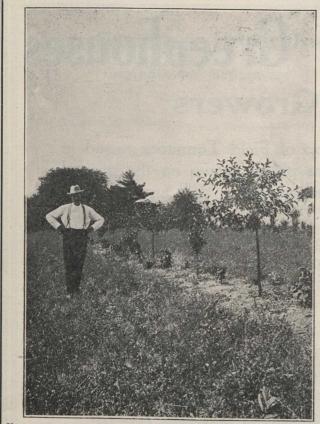


#### THE CANADIAN HORTICULTURIST

September, 1909



#### THE CANADIAN HORTICULTURIST



Young orchard on the farm of Emslie Bros.. "Glengairn," Oakville, Ont. Fertilized with "Complete Fertilizer," containing Potash. Trees: Montmorency cherries and dwarf Duchess pears. Bushes: Red currants between trees in row. Between the rows: Alfalfa from which two cuttings have already been taken. Soil: Gravelly with clay subsoil. Planted May 10, 1908. Photographed Aug. 7, 1909

# POTASH

### FOR ALL FARM, ORCHARD AND GARDEN CROPS

POTASH can be obtained from all leading fertilizer dealers and seedsmen in the highly concentrated forms of MURIATE AND SULPHATE OF POTASH

Call at our office when visiting the CANADIAN NATIONAL EXHIBITION, or write us for full particulars and copies of our **free** literature, including "Fertilizing Orchard and Garden," "Potato Crop in Canada," "Artificial Fertilizers, their nature and use," "Fertilizing Root Crops and Vegetables," "Farmers' Companion," etc., etc.

#### DOMINION OFFICES OF

THE POTASH SYNDICATE

1102-1105 TEMPLE BUILDING

TORONTO - - ONTARIO

# SIMMERS' BULBS For IMMEDIATE PLANTING



WE WANT every reader of THE CANADIAN HORTICULTURIST to have a copy of our **Autumn Catalogue** in which is offered the most complete and comprehensive list of bulbs to be found in Canada. It's free for the asking. To keep up-to-date floriculturally your name should be on our mailing list, and our various Catalogues will be sent as issued.

**BUL/BS**—Thousands of people overlook the planting of Spring Flowering Bulbs in the Fall, and have many regrets when they see them blooming in the gardens of their neighbors in the Spring. Send for our Catalogue now, make your selection and plant your bulbs out before hard frost comes, or selection of sorts may be left to us.

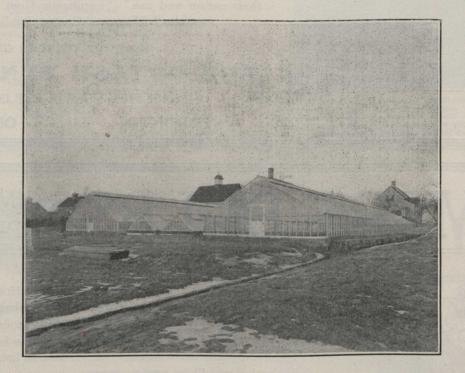
**HARDY PERENNIAL PLANTS**—No better time to set these out than now. They quickly take hold and invariably make finer and stronger plants than when planting is done in the Spring.

J. A. SIMMERS, Seeds, Bulbs, Plants, TORONTO, Ont.

# King Construction Greenhouses For Vegetable Growers

IT is claimed that the earliest and finest crop of Field Tomatoes raised in the Dominion this season, 1909, was from plants grown on the ground in King Construction Houses, no beds or benches used. Will any disputing this claim please send in their record?

The record for Inside Grown Tomatoes in the neighbourhood of Toronto in King Construction Houses is \$4.35 per lineal foot of a King 21 ft.  $8_2^1$  in. House realized in three months from time of planting to August 1st. Will any who can beat this please communicate?



Houses of F. V. Metcalf in the great Ironequpit Vegetable Growing District, in which nearly 12 miles of King Greenhouses were erected in 1907

The above cut illustrates the general transformation in style and size of houses as adopted in this district. The larger house with eaves as high as the ridges of the old style alongside being King Construction.

