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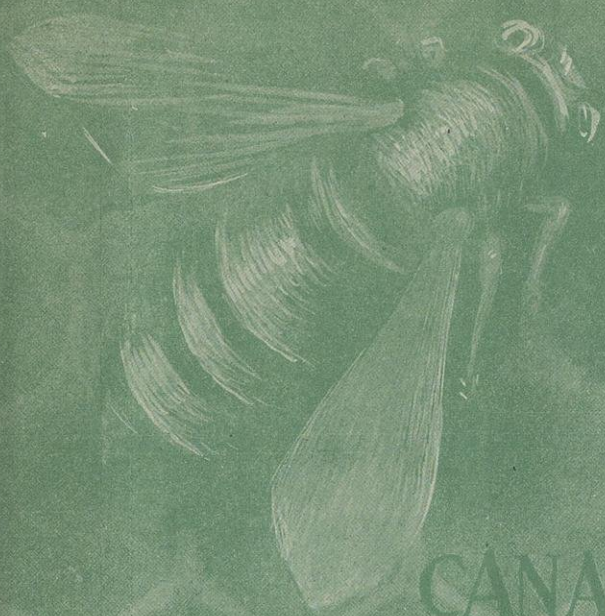
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# THE

CANADIAN HORTICULTURIST &

# BEEKEEPER

VOLUME 37. No. 10

\$1.00 a Year

PETERBORO, ONT.

OCTOBER, 1914





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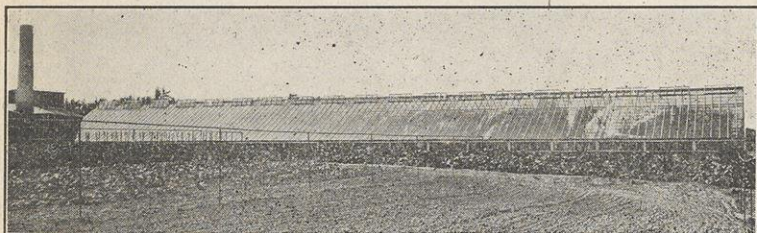


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Regular Edition

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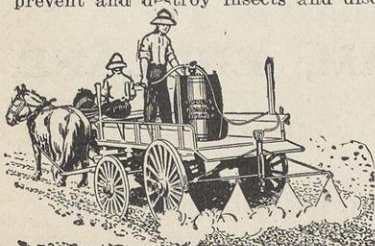
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# The Canadian Horticulturist

Vol. XXXVII

OCTOBER, 1914

No. 10

## Dominion Fruit Conference Resolutions

THE results of the Dominion Fruit Conference held in Grimsby, Ont., which is in the heart of the Niagara fruit district, on September 2 to 4, are largely summed up in the resolutions that were passed. Leading fruit growers were present from all the leading fruit growing provinces of Canada. Ontario, Nova Scotia, and British Columbia were particularly well represented. Delegates were present also from all the other provinces, including the three prairie provinces. The meetings were presided over by the recently appointed Dominion Fruit Commissioner, Mr. D. Johnson. Early in the proceedings the conference passed a resolution congratulating Hon. Martin Burrell upon having raised the fruit division to the status of a separate department and upon having selected Mr. Johnson to direct the activities of that department.

Elsewhere in this issue appears a general report of the proceedings of the conference. Separate reports are published also of some of the most important discussions. All the matters dealt with were fully and carefully considered. The more important resolutions adopted were as follow:

### PATRIOTIC RESOLUTION

"Resolved, That in this great struggle into which Great Britain has been forced, in order to preserve her national hon-

our, the ideals of freedom and democracy, and even her existence itself, that the fruit growers of Canada contribute liberally of their substance in order to support and strengthen the Empire."

### FRUIT INSPECTION

"That fruit districts in the different provinces shall be divided into sections.

"That a sufficient number of inspectors shall be appointed so that each inspector shall have a certain section under his charge so that he may be enabled to make at least weekly visits, and when instruction is required to either impart such instruction himself or, when time does not permit, that he be authorized to employ for such purpose and such time as may be required, a competent assistant.

"That in all cases when the pack is not consistent with the Fruit Marks Act, the offender, after receiving not more than one warning, or when it may be deemed advisable by the inspector to allow the offender to grade his fruit down, that on every occasion when the warning is not heeded the full penalty of the law be inflicted, and for every additional offence the fines be inflicted in accordance with the law.

"That all packers and shippers of fruit be compelled to register with the chief inspector of the division in which they reside.

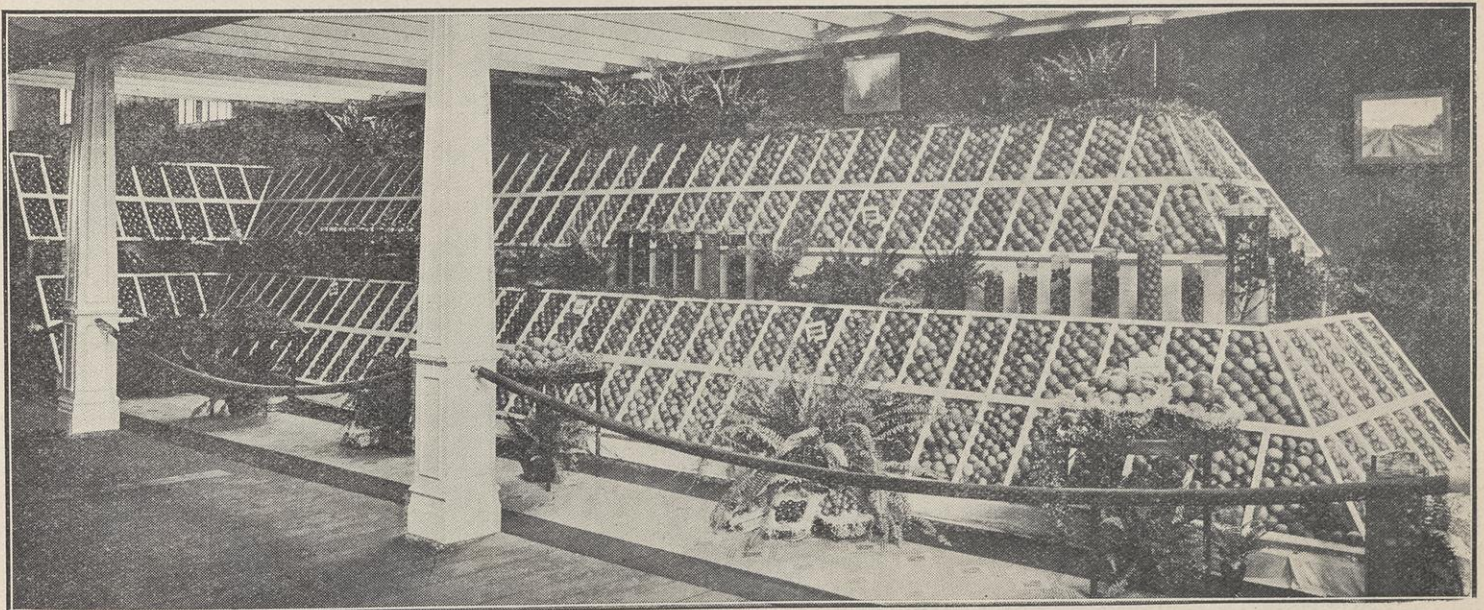
"Ever since the coming into force of

the Fruit Marks Act there has been a growing desire for some kind of report of the result of inspection which could be used as an assurance to the purchaser that the fruit in that shipment which had been inspected was up to the standard of the Fruit Marks Act. We recommend that as far as the plan can be worked out without injury to the work of inspection that such certificate of inspection be given to shippers requesting same; such certificate to be plainly stamped or printed in such a way as to indicate that it only applies to the packages inspected which may, if found desirable, be stamped 'inspected' on such parts of the packages as seem likely to best serve as an intimation that such packages have been inspected."

### STANDARD PACKAGES

"Be it resolved, That a full, dry pint berry box be considered a legal measure provided that in shape and form it shall not be made to deceive the public or imitate the four-fifth quart."

"Resolved, That all forms used in the manufacture of eleven and six quart baskets shall be inspected by an officer of the Fruit Branch appointed for that purpose, and when conforming with the requirements of the Inspection and Sale Act shall be stamped with a Government stamp: And further, that the Inspection and Sales Act shall be amended to make it a legal offence to manufacture from



One of the Striking Exhibits of Fruit Made at the Canadian National Exhibition in Toronto in September, was the One Here Shown.

Included in this exhibit were peaches, apples, plums, grapes and some wonderfully well preserved specimens of fruit that were shown in glass bottles. The exhibit showed something of the fruit possibilities of Ontario. It was arranged by the Fruit Branch of the Department of Agriculture.





**Mr. D. Johnson, Dominion Fruit Commissioner**

Mr. Johnson presided at all the sessions of the recent Fruit Conference at Grimsby, Ont. which is fully reported in this issue.

other than stamped forms on and after January 1st, 1915."

"That we would recommend that the Dominion Fruit Commissioner make inquiries with a view to selecting a standard box for domestic use."

#### EXPORT PACKAGES

"Whereas, certain countries require, either by law or custom, that fruit imported be contained in packages of a fixed size, thereby preventing our exporting in packages other than those they demand: Be it therefore resolved, That we respectfully ask our Government to legalize exporting in such packages as meet the requirements of the countries with whom we wish to trade."

#### PACKAGES FOR HOME USE

"Resolved, that we respectfully petition our Government that such legal requirements as to size or capacity of fruit packages for Canadian fruit shall apply equally and as rigidly to fruit imported into Canada."

Note.—This resolution does not apply to boxes or barrels.

#### MARKING OF IMPORTED FRUIT

"Resolved, That we endorse the following resolution passed by and forwarded by the British Columbia Fruit Growers' Association as follows: Whereas, the amendments to the Inspection and Sale Act recently passed require that all shipments of imported apples should be marked in accordance with the amendments of the Inspection and Sale Act, part 9, and that other marks inconsistent with the marks specified by the Act shall be erased: And whereas the designation

'C' is allowed by the Inspectors to be retained on boxes marked by the importers 'No. 2,' such apples subsequently being sold as 'C,' which is recognized as equivalent to 'choice.' Be it therefore resolved, That we respectfully request the Honourable the Federal Minister of Agriculture to take such steps as are necessary to have this mark, and all marks on imported fruit inconsistent with the provisions of the Act, removed by the importer at point of destination."

#### SHOULD FILL PACKAGES

"That all fruit packages, including berry boxes, shall be well and properly filled,, and in cases where there is evidence of under-filling inspectors shall have the right to weigh or measure fruit in such packages to find out if there is violation, and prosecutions shall follow at the discretion of the Department."

"That this conference respectfully asks the Government to consider the transportation conditions in Canada with a view to having the shipping difficulties with which fruit shippers have to contend removed."

#### CARGO INSPECTORS

"Inasmuch as a cargo inspector is appointed by the Government, and he apparently has no duties outlined and is practically without authority we would recommend that legislation be enacted giving him authority to protect the unloading, transfer, and packing of our fruit at all terminal points."

#### FOREIGN MARKETS

"That the Department of Agriculture should take the necessary steps to keep Canadian growers in closer touch with the importers of fruit, if necessary by the appointment of special commissioners in Great Britain, Europe, South America, Australia, and South Africa; and that the Department should set aside a sum of money for trial shipments on a commercial scale for the development of additional markets."

#### THE LATE ALEXANDER McNEILL

"Resolved, That this fourth Dominion Conference desires to express its appreciation of the admirable services rendered the fruit growers of Canada by the late Alexander McNeill, chief of the Fruit Division of the Dominion Department of Agriculture, whose unselfish, untiring and capable administration of his office it is desired to record.

"Among other important matters relating to the fruit industry, Mr. McNeill strongly and continuously advocated cooperation among fruit growers in Canada, and did much, both in his addresses and by his reports and bulletins, to bring before Canadians the great advantage of cooperative methods; and it is particularly desired in this resolution to emphasize this phase of his work and

the service he rendered for so many years.

"Owing to Mr. McNeill's attractive personality, his unselfishness, his geniality, and his unbounded enthusiasm for horticulture, he made many friends; and his death late last year has been a great loss to those who knew, admired and loved him; and as most of the members of this conference knew him well, it is hereby resolved that they record in the minutes of this conference the deep sense of their loss.

"It is further desired and resolved that a copy of this resolution be forwarded to Mr. McNeill's daughters, that they may know that though their father is no longer with us he is not forgotten by his many friends."

Several other somewhat formal resolutions were passed. These included one thanking those who assisted in arranging a motor trip given the delegates to St. Catharines and Niagara Falls; thanking the speakers, and thanking the Government for having arranged the conference.

### The Exhibition of Fruits

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

The handling, packing and transportation of fruit intended for exhibition purposes should be carefully supervised. Fruits at their best are mature or nearly so and in this condition are very easily damaged, or decay may quickly set in. As little handling as possible should be given in order to avoid bruises. In picking secure plenty of the desired type of fruit which should be immediately taken to some place under cover, where a more careful selection can be made. The specimens so selected should be carefully wrapped and packed away until required for the exhibition. This will lessen the amount of decay that is apt to occur.

The exhibition of fruits is exceedingly interesting and fascinating, so much so that one can scarcely refrain from taking part when once enthused, and the returns are not so much in money as in the pleasure and training obtained. A knowledge of varieties is a splendid thing to have, and few have it for any considerable number of varieties, largely because of lack of opportunity. Exhibiting gives this opportunity, to see and study the varieties of others as well as one's own. It also affords a splendid training to those who may aspire to qualify as judges. There is room for many more exhibitors than we now have, and with the development and improvement of our exhibitions there will be a corresponding development and improvement of the fruit interests of Canada.



# The Pre-Cooling of Fruit

MUCH interest was taken in a discussion on the pre-cooling of fruit which took place at the recent Dominion Fruit Conference held, Sept. 2 to 4, at Grimsby, Ont. The delegates having investigated during the afternoon the splendid pre-cooling plant erected at Grimsby by the Dominion Government under the direction of Cold Storage Commissioner J. A. Ruddick, were prepared to discuss the subject to advantage.

Mr. Ruddick led the discussion. "We first heard of the pre-cooling of fruit," he said, "through the establishments erected in California by the railway companies. These were large plants and cooled the fruit in several cars at one time. This led at first to the impression that all fruit was pre-cooled in this way. This is not the case, as most of the plants to-day are smaller and cool the fruit before it is loaded.

"There are a number of objections to the car-cooling plant. Such plants must be large, and therefore are expensive to operate. There is a considerable wastage of the cold air, also in adjusting the ducts between the plant and each car. It is difficult to so adjust them that either more cold air than is needed is let rush into the car or too much warm air from outside is taken into the plant. Then also considerable time is wasted in adjusting the air ducts to each car. This is an important consideration.

"In our small plant here in Grimsby we can cool fruit for shipment in twenty-four hours. Such plants are useful also for the purpose of holding fruit over periods of temporary gluts, or on occasions when there may be delays in the jam factories. Thousands of dollars can often be saved in this way.

"These plants can be used also for the storage of apples in the winter season.

"Our plant is operated on the gravity brine system. Mechanical refrigeration is the other system, often called the ammonia system. There has been some objection to this system on account of the danger of explosions from the gas. Improvements in the methods have largely overcome this objection.

"There is not much difference in the cost of installing the two systems. Our plant cost us \$17,300 for the building and \$6,100 for the cold storage equipment, with some extra charges for carpentry work, the figures for which I have not obtained as yet. We spent also \$250 for electrical thermometers, which are most important and a great convenience. We are able to cool three to four carloads a day.

"When considering the cost of operation, the ice supply is the first consideration. We obtained ours in Burlington Bay. The cost of hauling was quite an item. We have put in about seventy-five tons of sea grade rock salt, which cost us about six dollars a ton laid down in Grimsby. As the control of the temperature is largely dependent on the supply of salt it is most important to have an ample supply of good quality.

"As far as effectiveness is concerned, a mechanical plant has a larger reserve of power than the gravity brine. One system is as dry as the other.

"Dampness in a plant may be due to an improper circulation of the air or to a leakage which allows warm air to come in from the outside. Where the air circulates properly the moisture congeals on the cold surface of the pipes and is drawn off.

"We obtain a temperature of twenty degrees. I have seen a temperature of fifteen degrees. It is now realized that it is more important to hold the fruit

longer than twenty-four hours if necessary to ensure its being cooled to the proper degree of temperature. An extra few degrees of temperature may make a great difference in the shipping qualities of the fruit. I don't think much is to be gained, however, by cooling the fruit much lower than the temperature of a refrigerator car. In one of our rooms to-day I noticed that the temperature was thirty-eight degrees. A temperature of forty degrees is a pretty good one for a refrigerator car. We have a canvas cover that we fasten closely around the door of the building and of the car, which prevents a leakage of air while we are loading the fruit.

## PROPER LOADING

The proper loading of a car is just about as important as the pre-cooling. We use a rack, costing about eight dollars a car, which allows a good circulation of air from the ice bunkers. Some growers load so carelessly that instead of facilitating they prevent the proper circulation of the air.

"This plant is largely experimental. It is intended to show us if it will be practical for growers to erect similar plants elsewhere in the fruit districts. In addition, this plant is going to give me a chance to conduct experiments in the marketing of fruit held at different degrees of temperature and with fruit picked and kept at different stages of maturity.

