of the St. Lawrence Valley Fruit Growers' Association W. G. Robertson of Matilda township was elected president; L. E. Parisien of Cornwall, vice-president; E. P. Bradt, B.S.A., of Morrisburg, secretary-treasurer. Because of the European war Montreal buyers have offered prices below the normal. It was resolved to again make an exhibit at the annual flower and fruit show in Toronto, and to agitate for the holding of a similar show in Ottawa. A much larger exhibit will be sent to Toronto than in former years, probably three hundred boxes of McIntosh Reds. The selling of apples cooperatively, with a central packing place, which would insure uniformity, was favored by all, though the meeting concluded that until the war ended the making of definite plans was not advisable.

Canada's recently appointed Dominion Fruit Commissioner, Mr. D. Johnson, visited Nova Scotia during the latter part of June and early July, in order to acquaint himself fully with fruit conditions in that province. In company with leading fruit growers and government officials he visited many of the largest orchards and also attended the annual meeting of the United Fruit Companies of Nova Scotia Ltd. Everywhere he went he made a most favorable impression. At the closing session of the annual meeting of the fruit growers' company, the following resolution was passed: "Resolved,—That that United Fruit Companies of Nova Scotia, Limited, express their appreciation of the visit of Daniel Johnson, the fruit commissioner of Canada. From him we have received inspiration in our work and advice that will be most helpful. We congratulate the government of Canada on their having obtained for the important position of fruit commissioner a man so eminently fitted for the office."



**QUEENS OF QUALITY**

3-band leather color. Unt., 60c. each, \$7.00 per doz.  
Sel. Unt., 75c. each, \$8.00 per doz. Circular free.  
J. I. BANKS - - - LIBERTY, TENN.

**IF YOU WANT SOMETHING BETTER**

than what you already have in the Queen and Bee line, try one of the Atchley Dollar Queens. I make a specialty of Dollar Queens, or \$10.00 per doz. Good, strong two-frame nuclei with Untested Queen, \$2.50 each; three-frame, \$3.00. Safe arrival and satisfaction guaranteed.

WM. ATCHLEY, BEEVILLE, BEE COUNTY, TEXAS

**REQUEEN YOUR BEES**

this fall with young queens bred from Doolittle's best breeders. We have 500 or more choice untested queens on hand at all times. Prices, 60c each, \$6.60 per dozen. Delivery guaranteed. Nuclei, 2 frame \$1.50, 3 frame \$2.25. We have apiary of hundred colonies for sale at bargain, on easy terms of payment. Particulars on request  
SPENGER APIARIES CO. - - - NORDHOFF, CAL., U. S. A.

**THE BEEKEEPERS' REVIEW CLUBBING LIST**

The Review and Gleanings one year, \$1.50.  
The Review and American Bee Journal one year, \$1.50.

All three for one year only \$2.00.  
Canadian Subscribers add for postage as follows: Gleanings, 30c.; A. B. J., 10c.

Address

THE BEEKEEPERS' REVIEW, North Star, Mich.

**FOR SALE**

Hillcrest Fruit Farm of 48½ acres, the property of the late H. T. Stevens. This property is situated 1½ miles from the village of Norwich, Oxford County. 14 acres planted with apple, pear, plum and cherry trees and most all kinds of small fruit in bearing condition. Frame house and barns and 2 greenhouses on premises. For particulars apply to the undersigned Executors

ANDREW COHOE, R. R. No. 1, BURGESSVILLE  
GEO. CRAIK, R. R. No. 2, MOSLEY, ONT.

**QUEENS AND BEES**

We can supply choice leather colored Italian Queens promptly at the following prices:

	1	6	12
Untested	\$1.00	\$5.50	\$10.50
Tested	1.50	8.50	16.00
Select tested	2.00	11.25	22.50

For prices on larger quantities please write us.

We offer bees in pound packages from the same stock as above as follows after July 1st:

	1 lb.	2 lb.	3 lb.
	\$1.50	\$2.50	\$3.50

These prices do not include a queen. Add price of queen you may select to price of package when ordering. Safe delivery guaranteed. Full directions for handling sent with each shipment.

A full stock of bee-keepers' supplies always on hand for prompt shipment. Catalogue on request.

We Want More Beeswax.

F. W. JONES - - - BEDFORD, QUE

**CARNIOLAN QUEENS**

After July 1st

	1	6	12
Untested	75c.	\$4.25	\$8.00

Address

WM. KERNAN, DUSHORE, PA., U.S.A.  
R.F.D. No. 2

**WHEN YOU NEED QUEENS**

We will be pleased to fill your order. Our business of rearing Queens was established in 1884. We know what it means to have a good strain of Bees and Queens that stand second to none.

Three-band Italians only bred for business and free from disease. Tested Queens, \$1 each. Untested, 75c.; \$7 per dozen. Send for Price List.  
J. W. K. SHAW & CO., LOREAUVILLE, LA., U. S. A.

**SELECT ITALIAN QUEENS**

We will both be disappointed if you do not order a half dozen of our select untested Italian Queens at six for \$4.00. 1 lb. Bees with Queens, \$2.50. We have a number of satisfied Canadian customers. We want you too. Circular Free, write

J. B. HOLLOPETER

BOX 56 - - - PENTZ, Pa., U.S.A.

**INCREASE YOUR HONEY CROP**

by introducing some of Leininger's strain of Italians. Have been a breeder for 25 years. No better bees in America. Untested one \$1.00, six \$5.00. Tested one \$1.25, six \$6.00. Breeders, \$10.00 each. During August and September we will sell tested Queens, one year old, at 80c each. Will guarantee every queen.

FRED LEININGER & SON - - - DELPHOS, OHIO, U.S.A.

**QUEENS**

by return mail or your money back. Guaranteed purely mated. J. E. Hand strain of three-banded Italians. Write for price list and free booklet, "How to Transfer, Get Honey and Increase."

J. M. GINZERRICH, ARTHUR, ILL., U.S.A.

**BEES FOR SALE**

Having to reduce my stock of bees I offer for sale a few hives. All bees on good straight worker combs in factory-made frames, 8 frames to the hive.

CHAS. BLAKE, SNOW ROAD STATION, ONT. (C.P.R.)

**MILLER'S STRAIN ITALIAN QUEENS**

By return mail or money refunded, bred from the best red clover strains in United States, in full colonies; from my Superior Breeders, northern bred, for business, long-tongued, leather color or three-banded, gentle, winter well, hustlers. Not inclined to swarm, roll honey in. 1 untested, 75c; 6, \$4.00; 12, \$7.50; 1 sel, untested, \$1.00; 6, \$5.00; 12, \$9.00. A specialist of 17 years' experience. Safe arrival and satisfaction guaranteed.

I. F. MILLER, BROOKVILLE, PA., U.S.A.

**BUY CARNIOLANS IN CARNIOLA**

Pure Carniolan Alpine Bees  
Write in English for Booklet and Price List. Awarded 60 Honors.

Johann Strgar, - - - Wittnachs

P.O. Wocheiner Feistriz

Upper-Carniola (Krain), Austria

**QUEENS QUEENS**

Three Banded and Golden Italians. Vigorous queens, from clean, healthy colonies. Safe delivery at your Post Office guaranteed. See our catalogue.

THE HAM & NOTT CO., Ltd.

BRANTFORD

ONT.

**Bees and Bee Supplies**

Roots, Dadants, Ham & Nott's goods.  
Honey, Wax, Poultry Supplies, Seeds, etc.

Write for a Catalogue

THE CHAS. E. HOPPER COMPANY  
185 Wright Avenue, Toronto, Ont.

**TOAK QUEENS**

AFTER JULY 1st

Tested Strait	75c. each
Untested	50c. each
Bees per pound	\$1.00
Nuclei per frame	\$1.00 each

**I. N. BANKSTON**

BUFFALO - - - TEXAS, U.S.A.

**Famous Queens Direct from Italy**

Bees more beautiful, more gentle, more industrious, the best honey gatherers.  
PRIZES—VI. Swiss Agricultural Exposition, Berne, 1895.