> FOR U.S.A. OR EUROPE, APPLY: NORTH TONAWANDA, N.Y., U.S.A.

> > FOR CANADA, APPLY:

KING CONSTRUCTION CO. 248 WELLINGTON ST. WEST TORONTO, ONT.

### The Canadian Horticulturist Contents for September

An Autumn Scene . . . . . . . . . Cover

#### Fruits and Fruit Growing

Better Judging of Fruits..C. Webster 185Plant Breeding....The Fameuse Apple....Bees in the Orchard....Marketing Early Grapes..G. H. Carpenter 189

#### Flower Garden and Lawn

Model Park for Barrie	•		190
One of Our Oldest Gardens .			
Narcissi for House Culture .			
Peony Varieties		Contraction of the second s	
Hedges for Western Homes		S. A. Bedford	194
Hints for Amateurs			195

#### Vegetables and Market Gardening

Asparagus Pests..J. F. Nicholson 195The Potato Harvest..L. H. Newman 196Growing Ginseng from Seed..W. Gilgore 196

#### General

Question and Answer Depar	tme	nt			197
Editorials					198
Pre-cooling Fruit					
Notes from the Provinces .					
Fruit Crop Situation					
Ontario Export Apple Trade					
Poultry Department					

#### INDEX TO ADVERTISEMENTS.

Bank	
Baskets, Boxes and Barrells	
Cameras	
Cold Storage Firms	
Colleges	
Commission Merchants	
Devices for Canning, Evaporating, Distilling 208, 212, viii	
The second sec	
Fertilizers	
Flower Pots	
Furnaces and Stoves	
Gasoline Engines	
Greenhouse Material iv, 207, ii	
Growers' Supplies	
Insecticides	)
Ladders	2
Nursery Stock	
Orchard and Garden Implements	
Roofing	1
Rubber Stamps	
Salt	
Seed Firms	
Shoe Polish	
Steamship Companies	
Telephones	
Typewriters	
Washing Machines	
	1

# APPLE BARRELS

WE can furnish you with Staves, Hoops and Heading of the best quality for making Barrels, or arrange to supply you with the Barrels ready for packing

# The Sutherland-Innes Co.

## WHY DO TREES DIE IN TRANSPLANTING?

In nine cases out of ten because they are not properly handled. We can show you how to avoid losses. Write for Pelham's New Fall Catalogue and Circular on Transplanting. We grow and offer for sale the very best nursery stock in Fruit Trees, Ornamental Trees, Flowering Shrubs, Roses, etc., and guarantee delivery in good condition.

### PELHAM NURSERY CO. TORONTO, ONT. Office—Cor. Front and Church

N.B.—To reliable, energetic parties we can offer Good Agencies in Unrepresented Districts. If interested, write for terms

# **Select Ornamental Trees and Shrubs**



¶ The most careful and complete systems of transplantation, combined with the situation of our nurseries, enable us to dig thoroughly hardy, healthy, well-rooted specimens of fruit, ornamental and other trees, plants and vines including "specimens" for street, avenue and park plantings.

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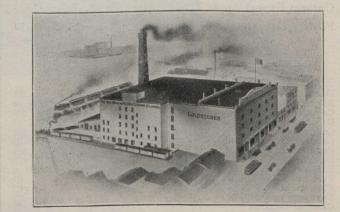
# CANADA'S APPLE TERMINAL

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HEAD PIER No. 9.

Cubic capacity900,000 ftTrack accomodation- 16 carsApple storage (cool air)50,000 bbls.

ST. JOHN. N.B.



This house represents the latest ideas in Cold Storage construction and has made good. Special attention is given the apple trade and dealers or growers may rely on quick handling by modern methods; good repacking accommodation; prompt shipment and the removal of the usual risks of missing steamers, freezing in transit and all those things which cause loss and annoyance. Inland freights are suspended on export goods stored here, thereby abolishing stopover charges and putting apples held here on a better footing than home storage, as regards initial expense. Warehouse advances arranged for parties with good goods. Rate for cold storage to April 1st, 1910, Twenty-five Cents per barrel. Insurance practically nothing. Inquiries promptly and fully dealt with.