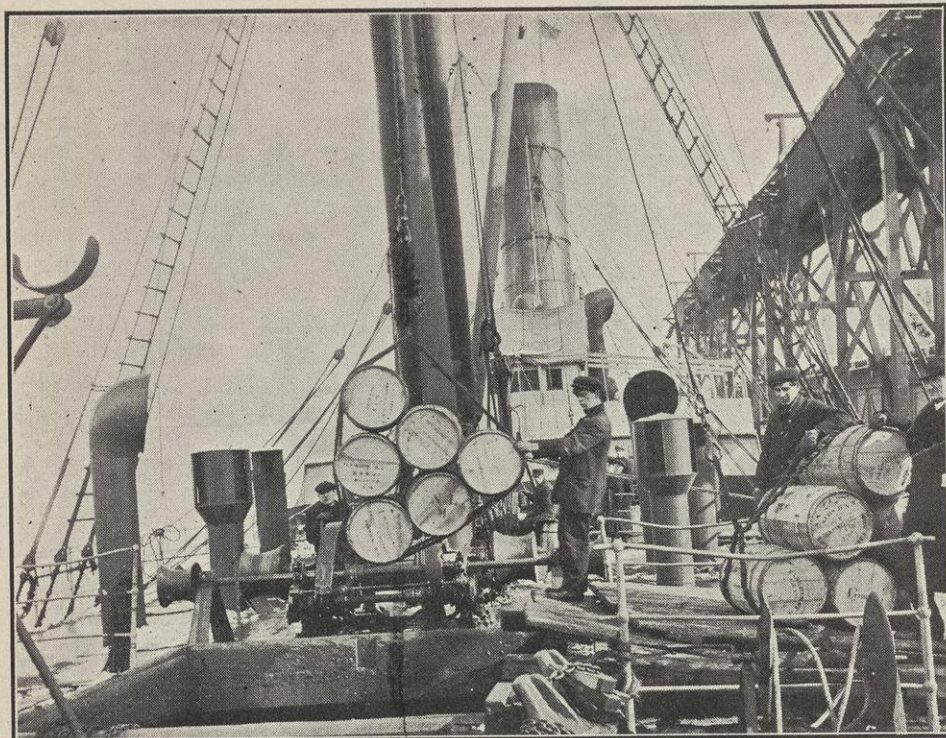
"We are charging the growers one cent for an eleven-quart basket and three-quarters of a cent for a six-quart basket, as well as eight dollars for the framework used in the car. The railways refund three dollars of the cost of putting the flooring in the car."

Q.—"How many barrels would your plant hold?"



Prominent Fruit Growers and Government Officials from all Parts of Canada Who Attended the Dominion Fruit Conference at Grimsby, Ont. September 2nd to 4th.





**Loading Nova Scotia Apples at Halifax for Export**

A glimpse of Mr. G. H. Vroom, the Dominion Fruit Inspector, may be obtained on the extreme right.

A.—“Five thousand to six thousand barrels.”

Q.—“How big a plant do you require?”

A.—“The one here is not nearly large enough. I heard one grower say that it should be four times as large to meet the requirements of this district.”

Q.—“What is the best insulating material?”

A.—“I do not know of anything better than shavings. They are drier and better than sawdust, which is apt to encourage mould. We have about one foot of shavings in our outside wall.”

Q.—“Do mice ever get in the shavings?”

A.—“Never when the boards are properly put on. If there are knot holes or cracks where mice can get a start, they may make trouble, but not otherwise.”

Q.—“Which is better for covering ice—sawdust or shavings?”

A.—“I would prefer sawdust.”

Mr. M. Snetsinger, Thornbury, Ont.: “One of the best features of a pre-cooling plant is that when fruit is put in it, it not only stops decay but the fruit holds up better after it is put in the car.

(Continued on page 252)

## The Barrel Packing of Apples\*

**A**LTHOUGH the box package for apples is becoming more popular every year, the greater proportion of our apples are still packed in barrels. Packing in barrels is a much simpler operation than packing in boxes, but judging from some of the fruit that we see on the market the packing methods of many growers who adopt barrel packing are in need of improvement.

Clean barrels are a prime requisite. Dirty or second-hand barrels should not be used, especially for export fruit. A necessary convenience is a proper packing table. The most convenient packing bench for orchard use is made on the same principle as the ordinary stretched couch or an enlarged saw horse

with a bolt where the supports cross each other. The upper points of these supports are joined with a two by two strip as long as the required length of the table, and on these pieces a sheet of stout burlap or canvas is securely fastened. For indoor work a more durable table can be built of lumber. It should be lined with burlap having straw or similar material placed between burlap and the wood.

When everything is in readiness the first operation is the preparation of barrels. The quarter hoop should be forced down firmly and three nails driven in in a slanting direction, and clinched upon the inside. The face end of the barrel should be nailed and the headlines placed in it. The fruit for the face should then be placed neatly in the barrel. For this

purpose it is well to support the barrel a few inches from the ground while performing the operation. The grade of the apples should be precisely the same in the face as in the rest of the barrel and there should not be the slightest attempt to get high-colored or specially perfect fruit for the face. Each apple is laid with the stem end down, the stem having been previously cut off with a stemmer. Upon no consideration should a very large or very small apple be used to finish up in the centre of the face. If the apples are colored, the second layer should be placed so that the color of the apples will show through between the apples for the first layer. After this second layer is laid the apples may be turned in from the round bottom baskets in which the graded apples have been placed. Never use any device that will require the apples to fall any distance into their place on grading table or in the barrel.

The presumption is that the grading has been done off the grading table, and that fruit of a perfectly uniform grade is put in each barrel. As each basketful is placed in the barrel, the barrel should be shaken (racked) slightly, not so as to throw the apples against each other or against the side of the barrel violently, but just sufficiently to settle them into place. It must not be supposed that this racking can be done successfully, if it is delayed until the barrel is nearly full.

When the barrel is full to within two or three layers of the top, a “follower,” a round piece of plank slightly smaller than the head of a barrel, is placed on the apples and the packer holds this firmly in place while he continues to rack or shake the barrel. The effect of this is to make a comparatively level surface upon which the last process or “tailing up” can be done. It is well to note here that the “follower” should be covered with heavy felt, such as is used by harness makers for pads.

### A TEST OF THE PACKER.

The process of “tailing” a barrel of apples is the severest test of a good packer. It consists in arranging the last two or more rows of apples so that they will project slightly above the barrel. The characteristic of good tailing is to have the apples of the last two rows placed solidly and evenly so that when finished the head will touch with the same pressure each apple exposed. This is a very difficult thing to accomplish even where considerable time is taken in the operation, and it is only a skilful packer who can perform this operation quickly and well. It is a common fault with unskilled packers to allow one or more apples to project above the general surface. When pressure is put upon the barrel, these apples take the whole pressure at first, and are frequently crushed before the head is in place.

\*Condensed from a bulletin on Apple Packing, issued by the Dominion Fruit Division.



# Planting Notes for the Fall

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

THE month of October may be properly termed bulb planting month, although most of the hardy garden lilies would be better planted or transplanted, if they require it, early in September. It is far better, however, to plant lilies in October than to leave them until spring. It should be remembered, however, that bulbous rooted lilies especially should not be transplanted or disturbed oftener than is absolutely necessary, not until the bulbs have become so thick and crowded that they produce a degenerate type of flower. Lily bulbs do not like to be disturbed or moved very frequently. The same rule will apply to some of the hardy early, spring flowering, bulbous, fleshy or rhizome rooted border plants, such as the *Dicentras* or *Dielytra*. *Dicentras Spectabilis*, the old-fashioned Bleeding Heart, *Dicentra Eximia*, and the *Corydalis nobilis* and *Corydalis bulbosa* are all better planted, or transplanted in the fall, rather than in the spring. The *Hemerocallis* (Lemon Lily) and the *Funkias* or Day Lilies can also be planted in the fall to advantage.

## GERMAN IRIS

German Iris can also be planted in the fall. In planting German Iris care should be taken not to bury the thick, fleshy rhizome roots far under the surface of the soil. It is best in planting these to first dig the ground well, then to firm it down well with the back of the spade, then insert the spade quite perpendicular to its full length so as to leave a narrow trench or opening the depth of the spade. In this the smaller more fibry roots growing from beneath the rhizome root should be placed, leaving the thick, fleshy rhizome root almost or quite on the surface of the soil. The ground should be pressed or tramped quite firm around the roots after planting. I have had better results by planting German Iris in the fall than by planting in the spring.

## PAEONIES

The common garden herbaceous paeonies are best planted in the fall. If old clumps of these require dividing up and replanting there is no better time for both of these operations than early in October. Tree paeonies are best planted in the spring. These last-named are, however, seldom grown, as they are not hardy without winter protection outside of the Niagara district; even there they are often partially winter-killed.

Paeonies succeed best on a well enriched, fairly heavy soil. A well drained clay soil, if not of too close a texture, will suit them, or a clay loam soil is still better. Very light sandy or gravelly soils do not suit paeonies. In planting

paeony roots, the tops of the crowns or buds should be not more than an inch under the surface of the soil, when the roots are planted.

Clumps of paeony roots that have been growing for several years in the same place and become weakened from that cause should be divided and transplanted. One method of doing this is to remove the earth from one or two sides of the root and take off a section or two of the root for planting elsewhere, leaving the major portion of the root still in the ground undisturbed for a year or two, until the young plants taken off have become established and possibly started flowering. Or the old clumps of roots can be dug up entirely and then divided into sections after being dug. A good sharp spade is the best implement for this purpose.

Very often in dividing paeony roots a partial natural division may be found in the clump. By working the spade carefully where this partial division is sometimes seen, any unnecessary mutilation or cutting of the roots can be avoided. At any rate when cutting up a clump of paeonies it is best to be sure of having from three to five or six crowns or buds on each division. These divisions or sections will often give some flower the first season, if the divisions are not too weak and small. The soil should be packed firmly around the roots, leaving about half an inch of loose soil over the tops of and around the crowns after they are planted. A mulching of well-rotted barnyard manure about an inch in depth over and around them will be of great benefit. This should, however, not be put on until later about the middle of November or before hard frosts set in. This manure will serve the purpose of a fertilizer if forked in around the plants in the spring.

The same rule and methods regarding

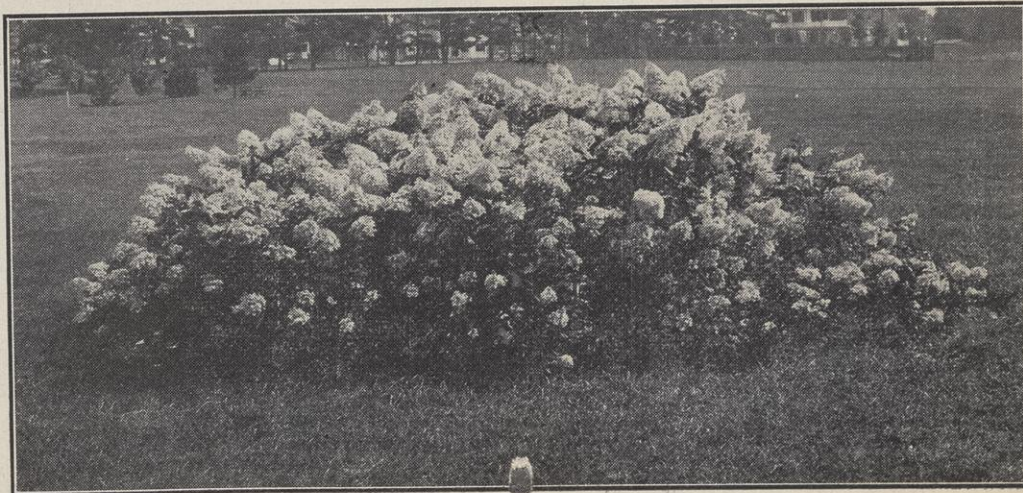
dividing and transplanting paeonies will apply very closely in dividing and transplanting *Dicentras*, *Corydalis*, and German Iris, except perhaps that the last-named should only be mulched very lightly, if at all.

## PLANTING BULBS

Outdoor spring flowering bulbs include Dutch hyacinths, tulips, narcissus, crocus, snowdrop, scilla, *Chionodoxa* (Glory of the Snow), and *Leucjum vernum* (Snowflakes). The *Fritillaria Imperialis* or Crown Imperial can also be included in this list. The best time to plant all of these bulbs is about the second or third week in October. They may be planted later on until hard frosts set in, but late planted bulbs do not, as a rule, give as good results as those planted earlier.

The Crown Imperials should be planted in groups three or five inches below the surface of the soil and six or eight inches apart. These last-named are tall growing, two or three feet in height. Dutch hyacinths, tulips, and narcissus should be planted so that the tops of the bulbs are from three to four inches under the surface of the soil and from four to six inches apart, whether planted in groups, rows, or massed in large flower beds. Crocus snowdrop, scilla, *Chionodoxa*, or Snowflake bulbs should be planted about three inches deep and about three inches apart. I have found that all bulbs are best not planted too deep in heavy soils, in light soils they may be planted the full depth stated. Straw manure or some similar material four or five inches in depth may be placed over bulbs late in November, after the ground has been frozen slightly. Green pine boughs placed over them will also serve as a protection for bulbs.

The following are good varieties of bulbs to plant:



A Bed of *Hydrangea Paniculata* as Grown in Victoria Park, Galt, Ont.



Tulips for temporary planting—where summer decorative plants are grown such as coleus, geraniums, cannas, etc., early single and double flowering varieties of tulips are best.

Tulips for permanent planting—All kinds of tulips are more or less suited for permanent planting. The Cottage Garden, Darwin, Rembrandt, and Parrot tulip are specially suited for planting among perennial plants or in a position where the bulbs do not have to be disturbed when digging the border in the spring time.

#### NARCISSUS

Narcissus are best suited for permanent planting where they are not disturbed. In groups in the perennial border they are very effective. Good varieties to plant are Emperor, Trumpet Major, Princeps, Bicolor Empress, Bicolor Victoria, Jonquils. These are trumpet flowering varieties. Barri conspicua, Stella, Sir Watkin, Mrs. Langtry Poeticus Ornatus are good cup varieties for the border, especially the two varieties last named. The Double Van Sion and some of the Polyanthus Narcissi are also suitable for permanent planting. The paper white Narcissus and Roman Hyacinths are not useful for out of door planting, the last-named especially being too tender. Both of these are, however, very useful for growing in pots indoors in the winter, both being early flowering kinds.

All of the varieties of Dutch hyacinths are more or less good for planting. The color and the selection of good quality bulbs are the main points in selecting Dutch hyacinths. They are not as hardy as narcissus and tulips.

Scilla Sibirica, Chionodoxa lucillae, Giant Snowdrops, Leucojum vernal, and mixed crocus are the best kinds of dwarf growing bulbs to plant. These are suitable for permanent planting. The crocus are the best of these for temporary planting where summer decorative plants are made use of.

Well drained, deeply dug garden soil, not too rich in fertilizers, and not of a too heavy, clayey nature is best for bulbs. If soil is heavy clay, dig in some sand or leaf mould, or both. Avoid digging in fresh or strawy manure when planting bulbs. If manure is used it should be quite decomposed, and should not come in direct contact with the bulbs when planting them.

Plant outdoor bulbs, such as tulips, crocuses, and daffodils. They should be set in a well-drained soil about three inches deep. Cover with strawy mulch as soon as the ground freezes.

Remove all weeds from the garden before they are allowed to scatter and ripen their seed. This will reduce the labor of hoeing next season.

## Fall Work in the Garden

**A** GOOD garden rule is to do all the work in the garden you possibly can in the fall, thus avoiding the spring rush.

Japanese lily bulbs do not reach this country until November. Therefore, heap fresh manure over the place where you wish to plant them, and you can have unfrozen ground in which to plant them.

Cannas, dahlias, and gladioli bulbs should be lifted as soon as the tops are killed by the frost. Cut off slightly above ground so that the stalk left may be used in carrying and handling the bulbs. Leave on top of the ground a few hours until the roots and soil dry, then place in a cool, though not moist, storage place. If it is necessary to place them under very dry conditions, they should be covered with dry sand or some material that will prevent the tuber drying out. If they are stored in a moist atmosphere the bulb is weakened.

If an arbor is desired on the lawn or over the porch, select a small fruiting grape vine this fall, mark it so that it will be readily found to transplant in the spring, or cuttings of the vine may be taken and set out next season.

All hardy shrubs that do not bloom in the spring can be pruned now, also vines and hardy roses.

As soon as the annuals and perennials have been killed by the frosts, the garden can be given its last cleaning. Annuals should be pulled up, and perennials cut off about three inches above the

ground. Then weed the entire garden, and, last of all burn all of the refuse, that no seeds of weeds are left for another year and no place is given insects to hide in during the winter. Be sure to burn any foliage that is diseased. Be on the lookout for any winter nests of garden pests and burn them.

If you have any unoccupied land to be used next spring plow or spade it now. The snow, rain, and frost will mellow it and kill the insects.

Poppies and cornflowers can be planted in November for early blooming next year.

A mulch of manure can be given all trees and shrubs, the bulb beds, and perennials that die down to the ground in fall. This mulch to be given after the ground is frozen. Cover perennials that do not die down but carry their green hearts through the winter (such as Canterbury bells and foxgloves) first with a little brush and then with leaves, cornstalks, or straw. The covering must not be so heavy as to exclude the air, as these plants are more often killed by rotting than by cold.

Dry sweet corn carefully for seed. It is usually more difficult to dry thoroughly than other kinds of corn. Store it where it will not be frozen during the winter.

Root crops, such as parsnips, beets, and carrots may be prevented from shrivelling in the winter if they are covered slightly with dry sand in the bin or box.