Swiss National Exposition, Geneva, 1896

Beekeeping Exhibition, Liege, Belgium, 1896

Beekeeping Exhibition, Frankfurt, O. M. (Germany), 1907.

Universal Exposition, St. Louis, Mo., U.S.A., 1904.

The highest award.

Extra. Breeding Queens, \$3.00; Selected, \$2.00; Fertilized, \$1.50. Lower prices per dozen or more Queens. Safe arrival guaranteed.

**ANTHONY BIAGGI**

PEDEVILLA, NEAR BELLINZONA ITALIAN SWITZERLAND

This country, politically, Switzerland Republic, lies geographically in Italy and possesses the best kind of Bees known.

Mention in writing—The Canadian Horticulturist and Beekeeper



Branch Warehouses:  
Sudbury, North Bay,  
Cobalt, Cochrane and  
Porcupine

Send for  
Shipping Stamp

**Fruit and Vegetables Solicited****WE GET YOU BEST PRICES**

OUR facilities enable us to realize top prices at all times for your fruit, vegetables or general produce. Aside from our large connection on the Toronto market, we have established branch warehouses with competent men in charge at Sudbury, North Bay, Cobalt, Cochrane and Porcupine. In time of congestion on the Toronto market we have a ready outlet through these branches. We never have to sacrifice your interests.

**H. PETERS**

88 Front St. East, Toronto


References: The Canadian Bank of Commerce, (Market Branch) and Commercial Agencies.





**Bissell Steel Stone Boat**

Used extensively by gardeners and fruit growers.



Steel Railing around edges. Steel Runners. Bevel Corners 7 ft. by 2, 2½ or 3 ft. Write Dept. N. for Folder and Prices

**T. E. BISSELL CO., LTD., ELORA, ONT.**

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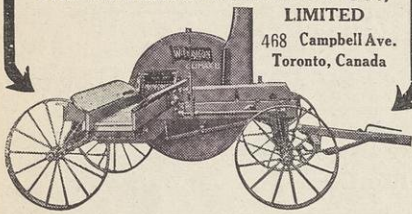
## Wilkinson Climax B

### Ensilage and Straw Cutter

Our "B" machine, built especially for the farmer. A combination machine—it will cut and deliver green corn into the highest silo or dry straw or hay into the mow. 12-inch throat, rolls raise 6 inches and set close to knives—solid, compact cutting surface. Can change cut without stopping. Can be reversed instantly. Direct pneumatic delivery. Knife wheel carries fans. No lodging, everything cut, wheel always in balance. Steel fan case.

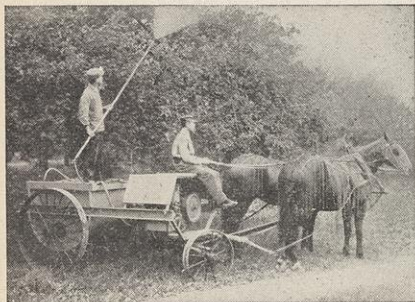
Made in two styles—mounted or unmounted. We also make large type machine for custom work. Ask your dealer about this well-known machine and write us for new catalog showing all styles.

**THE BATEMAN-WILKINSON CO., LIMITED**  
468 Campbell Ave.  
Toronto, Canada



# Mr. Fruit Grower

Each year more and more of the celebrated "Friend" hand and power Sprayers are to be found in Canada; THERE'S A REASON—Let us tell you.



**"FRIEND" QUEEN**

A popular model on which sales have doubled. We have many others.

**"FRIEND" MFG. CO.**  
GASPORT, N.Y.

## Common Mistakes in Barrel Packing of Apples

P. J. Carey, Chief Fruit Inspector, Ontario

FOR a half-century the barrel has been the package generally used for the shipment of Canadian apples for export. It is only within recent years that the box has made its appearance, and while the latter has come to stay as far as our domestic trade is concerned, the same cannot be said of the export trade. The reasons for this are plain. With the exception of some portions of the north of England, where our apples are purchased by the package by the more wealthy consumers, the great bulk of our fruit is sold by the pound.

This being the case it matters little, therefore, what trouble we may take in putting on the European market neat and attractive packages with a view of impressing the consumers, when such packages scarcely ever reach the public, but have their contents broken up and sold in small quantities. Generally speaking, it would seem then that the apple package for export for some time to come is nothing more than a carrier. I am ready to admit, therefore, that the barrel is the cheaper package and likely to hold its place for the greater portion of the export shipments, notwithstanding the fact that the number of boxes exported is increasing yearly. This being true, then, perhaps the last word has not been said on the proper methods of barrel packing apples. It is my intention to point out some of the mistakes commonly made by the great bulk of apple handlers.

### FACING.

Taking the operations in order, I would like to say a few words about the facing of the barrel. The Inspection and Sales Act requires that the face of a package shall fairly represent the contents. Of course, this means as to quality of fruit. There is no law to prevent a packer from making the face of his package look attractive by removing the stems from the apples and using fruits of a uniform size; or say a half-way between the maximum and minimum of the lot being packed as to size and color. There is easily twenty-five cents a barrel in value in the same lot of apples between a slovenly faced barrel and one properly faced.

### PROPER FULLNESS.

In the particular of proper fullness, packers have made the greatest mistake in the past. The large number of slacks reported from the Old Country and the low prices returned for such alarmed the apple handlers, and orders were given to all packers that the trouble of "slacks" had to be met. Quite naturally the first thought was to fill to overflowing, and as a result the fruit was heaped on the end of the barrel before the head was being placed on. Strangely enough it took almost a quarter of a century to convince the apple growers that this was a faulty method and that thousands of barrels of the worst kind of "slacks" was the result of this style of packing. Apples crushed into a barrel with skin broken, followed, in many cases, by heating while in transit, spells failure, and the account sales and check in such cases are heartbreaking to the shipper.

The word "racking" as it applies to barrel-packing was coined by the apple packer and is commonly understood to mean the shaking and settling down of the apples in the barrel. So important is its application in the operation of barrel packing that the difference between it being properly and improperly done is the difference between success and failure in the packing of apples.

The process of racking is well understood by all apple men, and it is not my purpose to go into detail; only to emphasize the importance of that particular part of the work.

### TAILING.

Perhaps fifty per cent. of the barrel packers still practice what may be termed jumble tailing. This is where an attempt is made to roughly and hurriedly level the top surface before placing the head. This may be put down as one of the common mistakes in barrel packing. When the head is put on, the high apples take the whole pressure first and are crushed or broken before the head is in place. What may be called proper tailing is when the apples are placed in solidly and evenly, so that each one will take its share of the pressure. Where this is done the operator can more easily detect if he is filling too high, and if the rest of the operation has been properly done the surface apples will not show more than a slight flattening and the fruit below not damaged. It has been admitted that up till a few years ago seventy-five per cent. of the export apples have been overpressed. Experiments have shown that where proper racking and tailing has been done it is not necessary that apples should project above the end of staves, and considerably lower for domestic markets.

### PRE COOLING.

This introduces another phase of the operation that is a big factor in successful apple handling. The packing of summer or fall apples in an airtight barrel when the temperature is high can certainly be classed as one of the mistakes. Experiments this season have shown that small fruits pre-cooled sold for double the price of the same class of fruits shipped in the ordinary way. The same difference has often been shown between apples that have been heated in barrels and the same class of fruit that had arrived in a sound condition. Where pre-cooling cannot be put in practice it is a wise plan when the weather is warm to pick apples from the trees the day before packing. Orchard boxes for this purpose are used to good advantage in the Annapolis Valley, and Ontario handlers and fruit growers' associations would do well to put this into practice where possible.

As the barrel is still to be the package for the shipment of a large proportion of export apples as well as for a proportion of the domestic supply, surely it is worth while for those engaged in the trade to make a study of the very latest methods in order to secure for all concerned the best results.

The United Fruit Companies of Nova Scotia, Ltd., last year paid salaries amounting to \$8,858.00. The general manager received \$2,500, the secretary and the combined organizer and inspector \$1,200 each; the European representative, \$1,111; the Halifax representative, \$1,000; and office help \$1,847. These officials incurred expenses in the course of their work amounting to \$1,963.