THE NEW BRUNSWICK COLD STORAGE CO., LIMITED

# The Canadian Horticulturist

Vol. XXXII

SEPTEMBER, 1909

### The Better Judging of Fruits

Charles Webster, Kelowna, British Columbia

THE first national apple show held at Spokane, Washington, last December, while doubtless the largest display of apples ever brought together, was also a skillfully managed and thoroughly successful event. Eight carloads of 630 boxes each, entered in competition in Class I., calling for "best carload of standard commercial apples," is but one instance of the magnificent scale upon which the show was run. There were other features, typically western in being about the best possible and showing independence in thought and action. Several fruit farms and a customer at \$25 a box for the first prize boxes in a certain section, were some of the novelties in prizes.

By-products of the apple—cider, apple butter, apple vinegar, apple jelly, etc., home-made and factory-made — won numerous awards. In the apple kitchen the king of fruits, daintily served in about every conceivable way by a bevy of college girls, was an innovation that proved very popular and will surely result in an increased use of this wholesome fruit by thousands who attended the show.

#### THE JUDGING SYSTEM

The splendid system of scoring by points must have been gratifying to the judges and was surely utter fairness to the exhibitors. This feature of the great show seems to have been but little commented upon by the horticultural press. In view of the notes about better judging of fruit in recent issues of THE CANA-DIAN HORTICULTURIST, a review of the methods of judging there may interest some of its readers, and may suggest some points worthy of adoption at the fruit shows of our Dominion.

A grand system was used in judging the plate exhibits. The judges were asked to score each variety on its merits as an apple as well as award prizes. A score from one to ten was used. Varieties that scored lower than three, were awarded no prizes. Some sorts were not scored at all. The field was open to any variety, new or old; the foregoing simple method will, however, gradually discourage the exhibition of comparatively worthless kinds at future shows.

Every entry winning a fifth prize or over was awarded a diploma or diplomas and cash prize according to the scoring. In the case of a variety scored ten by the judges, the winner of first prize received a diploma and \$5; second, diploma and \$2; third, diploma and \$1; fourth, medal and diploma; fifth, diploma. Varieties scoring only three and four points received prizes as follows: First, \$1 and diploma; second, fifty cents and diploma; third, diploma. Varieties scored intermediate to these instances were awarded prizes in proportion.

In the box and carload classes, the system was ideal, the judges having to show on score card just where the points had been earned as well as indicating (as in the plate fruit section) how much better they deemed one entry than another. An instance of score card will illustrate clearly:

General display, No. 2-Class 2-For best individual, county, district, state or

#### For Progressive People

I sincerely hope that THE CANA-DIAN HORTICULTURIST will soon have a vast circulation throughout Canada. It fills a long-felt want, and should become very popular, especially among progressive people in the rural communities.—Dr. J. E. Klotz, Lanark Co., Ont.

provincial exhibit of apples. Each exhibit to consist of two barrels, two boxes, two plates, two baskets and two jars of apples. No package to contain more than one variety:

	SCORE	CARD-SPECIAL	DISPLAY.
Entry	No.		47 23

57

Texture and flavor	15	14	13	12
Size	10	10	10	8
Uniformity	10	9	8	8
Color	10	10	10	9
Condition and freedom				
from blemish	20	18	18	17
Arrangement	10	8	5	7
Number of varieties	25	25	25	25
Total	100	94	891/	86

Figures in first column represent highest possible score. There were nine entries. Kelowna was entry No. 47 and she is justly proud of her success, as first prize meant \$500 cash and \$25 each from a Spokane merchant for the two first prize boxes. Rather a record price for a bushel of apples. Kelowna was also fortunate enough to win at the same time the greatly coveted silver loving-cup presented by the Seattle Chamber of Commerce to the exhibit in this class scoring highest points for texture and flavor. It is an open question whether eastern fruit excels in texture and flavor, but it is pretty certain now that British Columbia grows the finest flavored apples in the west.