The First Prize Decorated Table at the Canadian National Exhibition

For several years in Ontario great interest has been taken in the contests held for the best decorated tables that have been held in connection with the Ontario Horticultural Exhibition. This year for the first time a similar contest was held at the Canadian National Exhibition. The winning table, here shown, was arranged by Mr. S. A. Frost, of Toronto. Yellow orchids were used freely.





A Bed of Asters in the Garden of J. Gadsby, Hamilton, Ont.

## Planting Shrubs and Trees for Winter Effect

Henry Gibson, Tuxedo Park

THE impression that the spring time is the one and only time for active garden operations is being proved more and more a fallacy each year by the more enthusiastic and progressive of our gardeners. More planting and preparing for the following year's garden is being done in the autumn than ever before. This is a step in the right direction and one that should be encouraged.

Among the many activities that will aid in making the garden and home grounds more beautiful and attractive is the planting of flowering shrubs and trees. This work can be done this fall with equally as good results, and in many cases better results, than if it was deferred until spring. All that is necessary is a little extra care in protecting newly planted stock during the winter.

The number and varieties of summer flowering shrubs are legion. By a judicious selection therefrom, one may have a continuity of bloom from the time that the earliest of the Forsythias throw out their golden bracts, right through the summer and fall, to finish the season with that very popular and much appreciated shrub, *Hydrangea Paniculata Grandiflora*.

It does not necessarily follow that when the flowering period of these shrubs is past that the garden need be a dreary, bleak spot. There are many trees and shrubs whose flowering is only a passing incident, but whose fruits and berries possess the color and stability to brighten the home surroundings long after the foliage has gone. While planting operations are in progress, select a few of the best of these berried shrubs. True, not much could be expected of them this coming winter, but they will prove a source of pleasure later. A little

studied effort in the selection and disposition of certain of those trees and shrubs that possess beauty of bark and berries will go far towards making the garden a very pleasant place in winter.

### SUGGESTED VARIETIES

Try grouping a few specimens, as for example, the Bayberry, or wax myrtle, with its shoots thickly clustered with wax-like masses of fruits, with the common barberry, with its orange-red berries in rich clusters. The contrast is a strong and pleasing one. With a background of these two, to the group could be added that very common and useful shrub Thunberg's barberry — a shrub that has many other attractions throughout the year. Add to this the snowberry (*Symphoricarpos Racemosus*), whose great white fruits hang persistently all through the winter, and its red-fruited relative, the Indian currant, and there exists a group that can be carried out on any scale, according to the space available.

Another group suggests itself in the viburnums: *V. prunifolium*, which grows to the size of a respectable tree and covers itself with deep blue fruit until frost destroys the berries; *V. lantana* and *V. Sieboldi*, with a foreground of *V. cassinoides* and *V. acerifolium*, covered with clusters of black berries that hang long after the foliage has fallen. Some of the thorns (*Crataegus*) that are indigenous to North America, should not be overlooked; they make small, neat trees, and should be far more frequently seen in small gardens.

The Euonymus or spindle tree is also a brilliant spot when it is smothered with its bright fruits. *Ilex verticillata*, very appropriately named winter-berry, make another picture against the snow.

The *Pyracantha* is an evergreen thorn far too little seen in gardens. It will train against the wall, and make an admirable covering and a great mass of color when bearing its clusters of orange-red berries.

Our native holly (*Ilex opaca*) is worthy of the special care needed to establish it in the garden. In order to secure the ornamental fruits a staminate bush should be planted among the pistillate ones. The rowan tree or mountain ash makes a fine specimen for a lawn. Its bright scarlet berries hang from early summer until late winter.

In planning the shrubberies about the home keep in mind the essential point—that of having something that is pleasing and attractive for the greatest length of time. Don't let the factor of flower bloom deter you from planting some of the shrubs that will help to brighten the garden well into the winter.

### PREPARE YOUR SOIL

Soil required for vegetable or other plant growth in the spring should be deeply dug or trenched this fall. Any one who has grown plants in trenched ground only requires the one experience to always practise it in the future. Digging the ground two spades deep turns up dormant food supplies to the action of the air, allows the moisture to penetrate into the hard pan or subsoil, and leaves the soil porous and full of air and full of cavities, into which heated air, moisture and solvent foods for the plants are absorbed. It allows also the young plants of next season's growth to let their roots down into the loose, rich, moist, cool subsoil below, and thus keeps, no matter how great a drought may prevail. Your plants grow as by magic, and all from the important fact that your soil was prepared by thorough deep cultivation the fall previous. I could not enlarge too much on this subject, and I would count my time well spent could I but so convince the reader who has not tried it in his garden to give it but one trial.

Now all this talk is but a repetition of the same advice given every year to the garden amateur, and as this is also the month to plant your tulips, hyacinths, lilies, and other plants of the bulb family, prepare your beds for them by trenching instead of just one spade deep, and you will marvel next spring at the results.

You can have the earliest sweet peas by preparing the ground for them now. Also try planting a part of them in November. They do not make any growth until spring but will be much earlier than those planted then, and some claim their flowers are much larger.



## Hardy Conifers \*

W. T. Macoun, Dominion Horticulturist, Ottawa

**I**N a country, where the native species of conifers are numerous and where immense areas of evergreen forests exist, and where many kinds of beautiful conifers from other countries can be successfully grown, it is rather surprising that so little has yet been done in Canada to grow conifers under cultivation. Perhaps it is because Canadians are so familiar with them in the wild condition that they do not show more interest than they do in cultivating these beautiful trees. For instance, when one sees the majestic, yet graceful outlines of the native white pine clothed with branches to the ground or grown as a single specimen on the lawn, or in a group massed together and showing their straight, tall trunks, one cannot but be impressed by their great beauty, and this is but one of many conifers that may be grown successfully.

With such long winters as there are in Canada the conifers are very useful in giving, in our judgment, a warmer look to the landscape which otherwise, for more than six long months, would present but the bare boughs of the deciduous trees with, perhaps, the withered leaves of the beech as a constant reminder of the summer that has gone. There are few of the broad-leaved evergreens hardy in Eastern Canada, which, on the west coast of Canada, and in some other countries are used to take the place of conifers for evergreen effects. Hence, the great importance of a free use of hardy conifers in this part of Canada.

Some of the best hedges are made from conifers, and being evergreen they also help to soften the otherwise hard lines about a residence which a Canadian winter does so much to emphasize where there are no evergreens. But perhaps enough has been said of the value of conifers in general; let us see what material there is to draw upon.

At the Central Experimental Farm, Ottawa, more than five hundred species and varieties have been tested during the past twenty-six years, of which a very large proportion have proved hardy, and in the following short list the best in our judgment have been gathered together. It is much to be regretted that the beautiful Lawson's cypress of which there are many attractive varieties is not hardy in eastern Canada, nor the cedar of Lebanon, nor Deodar cedar, nor some of the fine firs of the western coast of the United States, but with the many to choose from that are hardy we can get along without them.

If one takes the conifers in botanical

sequence, the first that should be mentioned is the maiden hair tree (*Ginkgo biloba*), formerly called *Salisburia adiantifolia*. While a conifer this is not an evergreen, but it is such a striking tree that it must not be left out. The leaves remind one of the maiden hair fern. While not particularly graceful, it is very pleasing to the eye owing to its remarkable fan-shaped foliage, and while a rather slow grower it has been used as an avenue tree in some places in the United States. The oldest trees used for this purpose are, I believe, in Washington. This tree while sometimes killing back a little at the tips may be regarded as hardy at Ottawa, some specimens there now being about twenty-five feet high.

### THE YEWS

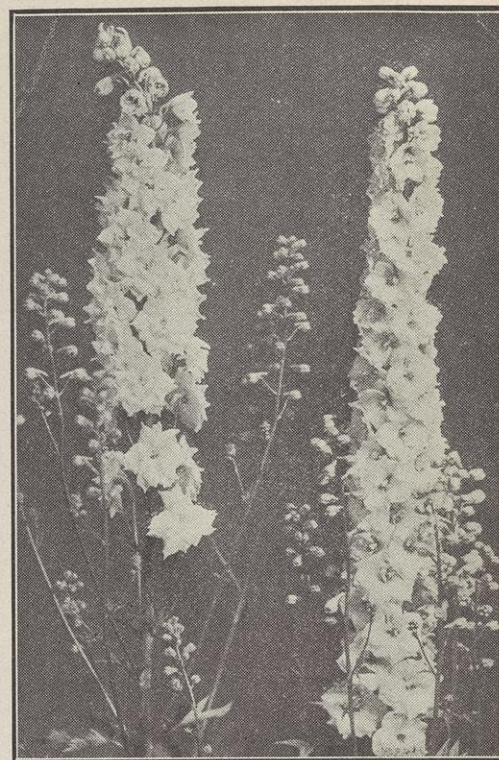
The yews, which are so commonly met with in Great Britain are not hardy at Ottawa, nor would they be satisfactory, I fear, in many parts of Ontario. There is, of course, the Canadian yew, *Taxus canadensis*, a low growing species, which is not to be despised where low growing evergreens are desired. There is, however, the Japanese yew, *Taxus cuspidata*, a splendid substitute for the common yew of Europe. It is perfectly hardy at Ottawa and a specimen planted in 1896 is now seven feet in height and ten feet in breadth. The foliage is attractive. This should prove very valuable in Canada both for massing, for single specimens, and for hedge purposes.

### THE JUNIPERS.

Among the junipers are some valuable species and varieties. The most satisfactory is the Savin, *Juniperus horizontalis*, formerly called *Sabina*, a native of Canada and other countries. This is a low growing trailing species of which there are several good varieties. It is very attractive when massed, for not only has it the narrow leaves of the junipers which give most of the species a light appearance, but the branchlets are long and slender, making it particularly striking.

The variety *tamariscifolia* is most marked in this respect and has a somewhat different color effect from the ordinary form.

There are a number of other good junipers, but perhaps the most attractive is the Irish juniper, *Juniperus communis fastigiata*. This is an erect form of the common European juniper, which grows from four to eight feet in height. The foliage is light green above and silvery beneath, and the contrast in color makes it attractive and a noticeable shrub on the lawn. At Ottawa the tips are usually injured by winter, rather hurting its ap-



**Delphinium or Larkspur**

The larkspur will grow in any soil or situation, but one open to the sun suits them best. They thrive when the soil is well enriched. The flowers here shown were grown in the garden of Mr. J. H. Bennett, Barrie, Ont.

pearance until new growth takes place. It has not been found stiff enough for hedge purposes, the snow breaking it down, otherwise it would be quite attractive.

As a contrast to the Savin in the color of its foliage the native variety of the common juniper, *Juniperus communis depressa*, formerly *J. communis canadensis* or *alpina* makes a fine low growing conifer for massing. Another hardy juniper not often seen, but which will probably be more grown in the future is *Juniperus rigida*, a Japanese species with rather pale foliage and slightly pendulous branches, which make it quite attractive. The largest specimen at Ottawa is about ten feet high.

### RETINOSPORAS.

The Japanese *retinosporas* are very useful hardy conifers. They come under the same genus as the cypress, the botanists calling them *Cupressus* or *Chamaecyparis*, and as evergreen shrubs or small trees for the lawn, have a distinct place. Some of them do much better than others. Perhaps the hardiest and most beautiful of all is that known in the trade as the *Retinospora filifera*. This has not been injured at Ottawa in any way, and has made a remarkably graceful and beautiful lawn specimen. Planted in 1893, this is now twelve feet in height and about the same in width. It has drooping branches and slender thread-like pendulous branchlets. Another good one is *Retinospora plumosa*, a compact tree and very orna-

\*Extract from an address delivered before the annual convention of The Canadian Horticultural Association.



# The Beekeeper

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## Wintering Bees Out-of-Doors

By F. W. L. Sladen, Apiculturist, Central Experimental Farm, Ottawa

**P**ARADOXICAL as it may seem, it is easier to winter bees successfully out-of-doors in Ontario than in many parts of Ohio and New York State. This appears to be partly because there is less alternate freezing and thawing in Central Canada than in the States. When it turns cold it stays cold and there is less moisture. In recent years outdoor wintering has become very popular among the progressive beekeepers in southern Ontario. During the past two winters it has been tried in the more severe climate of Ottawa at the Central Experimental Farm with marked success.

Some of the advantages of outdoor wintering over cellar wintering are that the bees make an earlier start, without any setbacks, in the spring. Brood rearing starts earlier. The period of confinement in the hives without flight is shorter, and if the hives are properly protected fewer bees will die during the winter than in many bee cellars that are not sufficiently ventilated or else are too cold, and require frequent attention to keep the temperature uniform.

Among the disadvantages of outdoor wintering are an increased consumption of stores. There is also the cost of erecting windbreaks, if such do not exist, and the outlay for wintering cases. To these must be added the work of packing and unpacking the bees, which, however, when properly systematized is not much greater than that of carrying the hives into and out of the cellar.

The bees are left in their wintering cases until June. The protection afforded by the wintering cases in spring is in many places and seasons an important point in favor of outdoor wintering, though, of course, cellar wintered bees may be provided with special protection in the spring.

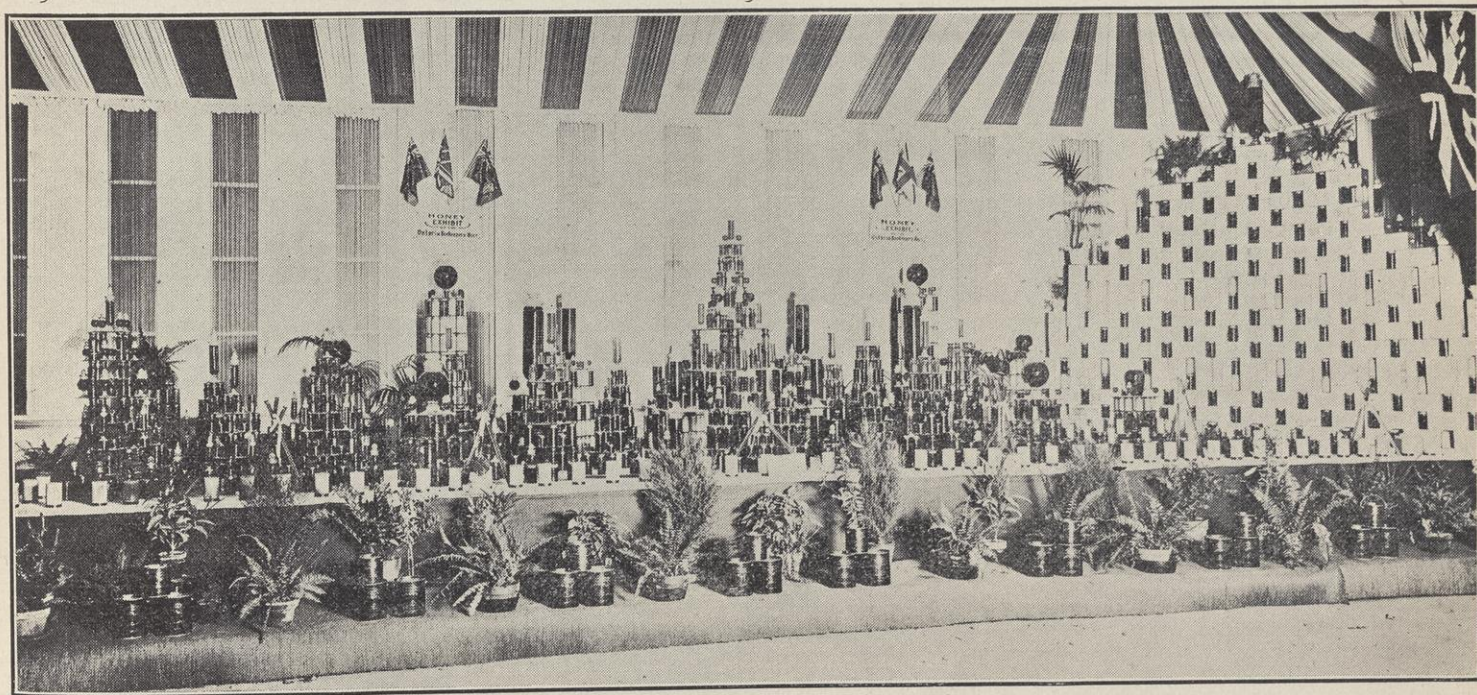
Outdoor wintering is probably inferior to cellar wintering under favorable conditions, but these are hard to obtain in Canada.

Success in outdoor wintering is dependent mainly on the means employed to protect the bees from the great and long continued cold while keeping them sufficiently supplied with fresh air. In the experiments conducted in Ottawa, win-

tering cases, each large enough to hold four colonies in 10-frame hives, with space for packing material, have been employed. Two of the hives have their entrance on one side of the case and the other two on the opposite side. About three inches of planer shavings around the front, sides, and beneath, and ten inches on top were found to protect the bees, as well as three inches more all round. The shavings on top are in four bags, filled full and pressed tightly together. These bags of shavings are easily removed for examining the colonies in the spring.

The wintering cases are made of one inch tongued and grooved spruce. The outside dimensions are forty-two inches wide, forty-eight inches long, and twenty-seven inches high. The cover is made of thin boards, and has a slight slope on top to carry off water. It is covered with paroid roofing. Ventilation is provided under the cover. Four one inch by three inch joists are fixed in the bottom of the case for the hives to rest upon.

The entrances are ten inches long by



This Exhibit, by the Ontario Beekeepers' Association at the Canadian National Exhibition, in Toronto, Attracted Favorable Comment. Mr. H. G. Sibbald, who had charge of this exhibit, states that hundreds of people wanted to buy bottles of honey. The arrangement of the Association with the Exhibition management did not permit of this being done this year. This arrangement should be changed for another year.



one and one-quarter inches high, and are ten inches apart. A strip of wood revolving on a screw reduces the size of the entrance for winter to one and one-quarter inches high by three-eighths of an inch wide. To avoid the risk of winter entrances getting blocked with ice, there is no protecting ledge under the winter entrances. The case rests on a stand made of eight inch boards.