Mr. J. L. Hilborn, who at one time conducted the Fruit Experiment Station at Leamington, Ont., for the Ontario Department of Agriculture, has recently been appointed by the British Columbia Department of Agriculture, to take charge of an Experimental Station for small fruits and vegetables that is to be opened by the Provincial Government at Summerland, B.C.



# ANNOUNCEMENT



WE ARE PLEASED to announce to readers of The Canadian Horticulturist the incorporation of a Canadian greenhouse construction firm, under an Ontario charter called The Glass Garden Builders Ltd., and financed entirely by Canadian capital.. All the executive officers of the Company are men of repute in business and financial circles. The President is W. J. Keens, a prominent business man of Toronto; the Vice-President, Dr. J. M. Baldwin, at one time Vice-President of the Toronto Horticultural Society; the Secretary-Treasurer, C. M. Baldwin, for some years an officer of the Imperial Bank of Canada, and later connected with Real Estate Companies of Toronto.

The Company is most fortunate in having the services of Isaac Cassidy, formerly Secretary of the Lord & Burnham Co., Limited, of Canada, who has been in the greenhouse building business for about twenty years. He will devote his entire time to the activities of the Company.

R. Derbyshire, formerly Canadian Manager of The Parkes Construction Company, has also consented to give his entire services to the Company. He has been in the business for the past ten years and is well acquainted with the Canadian trade.

The policy of the Company is to build all types of commercial and private greenhouses, including all kinds of equipment. As an evidence of progressiveness on the part of the new firm two new houses are already under way for J. H. Dunlop of Richmond Hill. One of these, 61 by 400 feet, is being built of the flat rafter full iron frame type. The other is a pipe frame house, 24 by 236 feet. Several private houses are also being erected in the City of Toronto.

We would be pleased to submit plans and estimates on any work in this line. We know that our figures will interest you as all parts are manufactured in Canada.

## GLASS GARDEN BUILDERS

43 SCOTT ST., TORONTO, ONT.

LIMITED



# FACTORY CLEARANCE SALE

# ROOFING

# 98¢

Per Roll  
108 Square Feet  
Regular \$2.00  
Quality.

## ASPHALT FELT ROOFING

100 per cent. Saturation  
Contains no Tar or Paper

Lowest price for Government Standard Roofing ever offered in Canada. Sale necessitated by business conditions.

Send for Free Sample

**THE HALLIDAY COMPANY, LTD.**  
Formerly Stanley Mills & Co.  
**HAMILTON CANADA**



**True to Name**  
**—Free From Disease**

Mr. Fruit Grower, you are looking for the best Apple, Pear, Peach, Plum, Cherry and Quince Trees you can buy.

Kelly Trees are sold at Growers' Prices—Shipped direct from our own nurseries in Dansville and guaranteed sturdy, free from disease and True to Name.

For 23 years we have had the name of knowing how to grow trees right. From seedling to freight car we watch our own trees personally and know we are shipping just what you order. We have an up-to-date nursery plant and can ship all orders promptly, as well as grow and ship at a low cost. We give you every advantage on price. Plant apples this fall.

Write for our catalogue TO-DAY, and get our prices.

**KELLY BROS.** Wholesale Nurseries  
216 Main Street, **DANSVILLE, N.Y.**

*You'll never regret planting Kelly Trees.*

## The Effect of the War on Fruit Prices

Fruit growers everywhere are wondering what effect the war will have on fruit prices. The following views on this point, of well known authorities, have been obtained by The Canadian Horticulturist:

P. W. Hodgetts, Secretary Ontario Fruit Growers' Association, Toronto, Ont.: "Without doubt the European war will lower the prices of our apples and we must be prepared to accept just enough to make living wages and fair returns on our investments, perhaps less. The crop over the entire continent is good and prices would have been lower than last year if the war had not occurred. With millions of people affected by the shutting down of factories, absence of soldiers and breadwinners at the front in all large countries except the United States, disturbed trade conditions, both here and abroad, the outlook is far from favorable. About three million barrels of our apples, besides millions of pounds of dried apples are sent yearly to Germany, Great Britain, Denmark, France, Holland and Belgium. The greater part of the trade will be lost, and the fruit must be consumed at home, adding a large volume to that usually marketed here. The only policy seems to be to sell as much as possible this fall at lower prices, then prepare to pack and store the balance awaiting more favorable conditions of trade later in the year. By all means, pick and pack only the best grades this year."

Senator E. D. Smith, Winona, Ont.: "I feel that the effect of the war will be very injurious on the prices of Canadian fruits. Fruit is more or less of a luxury and in times of financial stress people are sure to cut off luxuries first. Furthermore, the shipping of apples to the Old Country will be under less favorable conditions than usual, not only as to freight rates and insurance, but the consumptive power of the British people will be impaired by the war. The two kinds of fruit which I look to be affected seriously will be apples and grapes. We have no peaches of any consequence in the country to be affected. Our plum and pear crops are comparatively light, and will be sold at reasonable prices, though not nearly so high as they would bring under normal conditions."

A Prominent Government Official: "I hesitate to venture an opinion as to the effect the present European war will have on the demand and prices for Canadian apples and Canadian fruit generally, because there are many uncertain factors in the situation which may change rapidly in the course of a week or two. With shipping, freight rates and marine insurance rates in a state of flux and the exchange market demoralized it will likely be those who know the least about the actual situation who will be most ready at this time to offer a hard and fast prediction. In Great Britain the question of unemployment will have an important bearing on the demand for Canadian fruit. A great many large manufacturing industries in the Old Country, which depend absolutely on the export trade, will be closed for an indefinite period and the purchasing power of a large section of the public will therefore be considerably diminished. In another week or two it is probable that the question of uninterrupted shipping, freight rates and the financing of export shipments will be better determined and that a forecast can then be made with some degree of confidence."

Dominion Fruit Division: In its August report this division says: "With European countries in their present unsettled state, it would be imprudent to give any but the most indefinite prediction until some more

(Continued on page 235.)

# WANTED, APPLES

## AND BASKET FRUITS

**GEO. VIPOND & CO.**  
Montreal, Quebec

Branches: OTTAWA WINNIPEG REGINA

## BRUCE'S REGAL FLOWERING BULBS

We offer a complete assortment of Bulbs for Winter Flowering in the house and Spring Flowering in the garden—Planting time Oct. 1st to Nov. 15th.

PRICES AT HAMILTON	Each	Doz.	100
Crocus, in 4 Colors	\$.02	\$ .15	\$ .75
Freezias, Refracta Alba, large	.03	.25	1.50
Lillies, Calla, White, large	.20	1.80	
Lillies, Chinese Sacred, large	.10	.80	
Hyacinths, Roman, 4 Colors	.05	.50	3.75
Hyacinths, Dutch, 4 Colors	.06	.55	4.00
Narcissus, Paper White Grandiflora	.05	.30	2.00
Narcissus, Single, 6 varieties	.04	.30	1.75
Narcissus, Double, 4 varieties	.04	.30	2.00
Scilla Siberica	.03	.25	1.50
Snowdrops, Single	.02	.15	1.00
Tulips, Single, named, 6 colors	.04	.30	1.75
Tulips, Single, choice mixed	.03	.25	1.25
Tulips, Single, good mixed	.03	.20	1.00
Tulips, Double, named, 6 colors	.04	.35	2.00
Tulips, Double, choice mixed	.04	.30	1.50
Tulips, Double, good mixed	.03	.25	1.25

The TANGO Tulip, a beautiful Tango colored variety, with very sweet perfume, Doz. .35, 100 for \$2.50. Where Bulbs are to be mailed (parcel post) add one-fifth to amount of order for postage—where there are Express Offices, Express is cheaper than mail on all orders amounting to \$2.50 and over.

FREE—Write for our 28 page Illustrated Catalogue of Bulbs, Plants, Seeds, Poultry Supplies, Etc. This offer subject to the contingencies of war.