For Foreign Countries.—No. 6—Class 5.—For best two barrels or six boxes from foreign countries:

SCORE CARD-FOREIGN	BBLS.	AND	BOXES.	
Entry No		211	47	46
Variety	20	15	18	15
Commercial value	30	25	28	28
Uniformity	20	16	19	18
Attractiveness	20	16	18	18
Total	90	72	83	79
PACK SCORE (	BOXES	s.)		
Bulge or swell	20	16	18	17
Alignment	20	15	17	16
Height of ends	20	16	17	17
Firmness	20	15	18	17
Attractiveness	20	18	19	18
Total	100	80	89	85

All prizes in this section, first, second and third, were won by British Columbia. Kelowna was entry 47. Second and third were won by Mrs. Smith, Spence's Bridge, (46), and Mr. Cockle, Kaslo, (211), respectively.

No. 12.—Class 7.—For best packed two barrels.—No barrel packing is done in Kelowna, the standard Canadian apple box being used exclusively, therefore Mr. De Hart who packed this exhibit and who had had no practice for years, deserves great credit for winning first prize. As I have been unable to get details of the score, only the possible points are shown:

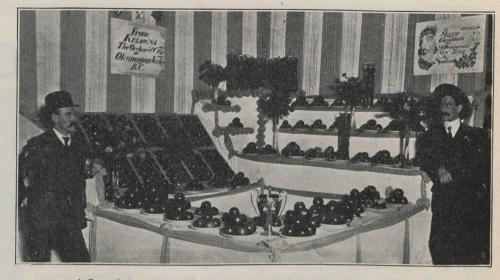
		CARD-TWO BARREL PACK.	
Fruit	(/	Quality	
	(6)	Appearance	
			- 60
Packir		Staves	3
		Hoops	
	(c)	Heads	
	(d)	Nailing	3
			—15
Packin		Facing	10
	(b)	<b>Tailing</b>	5 5
	(c)	Pressing	5
	(d)	Racking	5
			- 25
			100

In the fruit score it would almost seem as if fifty points for appearance was a handicap for eastern barrel fruit which

seldom equals the western product in color. The package and packing scores are very comprehensive, however, and well worth adoption elsewhere.

Other important winnings were ten boxes Jonathan; one of the items in this prize was a \$2,000 fruit farm at Edendale, Wash. Best four-tier box Jonathan. This variety is very widely grown west of the Rockies, there was consequently great competition. First for ten boxes Northern Spy and first for plate of same variety. The prize for best ten boxes included a \$1,200 fruit farm in the state of Washington, so that this "orchard city" of British Columbia has now added to her qualifications the distinction of being a United States landlord.

As several of Kelowna's prizes have been mentioned in the columns of THE CANADIAN HORTICULTURIST before, I will touch on but one more of them,—the second prize for the exhibitor winning greatest number of first prizes. As we missed first prize by but three points, we are justly proud of our second place.

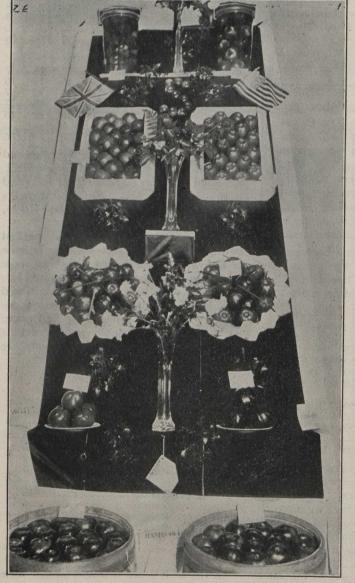


#### A Part of the Kelowna, British Columbia, Display at the Spokane Apple Show

In this class each exhibitor was allowed 12 x 18 feet of space. Kelowna lost first place to the Wenatchee Valley, Wash., by three points. Mr. DeHart stands on the left and Mr. Gibbs on the right.

To Mr. F. R. E. De Hart the utmost credit is due for his untiring efforts in collecting the exhibit in so short a time

and his splendid staging of the fruit at Spokane. So public spirited a man is a valuable adjunct to a fruit section. Mr. James Gibb, an expert from Stirling and Pitcairn's packing house, accompanied Mr. De Hart and his faultless packing helped to place this city in the lime-light as a fruit-growing centre.