An important requirement in outdoor wintering is protection from wind. The portion of the apiary at the Central Experimental Farm containing the wintering colonies is surrounded by a close board fence seven to eight inches high. The higher fence is on the north-west side. It is found that the bees do not come out and die in the snow to any large extent. The air is so cold in February and March that they do not fly out much, provided they have not been made restless by bowel trouble, often attributable to unwholesome food. A still day comes usually early in March when the heat of the sun is great enough to prevent them from getting chilled when alighting on the snow, the surface of which has been hardened sufficiently, by repeated thawing and freezing, to prevent them from sinking into it. After

the first great flight, healthy bees may be trusted not to fly in unfavorable weather, and they make uninterrupted progress.

No snow is cleared away from the hives during the depth of winter but in March wet snow is removed from the entrances to the extent of about three feet around each entrance. The two strongest colonies in the apiary at the Central Experimental Farm last spring had been wintered out of doors. They were in such a forward condition that they were able to take full advantage of a flow from dandelions, and each filled a super with dandelion honey collected between May 20th and June 1st.

A sufficiency of wholesome stores, plenty of bees of all ages, and a good queen are, of course, essential for successful wintering, indoors or out. The best food is white honey, supplemented by good sugar syrup. The wholesomeness of dark honey collected in August and September depends on the locality and season. Forty pounds of stores is amply sufficient for outdoor wintering, and thirty pounds for cellar wintering. The weight of a Langstroth hive with combs and bees, exclusive of stores, is twenty-five to thirty pounds.

## A Successful Wintering Method

John Ramsay, Sr., Campbellville, Ont.

THE great drawback to profitable beekeeping is the present mode of wintering in bee houses and cellars. It disarranges the bees by moving them twice a year. They have to be set out early in the spring when the weather is cold and raw, when the chilling of the young brood causes spring dwindling.

After trying this system I adopted the plan of making an outside case for each hive with five inches of space around the hive for packing with a bridge over the entrance. I packed it with chaff or dry forest leaves to the top of the hive and left it so. The outside case was made high enough to put the super on below the cover. I covered the hives with a sheet of matting (that comes on tea chests) and I found it much better than cotton. Never cover the hive, neither summer nor winter, with a light board cover. I remove the sheet and place a queen excluder over the frames and put on the super and put the sheet of matting on top. In the fall when the supers are removed and queen excluders I place the mat over the frames and pack the case full of soft pea straw and put on the cover. No more handling is needed until spring when the top packing is removed.

The packing below saves any spring dwindling and keeps the hive cooler during the heat of summer and lessens ex-

cessive swarming. This system I consider adds very little to the expense compared to the great loss occasioned by the present system in use. It saves the cost of waterproof hives and covers and paint. I think the saving from loss of bees under the present system would pay to fit up every colony with neat, well-made hives in this manner. It would avoid all disarrangement of the bees.

I tried the Langstroth frame when it was first invented and I did not like it for winter purposes. I wanted a hive where the bees could store sufficeint for winter without feeding and I adopted the Jones frame and have found for many years that ten frames are sufficient for winter purposes. I find there generally is a sheet or two at the back of the hive untouched which can be removed and empty sheets put in in their place. I have not fed sugar since adopting my present system many years ago.

The most common way of marketing honey when I was a boy was to take a pan of honey to the grocer, who would place the pan on the counter, and sell out of it by the pound. In the case where first or old swarms were destroyed there was much pollen and old comb to contend with, and this honey was marketed in jars.—Wm. Couse, Streetsville, Ont.

## European Foul Brood

European foul brood usually attacks the larvae while it is still curled up at the base of the cell. A small percentage of larvae dies after capping, but sometimes quite young larvae are attacked. The earliest indications of the disease are a slight yellow or grey discoloration and an uneasy movement of the larvae in the cell. The larvae loses its well-rounded, opaque appearance and becomes slightly translucent, so that the tracheae may become prominent, giving the larvae a clearly segmented appearance. The larvae is usually flattened against the base of the cell, but may be seen on the lower side or clinging to the sides or top of the cell. The yellow color is very characteristic of E.F.B. The dead larvae appears as a moist, somewhat collapsed mass, giving the appearance of being melted. Finally all that is left of the larvae is a greyish-brown scale against the base of the cell. Very few scales are black. The scale is often carried out by the bees and is not like the scale of American Foul brood, that cannot be removed from the cell. It does not have the ropyness of the A.F.B. There is usually an odor present that resembles decayed fish. E.F.B. attacks the drone and queen larvae. The disease shows up most in the spring.

The treatment recommended is to Italianize. Keep strong colonies and stimulate. Less and less is being said about destroying combs to hold this disease in check.

Why don't we go ahead of the disease and lead beekeepers to Italianize? Let me show you. A year ago last summer the inspector in Peterboro county, while following up the disease, got beyond the diseased area. He found a beekeeper who had a fine lot of black bees that had done well. Last summer I found the same place, and still no disease. The woman told me that the inspector had begged them to put in Italian queens and be prepared for the disease. They had refused to do so. The woman said to me, "Do you think it is so necessary to put in Italian queens?" I told her that experience had taught us that the Italian bees were the only ones that resisted the disease, and those that had prepared in time were still keeping bees and those that would not take our warning had lost their black ones.

You can still keep bees and have them do well even with disease in the neighborhood, so don't worry about your neighbor beekeeper cleaning up. Some of the large beekeepers in other places almost welcome E.F.B. They say it does away with the careless beekeeper and his black bees, and gives the good beekeepers a better chance. They consider it to be a blessing in disguise.





An Apiary of Seven Colonies at Sandwick, B.C., from which 1,100 Pounds of Honey were Taken in One Season

### Government Work

The apiculturist at the Central Experimental Farm, Ottawa, Mr. F. W. L. Sladen, has recently returned from visits to the western and eastern Experimental Farms and Stations. In the west bees are now kept at Sidney, Agassiz, and Invermere in British Columbia, at Lethbridge and Lacombe in Alberta, at Indian Head, Saskatchewan, and at Brandon, Manitoba. At Sidney, B.C., where there are fourteen colonies, a good crop of white clover honey had been gathered by July 6th, notwithstanding that the Station is on the sea coast. At Agassiz, by July 9th, seven out of nine colonies were beginning to fill the supers well from the same source at the rate of about five pounds a day.

Visiting the eastern farms upon his return from the west, Mr. Sladen found flourishing apiaries at Cap Rouge and Ste. Anne de la Pocatiere in Quebec; at Fredericton, N.B.; Nappan and Kentville, N.S.; and Charlottetown, P.E.I. Satisfactory crops of nearly pure clover honey had been taken at Cap Rouge and Ste. Anne and Fredericton had heavy supers from the same source ready for removal. The honey crop at Nappan was a failure owing to the severe winter-killing of the clover followed by a late spring and a cool and wet summer. Kentville, N.S., showed a fair crop. At Charlottetown, P.E.I., but for excessive swarming a good crop would have been secured. At the time of visiting this Station, the bees were working busily on the European lime trees in the city. Prince Edward Island is a good province for clover honey production, but as yet, little attention is paid to the beekeeping industry.

One of the chief problems in Cana-

dian beekeeping is how to control swarming. Swarm control is easier when extracted honey is produced than when comb honey is worked for, and the former is also the more profitable.

Among the beekeeping experiments under way or contemplated are the testing of Italian bees at the Farms on the Pacific and Atlantic Coasts, and in Quebec where hitherto only black bees or dark hybrids have been kept, and attempts to winter bees out-of-doors, in regions where at present they are wintered only in cellars, in order that the two methods may be compared.

### No Heather in Canada

W. J. Sheppard, Nelson, B.C.

In some interesting notes on the Wild Flowers of West Kootenay, contributed to "The Independent," Nelson, by Mr. F. Stuart Palmer, mention is made of heather found growing on the mountains of British Columbia. Beekeepers devoutly wish that this was so, but as a matter of fact heather is not indigenous to this country. The so-called heather that grows here, although very similar to and easily mistaken for the Bell heather (*Erica cinerea*) of Great Britain, is a false heather of which there are three varieties to be found in British Columbia, viz., the white (*Bryanthus glandulifloris*), the red (*Bryanthus impetiformis*) and the pink (*Bryanthus intermedius*.)

In Miss Henshaw's "Mountain Wild Flowers of Canada," appears the following. "The false heathers—there are no true heathers indigenous to this continent—are low branching shrubs. The red grows abundantly in the mountains, and at very high altitudes. It is a wonderful sight to see acre upon acre covered with

its beautiful bells, until the slopes of the hills and the alpine meadows seem to be literally clothed with a glorious robe of rose-red heather, whose border is embroidered with the white false heather."

Nor is the ling (*Calluna vulgaris*) that grows in such luxuriance on the Scotch and Yorkshire moors, and from which the celebrated honey is mostly obtained, to be found here at all. It would be a great acquisition to get it acclimatized, if possible, and so add to our list of nectar-yielding flowers.

### QUESTION BOX

Replies Furnished by  
Prof. Morley Pettit, Guelph, Ont.

#### The Feeding Mixture

What proportions of sugar and water do you advise for spring feeding, and what quantity of tartaric acid? Do you recommend the same quantities or proportions in the spring and fall? Do you like the glass sealer as a feeder?—A. W. F., Northumberland county.

You do not say whether you refer to stimulative feeding or to colonies that are short of stores. If the former you would not expect to feed until after fruit bloom, and in that case you would make a syrup half and half. If you have colonies which you think are short of stores I would make the syrup somewhat thicker, although it does not need to be as thick as for fall feeding. The glass fruit jars are about the handiest kind of feeder that there is providing it is convenient to put them on top of the hive. You do not need to use any acid in making syrup for spring feeding.

#### Shading Entrances

How should I treat bees that are wintered out of doors as regards shading the entrances that are exposed to sunshine? Do you recommend shading them with boards, and, if so, do you find it necessary to watch the weather and remove the boards on warm days? I would think that the bees might on such occasions fly and be unable to make their way back?—F. L.

We do not find it necessary to shade the entrances of the hives in out-door wintering, although it might be a good plan if you have an attendant who can watch them to take the shade boards away when it is warm enough for bees to fly.

#### Goldenrod

Do bees obtain honey from goldenrod?—J. G. T.

I have found that bees always obtain more honey from this plant when it is grown on sandy soil. On the heavy soil they do not usually get very much from it.

#### Location of Hive

Is there any law in Ontario in regard to how far bees should be kept from a public road or a line fence?—I. M.

I do not know of any law which regulates the distance that bees can be kept from the road or side line. They have such a law in Quebec, but I do not think there is any regulation in Ontario.



## Promoting the Sale of Honey

Wm. A. Weir, Toronto, Ont.

**A**RRANGEMENTS for linking ourselves together to advertise and market our honey along the lines outlined in the September issue of *The Beekeeper*, do not present many serious difficulties. Our good friend, the editor, has suggested an example which has appealed to us. The application of the same principle lends itself admirably to our lines, and even more so than to fruit.

In our arrangements we must bear in mind what we are working for.

- (1) To make honey known.
- (2) To facilitate the public effort to get good, well-ripened honey.
- (3) To make returns to those who participate in as direct proportion to their investment as possible with these points in view.

The following system will perhaps open the question and lead to a thorough discussion of our advertising problem. Let us first, as an Association, give it our support and use the Ontario Beekeepers' Association name as sponsor for the scheme. Then let the executive work be delegated and the secretary-treasurer of the Association act as the director of the campaign. Allowance from the funds should, of course, be made for his time and expenses.

A quantity of suitable mailing bottles for samples should be secured, and when the crop is about off a circular letter sent from the secretary to the member asking for a guaranteed average sample of the season's crop. This letter should also intimate that bottles will be supplied at cost. The receipt of these samples will enable the secretary to gauge the quality of Ontario's crop and he will then notify such members as send samples, how their crop compares or grades with the average. Attention is then called to the stamps and beekeepers may subscribe for the necessary number of pails at the rate of:

$\frac{1}{4}$ c, 2½ lb. pail;  $\frac{1}{2}$ c, 5 lb. pail; 1c, 10 lb. pail; 10c, 60 lb. pail.

As these subscriptions come in a list will be prepared and every subscriber's name placed thereon, with full particulars of the supply he wishes to sell, size of pails, and post office address. Funds so derived will be held in trust and the larger the subscription the more prominent the position of the subscriber's name on the list.

Advertising may then be carried on all over Ontario in the name of the Association and inquiries will be furnished with the above mentioned list of names. Thus the producer is put in direct touch with the buyer.

As outlined we seem to have accomplished our tri-fold object. We have secured funds and the advertising is more or less extensive, according to the sale of stamps. We are facilitating the public effort to get good honey because the stamp is a partial guarantee by the O.B.A. (secured by the beekeepers' sample and signature) and every pail so stamped is an assurance to the buyer or consumer. And we are benefitting the large subscriber by prominence on the list without eclipsing the small beekeeper, who may have the advantage of being geographically nearer the prospective buyer.

After a season or two the work should be sufficiently established to allow advances toward helping the beekeeper to "put up" his honey profitably, and so we will come closer to the cooperative marketing question than ever before without any loss of individuality.

In conclusion, let me mention that advertisements, either "personal" or through medium, is an investment. We do not realize all of its benefit at once. It comes back like a belated boomerang sometimes, and we must stick to it to reap a full harvest. Think it over, write about it, and let us formulate some definite plan for discussion at the coming convention.

## The Sugar Situation

The question as to whether or not beekeepers will be able to obtain enough sugar this fall for feeding purposes to satisfy their requirements still remains unanswered. In some districts beekeepers are able to get what they want and in other districts they cannot. Prices quoted range all the way from six cents to seven cents a pound.

In an effort to clear up the situation, Mr. Morley Pettit, Provincial Apiculturist for Ontario, sent out a letter under date of September 12 to the members of the Ontario Beekeepers' Association, asking them to report to him as to how many colonies of bees they had, how many pounds of granulated sugar they would need to feed them for the winter, how much of this they had been able to buy, and the price they paid. Mr. Pettit intends to lay this information before Sir Geo. E. Foster if it seems necessary that the Government should take action to help the beekeepers to obtain their necessary supplies.

The following is an extract from a letter received by Mr. Pettit from Sir Geo. E. Foster:

"I do not think there will be any particular difficulty in the beekeepers getting such supplies as are necessary for the feeding of their stock, provided care is taken that supplies intended for that purpose are not diverted in other ways, it being the desire of the Government to retain as reasonable prices as possible, which can be materially helped by abstaining from hoarding supplies, on one hand, and diverting them to the United States, on the other.

"I am told that the beekeepers have generally supplied themselves from retail merchants, but if it becomes impossible to get what may be necessary therefrom, the matter may be taken up with the refiners."

## THE OTTAWA EXHIBITION

At the Central Canada Exhibition at Ottawa this year much interest was taken in an exhibition of apicultural supplies, including types of hives as well as samples of foul brood and a case of live bees, which were shown by the Apicultural Division of the Central Experimental Farm. Mr. F. W. L. Sladen, of the Experimental Farm, was in charge, and during a considerable portion of the time was kept busy answering questions and handing out literature to interested people.

The prizes offered in the Apiculture Department were pretty well divided between Vincent Benoit of St. Scholastique, Que., who among a number of other prizes won a diploma for the most tasty and neatly arranged exhibit of honey, and Alfred Dennison of Pana, Ont. Among the prizes won by Mr. Dennison were those offered for one hundred pounds of liquid extracted honey in glass, not less than fifty pounds of comb honey in a section, and

extracted Linden honey. Others who won prizes were F. B. Robson, of Ottawa, John A. Davidson, of Hintonburg, and A. Wallace of North Gower.

## British Honey Exhibitions

Editor, *The Beekeeper*:—Will you kindly bring to the notice of your readers a suggestion made by Mr. Harrison Watson, the Canadian Trade Commissioner in England, to Mr. H. S. Rogers, the manager of two well-known annual honey exhibitions in London, England, namely, the Confectioners' and Bakers' Exhibition, and the Grocers' Exhibition, that some of the Canadian honey producers might like to enter an Intercolonial Honey Competition which is to be held at the Grocers' Exhibition in September, 1915. The prizes for the competition will be gold, silver and bronze medals, and diplomas, and the entrance fee will be 2s. 6d. per entry. The honey will have to be sent in one dozen one-pound bottles, and the judges will be those that adjudicate in the British Honey Competitions. I might add that the bottles used at British exhibitions are tall, metal screw-top bottles of white flint glass.

This is an opportunity for showing to the British honey merchants and British public the fine quality of Canadian honey. Samples of clover honey, willow herb honey, and buckwheat honey would not only attract a great deal of attention, but might secure prizes, and lead to the placing of Canadian honey on the British market. Largely on account of the high value set upon Canadian honey it is almost unknown in England, but there is always a demand in England for an article of exceptional quality, such as the alsike clover honey produced in Ontario. I should be pleased to hear from any intending exhibitors and would endeavor to obtain any further information that they may desire. Further particulars of the competition may be obtained by communicating with the Secretary of the Exhibition, Mr. H. S. Rogers, of Palmerston House, Old Broad St., London, E.C., England.—F. W. L. Sladen, Agriculturist, Central Experimental Farm, Ottawa.