SINGLE NARCISSUS

**JOHN A. BRUCE & CO., LIMITED**  
SEED MERCHANTS Established 1850 HAMILTON, ONT.



## First Sales of Ontario Pre-cooled Fruit

J. A. Ruddick, Dominion Cold Storage Commissioner, Ottawa, Ont.

THE first carload of pre-cooled fruit to be shipped from the Grimsby Cold Storage, was a carload of Montmorency cherries, purchased by the Department of Agriculture from the growers at thirty-seven and a half cents per six quart basket, delivered at the cold storage. After cooling, the cherries were loaded in a refrigerator car and consigned to the Scott Fruit Company, of Winnipeg. The car left Grimsby on the evening of Thursday, July 16th and was opened in Winnipeg on Wednesday, July 22nd. The account sales were as follows:

### ACCOUNT SALES:

Pkgs. Rec.	Description Car 340, 232	Total
No. Sold		
2277 Baskets cherries, sold for	..... cts.	\$1,366.20
10 Raspberries	.....\$1.25	12.50
		\$1,378.70
Freight	.....	\$148.00
Commission	.....	275.74
		423.74
	Net proceeds	.....\$ 954.96

Other sour cherries were selling in Winnipeg on the same day (July 22nd) at 38 cents. The car was accompanied as far as Winnipeg by Mr. Edwin Smith, who is in charge at Grimsby and both his report and the report of the Scott Fruit Company

state that the cherries were in perfect condition.

A little calculation will show that the net proceeds of this car was nearly one hundred dollars in excess of the price paid the growers. The commission of twenty per cent. for handling seems altogether too high. I do not see why a commission agent should receive nearly twice as much for disposing of a car of fruit as the railway company receives for hauling it nearly fourteen hundred miles.

A second carload of cherries, which was put through the warehouse and pre-cooled

Winnipeg, July 24, 1914

for E. J. Woolverton & Sons, was sold in Montreal on Monday, July 27th. These cherries were picked at different times during the ten days preceding shipment, and they were placed in the cooling room the day they were picked. Some of them had

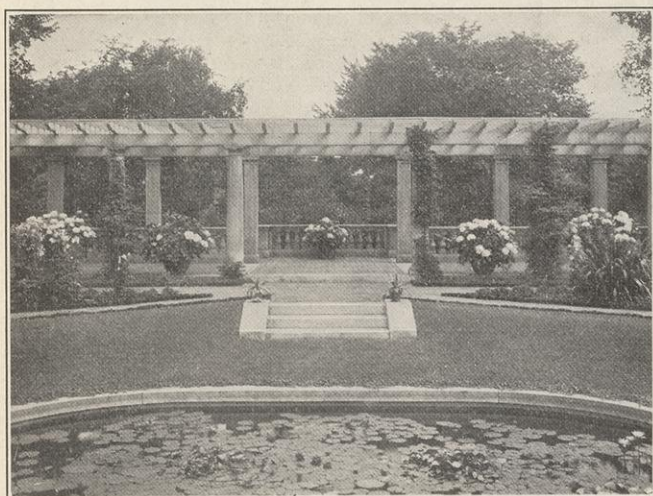
been in storage for over a week when the car was lifted on Friday, the 24th. The Montmorencys in this lot sold as high as forty-five cents and Windsors as high as seventy-five cents per 6-quart basket. The fruit inspectors report that the cherries arrived in Montreal ex-refrigerator car in good condition. Messrs. Woolverton's object in this shipment was to extend the season a week or ten days and thus avoid the glut which prevailed at the time of picking. They seem to have succeeded in their object.

### Demonstration Orchards

The Fruit Branch of the Ontario Department of Agriculture has secured long term leases on three orchards in Prince Edward, Ontario and Brant Counties, respectively, which are to be used for demonstration purposes. Hitherto demonstrations have been conducted only once in the same orchards. It is realized that very little of value can be gathered from experiments conducted only once. It has been decided, therefore, that by getting orchards in several localities and treating each orchard the same for six or seven years, it will be possible to find out something of value to the apple growers of Ontario. Some orchardists have had good results with one spray material, others prefer something else. Some growers prefer Bordeaux mixture and Paris green, and say they cannot grow apples with any other mixture. The Department has not been in a position to say that they would have done better by applying some other material.

It is the intention of the Department to have about half of each orchard in sod and to compare the apples grown on it with those grown on cultivated ground. The

## Have Your Grounds Been Satisfactory This Season?



It is during these months that you become best acquainted with your grounds. You realize where improvements might be made and promise yourself that next year things will be different.

Do you know that the time to make your improvements is during the next few weeks? You have this season's experience keenly in mind and know what should be done.

Have you thought of having professional advice to show you how to accomplish the most satisfactory result? Remember that when your grounds are once laid out to a well studied plan, prepared by one who has had a thorough training and wide experience in Landscape improvement, your expenditure is closed and with the growth of your shrubs and trees your place becomes more beautiful each year. We place such training at your service and for a moderate cost you may have plans prepared providing for building location, design and specifications for walks and drives, drainage, orchard plantings, gardens, in fact we handle your entire estate through to completion.

Write at once acquainting us with your problems and we will be pleased to advise you as to the best procedure.

Address

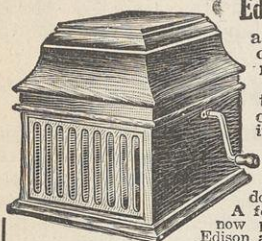
**E. D. SMITH & SON, LIMITED**  
WINONA (Landscape Department) ONTARIO



**WE ARE NOW BOOKING ORDERS**

For Fall Planting, which is the best time to plant. My apple trees are grown from French Crab Seed, which is the hardiest and best for Orchard Planting; also a long list of leading varieties of Fruits and Ornamentals.

**FRUITLAND NURSERIES - FRUITLAND, ONT.**  
G. M. HILL, Prop.

**The New Style****Edison Phonograph**

and your choice of over 1500 records now shipped direct to you for a full free trial right in your own home. Yes, try it out right in your own home. Entertain your family and friends. Send it back at our expense if you don't want to keep it.

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**PAEONIES**

Among the best of the newer varieties, are

"M. Leonie Calot"

"Marguerite Gerard"

"Monsieur Jules Elli"

and

"Albert Crousse"

"Festiva Maxima" is still among the best, and we have a large stock of it.

In "Phlox" we have a number of the best and newest varieties.

"Japanese and German Iris," Perennials in variety.

Send for List

**CAMPBELL BROS. - SIMCOE**

orchards are divided into about four parts. In the first part, commercial lime and sulphur with arsenate of lead will be used. In the second part soluble sulphur with arsenate of lead. In the third part Bordeaux mixture and Paris green, and in the fourth part one spray of commercial sulphur, second spray of Bordeaux mixture, and a third spray of commercial sulphur.

This will be done to find out if Bordeaux mixture for a second spray will control fungus better than three sprayings with lime sulphur. One row of each part had a fourth spraying, several rows had arsenate of lead powder (instead of paste) used to see if it is as good, as it is much easier mixed. One orchard had barn manure put on part of it to see what advantage it has over commercial fertilizer.

The three demonstration orchards are as follows: One in Prince Edward County, at Wellington, the property of H. B. Collins and son, of two hundred acres. One in Ontario County at Whitby, the property of Mrs. J. J. Fothergill, containing two hundred and eleven trees. This was leased last year, and the work will be a continuation of that which was commenced then.

The third orchard is that of G. A. Parkhill, at Paris, in Brant County, containing eight acres of orchard.

**Items of Interest**

Prof. T. D. Jarvis, B.S.A., for some years past Associate Professor of Entomology at the Ontario Agricultural College, has resigned his position to take up active farming operations on his property in the Grimsby district. His resignation has resulted in a rearrangement of the work of the Department and general promotions. L. Caesar is promoted from the position of lecturer to that of associate professor, and A. W. Baker, who has been demonstrator, is made lecturer in fungus diseases and insects. G. J. Spencer, a graduate of the 1914 class, who has taken a special interest in entomological work, has been appointed demonstrator in succession to Mr. Baker. These appointments went into effect on the first of July.

At the annual conference of the Ministers of Agriculture in the Australian states, opened at Brisbane during the summer, it was resolved that "what is known as the Canadian standard fruit case be included in the list of Australian fruit cases already accepted by the authorities.—i.e., that fruit imported from Canada, packed in standard cases, could be sold in Australia without re-packing. Should the New South Wales Government decide to give effect to the resolution passed by the conference, in time for the Canadian export season of 1914, cabled advices will be forwarded to the Department of Trade and Commerce, Ottawa, from which Canadian shippers will be advised.