First Prize Collection of Apples at Spokane Show last December Display of Mr. F. R. E. DeHart, Kelowna, B.C.

### **Principles of Plant Breeding\***

Prof. W. Lochhead, Macdonald College

GREAT deal of attention is now being given to the improvement of plants by the separation of mutations. The recent studies of De Vries of Holland, of Nilsson of Sweden, of Burbank of California, and of others, have revealed the importance in breeding of variations that appear suddenly, sometimes of such magnitude that they are designated as "sports." As a rule, this kind of variation or mutation is not of frequent occurrence, although the work of Nilsson with cereal crops would lead us to believe that such varieties are to be found in considerable number in every field of grain.

We do not know the causes that bring about these mutations, nor can we produce them at will. A practical difficulty lies in being able to distinguish them from variations of the ordinary sort. The only test is to breed them. Mutations come true to type and do not show any tendency to revert to the normal or parental type.

It will be gathered, therefore, that "ordinary variations are of value mainly in the production of improved strains of a race which differ only in such characters as high yielding capacity, which are soon lost when the selection is discontinued. Mutations or sports, on the contrary, are of value in the production of distinctly new races and varieties which maintain their new characters without continued selection."—(Webber.)

It must not be inferred, however, that mutations remain absolutely constant and without variation. They, too, are liable to vary within definite limits, so that when a mutation is chosen on account of its desirable and superior qualities, it is necessary for a breeder to keep up a selective process if he wishes to get the best possible plants of the mutation.

"Mutations are found in wild as well as cultivated plants, and their occurrence reasonably accounts for the numerous 'elementary species', or sub-divisions of Linnaeus' species that are found in Nature."

#### EXAMPLES OF MUTATIONS

Well known examples are the weeping willow and the nectarine, but many other plants are now classed as mutations. Some of the most popular and most high-

\*In the June issue of The Canadian Horticulturist, the improvement of plants by selection was discussed. Mutations, herewith dealt with, will be followed by an article on hybridization. ly prized of our smaller fruits, such as the Houghton and Downing gooseberries; the garden strawberry (*Fragaria Chiloensis*); the Wilson's Early, Lawton, Wilson Junior and the Eureka blackberries, and the Wolf and Quaker plums are mutations. The apricot is probably a mutant of the plum. The purple-leaved plum (*Prunus pissardi*), an ornamental species, may be classed as a distinct mutation.

Most of our best varieties of grapes are probably mutations. The Catawba is a sport of the wild grape; the Concord and the Clinton are seedlings of wild grapes and are very likely true muta tions

The history of the apple is obscure, but it is generally believed that the modern varieties have been derived from several "elementary species" of the wild crab. As a matter of fact we know for a certainty of the origin of the Wealthy, the McIntosh Red and others.

De Vries' wonderful discoveries of the mode of origin of several new species of evening primroses from Lamarck's evening primrose are now fairly well known to readers, as are also his observations on the origin of the Pelonic toadflax, from *Linaria vulgaris*, a double marigold from *Chrysanthemum segetum*, and a twisted variety of *Dracocephalum Moldavicum*.

Suffice it to say, that after De Vries had detected Lamarck's evening primrose in a mutating condition and had transferred some of the roots and seeds from the field to his garden, he grew over 50,000 individual plants. Out of this number of plants more than 800 showed mutation, which comprised about fifteen new kinds. Some of these appeared time and again in the course of the experiments, which extended over a number of years.

#### MUTATIONS IN NATURE

These are examples of mutations that sometimes occur in nature. De Vries found these mutations "to occur suddenly, without preparation, and without intermediates." Among garden and house plants we may notice two or three mutations: The cut-leaved variety of the greater celandine, (*Chelidonium laciniatum*) discovered in 1590 by Sprenger at Heidelberg, which is distinguished from the ordinary species (*C. majus*) by the narrow cut lobes of its leaves and petals; the white cyclamen which made its appearance in 1836 in Holland; the cockscomb (*Celosia cristata*) and others.