**Some of the Beekeepers** who attended the Canadian National Exhibition greatly enjoyed a joke that some friend of his played on Mr. Wm. Couse, the well known beekeeper of Streetsville. In one of the buildings on the grounds an exhibitor had a small cardboard sign which read "The Bee that Gathers Honey doesn't Hang Around the Hive." Some one who knew Mr. Couse managed to gain possession of this sign and to attach it to Mr. Couse's coat tail. Mr. Couse proceeded on his way in all his glory and naturally ended up in front of the exhibit of the Ontario Beekeepers' Association in the Horticultural Building, where the hilarity of some of his friends gave the joke away. Needless to say Mr. Couse enjoyed it as much as anybody.

The directors of the Ontario Beekeepers' Association have decided to make an exhibit of honey at the Horticultural Exhibition in November, although no prize money will be offered or other special inducements given. Owing to the war situation, certain financial assistance that the exhibition has always had has been withdrawn this year. The exhibitors of fruit, flowers and vegetables, in order that the exhibition might be held as usual, offered to make exhibits for nothing, and the beekeepers have decided to do the same. The proceeds of the exhibition will go to the Red Cross Fund. Further mention of the matter appears in another column.



## New Brunswick Beekeepers in Convention

The New Brunswick Beekeepers' Association held its first annual meeting in St. John, September 10th. The attendance was good and the close attention and keen and intelligent discussions of many phases of bee culture that took place augurs well for the progress of beekeeping in New Brunswick.

Only one formal address, that by Mr. G. L. Kingsmill, assistant to the Dominion Apiculturist, on the work of his department at Ottawa, was given. The idea and arrangement of the programme was to have just as many of those present take part as possible. Discussions of such subjects as "Fall Management and Wintering," "The Preparation of Honey for Market," "Our Local Markets," "The Beekeeper's Workshop," etc., were opened by various members to whom the subjects had been previously assigned, and the enthusiastic discussions that followed fully justified the course adopted. The presence of Mr. Kingsmill to act as a "ready reference" was found of great assistance.

At the business meeting, officers for the ensuing year were elected as follow: President, L. T. Floyd; 1st Vice-President, John Comber; 2nd Vice-President, W. G. Ashell; Secy.-Treas., H. B. Durost, Woodstock, N.B.

A director for each county of the province was also elected.

A feature of the exhibition that attracted a great deal of attention, and that was classed by many with the dare-devil auto cyclists and auto poloists, was the performance of H. B. Durost, Provincial Apiarist, in the handling of live bees. Even yet, many are not convinced that the bees were not under some magical spell. To many it did not seem possible that a person could enter a cage in which the air was literally filled with bees, and allow them to alight in swarms on his bare face, while he scooped them up by handfuls in his bare hands without being fearfully stung. Nevertheless, he did handle the bees several times daily during the full week of the exhibition without being once stung. By so doing, many persons were convinced that our little friends are not so vicious as most people believe them to be.

The honey and bee exhibit was one of the best ever seen in this province, considering the small number of beekeepers in New Brunswick and that this, in most sections of the province, was a very poor honey season. The display of something like a half-ton of honey in various forms was remarkable. Those in a position to know said that the quality of the honey displayed could hardly be improved upon. There are great possibilities in New Brunswick for the extension of bee culture.

## Beekeepers' Supplies

Editor The Beekeeper.—I feel forced to reply to Mr. Stone's articles in The Beekeeper. Mr. Stone infers that my statement that the goods ordered from the States were goods not made in Canada was untrue, and asks, for the benefit of Canadian firms, that I state what they were. Well, The Ham & Nott Co. took me seriously, wrote, and received the information months since. My order was: 4,000 thumb screws, 2,500 three-wire strips for queen excluders, two Peterson capping melters, two taps, a quantity of comb honey cartoons, and a quantity of blank blades for electric uncapping knives that I have invented: Total order \$118, and duty \$25, added. Possibly Mr. Stone can tell me where to get them in Canada.

Mr. Stone finds fault with the Canadian frames being too light, or thin. This may be so; I do not use them. I use a much lighter frame, have over fifteen thousand frames, and do not remember ever breaking one. This seems only a matter of opinion or preference, and not poor workmanship, as Mr. Stone says. I could name some of our largest beekeepers who definitely express a preference for the thin frame. Further, I had samples of four frames sent from The Ham & Nott Co. These I compared with some seven styles of frames selected from a car of bees bought in five different apiaries in Missouri this spring, some 230 colonies, and I found that I had none as heavy as the heaviest made by The Ham & Nott Co. This shows a preference for a thin frame in at least some parts of the States.

Mr. Stone thinks Canadian goods should be cheaper, as the Root Co. use cyprus and sell at the same price. The Root Co. do not make hives of cyprus unless specially ordered, and do not advise cyprus. The price would depend on the quantity ordered, as they would have to be specially made for that particular order. Cyprus is less expensive than pine and costs from two to four dollars less than an equally

good quality of pine. I am speaking now of the wholesale price laid down to Canadian manufacturers at their factories.

The Chas. E. Hopper Co. say I made a serious mistake in stating that the Root Co. used cyprus in their supplies. In two carloads of bees bought in Michigan and Missouri, all factory-made hives were of cyprus, and I was assured they were Root goods. I do not know if they were specially ordered, but I am still of the opinion that about five years ago the Root Co. were using cyprus. I must assure the Chas. E. Hopper Co. that I am not disparaging Root goods, and am sorry if they looked upon my letter in the May issue in that way. They say they have hundreds of bottom boards of cyprus. I have only about 175, but I do not like them. I find them much inclined to warp. Were they made of the quality of lumber that I have always found in the covers and hive bodies I believe they would be equal to any pine. When we started using cyprus in Canada about five years ago, the quality was very much better than to-day. There is now too much of the hard, heavy variety. If we could get all soft yellow cyprus, I know of no reason why it should not be used. I have about eight hundred bodies and supers of cyprus, and my objection to them is that there is too much difference in the weight, leaving too much to guess at when weighing up colonies for winter feeding.

Mr. Stone thinks the Canadian hive corner is not equal to the American dove-tailed corner. This, too, is a matter of opinion. The Ham & Nott Co. used to make a dove-tailed hive, but discarded it for the present hive. I do not know which is better, but I do know from three years' experience on a large dove-tailing machine some years ago, that the dove-tailed corner is neither difficult or expensive to make. Moreover, Prof. Burton S. Gates, of the Massachusetts Agricultural College, when visiting the Brantford factory, was very enthusiastic over this hive joint and

had samples sent to the College in Massachusetts. I have heard other prominent beekeepers express a decided preference for this hive corner.

As to Mr. Stone's prediction that some American company would put our Canadian companies out of business, I am sure he means this only as a joke, and would not want us to take him seriously.

S. B. Bisbee,  
Beamsville, Ont.

## How I Market My Honey

Jas. M. Munro, Slate River, Ont.

I was pleased to see in The Beekeeper Mr. Pettit's encouragement to honey producers to work up a home market by personal canvass of customers. Less than four per cent. of my crop is sold through the middleman, and that small portion only to local stores for the convenience of country customers. My city trade is looked after personally. I use the public market in summer and the house to house method in the winter. My method is to put a local advertisement in the city papers the day before a trip. I then load up the sleigh with cases of sealers, and with two of the boys start for the city in time to be ready for work by nine a.m. The younger boy drives, while the elder one takes one side of the street and I the other. We call at every door, make no exception, and sell to Jew and Gentile. Whether the salutation is "Good-day," "Bon-jour," "Gin Dobera" or "Cia mar ha sibh an diugh," we meet with a hearty welcome from all; and if they have the cash there is usually a sale. The main thing is to carry a cheerful face, have both yourself and your goods clean, and don't go on a day when there is an east wind.

## Dark Honey Crop Report

The Crop Report Committee of the Ontario Beekeepers' Association met on Friday, September 11th, to consider the crop of dark honey. It was found that 198 members had reported 89,568 pounds from 9,131 colonies, being an average of less than ten pounds a colony. This is less than half of last year's average. The committee advises members to ask seven and one-half to eight and one-half cents a pound wholesale, depending on the size of package and the quantity sold in one order. No buckwheat honey should be re-tailed at less than ten cents a pound.

The white honey market is quiet, and owing to the uncertainty of market conditions on account of the war it is difficult to advise. Owing to the general failure of the honey crop, both light and dark, the stock of honey in the country is steadily diminishing, and it will be many months before another harvest time. Meanwhile, thousands of colonies are on the point of starvation, and the advancing price of sugar will cause many of these to perish before spring, thus reducing next season's output. All considered, the committee feels that honey need not be sold below prices recommended.

Signed by the committee:  
Wm. Couse, H. G. Sibbald, P. W. Hodgetts, F. W. Krouse, Jas. Armstrong;  
Morley Pettit, Secy.-Treas.

## Dominion Fruit Conference

At the recent Dominion Fruit Conference a discussion took place over a matter brought up by the Nova Scotia delegates. Mr. McMahon informed the conference that Nova Scotia growers were faced with





**Hon. Martin Burrill, Dominion Minister of Agriculture**

Being a practical fruit grower, Hon. Mr. Burrill is much interested in the fruit industry. During the three years he has been Minister of Agriculture, he has held two Dominion conferences of fruit growers. He attended and spoke briefly at the conference held at Grimsby, Ont.

a serious situation due to the fact that the steamship companies carrying the bulk of the Nova Scotia apple pack from Halifax to the Old Country had given notice of a proposed advance in carrying charges of 32c. a barrel. As a reason for this they had mentioned additional war risks. At the time the advance was announced it was known that the additional charges due to the war risks would not amount to more than .15c a barrel. The steamship companies were evidently endeavoring to take advantage of the situation to impose an additional burden on the fruit growers. There was reason to believe also that the advance had been contemplated before war was declared. In view of the fact that the Government subsidized these steamship companies heavily Nova Scotia fruit growers felt that the Government should take action to prevent such a large increase in rates. Mr. McMahon appealed to the conference to assist the Nova Scotia fruit growers in obtaining a satisfactory adjustment.

At first, as the Nova Scotia growers explained the situation, the growers from the other provinces listened with interest, but without showing any tendency to give special support to the Nova Scotia growers in dealing with the situation. They were ready to do what they could to help, but seemed to look on it as a Nova Scotia matter which the Nova Scotia growers should deal with themselves. A sudden and remarkable change in this attitude was brought about when one of the Nova Scotia delegates pointed out that the situation was one which affected the other provinces fully as much as it did Nova Scotia, because unless a considerable reduction was obtained in the proposed advance in the steamship rates it would practically prevent the shipment of certain varieties of Nova Scotia apples now shipped to European markets. Being unable to market these apples in Britain, Nova Scotia growers would be forced to unload them on the markets of Ontario and the west at low prices, where they would compete

with the products of the other provinces.

This point scored a bull's eye. Within a few minutes it was decided to have a delegation wait on the Government at Ottawa. Ontario and British Columbia quickly agreed to stand the expense of being represented on that delegation in order to prove to the Government that it was a matter of national importance. The delegation was duly appointed and waited on the Government on the following Saturday. The Canadian Horticulturist has since been looking into the matter. Partly as a with an encouraging reception. At the request of the United Fruit Companies of Nova Scotia the Government had already been looking into the matter. Partly as a result of the work of Sir Geo. E. Foster, and partly on account of the fact that the United Fruit Companies had commenced to charter boats independent of the combine, the growers have obtained a reduction in the proposed advance of not less than .19c a barrel, and are satisfied with the new arrangement.

The incident brought home to all present the solidarity of interests between the fruit growers in all parts of Canada, and seemed to indicate the possibility that within a few years the fruit growers in the different provinces will be cooperating in the marketing of their crops. During the discussion Mr. A. W. Peart pointed out that cold storage charges on shipments of fruit had been greatly increased this year as compared with last year. Mr. Ruddick stated that one of the chief difficulties this year is going to be to get any space at all on vessels, as many of the steamships will be required to be used as transports, and may not be available to handle apples when most needed. About twenty vessels would be required to transport the troops at Valcartier alone. The Nova Scotia delegates did not seem to think that there would be much difficulty in their obtaining all the accommodation necessary. Their chief concern was to prevent the proposed advance in rate.

#### THURSDAY'S SESSIONS

According to the programme, Thursday morning was to be devoted to an automobile ride through the Niagara district. The drive lasted, however, until six o'clock. Most of the automobiles were loaned by local fruit growers. The delegates were taken from Grimsby to the Fruit Experiment Station at Jordan Harbor, and from there to St. Catharines and Niagara Falls, where dinner was served. The drive took the delegates through some of the best fruit sections of the Niagara district.

#### SUCCESSFUL COOPERATION

At the Thursday evening conference, Mr. A. E. Adams, the secretary of the United Fruit Companies Ltd. of Nova Scotia gave a most instructive address entitled, "Systematic Cooperation in Nova Scotia." Mr. Adams traced the initial efforts of the fruit growers of Nova Scotia to cooperate, their failures and successes. He told of the Acts that it was necessary for them to get passed through their local Legislature in order that they might cooperate effectively, and concluded by describing the wonderful success that has been attained. Last year the United Companies handled 6,044 tons of fertilizers or over 300 car loads, saving at least \$18,000 to their members on fertilizers alone. In addition they handled 575,000 pulp heads, 35,000 pounds of nails, 67,800 pounds of grass and clover seed, 104,000 pounds of arsenate of lead, 8,900 rods of wire fencing and 1,800 barrels of lime-sulphur, as well as handling many other articles of a similar nature. Last year the companies

did a fire insurance business, exceeding \$450,000. Extracts from this paper will be published in The Canadian Horticulturist as space permits. In reply to questions, Mr. Adams stated that the Companies do not sell to middlemen, nor to private individuals. Their sales are made to their local affiliated companies. Where sales are made to outsiders the companies make a profit on each transaction and the outsiders do not participate in the rebates given to members.

#### FRIDAY'S SESSIONS

Three busy sessions were held on Friday. These were devoted mainly to discussions of the Inspection and Sales Act and to the standardization of packages. Mr. Robt. Thompson of St. Catharines was the chairman of the committee appointed to deal with standard packages. This committee reported that they had decided after thorough discussion not to recommend any changes in the present standard barrels or boxes. The six-quart and eleven-quart baskets were also looked on as standard. It was felt that it was not desirable that there should be any change here, also except that the style of basket used might be standardized as at present some of the manufacturers were making baskets that, while they contained the same amount of fruit, were made in different shapes.

Senator E. D. Smith said that previous to 1900 there was no standard size of basket. The twelve-quart basket was commonly used. Gradually growers began to shave off half an inch in the length or width or depth of the basket, while still calling it a twelve-quart basket. This continued until the so-called twelve-quart basket contained only nine quarts. Berry boxes were not touched for a long time, but finally the growers began to tamper with them. When standards were set and the fruit division was given power to deal with the matter an improvement in conditions became noticeable.

Fruit Commissioner Johnson wanted to know if the committee did not deem it advisable to require that the baskets should be made of a certain thickness of veneer to ensure their being made of good material.

Mr. Thompson replied that this did not seem practical, as thick veneer made of poor material often was not as strong as veneer, that while thinner was made of better material.

Senator Smith agreed with this contention.

Commissioner Johnson suggested that the law might require that the material used should be of good quality.

#### THE STANDARD BOX

A discussion was held as to whether or not it is advisable to discard the Canadian standard apple box in favor of the standard box recently adopted by the United States. The discussion soon showed that the British Columbia growers, who have had the most experience in box packing were seriously divided on this point. Aside from some of the western growers, however, the opinion of the western dealers present and others who spoke seemed to be favorable to adopting the American standard box as the Canadian standard. The Canadian standard is 10x11x20. The American standard is 10½x11½x18. It was said that while the American box is twenty odd inches smaller than the Canadian box, it is a little squarer and gives the public the impression that it is larger and holds more. It therefore sells better. It also holds better in the car and lends itself better to certain packs.



### Dominion Fruit Conference

At the recent Dominion Fruit Conference, during the discussion of the Standard apple box, one of the arguments advanced favoring the Canadian box was that it can, with only a slight alteration, be made suitable for use in the New South Wales trade.

Messrs Ells and Parker said that as Nova Scotia is beginning to adopt the box with the idea of going after some of the United States trade they would like to have a standard box definitely decided upon.

The discussion was concluded by the adoption of a resolution asking the Government to investigate the matter and report as to the best box.

#### A NO. 3 APPLE

There was a big discussion over what constitutes a No. 3 apple, and whether or not that grade of apple should be allowed to be placed on the market. The British Columbia delegates claimed that they did not market any No. 3 apples. One of the Nova Scotia delegates said he had seen apples graded No. 3 sold that were a disgrace to the trade. There were some growers who would not spray or take proper care of their fruit as long as they thought there was any chance to sell their No. 3 apples.

Mr. Laing, a fruit dealer of Winnipeg, said that he had handled large quantities of No. 3's with good results, but they were a better lot than usual for that grade.

Fruit Inspector G. H. Vroom said that he had been in England and was asked by some of the dealers why the Nova Scotia growers shipped No. 3 apples. He replied by asking them why they continued to buy them. "Well," they said, "we feel that when men go to the trouble of packing a barrel of apples and sending them over here it is too bad not to be able to

make them any returns." If, therefore, their No. 1 apples sell for 18 shillings, their No. 2 apples for 14 shillings, and their No. 3 apples for little or nothing, we dock a little off their first two grades in order that we can make the growers some return on their poor grade.

Mr. M. K. Ells claimed that there are apples not quite good enough for No. 2's that are too good to be wasted, and for which in parts of the Maritime Provinces and Quebec there is a good demand for use for cooking purposes.