About fifty prominent fruit growers of the Grimsby District in Ontario met recently, and decided to appeal to the Railway Commission in reference to the poor service that has been given the fruit growers of that district this year by the Canadian Express Company. It is claimed that the delay in shipments through to Montreal has cost thousands of dollars. Growers who shipped to Vipond & Company, of Montreal, claim that the delay and the way the shipments were handled, resulted in a ten thousand dollar loss in two days.

Reports which are coming in from the English fruit growing districts tend to indicate that this season's apple crop will be a short one. Frost has been the main setback, but drought and insect pests have also been harmful.

**Beautify and Protect Your Property**

Peerless Ornamental Fencing accomplishes two great purposes. It beautifies your premises by giving them that symmetrical, pleasing, orderly appearance, and it protects them by furnishing rigid, effective resistance against marauding animals, etc.

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is made of strong, stiff, galvanized wire that will not sag. In addition to galvanizing, every strand is given a coating of zinc enamel paint, thus forming the best possible insurance against rust. Peerless ornamental fence is made in several styles. It's easy to erect and holds its shape for years.

Send for free catalog. If interested, ask about our farm and poultry fencing. Agents nearly everywhere. Agents wanted in open territory.

**Banwell Hoxie Wire Fence Co., Ltd.**  
Winnipeg, Man.—Hamilton, Ont.

Black  
White  
Tan

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**2 IN 1**  
**SHOE POLISHES**

In our new  
"Easy-Opening-Box."  
No trouble. No muss.

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BUFFALO, N. Y. HAMILTON, ONT.

**ALPHANO HUMUS****An ODORLESS Plant Food of Exceptional Merit**

We have not the space to tell all that "Alphano Humus" will do for your Lawn and Garden, but if you are interested in Lawns, Gardens, Bowling Greens, Golf Links, Etc., we want "CONVINCEMENT BOOK" which tells you why you to send for our "Alphano Humus" is Better and Cheaper than Chemical Fertilizers and Animal Manures, and gives Useful Information for Gardeners.

It is Odorless, Sanitary and Holds 14 Times its own Weight in Moisture.

PRICE—\$2.00 per 100 lbs., Freight Paid. TERMS—Cash with Order

**THE GARDEN & ORCHARD SUPPLY CO.,** 637 King St. East **HAMILTON, ONT.**

SEND FOR YOUR SAMPLE AND BOOKLETS TO-DAY



## The War and Fruit Prices

(Continued from page 232.)

decisive developments take place. Under these circumstances, the wisest attitude for fruit growers to adopt is to wait until the crop is ready to handle, to harvest and pack it, and if at that time the facilities for marketing abroad are inadequate, and the demand at home is not sufficiently keen to keep prices at a satisfactory level, then the only logical alternative will be to hold what

remains of the crop in storage for later distribution, and hope for the best."

Robert Thompson: Manager, St. Catharines Cold Storage and Forwarding Co., St. Catharines, Ont.: "I fear that the war situation is likely to have a depressing effect upon the sale of fruits in general in our local markets, and especially in apples for export. The higher prices likely to prevail for good products may create more of a home demand for our fruits and vegetables, especially if they are lower in price."

## Effect of the War on the Bulb and Seed Trade

The war situation has led many to wonder what the effect is likely to be on next year's supply of bulbs and seeds, as large quantities are imported annually from Germany, France, Belgium, Denmark, Holland and England. In an effort to gain information on this point The Canadian Horticulturist recently wrote to a number of the leading seed firms and florists. Their replies indicate that there is likely to be a sufficient supply of bulbs, but that the seed trade may be considerably affected. The letters received from these firms follow:

J. A. Simmers, Limited, Toronto, Ont.— "It is too early to give an intelligent reply but we anticipate that we are going to be able to supply most of the European stock of bulbs that we usually list this fall. We consider that it is entirely too early to make an estimate of the outlook on seeds."

Steele, Briggs Seed Co., Toronto, Ont.: "We believe that we shall have sufficient bulbs this fall to cover all orders, with the exception of, possibly, *Spraea*, which, of course, matures very much later than other stocks. Owing to the war conditions we cannot give any definite information regarding them. As regards the balance of bulbs such as tulips, hyacinths, narcissus,

crocus, etc., we have already received advice that they have been shipped and should reach New York during this week. At this writing it is impossible to give any information regarding seeds, as no one can say what percentage of the German crop will be harvested and ready for the market."

Carters Tested Seeds, Inc., Toronto, Ont.: "Last week we received news from our parent house in England which indicated that we should not obtain very much of our stock of bulbs. The major portion of these, of course, come from Holland, and although this is one of the very few countries not at war, their troops are mobilized and their ports are practically closed, and all business is at a standstill. Later news has been more favorable, and it would seem that after all, shipments are being made, and present indications point to there being very little shortage of Dutch bulbs. We are not yet in a position to give any definite information regarding French bulbs. The outlook is dark regarding them, but we hope and feel that eventually matters will work out as satisfactorily with them, as with the Dutch bulbs. It must be remembered that customary freight rates across the Atlantic are suspended,

and we now have to pay in some cases, double this, and a partial shortage should mean a slight tendency to enhancement in prices, which we suspect will be largely modified by the present stringent conditions here, there being indications that the demand for bulbs this fall in Canada will not be so brisk as in former seasons."

W. W. Gammage, London, Ont.: "As this is a wholly new experience it is but a conjecture what or when the termination may be. So far as the bulb situation is concerned there seems to be some prospects of shipments coming through although this is as uncertain as are the dates of delivery. Azalias and other plant stocks are quite uncertain. American agents for European concerns can give no information. Their opinion is that there will be no shipments this fall. What the effect will be is problematical. It may be a blessing in disguise. The public have been educated to buy this class of stock but at a margin of profit to the grower that is not commensurate with the risk. There is little anticipation of a falling off in demand. Crops are good—and with the cutting off of supplies from Germany and other European countries, new industries will spring up that will create a wave of prosperity which will be shared in by those who are prepared."

Kenneth McDonald & Sons, Limited, Ottawa, Ont.: "It is our impression that while numerous delays in transit will surely occur, still there is a likelihood that a sufficient proportion of Dutch and French bulbs will reach this side of the water to satisfy early orders. After our first supplies are exhausted, however, we would not venture sending repeat orders depending upon the goods reaching us in time for planting. The larger portion of our French bulbs have, we understand, just reached New York, while the bulk of our Dutch grown bulbs have left Holland. Regarding seeds, just a few varieties which can

## OTTAWA, CANADA SEPTEMBER 11th to 19th CENTRAL CANADA FAIR

Entries Close Sept. 4th, 1914

Special Excursion Rates on all Railways and Steamboats

New  
**\$50,000.00**  
Horticulture  
and  
Agriculture  
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CANADA'S GREATEST EAST-  
ERN FALL LIVE STOCK AND  
POULTRY SHOW

New \$75,000.00 General  
Purpose and  
Machinery Hall

Two Big Main Building  
**2,500 EXHIBITS**  
OF PRIZE CATTLE  
(Freight Paid upon all Live Stock Exhibits)

Daily Butter Making Demonstrations

A Mid-way of Fifty of the Finest and  
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Grand Stand Performance  
Every Afternoon and Evening

UNPRECEDENTED NIGHT FIREWORKS

Spectacular Nero and the  
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A presentation involving the introduction  
of a fully One Thousand Persons.

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Sec. and Man.  
Central Canada Fair  
Offices: 26 Sparks Street  
OTTAWA, Ont.

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### The "Daisy" Folding Apple-Sorting Table



This is another of the famous "Daisy" Apple Packer's Outfits which is being put on the market this season.

It is light yet strongly built to meet rough usage. It folds compactly and can be readily carried from place to place in the orchard. It is thoroughly tested for strength and efficiency.

The table frame is of oak and all metal parts are of first-class malleable, thus being interchangeable in case of breakage. The cover is of No. 10 canvas.

An Article Every Packer Should Have This Season

If interested write for circular and prices

**J. J. ROBLIN & SON**

Manufacturers — BRIGHTON, Ont.

Special Quotations to Cooperative Societies



## Choicest Bulbs Grown in Holland

### Imported for YOU

**W**E import the finest bulbs grown—  
sound, large, and full of vitality.

**Hyacinths—Tulips—Narcissus—Crocus**

The bulbs come from Holland's  
quality bulb fields, and are offered at  
prices usually paid for ordinary stock.  
Don't buy elsewhere until you've  
heard our story. Send for Catalog now.

**Wm. RENNIE CO. Limited, TORONTO.**  
Also at Montreal, Winnipeg, Vancouver.

From  
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**Bulbs**  
to Your  
Garden



## SMALL FRUIT PLANTS

Gooseberries, Josselyn! Josselyn!! Red Jacket, Downing, Pearl,  
Houghton.—Currants, Perfection! Perfection!! Ruby, Cherry, White  
Grape, Lee's Prolific, Champion, Black Naples, Black Victoria, Bos-  
coop.—Raspberries, Herbert! Herbert!! Herbert!!! Cuthbert, Marlboro,  
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**For Fighting Every Disease of Cultivated Plants**

**Knapsack, Pack Saddle or Horse Drawn  
Power Sprayers**

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**VERMOREL** Manufacturer,  
(Rhône), FRANCE **VILLEFRANCHE**



be harvested early have reached us, and we feel that many sorts which are produced in Germany and France will not be harvested. This will prove disastrous to the seed trade throughout the world. Seedsmen everywhere depend largely upon France for its supplies of such seeds as carrot, beet, celery, mangel, etc., and upon Germany for fine varieties of stocks, asters, pansies and other flowers. Great Britain also produces annually immense quantities of various seeds and we expect they will be harvested as usual, but it will be impossible for Britain to supply sufficient quantities to make up for the shortages of these other countries. This will result in higher prices ruling generally."

Morgan's Supply House, London, Ont.: "We have had information which assures us that our supply of bulbs from Holland, with very little doubt, will be here at the usual time. We think that in all probability Canada will be supplied as usual, with these goods."

Wm. Rennie Co., Limited, Toronto, Ont.: "Owing to the European war it is possible that certain varieties of high class flower seeds will be somewhat difficult to obtain, and particularly so as many of these special seeds lose their vitality in a year, and any stocks that may be carried over would scarcely be saleable. This refers to certain varieties produced in Germany and France. As far as our own position is concerned, we are large growers of home product seeds, and with a fair harvest, will be in moderately good shape for the coming season's trade. Some varieties, of course, will be sure to be short and unobtainable from the scenes of trouble, but from general reports, we reasonably expect that there will be sufficient seed of satisfactory varieties of both field and garden seeds to supply the demands for the coming season at least."

## APPLE BOXES

The package that commands the highest prices.  
Let us quote you prices  
on your Box requirements, made up or knocked down.

No charge for printing.

**BARCHARD & CO.**

PIONEER BOX FACTORY Limited

135-151 DUKE ST. - TORONTO, ONT.

## WHITE DUPLEX FRUIT WRAPPER

This wrapper is a product of many years of experimenting by the larger fruit packers. It protects, as no other wrapper can, the individual fruit from spread of any decay which may accidentally get into the box. The thinner tissue wrappers cannot give the protection from bruising, given by the thicker substance of our Duplex.

**9 x 9      10 x 10      12 x 12**

**Corrugated, Pulp and Lace Barrel  
Heads. Corrugated, Lace and Wax  
Paper for Boxes. Tissue Fruit Wraps.**

*Samples and prices upon request*

**J. H. GAIN**

124 RICHMOND ST. W. - TORONTO, ONT.



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We have the only public Cold Storage Plant in Toronto that has railway facilities (both G. T. R. and C. P. R.), and you can store your apples here with the minimum of handling. By employing our facilities you are saved the expense of carting to and from cold storage plant. Every extra hand-

ling, as you know, is bad for the apples. We have a strictly modern plant. Low insurance rates. Splendid facilities for quick handling. Write for rates and reserve space early, as there is certain to be a big demand for storage space this fall.

## Public Cold Storage & Warehouse Co.

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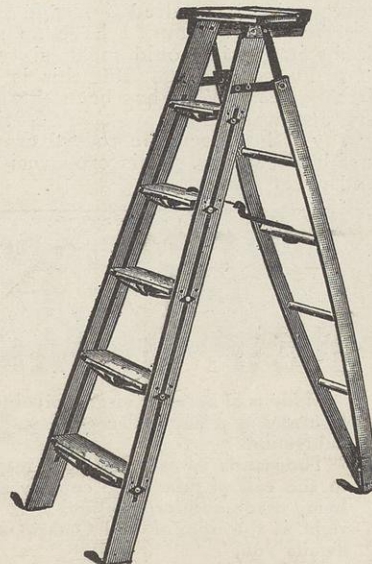
## Buy Your Ladders Now

Almost before you realize it, the busy fruit picking season will be here. Have you got the new ladders you will need? Get them **NOW** before the rush starts.

### Fruit Picking Ladders

#### A SPECIALTY

We Make Ladders  
of All Sizes  
and  
For ALL Purposes



### Co-operative Associations!

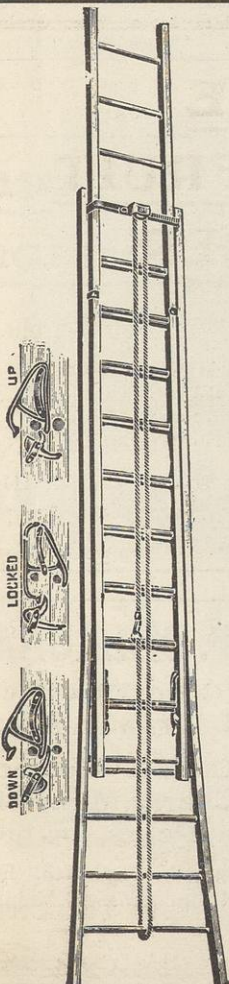
We  
Especially Invite  
Correspondence  
From Secretaries  
of  
Associations

We are prepared to quote attractive prices on large orders

Catalogue "E" is yours for the asking

## THE STRATFORD MFG. CO. LIMITED

STRATFORD, ONTARIO





**GINSENG**

Now is the time to order nursery stock for Fall planting. Our roots and seeds are grown from wild ones found in Elgin County, Ont. Prices right. If interested write for price list and other information.

**W. WALKER - PORT BURWELL, ONT.**

**GINSENG**

True Canadian Nursery Stock for Fall Planting. 1,000 Stratified Seeds \$3.00. 1,000 one year old roots \$20.00. 1,000 two year old roots \$40.00. Write us for full particulars.

**I. E. YORK & CO. - WATERFORD, ONT.**

**Canadian Ginseng**

Pure Canadian Ginseng stock for sale. Order early for October planting. Booklet free.

**HURONIA GINSENG GARDEN  
BOX 341 BLYTH, ONT.**

**LANARK GINSENG**

Fortune awaits any man who will give time and attention to the growing of Ginseng. We have made a complete success of it and are ready to point the way to others. The time to prepare the ground is now, the time to plant is September and October.

Lanark Ginseng Seed is noted for its strong germinating qualities.

Lanark Ginseng Roots are sure growers and great producers.

Don't fail to make investigation of this highly profitable industry. Write to the Secretary and he will tell you all about it.

Address **C. M. FORBES**  
Sec. Lanark Ginseng Garden Co.  
LANARK, ONT.

**FRUIT MACHINERY CO.**

INGERSOLL, ONT.

**Manufacturers of Fruit Sprayers**

and a complete line of

**Apple Evaporating Machinery**

Our complete **POWER SYSTEMS** for evaporating, when installed by our experienced millwrights are the most practical, sanitary and labor saving to be found anywhere. Our prices and terms always reasonable.