Commissioner Johnson summed up the discussion by saying the question seemed to be governed largely by crop and market conditions. In years when there was a large crop of good quality of fruit it was a mistake to market No. 3's. Other years when there is a shortage in the better grades and a larger percentage than usual of the poorer grades there was often a demand for the poorer grades.

It was decided not to recommend any change in the definition of a No. 3 apple as given in the Inspection and Sale Act.

There has been no serious objection taken to the 20x11x10 apple box. Why not legalize it for the whole of Canada, both for the home trade and for export?—W. A. Pitcairn, Kelowna, B. C.

The Oregon Agricultural College, at Corvallis, Oregon, has issued Bulletin 117, entitled "Loganberry By-Products," by C. I. Lewis and F. R. Brown.

There has been formed in Louth township a new cooperative association, which will be known as The Port Dalhousie Cooperative Fruit Growers' Association. The capital is placed at \$10,000, in \$50 shares.

## 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.

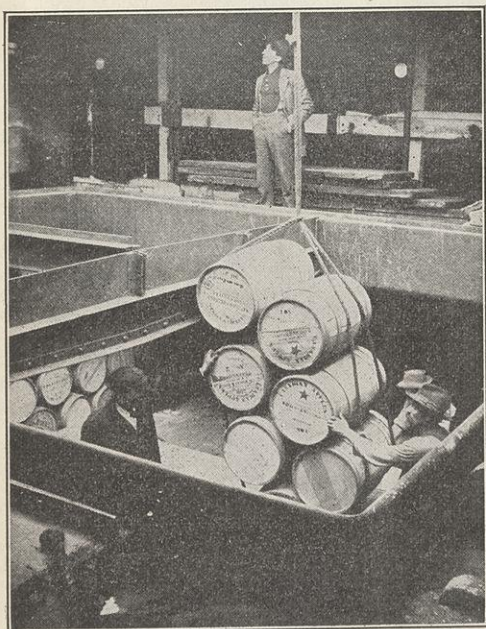
We offer 50 varieties of Paeonies at from 30c to \$2.50 each; 30 vars. of Irises at from 15c to \$1.00 each; 5 vars. of Phloxes at 15-20c each; 5 vars. of Heleniums at 15-20c each; Gold Medal Hybrid Delphiniums at 20c each; 10 for \$1.50. 5 vars. of Hemerocallis at 15-20c each; 6 vars. Astilbe and Spirea 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**

# 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.

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## Every farmer should hire him

You pay him only \$3.00 for 365 full 24-hour days a year—and nobody knows how many years he'll last, for he has never been known to wear out.

His board amounts to a drop of oil every twelve months—that's all the pay he asks.

His work is getting the farm hands in the fields on time, starting the before-breakfast chores on time, and telling the right time all day so the women folks can have the meals on time—these are easy jobs for him.

Big Ben stands seven inches tall. He is triple-nickel plated and wears

an inner vest of steel that insures him for life. His big bold figures and hands are easy to read in the dim morning light. His keys almost wind themselves. He rings for five minutes straight, or every other half minute for ten minutes as you prefer.

The next time you're in town just drop in at your dealer's and ask to see Big Ben. If your dealer hasn't him, send a money order for \$3.00 to *Westclox, La Salle, Illinois*, and he'll come to you, transportation charges prepaid, all ready for work. Hire Big Ben for your farm and he'll prove the promptest hired man on the place.

## The Pre-Cooling of Fruit

(Continued from page 240)

When hot fruit is put in a car the ice in the bunkers goes down fast."

Mr. Ruddick: "One objection to cooling fruit in cars is the long time it takes to cool the fruit. In some cases it requires three or four days to cool the fruit."

Q.—"Would you prefer one large or several small plants?"

A.—"Where there are several storage warehouses around one shipping point, a central plant connected with the others is probably the best. Often some of the warehouses are not in use when the others are. In such cases the supply of cold air can be shut off in those warehouses."

### SMALL PLANTS

Mr. Edwin Smith, assistant to Mr. Ruddick: "There are certain fruit districts where tender small fruits are shipped during limited periods where it is not practical to establish large plants, as the overhead operating expense would be too great. The Washington Department of Agriculture has devised a simple system that is sufficient for such districts. I put up one of these in British Columbia, with satisfactory results. It cost to construct about \$2,500, not counting a few extras. The rooms have a capacity of about two carloads. Such a plant is all right for holding temperatures for short periods, but not for use as a cold storage."

## Recent Bulletins

Recent circulars and bulletins that have reached The Canadian Horticulturist include Circular No. 172, issued by the Agricultural Experiment Station, Urbana, Illinois, entitled "The Blight of Apples, Pears, and Quinces." This bulletin is by Prof. P. S. Pickett, formerly of Ontario. The same Station has issued Circular No. 173 entitled "Onion Culture," by John W. Lloyd.

The Dominion Department of Agriculture is distributing a number of circulars for use at the fall exhibitions. These include three by the Dominion Horticulturist, W. T. Macoun, entitled "How to Make and Use Hotbeds and Cold Frames," "Protection of Fruit Trees from Mice and Rabbits, including the care of Injured Trees," and "Top Grafting."

The largest and heaviest apple ever grown in the world, says an English paper, has been raised this season in England. It is a Gloria Mundi, and was produced by the same grower who a few seasons ago raised the famous giant apple of the same variety, which measured 26 inches in circumference and weighed 27 ounces. Sent for sale in Covent Garden in October the 19th, 1909, it realized the astonishing price of £14 (\$70) by public auction, breaking all previous record. The new record breaker weighs no less than 32½ ounces. This wonderful apple was grown in an 11-inch flower pot, the tree producing six mammoth fruits at the same time. It was this very tree which bore the giant of 1909.

An unusually full description of the Codling-Moth is given in Bulletin No. 147 of the Iowa State College of Agriculture, Ames, Iowa. It is entitled "The Codling-Moth in Iowa." Bulletin 148, issued by the same college, is entitled "The Effect of Potato Treatments on Seed Vitality."

The Michigan Agricultural College, at East Lansing, Michigan, is distributing Bulletins 67, 68 and 69, entitled "Onion Culture on Muck Land," "Two Michigan Bean Diseases," and "Spray and Practice Outline for 1914."



## 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

## THIS WASHER MUST PAY FOR ITSELF.

A MAN tried to sell me a horse once. He said it was a fine horse and had nothing the matter with it I wanted a fine horse, but, I didn't know anything about horses much. And I didn't know the man very well either.

So I told him I wanted to try the horse for a month. He said "All right," but pay me first, and I'll give you back your money if the horse isn't all right."

Well, I didn't like that. I was afraid the horse wasn't "all right" and that I might have to whistle for my money if I once parted with it. So I didn't buy the horse, although I wanted it badly. Now, this set me thinking.

You see I make Washing Machines—the "1900 Gravity" Washer

And I said to myself, lots of people may think about my Washing Machine as I thought about the horse, and about the man who owned it.

But I'd never know because they wouldn't write and tell me. You see I sell my Washing Machines by mail. I have sold over half a million that way. So, thought I, it is only fair enough to let people try my Washing Machines for a month, before they pay for them just as I wanted to try the horse.

Now, I know what our "1900 Gravity" Washer will do. I know it will wash the clothes, without wearing or tearing them. In less than half the time they can be washed by hand or by any other machine.

I know it will wash a tub full of very dirty clothes in Six Minutes. I know no other machine ever invented can do that, without wearing the clothes. Our "1900 Gravity" Washer does the work so easy that a child can run it almost as well as a strong woman, and it don't wear the clothes, fray the edges, nor break buttons. the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump might.

So, said I to myself, I will do with my "1900 Gravity" Washer what I wanted the man to do with the horse. Only I won't wait for people to ask me. I'll offer first, and I'll make good the offer every time.

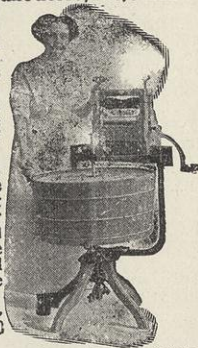
Let me send you a "1900 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after you've used it a month, I'll take it back and pay the freight, too. Surely that is fair enough, isn't it?

Doesn't it prove that the "1900 Gravity" Washer must be all that I say it is?

And you can pay me out of what it saves for you. It will save its whole cost in a few months in wear and tear on the clothes alone. And then it will save 50 to 75 cents a week over that in washwoman's wages. If you keep the machine after the month's trial, I'll let you pay for it out of what it saves you. If it saves you 60 cents a week, send me 50 cents a week 'till paid for. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance.

Drop me a line to-day, and let me send you a book about the "1900 Gravity" Washer that washes clothes in six minutes.

Address me personally:  
B. S. MORRIS, Mgr., 1900 Washer Co., 357 Yonge St., Toronto, Ont.



## An Exhibit of Merit

Messrs. Ross & Son, Toronto Nurseries, in addition to their usual exhibit of nursery stock at the Toronto Exhibition, showed a number of fine specimens of the English Laurel, variegated Silver and Golden Hollies, English Ives, variegated Japanese Euonymus, Retinosporas in variety, Specimen Boxwood, both pyramidal and globe, and different sized Bay Trees, Rhododendrons, and Japanese Maples. They are endeavoring to popularize these half-hardy broad-leaved evergreens, and to show how easy it is to decorate home grounds with clumps and single specimens of these beautiful plants. They can be lifted with ease before winter and stored in the cellar with a little earth thrown over the roots. In the spring they may again be planted out on the lawn or garden, where they are very effective on account of their novelty and beauty. They are splendid substitutes for palms in the sunrooms, halls or green-houses.

The Cupressus Lawsoniana, Triumph of Boskeep or Blue Cypress was much admired. It is hardy in Toronto, two fine specimens having been growing for years in the St. Clair district.

Ross & Son, besides the usual line of ornamental trees and shrubs, have many other evergreens, such as Magnolias, Kalmias, Deodar Cedars, Irish Yews, and Junipers. They invite intending planters to inspect their stock at the Nurseries, and will be pleased to mail their catalogue to any address or give information on any subject relating to Horticulture on application.—Ross & Son, 1167 Queen St. E., Toronto, Ontario.

## Possible Western Outlet

Dr. J. W. Ross, Canadian Trade Agent, Shanghai, China

British Columbia fruit packers will do well to study the China market, for it has great possibilities of a demand for the products which they can supply. British jams and marmalade, United States tinned fruits, vegetables and preserves, and Australian jams have for years had a quite extensive sale in all the open ports of China, and the demand will surely increase.

In promoting this trade, the same points must be observed as those applying to condensed milk. In the case of jams, glass containers would have the best appearance. All labels must be attractive, and the word Canada or Canadian must always appear. Good articles of this class when put up in an attractive manner will always find a ready sale in the China market.

## Packing Fruit for Exhibition

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

It seems to be the general opinion of those unfamiliar with wrapping that it adds considerably to the cost of packing. As a matter of fact, the cost of paper for wrapping is almost saved by the weight of fruit displaced by the paper. Furthermore experienced packers can do as quick or even quicker work wrapping than without. Again, it is easier to secure the proper bulge with wrapping, as the firmness of the pack can be varied considerably from the middle of the pack to the ends without injuring the pack in any way. The principle of this has already been dealt with in "Bulge." Wrapping also allows more latitude in the style of pack. In fact, it is easier by far to pack wrapped apples

## 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.

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## TOAK QUEENS

AFTER JULY 1st

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

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## Fruit-Men

A General Line of  
EXTENSION  
SINGLE and  
FRUIT-PICKING

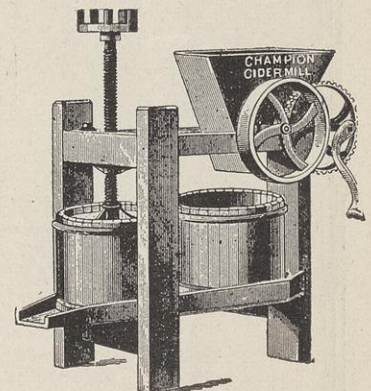
Extension Ladders are Light and Strong, Wire-trussed and have a Safe Lock.

LET US QUOTE  
YOU PRICES

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174 York St., HAMILTON, Ont.

## CIDER MILL AND PRESS



## FREIGHT PAID

ONTARIO AND EAST

Best Cider Mill and Press made. Works hand or power, (power fly wheel extra). Grinds rapidly and easily. Gets all the juice and does not clog. Screw powerful and easily operated. Strong and well made. Shipped Promptly

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

## FLOWER POTTS



Large stock of all sizes for the Spring trade.

Send us your order NOW and receive your supply before the Spring rush.

THE FOSTER POTTERY CO., Ltd.  
HAMILTON, ONT.

## 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 hardest and best for Orchard Planting; also a long list of leading varieties of Fruits and Ornamentals.

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

## 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  
533 William St., MONTREAL, Que.



## 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, Boscoop.—Raspberries, Herbert! Herbert!! Herbert!!! Outhbert, Marlboro, Brinckle's Orange, Golden Queen, Strawberry-Raspberry. — Garden Roots, Asparagus, Rhubarb. Write for Catalogue.

WM. FLEMING, Nurseryman, 496 - 4th Avenue W., OWEN SOUND, ONT.



## 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.

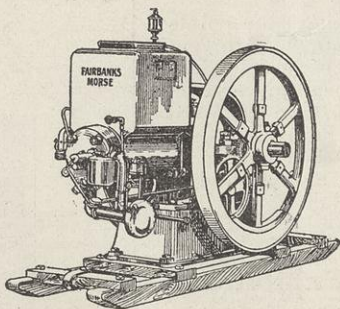
For 28 years we have had the name of knowing how to grow trees right. From seedling to freight car we watch our own trees personally and know we are shipping just what you order. We have an up-to-date nursery plant and can ship all orders promptly, as well as grow and ship at a low cost. We give you every advantage on price. Plant apples this fall.

Write for our catalog TO DAY, and get our prices.

KELLY BROS., Wholesale Nurseries, 216 Main St., Dansville, N.Y.

You'll never regret planting Kelly Trees

Fairbanks-  
Morse  
Farm  
Engine



Serves every power purpose on the average farm.

Easy to operate, simply and durably made, reliable at all times and will run on cheap fuels.

Of the 160,000 Fairbanks-Morse Engines

built during the past 35 years, 90% are still in active service. The best possible evidence of their dependability.

Many types and powers. Vertical and horizontal—portable and stationary—1 to 200 h.p.

Send for free booklet, "Farm Power."

## The Canadian Fairbanks - Morse Co., Limited

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Regina  
Saskatoon  
Victoria

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Edmonton  
Vancouver

Canada's Departmental House for Mechanical Goods

than unwrapped as any packer skilled in both methods will testify. The fruit stays where it is placed.

As to the benefit to the fruit of wrapping, there is no question. It prevents the rapid spread of disease, the fruit keeps longer, it is protected from outside influences, as sudden changes of temperature and excessive moisture. It tends to prevent the apples bruising one another, it makes an elastic but firm pack much less liable to shift than unwrapped fruit, and it gives a more finished appearance to the package. It presumes a high grade product so finding a readier sale and a higher price.

In wrapped fruit, the top of the box should be packed last, while in unwrapped fruit the top is packed first. Packing the top of wrapped fruit first is a poor method. It wastes time and should be discouraged.

### PACKING FOR EXHIBITION.

Packing for exhibition is essentially the same as commercial packing in so far as the actual operation is concerned. Great care should be taken, however, to choose only apples that are as near perfect in regard to color and freedom from blemishes as it is possible to get them. A single wormy apple in a box is enough to disqualify that box in the eyes of most judges, if the competition is at all keen.

It is good practice to clip the stems of the top layer of apples so that the apples may be packed stem end up. They present a better appearance than if packed calyx-end up.

In competitions where more than one box is called for, have the same pack and the same number of apples to each box. In fact, have the boxes as nearly alike in every respect as possible. Uniformity counts many points in judging.

Before shipping your fruit to the exhibition, take every precaution to ensure its arrival in perfect condition. It is a good plan to line your boxes with corrugated paper, double wrap your fruit, and re-pack at the exhibition. It takes only a short train journey to loosen up what looks like a perfect pack. Needless to say the pack should be firm at judging time.

Above all things keep to the letter of the rules as given in the prize list. In close competitions judges often have to resort to technicalities to simplify their work, and if you don't agree with the judges' decision—don't kick. He has a thankless job at best.

### Items of Interest

Philip J. Gabler, Cargo Inspector for Canada at Liverpool, reports in the Census and Statistics Monthly as follows. "It will be generally admitted that in these days of keen competition continued improvement is necessary if we are to hold our own or keep ahead, and I would like to call the attention of Canadian packers to the fact that the Western New York State people are making a big effort to capture the best of this market. Their fruit is of very good quality generally, and very well graded, and they go sometimes to the extent of what may be termed fancy packing in barrels (i.e., fancy paper lace for the face of the barrels and a pad at top and bottom.) These apples easily command top prices."

An association with 50,000 or 100,000 barrels to sell can command a better price than an association with 2,000 to 8,000 barrels, because the cost of making sales in large bulk is much less than the cost of making a number of sales in small bulk.



## Should Fruit Inspectors Give Out Certificates

**S**HOULD the Dominion fruit inspectors, after they have inspected packages of fruit, give the growers a copy of their report concerning it? This point was raised at the Dominion Fruit Conference held in Grimsby, Ont., September 2 to 4, and led to a lively discussion. It resulted finally in the conference adopting a resolution favoring the idea if the Government can arrange to do so without injury to the work of the fruit inspectors.

When the point was first raised Dominion Fruit Commissioner D. Johnson explained how the work of inspection is conducted. He said that Ontario has been divided into districts, but the districts are so large it is impossible for the fruit inspectors to get around as often as the growers seem to desire. This is because there are not enough inspectors.