Write for Illustrated Catalogue

**BULBS**

Now is your chance to get your Fall Bulbs  
**At ROCK BOTTOM PRICES**

We represent in Canada one of the largest Wholesale Bulb and Plant Growers of Holland and we are going to sell at retail better Bulbs at less than you have paid before for inferior kinds.

Send us your List and we will quote you, as we have no Retail Catalog and you do not help pay for one.

NO ORDER TOO LARGE - NO ORDER TOO SMALL

**THE GARDEN & ORCHARD SUPPLY CO.**

637 King Street East, HAMILTON, ONT.

Phone 3514

**Standard Packages for Fruit**

ONE of the important subjects that will be discussed at the Dominion Fruit Conference to be held in Grimsby, Ont., early in September, will be the adoption of standard sizes for fruit packages other than the apple box although it too will probably be considered, as the Pacific Coast standard box had many admirers in British Columbia. This being the case, the following report by Dominion Trade Commissioner D. H. Ross, of Melbourne, to the Department of Trade and Commerce, Ottawa, on the Commonwealth regulations in respect to fruit, should be of interest:

Under the Commonwealth Commerce (Trade Descriptions) Act and regulations, the sizes of fruit cases, either for import or export, are not questioned. If, however, the cases are marked 'one bushel' it is stipulated that the contents shall be of a capacity equal to that of the Imperial bushel. The fruit must be correctly described and should the contents be marked on the case it is imperative that the quantity shall be correct. The Commonwealth Quarantine Act applies to all imported fruit, and prohibits the importation of fruit from certain places on account of the existence of fruit pests or diseases.

**Montreal**

**E. H. Wartman, Fruit Inspector, Montreal**

We are receiving large quantities of apples from all directions: Delaware and New York State in bushel baskets, and Ontario in barrels, boxes and eleven-quart baskets. For anything but fine quality prices are very low, about one hundred per cent less than last year at this date. This should be the year that number three apples would be better absent from our markets. There is a better use for them, apple chop or animal feed in moderation.

Although this is August 18th, about six hundred baskets of cherries arrived, and quantities of gooseberries and currants. As these fruits come in by the middle of June it has been a long season.

One of our big fruit firms here claim to have sold one hundred thousand baskets of cherries this season. I have no reason to doubt it. This would mean sixty-six cars of ordinary loading. But this is only one firm's sales. What has been the grand aggregate, who knows. I think I might safely say it has been the record crop for the last half century. This crop was predicted and never failed.

**FREE LAND  
FOR THE SETTLER IN  
NEW ONTARIO**

Millions of acres of virgin soil obtainable free and at a nominal cost are calling for cultivation.

Thousands of farmers have responded to the call of this fertile country and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you.

For full information as to terms, regulations, and settlers rates, write to

**H. A. MACDONELL**

Director of Colonization

Parliament Buildings., TORONTO

**HON. JAS. S. DUFF**

Minister of Agriculture

Parliament Bldgs., Toronto

**FOR SALE AND WANTED**

**ALL KINDS OF FARMS**—Fruit farms a specialty  
—W. B. Calder, Grimsby.

**NIAGARA DISTRICT FRUIT FARMS**—Before buying it will pay you to consult me. I make a specialty of fruit and grain farms.—Melvin Gayman & Co., St. Catharines.

**ASK DAWSON.** He knows.

**IF YOU WANT** to sell a farm consult me.

**IF YOU WANT** to buy a farm consult me.

**I HAVE** some of the best Fruit, Stock, Grain and Dairy Farms on my list at right prices.

H. W. Dawson, Ninety Colborne St. Toronto.

**GOLDEN AND THREE-BANDED ITALIAN** AND Carniolan Queens, ready to ship after April 1st. Tested, \$1.00; 3 to 6, 95c each; 6 to 12 or more, 90c each. Untested, 75c each; 3 to 6, 70c each; 6 or more, 65c. Bees, per lb., \$1.50. Nuclei, per frame, \$1.50. — C. B. Bankston, Buffalo, Leon Co., Texas, U.S.A.

**FOR SALE**—By return mail. Root and Moor strain select tested Italian Queens, \$1.00 each, untested 75c; breeders \$2.00; grades 50c., no disease.—Wilmer Clarke, Box 200, Earlville, Mad. Co., N.Y., U.S.A.

**FOR SALE**—25,000 lbs. white honey. Will sell to the highest offer.—Jos. Martineau, Montceuf, Que.

**WANTED**—Situation in greenhouse by man with some experience, reliable worker, good references, disengaged end of September.—D. Box 114, Listowel, Ont.

**WANTED**—Clean, bright beeswax and fancy comb honey.—R. N. Smeall, 95 4th Ave., Viauville, Montreal, Que.

**FOR SALE**—30 empty hives with frames; some are Richardson, nearly new, no disease. Reason for selling—am using the Langstroth. Price for the lot, \$15.00. First money order gets them.—Lawrence Stone, Erie Beach, Ont.

**FOR SALE**—35 Colonies of Black Bees free from disease in up-to-date hives. Wm. Graham, Box 34, Monklands P.O., Ont.

**FOR SALE**—100 hives of bees. J. D. Evans, Islington, Ont.

**Apple Growers  
and Evaporators**

It certainly pays to Grade Your Apples. One of our APPLE GRADERS in your Orchard or the EVAPORATOR will pay for itself the first day. Write at once for illustration and price.

**The Brown Boggs Co., Ltd.**  
HAMILTON, ONT.

**Nurseries-F. DELAUNAY**

ANGERS - FRANCE

**SPECIALTIES** Fruit tree stocks as:

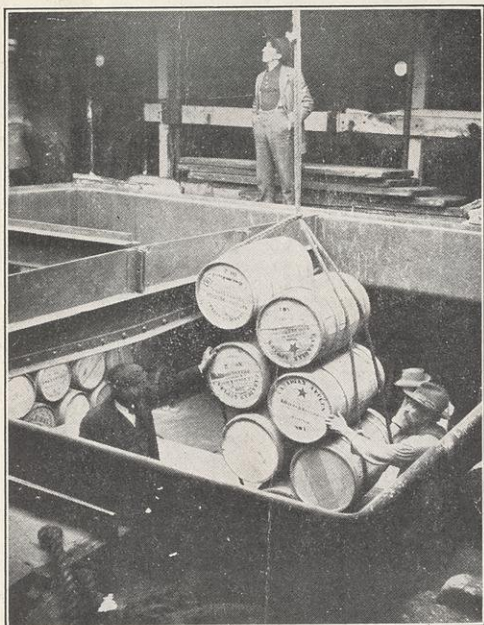
**Apple, Angers Quince,  
Mazzard Cherry Mahaleb  
Myrobalan, Pears, Etc. Etc.**

Forest tree seedling and transplanted. Evergreens, Ornamental Shrubs, Manetti, Multiflora  
Roses in great quantities.

My General Catalogue will be sent Free on application



# CHOICE APPLE BARREL STOCK



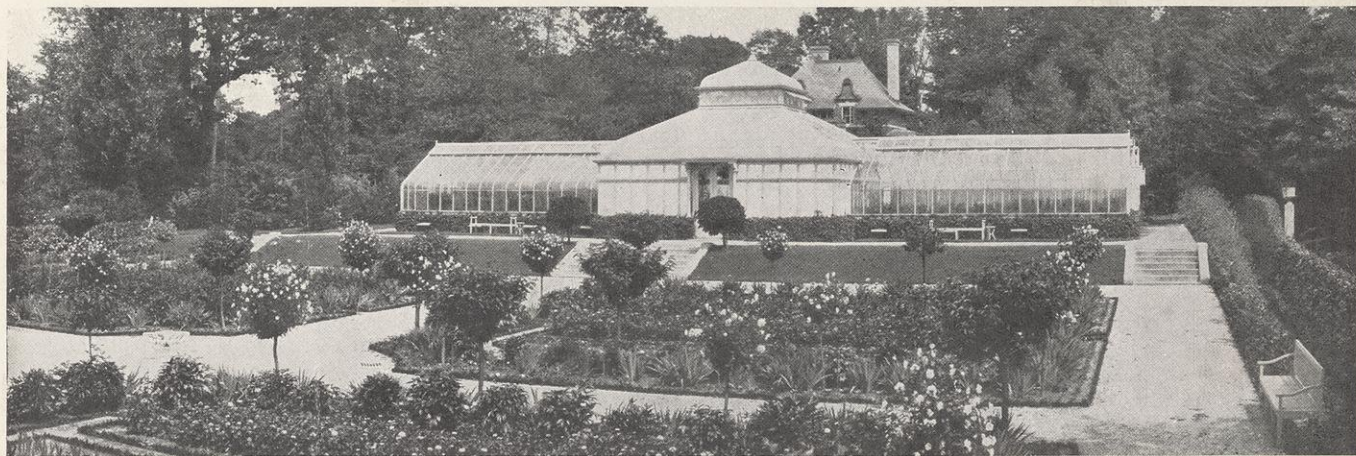
Staves, Hoops

Heading, Head Liners

Coopers' Nails

For Packers who are unable to get barrels made, we can arrange to furnish them with Apple Barrels at lowest prices for first-class Barrels.

**THE SUTHERLAND-INNES CO., LTD.**  
CHATHAM - - - - - ONTARIO



## A Practical Greenhouse Grouping

**W**HEN it comes to a thoroughly practical group of glass enclosed garden plots for growing a rather extensive range of flowers, vegetables and fruit—a layout like this one is worth careful consideration. Its ornamental show house is a pleasing central feature—the wing houses give a

balance, while the parallel houses adjoining it at the back all form a group that for practicalness is hard to beat. Being constructed with the U-Bar, as our houses are, none can match them for superior

**U-BAR GREENHOUSES**  
**PIERSON U-BAR CO**

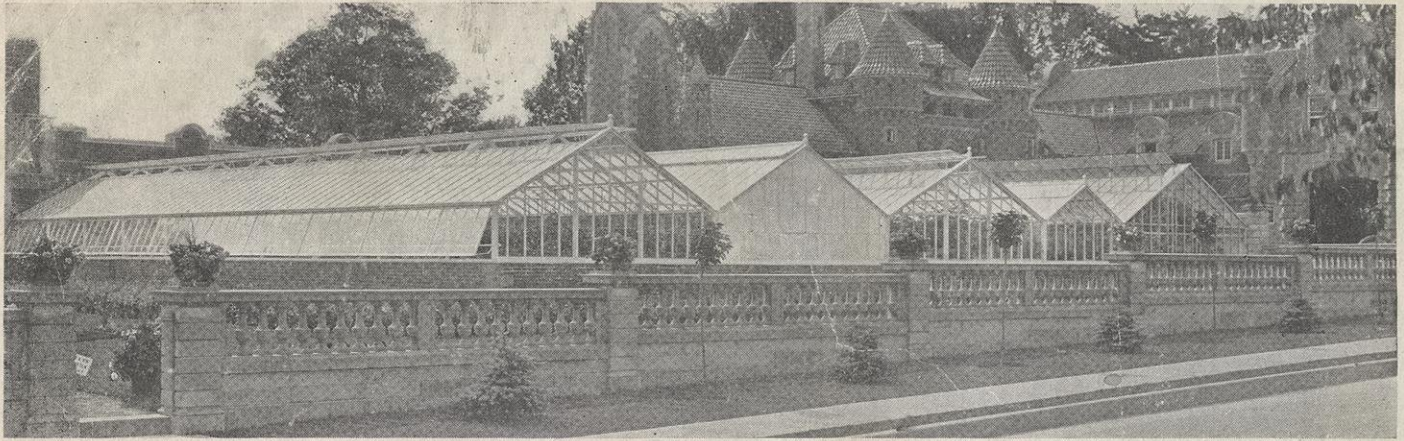
ONE MADISON AVE. NEW YORK  
CANADIAN OFFICE, 10 PHILLIPS PLACE, MONTREAL

growing conditions or surpass them in endurance.

Before you decide to put your money into a greenhouse fortify yourself against after regrets, by reading the second page of our new catalog entitled "U-Bar Excelling Points."

Send for this catalog. Or send for us. Or both.





General View of Range with Stables in background

## The Sir Henry Pellatt Greenhouses at Toronto

The five houses this way were erected by us on the foundations of former houses that, because of their obsolete construction, were neither pleasing in appearance or satisfactory as a glass garden.

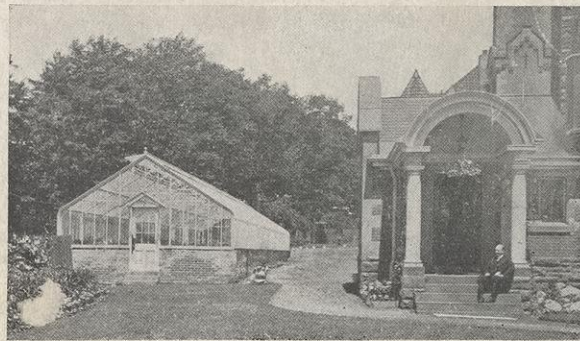
The present houses are each 90 feet long and have a complete steel frame. The gutters are cast iron. The least possible wood is used, and that only the best of cypress. Everything about the houses plainly indicate their main intent of highest efficiency and greatest endurance.

The curved eave house shown below is of more recent construction; one that because of its grace of lines, extreme lightness and the excellent growing

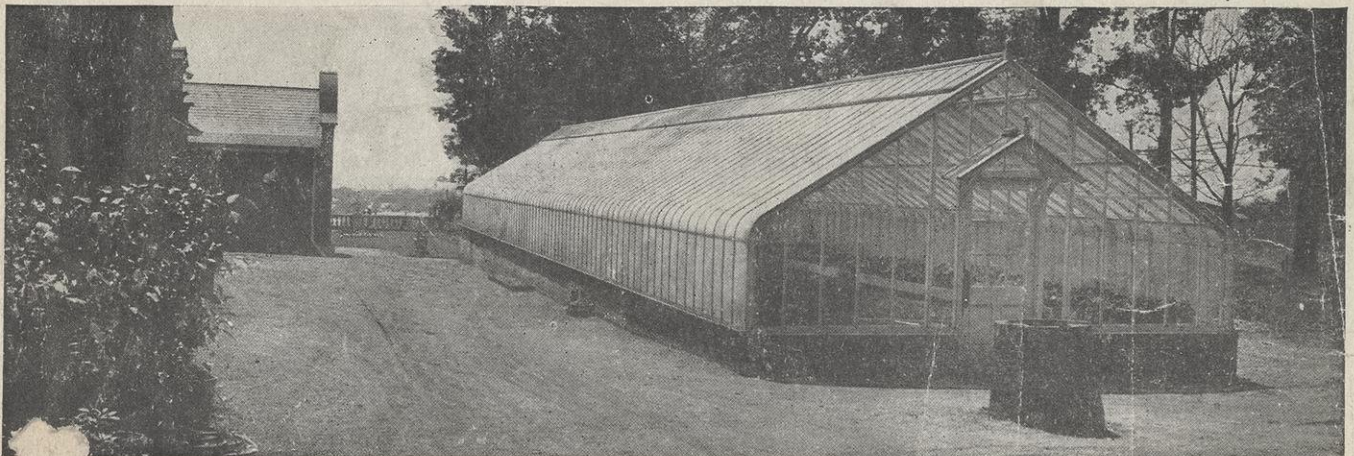
it makes possible, is fast finding the favor in Canada that it has long enjoyed in the States.

If you plan to attend the Canadian National Exhibition at Toronto in September, you will there have the opportunity of seeing one of our snug little curved eave houses, 18 x 25 ft., with an attractive workroom attached. A complete greenhouse it will be.

If you are thinking of possessing a greenhouse of your own there is no need to urge you to see this exhibition house, or ask you to send for our Two G's Booklet on Glass Gardens—A Peep into their Delights. But here is a suggestion—if that exhibition house appeals to you, we might sell it. C. M. Baldwin, of Toronto, bought the one shown last year.



Glimpse of the Curved Eave House looking toward Superintendent's Office



As it looks from opposite end. It is 20 feet wide x 100 feet long and divided in two compartments

# Lord & Burnham Co.

Ltd. of Canada

Greenhouse Designers and Manufacturers

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