Mr. P. W. Hodgetts, of Toronto, said that he had heard the suggestion made that if necessary fewer inspectors should be engaged permanently in order that more inspectors might be engaged temporarily during the shipping season.

Fruit Inspector C. W. Baxter pointed out that where a buyer was handling a lot of different packs the inspector might inspect only one pack. Were he to give a certificate for one pack it might not be representative of the other packs, and yet the dealer might use it to help to sell the other packs also. Some method of guarding this point would have to be found.

Mr. M. Snetsinger, of Thornbury, Ont., did not think this difficulty was likely to be serious, as each packer has to be responsible for all the packs he sells.

Mr. A. E. McMahon, Aylesford, N.S., pointed out that the inspectors have to re-

port to the Department of Agriculture on each lot of fruit they inspect. He thought that it was only fair that the packer should be given a copy of that report.

Mr. Elmer Lick, Oshawa, Ont., thought that it would be a good idea if an association or packer could get a report covering a lot of inspections showing them to have been packing a consistently uniform and high quality pack.

Prof. M. Cumming, Deputy Minister of Agriculture for Nova Scotia, was in favor of copies of the inspector's reports being given to the packers, although there was a danger that the reports might be used as a guarantee of quality to help sell other fruit and thus lead possibly to law suits. This would have to be guarded against.

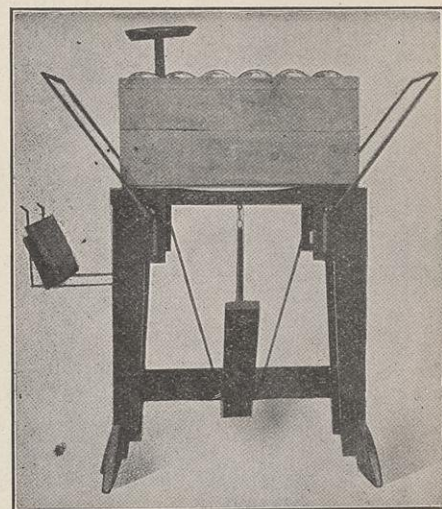
Mr. P. W. Hodgetts pointed out that Ontario fruit sent to the west sometimes deteriorates in the dealers' hand. He has it inspected there, and in some cases has used the inspector's reports when applying for rebates from the packers. If the packers had a copy of the inspector's report as obtained at their end of the line, it would in some cases serve to protect them. He felt that it would not be long before the trade would recognize that the reports were in no sense a guarantee of quality, but merely a report on conditions at the time of the inspector's visits.

Mr. A. E. Dewar, Charlottetown, P.E.I., was afraid that after the inspector left, dishonest packers would take advantage of the inspector's reports to use them in selling inferior lots of fruit that the inspector had not inspected.

Mr. A. W. Peart, Burlington, Ont., favored the suggestion that the inspectors should give the packers a copy of their reports

## Quick and Easy

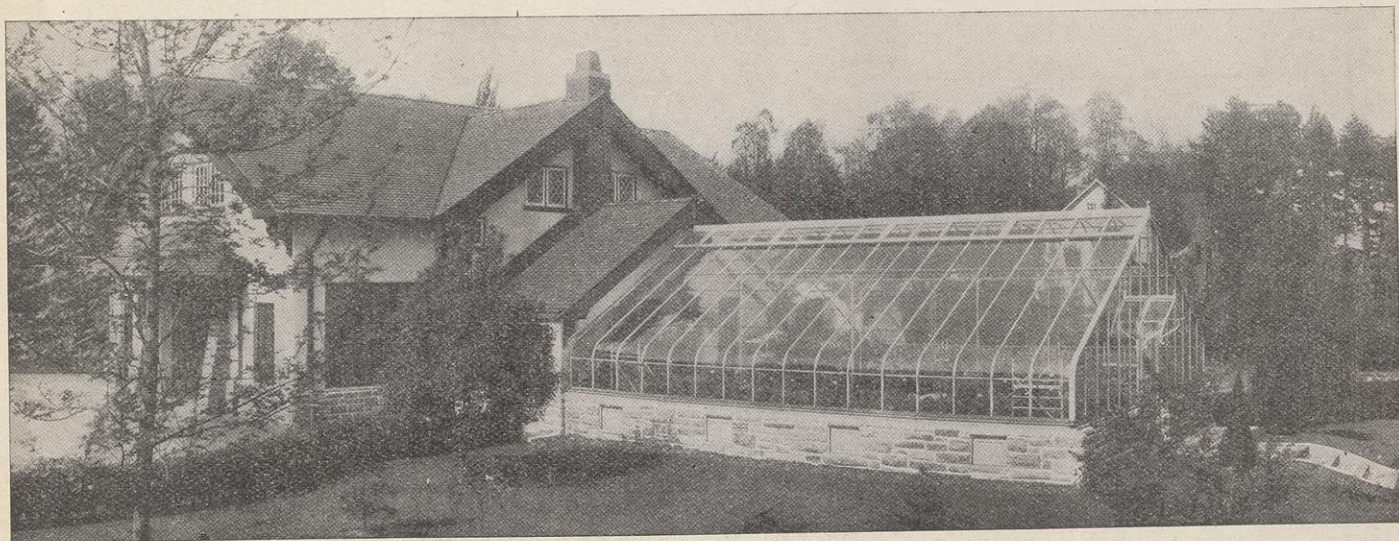
That is the way the DAISY APPLE BOX PRESS works. A simple pressure of the foot brings the arms up over the ends of the box, automatically draws them down and holds them in place while being nailed. The fastest and only automatic press on the market.



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**T**WO pleasure givers—two essentials—the auto and the greenhouse. Adding so much to the enjoyment of country living, the associating of them in thought seems but natural. To carry the thought still farther: The garage and the greenhouse are a logical link-up. Logical and economical. You save the cost on one gable of the work room. The one boiler will heat them both, to the economy of both. There

are, however, certain important factors that must be considered for the safety and efficiency of each. We won't go into them here, but will gladly advise you about them. If you would like our suggestions concerning the design and layout of the "link-up," we will gladly arrange to make them for you. Or should you employ an architect, we would be glad to cooperate with him. In any event, let's talk the question over.

## U-BAR GREENHOUSES

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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.

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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
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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
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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.

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SEED MERCHANTS Established 1850 HAMILTON, ONT.



SINGLE NARCISSUS

Mr. McMahon favored every packer being registered. It would help the inspectors in the performance of their duties and in looking after some of the packers.

Mr. Max Smith, Burlington, Ont., claimed that an honest packer does not need an inspector's certificate. Dishonest packers are the men who need certificates to help them make sales. Dealers in the west would require that all shipments should be accompanied by certificates. To start giving certificates would make it necessary to employ an army of inspectors.

Lorne Carey, of the Wentworth Fruit Growers' Association, told of a carload of apples that had been shipped west. The retailer wired back on its receipt that it was unsaleable. The fruit inspector was called in and reported that the fruit was first-class. In the course of the trouble the apples became frozen and had to be sold at a great loss. Had the shippers had an inspector's certificate in the first place, it would have been a great protection.

Senator E. D. Smith, of Winona, Ont., was strongly in favor of the granting of inspectors' certificates. If necessary a nominal charge per barrel might be imposed in connection with each inspection to deter an undue number of applications for inspection being made. The granting of certificates would tend to help young growers whose pack was unknown to the trade to gain a quicker acceptance for their fruit.

Rev. Mr. Dickson, Rectory Hill, Que., wanted to know if the first inspection would be final.

Mr. Lick replied that this would be impossible, as it would lead to many attempts at fraud. Fruit might deteriorate and require to be reinspected.

The matter was referred to the committee on resolutions, which later brought in a report which was adopted recommending the Government to issue the certificates if a satisfactory method of doing so could be devised.

I know of claims in Ontario that have been standing against railway companies for five years, and for amounts as great as \$1,500. One of the powers that should be given to the Dominion Railway Commission is the right to adjudicate cases that have been standing for over three months.—Geo. E. McIntosh, Forest, Ont., Traffic Expert for the Ontario Fruit Growers' Association.

Mr. Charles H. Williams, B.S.A., who has for the past two years been resident horticulturist at Charlottetown, in connection with the Dominion Department of Agriculture, has been promoted to the position of Assistant Superintendent of the Dominion Experimental Farm at Nappan, N. S.



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

Send for  
Shipping Stamp

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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.





### Quebec Fruit Growers Meet

THE summer meeting of the Pomological Society of the province of Quebec was held at Abbotsford, September 9-10th, in conjunction with the exhibition of the Abbotsford Fruit Growers' Association.

The programme included an introductory address by the President, Prof. T. G. Bunting, of Macdonald College, and an address of welcome by J. M. Fisk, of Abbotsford; Mr. C. E. Petch, of the Experimental Farm, Ottawa, spoke on "New Sprays," Mr. Robt. Brodie, of Montreal, on "An Amateur Rose Garden," Mr. M. B. Davis, of the Experimental Farm, Ottawa, on "Cooperation," and Rev. Father Leopold, of La Trappe, on "Cherries."

Among those present were delegates from Quebec, who had been in attendance at the Dominion Fruit Conference held in Grimsby, Ontario, shortly before. Rev. H. Dickson, of Rectory Hill, presented a report of the proceedings at the conference at the Thursday morning session. This was followed by an address entitled "Insects of the Orchard," by Prof. Lochhead, of Macdonald College, and a talk on "The Packing of Fruit," by Mr. P. J. Carey, of Toronto, representing the Dominion Fruit Division.

A keen interest was taken in the papers which were followed by animated discussions. Much interest is now being taken in orchard pests of all kinds and means of control, and Prof. Lochhead's and Mr. Petch's papers were specially interesting.

During the past four years there has been a great improvement in the general care of the orchards in regard to spraying and as marked results are now showing in these well-sprayed orchards the growers are keen for information. The five demonstration orchards of the province have fine crops of beautiful fruit this year, and the influence of these is being felt in their respective districts. From general reports there will be a great increase in the number of sprayed orchards next year.

Much interest was taken in Mr. Carey's address on the packing of fruit, which had special reference to box packing. In the afternoon a practical demonstration in box packing was given by Mr. Carey. As yet the box has not been adopted to any extent in the province, but now the growers of the Fameuse and McIntosh are beginning to take to it as a package for these varieties.

A new mechanical grading machine was in operation during the afternoon. It made a very favorable impression.

Between meetings a visit was paid to a neighboring orchard owned by Dr. C. W. Byers of Montreal. This orchard largely consists of Fameuse and McIntosh, and it is about eighteen years old. It is estimated that there will be twelve hundred barrels of these two varieties, and a finer, cleaner or better crop was never grown. The color and uniformity of the apples on the trees was particularly noted by the visitors. This orchard is considered one of the best in the province. The annual meeting of the society will be held at Macdonald College, December, 2nd and 3rd, 1914.

### Bulletins and Reports

Recent bulletins and reports that have reached The Canadian Horticulturist include the following: "Fertilizers in Relation to Soils and Crop Production," by R. Harcourt, Professor of Chemistry, and A. L. Gibson, Demonstrator in Soils, of the Ontario Agricultural College. This is Bulletin

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# IRON AGE

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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?

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This beautiful Set contains 40 pieces. 1 dozen cups, dozen saucers, dozen plates, 2 cake plates, 1 cream jug

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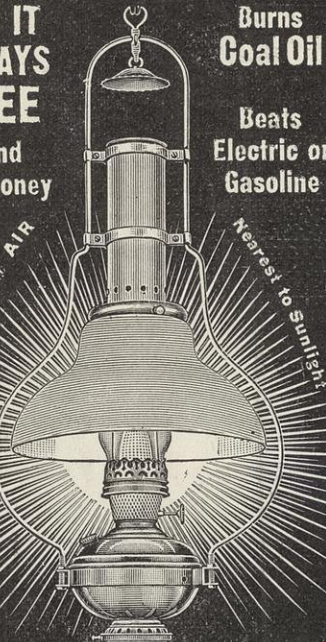
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to try this wonderful new Aladdin coal oil mantle lamp 10 days right in your own home. You don't need to send us a cent in advance, and if you are not perfectly satisfied, you may return it at our expense.

## Twice the Light on Half the Oil

Recent tests by noted scientists at 14 leading Universities, prove the Aladdin gives more than twice the light and burns less than half as much oil as the best round wick open flame lamps on the market. Thus the Aladdin will pay for itself many times over in oil saved, to say nothing of the increased quantity and quality of pure white light it produces. A style for every need.

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people now enjoy the light of the Aladdin and every mail brings hundreds of enthusiastic letters from satisfied users endorsing it as the most wonderful light they have ever seen. Such comments as "You have solved the problem of rural home lighting"; "I could not think of parting with my Aladdin"; "The grandest thing on earth"; "You could not buy it back at any price"; "Beats any light I have ever seen"; "A blessing to any household"; "It is the acme of perfection"; "Better than I ever dreamed possible"; "Makes my light look like a tallow dip"; etc., etc., pour into our office every day. **Good Housekeeping Institute**, New York, tested and approved the Aladdin.

## We Will Give \$1000

to the person who shows us an oil lamp equal to the Aladdin (details of this Reward Offer given in our circular which will be sent you). Would we dare invite such comparison with all other lights if there were any doubt about the superiority of the Aladdin?

## Get One FREE

We want one user in each locality to advertise and recommend the Aladdin. To that person we have a special introductory offer under which one lamp is given free. Just drop us a postal and we will send you full particulars about our great 10 Day Free Trial Offer, and tell you how you can get one free.

**THE MANTLE LAMP COMPANY**  
409 Aladdin Bldg., Montreal and Winnipeg, Canada  
Largest Manufacturers and Distributors  
of Coal Oil Mantle Lamps in the World.

## Men With Rigs Make Big Money

delivering Aladdin lamps. No previous experience necessary. One farmer who had never sold anything in his life made over \$500.00 in six weeks. Another says: "I disposed of 34 lamps out of 31 calls."

**No Money Required** We furnish capital to reliable men to get started. Ask for our distributor's Easy-System-of-Delivery plan quick, before territory is taken.

223. It is being issued by the Ontario Department of Agriculture, Toronto.

"Plant Lice on Currant and Gooseberry Bushes," is the title of a circular by Edith M. Patch, being issued by the University of Maine, Orono, Maine, which is also distributing Bulletin No. 227, entitled, "Powdery Scab on Potatoes." The author of the bulletin is Dr. W. J. Morse.

## Apple Crop Prospects

The present season, so far as production is concerned, and speaking broadly for the whole Dominion, is a most satisfactory one. The crop is large and the fruit is clean and of good size. Such a condition is exceptional, and if the means of distributing and marketing were normal, the growers would unquestionably reap abundant returns.

The foreign market, however, at the present time is greatly demoralized. In practically every section of the country the growers are exceedingly pessimistic regarding the ultimate distribution of their fruit in a satisfactory manner. This feeling is particularly marked among independent growers, who have in previous years relied upon the itinerant buyers to purchase their fruit. Many of these buyers are not operating this season, and even in cases where they have quoted prices, their offers are far from alluring. The consequence is that growers are practically at a loss as to any means of selling their crop. Many of them have had no experience in marketing, having formerly sold their fruit on the trees or packed in the orchard. Cooperative associations are not so seriously affected. Being groups of growers under capable management and with experience in disposing of previous crops, most of the associations have established connections upon which they can place some reliance in the present season. The average over the whole Dominion for early apples is seventy-eight per cent., for fall apples seventy-eight per cent., and for winter apples seventy-four per cent. This gives a total crop of seventy-six per cent., which is an increase of twenty-eight per cent. over that of 1913.

## HARVESTING

On account of the very exceptional conditions which are at present existing throughout the world, there are certain features which Canadian fruit producers should keep in mind when harvesting their crop. There is a general laxity on the part of consumers in making purchases, and the demand for any inferior fruit from present indications, will be slight. It is therefore desirable that only the better grades should be packed and shipped, at least until a more equitable state of affairs is reached. There should be a satisfactory home market for the better grades, and the growers would be wise to limit their shipments to such grades and hold the lower grades for later sales. The main thing to bear in mind is that, just as long as the demand for fruit is limited, it should be supplied only by the better grades and every barrel of No. 2 or No. 3 apples that is placed on the market interferes to just that extent with the sale of higher grades.

## FOREIGN CONDITIONS

The crop in Great Britain is larger than was anticipated early in the season, and the markets are well supplied. Large quantities of bananas and pineapples, originally intended for European points, have been diverted to British markets, with the result that the public are being well supplied at low prices. Local apples, pears, and plums are all excellent crops.—Dominion Fruit Crop Report.

## 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

## FREE LAND

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## 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

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# GLASS GARDENS

Canadians will be glad to learn that it is possible to get Glass Gardens entirely made in Canada by a Canadian Company—Glass Garden Builders, Limited.

The Company will erect private or commercial greenhouses of any type or size with full equipment of any sort.

The Company's staff includes Mr. Isaac Cassidy, formerly of Lord & Burnham Co., Mr. R. L. Derbyshire, formerly Canadian Manager of the Parkes Construction Co., Mr. W. J. Keens, of Toronto, is President, Dr. J. M. Baldwin, late Vice-President of Toronto Horticultural Society, Vice-President, and Mr. C. M. Baldwin, Secretary-Treasurer.

It has already under construction two large houses for J. H. Dunlop, of Richmond Hill, and several private gardens in Toronto.

Further particulars or plans and estimates will be gladly furnished to anyone interested.

## Glass Garden Builders, Ltd.

43 Scott St., TORONTO

When writing advertisers, say you saw their advertisement in  
**THE CANADIAN HORTICULTURIST**



### Market Prospects

**P. W. Hodgetts, Sec'y, Ontario Fruit Growers' Association,  
Toronto, Ont.**

The apple markets still continue very slow and prospects are not brightening as yet. It is felt that there may be a fair market in Great Britain for shipments going forward up to the first of October. Liverpool advises us that only about half of the usual quantity will be required, and that largely of the No. 1 grade. The people who are suffering most from the war are those who consume the lower grades of apples.

Sales of apples have been made for the western market at prices all the way from \$2.00 to \$2.70 per barrel f.o.b., depending on the percentage of Spys in the shipment. Competition is very severe, many salesmen being in the west and some unfair tactics have been adopted. One of our Ontario Associations in a circular issued to the trade, stated that they are continuing to use the large Ontario barrel, but that some Ontario Associations and Nova Scotia are using the small barrel. The fact is that not an association nor dealer in Ontario is using the small or what is generally known as the Nova Scotia barrel.

### Horticultural Exhibition

In spite of the war and the change in conditions created by it, the Ontario Horticultural Exhibition will be held this year as usual. For a while it looked as though the exhibition would have to be abandoned. Certain financial support that the Association has always received, it was found could not be counted upon. Hearing of the situation the exhibitors quickly rallied to the support of the directors with the result that at a meeting of the directors held on Friday, September 18th, it was decided unanimously to hold the exhibition as usual. The dates selected were November 9th to 14th.

This year's exhibition may surpass all previous ones. Desiring to show their patriotism, both to their country and to the exhibition, the exhibitors have offered to make exhibits without drawing any prize money. In consequence no prizes will be offered. Sufficient promises have already been made from the flower, fruit, honey and vegetable sections to ensure a splendid exhibition. The city of Toronto has agreed to give the use of their Horticultural Building on the Exhibition Grounds, heated and lighted, free of cost. The entire gate receipts will be given over to the Red Cross Society, which will look after the advertising and ticket selling, the funds going through this channel to aid in caring for the sick and wounded in the war. Not a cent of the gate receipts will be taken for the expenses, the growers receiving only the advertising for their expense and trouble of putting up an exhibit. The names of all growers will be placed on the fruit or other produce which they send in, and a sale will be held of all the goods on exhibit on the last day of the show. Exhibits on these terms are invited.

### Market Fruit Carefully

Only a little extra time and skill are required to market plums and apples properly. If they reach the market poorly graded and bruised, or in dirty, broken packages, they cannot command good prices. Clean, neat packages are necessary to show fruit's advantageously.

Pick with care. Don't wait for plums to soften or apples to become mealy. They should be well colored and large, but still

# Ontario Horticultural Exhibition

## EXHIBITION GROUNDS

TORONTO, ONTARIO

November 10, 11, 12, 13, 14

## Fruit Flowers Honey Vegetables

This year's Exhibition promises to be just as large and splendid as the many successful Exhibitions of former years.

The Growers in each section have consented to exhibit the best in their possession, and to forego the acceptance of prize money, which will enable the giving of the **entire proceeds, including the gate receipts, to the**

## Red Cross Society

Entries should be made at once with the Secretary.

**P. W. HODGETTS, Secretary**

Parliament Buildings, TORONTO

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President



## FOR SALE AND WANTED

Advertisements in this department inserted at rate of 3 cents a word for each insertion, each figure, sign or single letter to count as one word, minimum cost, 30 cents, strictly cash in advance.

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.

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

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**RHODES MFG. CO.**  
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## FRUIT FARM FOR SALE

Complete in every way and situated on outskirts of growing county town in Ontario. Comprises 28 acres, planted with young apple, peach and pear trees, and bearing small fruits, etc. Greenhouse, 25 x 50 feet, also steam bottling and preserving outfit. Complete water system and natural gas.

Houses and barns in first-class condition, with newly erected fruit-packing barn, having cement lower story and storage cellar. Very valuable gravel-pit next to road.

Write now, before this is snapped up, and get full particulars from the owners.

BOX 10, CANADIAN HORTICULTURIST



**FACTORY CLEARANCE SALE...**

Unusual business conditions are forcing large manufacturers to sacrifice stocks in order to keep their mills running. To the alert buyer this represents an unprecedented opportunity to save money. These chances come only once in a long time—when they do come it pays to act quick.

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Wall Board takes the place of both lath and plaster. It gives a finished wall without further decorating. Anybody can put it on. Now selling at a special price.

**21 Cents Square Foot**

**SAMPLE FREE.**

**ROOFING**

Lowest prices on record. Genuine Asphalt Felt Roofing 100 per cent. saturation, contains no tar or paper. In full rolls of 108 square feet with nails and cement.

**79 Cents Roll 108 Sq. Ft**

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**BUILDING PAPER**

A great snap at this price. Full measure rolls 400 sq. feet in each. Use it plentifully at this price. **SAMPLE FREE.**

**35 Cents Roll 400 Sq. Ft**

*The Halliday Company Limited.*  
FORMERLY STANLEY MILLS & CO.  
**HAMILTON ESTAB. 1888. CANADA**

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Lowest prices on record. Genuine Asphalt Felt Roofing 100 per cent. saturation, contains no tar or paper. In full rolls of 108 square feet with nails and cement.

**79 Cents Roll 108 Sq. Ft**

**SAMPLE FREE.**

firm. A soft plum will not stay up in the market, and neither will the price. Fall apples may be picked when full size is reached without regard to color, or the color may be allowed to develop if desired, but the fruit must not be allowed to soften or drop if it is to be handled profitably.

Discard all bruised, stung, or mis-shapen plums and grade as No. 1 those of good color, and as No. 2 those inferior in coloring. Sort according to size so that every package is uniform throughout in size of plums which it contains. The same suggestions apply to apples, especial care being taken to discard those that are wormy, scabby, bruised or stung. Uniformity in color and size of fruit and size of package, combined with neatness and cleanliness of package, will add greatly to the market price of fruit.

## Eastern Annapolis Valley

Eunice Buchanan

We now find that the apple crop of the Annapolis Valley is not as large as was at first expected; probably the United Fruit Companies will handle about seven hundred thousand, and a liberal estimate of the Valley yield would be eight hundred thousand packed out of nine hundred thousand barrels.

Golden Russets have a full crop, while Starks seem to be generally scarce. Where the fruit has been sprayed it is very clean, but spot has developed in unsprayed orchards and there is likely to be fifteen to twenty per cent of spotted fruit. At first it was thought that there were no aphids worth mentioning, but now the damage by these insects is noticeable.

Cherries have been plentiful, and plums promise to be good; this year the growers are thinning them. Currants were eight cents to eleven cents a quart. Strawberries and raspberries have been scarce owing to the effects of frost and gall-root on the latter. Blueberries have not been less than eight cents a quart. Tomatoes and other things are late.

The price of barrels is twenty-six cents to twenty-eight cents delivered with time until fall for payment. Some barrels have been sold for twenty-five cents cash.

Mr. George Saunders, entomologist of the Bridgetown Dominion Experimental Station, has succeeded with experiments which indicate great cheapening in the cost of arsenical sprays; these experiments will shortly be made public. Mr. Saunders finds that powdered arsenates have not the adhering qualities of the pastes.

Of course the thing uppermost in the minds of the farmers is the war, and its effect on the apple market and harvest. Several men are holding themselves in readiness to leave the Valley should the militia or volunteer regiments call upon them, some have already gone. However, the apple companies are hoping to send fruit to England and to receive fair prices, also they are sending men to open up new markets in western Canada, South America and Cuba. Much depends on the shipping rates and increased marine insurance.

## Items of Importance

It is reported that the Dominion Government is arranging to conduct an energetic advertising campaign in the leading consuming centres of Canada with the object of aiding apple growers to market this year's crop to the best possible advantage.

Canadian Trade Commissioners resident in the United Kingdom as the result of a special enquiry, report that so far there have been no indications that the requirements of the United Kingdom for canned fruit and vegetables will be greater

this year on account of the war than in ordinary years. It is not anticipated that the army and navy will purchase any considerable quantity of these goods.

According to investigations conducted by the United States Department of Agriculture it is estimated that the commercial apple crop of 1914 will be much larger than that of last year, but not so great by several million barrels as in 1912. A total production of 220,000,000 bushels is forecasted.

## CHOICE SELECTED BULBS

Tulips, mixed, single or double 75c. per hundred; separate colors \$1.00 per hundred; Daffodils, single or double, 25c. doz.; \$1.75 per hundred. Mixed Hyacinths, 40c. doz.; \$2.75 per hundred. Mixed Hyacinths, 50c. doz.; \$3.50 per hundred. Order of \$2.00 and up sent free. Address—

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108 St. Paul Street - St. Catharines, Ont.

## SKINNER SYSTEM THE RAIN MACHINE

OF IRRIGATION TRADE MARK Write for six books on indoor and outdoor irrigation.

THE SKINNER IRRIGATION CO. DEPT. R., TROY, OHIO

## Protect Your Fruit

BY USING

## WARNER'S APPLE BARREL PAD

It costs LITTLE and PAYS BIG

Manufactured by

ROSSELL B. WARNER, INWOOD, ONT.

## Ploughs—Wilkinson

TRADE MARK

REGISTERED

U.S.S. Soft Centre Steel Moldboards, highly tempered and guaranteed to clean any soil. Steel beams, steel land sides and high carbon steel coulters. Clevises can be used either stiff or swing. Each plough is fitted especially with its own pair of handles—rock elm, long and heavy and thoroughly braced. The long body makes it a very steady running plough. Shaves of all widths—specials for stony or clay land. The plough shown turns a beautiful furrow, with minimum draft and narrow furrow at finish. Ask for catalogue.

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General  
Purpose  
Plough.  
25 styles  
to choose  
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## 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.

## 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.

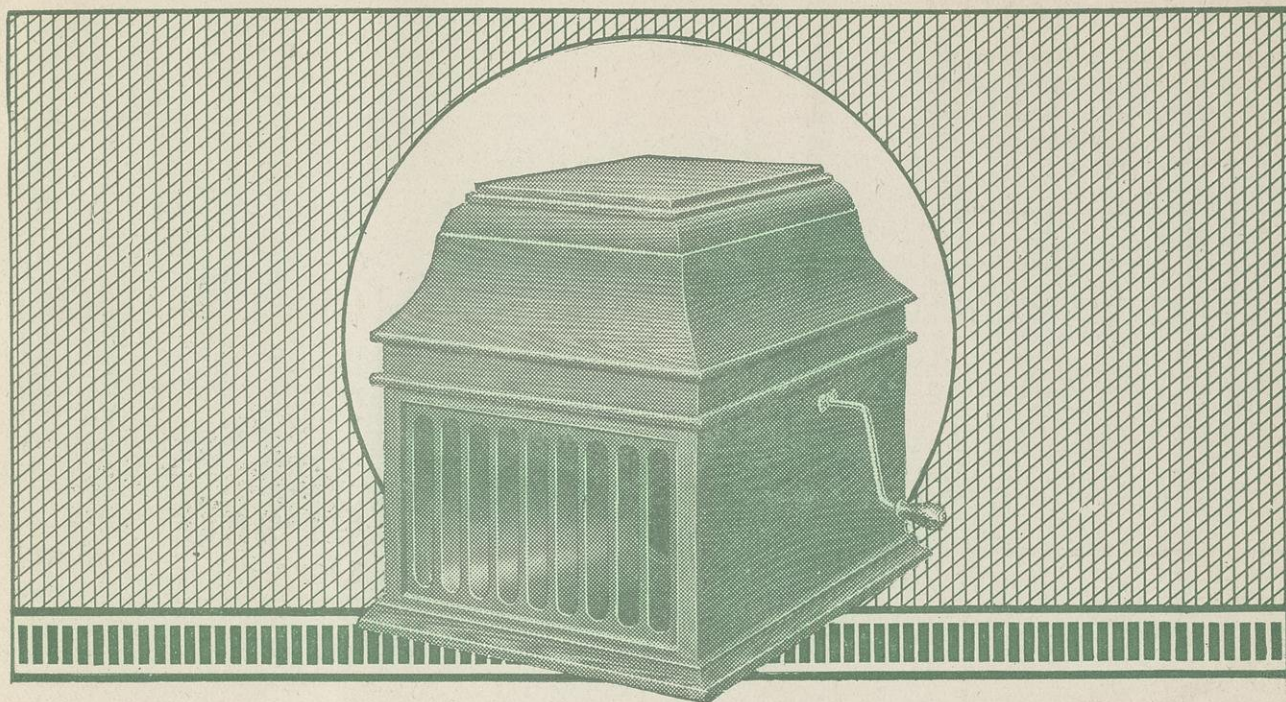
The time to prepare the ground is now, the time to plant is September and October.

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.





**Mr. Edison's  
Wonderful  
New Instrument**

**NEW!**

**MASTER  
Instrument**  
Mr. Edison's *Latest* Invention)

**Just Out**—The perfected musical wonder of the age.  
And shipped on a stupendous special offer direct from us.

**WRITE** today for our *new* Edison Catalog—the catalog that tells you all about the wonderful *new* model Edison with Mr. Edison's *new* diamond point reproducer. It will also tell you about our *new* Edison offer! Now read:

**Mr. Edison's** *Pet and Hobby*



among all his wonderful inventions is his phonograph. He worked for years striving to produce the most perfect phonograph. At last he has produced this new model. Think of it; over 25 years of work on all these epoch-making inventions—then his pet and hobby perfected!

## Endless Fun

Happiness is life—and real happiness is found only in a real home where the happy and united family gather together for mutual enjoyment and recreation.



Such a variety of entertainment! Here the latest up-to-date song hits of the big cities. Laugh until the tears stream down your face and your sides ache from laughing at the funniest of funny minstrel shows. Hear the grand old church hymns, the majestic choirs. Hear the pealing organs, the crashing brass bands, the waltzes, the two steps, the solos, duets and quartettes. All will be yours with the Edison in your home. Send the coupon **TODAY**.

## Free Loan Offer:

We will send you the *new* model Edison and your choice of all the brand new records on an **absolutely free loan**. Hear all the waltzes, two-steps, vaudevilles, minstrels, grand operas, old sacred hymns, every kind of comic and popular music, also your choice of the highest grade concerts and operas, as rendered by the world's greatest artists. Entertain your family and your friends. *Then, when you are through with the outfit you may send it back at our expense.*

Remember, not a penny down—no deposit—no guarantee—no C. O. D. to us—no obligation to buy—a **full free trial** in your own home—**direct** from us—**direct** to you. Returnable at our expense or payable (if you want to keep it) at the actual rock-bottom price direct from us.

## The Reason:

Why should we make such an ultra-liberal offer? Well, we'll tell you:—we are tremendously proud of this magnificent new instrument. When **you** get it in your town we **know** everybody will say that nothing like it has ever been heard—so wonderful, so grand, so beautiful, such a king of entertainers—so we are pretty sure that at least some one, if not you, then somebody else, will want to buy one of these **new style** Edisons **especially as they are being offered now at the most astounding rock-bottom price and on easy terms as low as a few dollars a month.**

## Our New Edison Catalog Sent Free!

Your name and address on a postal or in a letter, (or just the coupon) is enough. No obligations in asking for the catalog. Get this offer—**while this offer lasts.** Fill out the coupon today.

**F. K. Babson, Edison Phonograph Distributors**  
Dept. 7677, 355 Portage Ave., Winnipeg, Manitoba  
U. S. Office, Edison Block, Chicago

To  
**F. K. BABSON**

Edison Phonograph Distributors,  
Dept. 7677, 355 Portage Ave., Winnipeg, Manitoba

Gentlemen:—Please send me your new Edison Catalog and full particulars of your free trial offer on the new model Edison Phonograph.

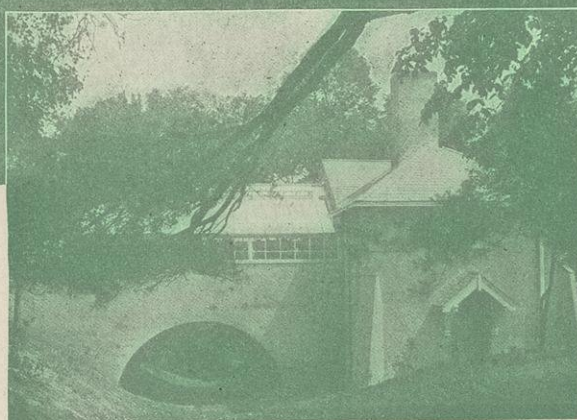
Name.....

Address.....





Architects:  
Darling & Pearson



Residence and Green-  
houses on Estate of  
Joseph Kilgour

## The Greenhouses on the Kilgour Estate

### Three Miles from Toronto

THE portion directly adjoining the residence, bounds two sides of the lounge room, from which the flower filled benches are in full view. A glass passage connects this floral Show House with the Palm Room; from which you look down into the blooms of the glass enclosed garden, several steps below. There are three divisions to this garden, each separated by a glass partition; and then comes the workroom, in the cellar of which is the boiler.

We are very enthusiastic about it all and took a good deal of pleasure in putting every part of the work through. It does seem to us like an ideal arrangement, when one's

glass enclosed garden can be so accessible—so intimate a part of one's home life. To be able in the long, cold winter months, to always have at your very door a summer time garden with a temperature of the sunny days of the far South, is indeed like a dream coming true.

And now how about you—can't we build a glass garden for you, that will fit both your pocketbook and your needs? Why don't we talk it over, or write about it? We have been building greenhouses for over half a century. You are heartily welcome to our Two G's Booklet, "Glass Gardens—A Peep Into Their Delights."

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