The Shirley poppy originated definitely and suddenly as a mutation of the common wild poppy (*Papaver rhoeas*) in 1880. This poppy is characterized by the presence of a narrow white border on the petals, and was discovered as a solitary flower by the Vicar of Shirley near Croydon, England. It is unnecessary for me to give more examples, but simply to refer you to the literature of horticulture, where mention is made of the many "sports" that have occurred.

Burbank's wonderful success in the origination of new and valuable varieties of plants is largely due to his ability to detect new and original forms which arise in his breeding grounds. He grows thousands, even tens of thousands of seedlings, and from these he selects those that give promise of greater usefulness. In many cases the plants he chooses are mutations. Oftentimes he causes a staple variety to vary by crossing it with a closely related form, and from the variations he selects the most likely forms. By selection he then brings the plant up to his ideal.

#### The Fameuse Apple

#### R. W. Shepherd, Montreal

THE orchard shown in the illustration on this page has suffered much from winter killing the last four years. The varieties are Fameuse (Snow) and McIntosh. The latter has stood the se-



#### Orchard of Fameuse and McIntosh

vere winters better than Fameuse. I have found that much cultivation in this province rather tends to induce too late a growth and, consequently, the young wood is not well enough prepared for a severe winter. The Fameuse is apt, in any case, to grow late in the season, and does not generally finish off its terminal growth in preparation for our winters, as well as the McIntosh. All growers in this vicinity complain of much winter killing in late years.

If the orchard is not well protected by belts of trees from the cold winter blasts, when the thermometer falls to twenty degrees below zero for three or four days, there is sure to be a loss in that orchard of Fameuse the following spring. Once the trees are seriously damaged by severe winters, and become black-hearted, the days of those trees are numbered; they will gradually succumb. No nursing will help them.

In the province of Quebec fifty years ago, the Fameuse trees were hardier and better able to withstand the winters. Probably there was more natural tree protection to the orchards, and also, probably, the Fameuse trees of those days were of a more robust constitution.

Much of the delicate constitution of the Fameuse we may attribute to the practice of cutting scions from unhealthy trees or trees that are slightly blackhearted. Nurserymen are not particular enough about the healthiness of the trees from which they cut scions. At any rate, it is well known fact that Fameuse trees, which fifty years ago were expected to live at least forty or fifty years, do not now live beyond twenty-five or thirty years. Of course, on the Island of Montreal and around St. Hilaire Mountain, there are orchards of Fameuse of fifty years of age or more, and in good condition, but the orchards that have been planted within the last twenty-five years in these sections show weakness and a tendency to decline; therefore, I cannot trace this weakness to any other source but the selection of scions from unsound and unhealthy trees. It may be that thoroughly healthy scions are very difficult to procure.

We must remember that the Fameuse variety is probably 150 to 200 years old and, perhaps, there is a time when a variety must begin to decline. I predicted two years ago, at the winter meeting of the Quebec Pomological Society, that the



187

Potatoes Growing Between Trees In Orchard of Mr. R.'W. Shepherd, Como, Que. Photo taken two years ago.

days of the Fameuse were probably numbered; that fewer trees were being planted in this province; that growers were planting McIntosh Red in place of Fameuse; and that, therefore, in a few years the Fameuse would be a scarce apple and high priced. I am still of the same opinion. McIntosh will become cheaper every

year, because more apples of that variety will come on the market.

At present, McIntosh commands as high price here as Fameuse, but in a short time it will not be so. Fameuse is our best dessert apple and has no competitors, in that respect, of its season. McIntosh is a fine apple but it has not

the high, delicious flavor of Fameuse. The English gentry always prefer the latter. They find the McIntosh too large for dessert and not of as high a quality. Where Fameuse of first quality has been introduced into England, they will not take McIntosh instead. I speak from experience.

### **Keeping Bees in the Orchard**

F the question were asked, "How many people dislike honey?" there would be

very few say that they are among the number. Then why should not we keep our own source of supply?

Most agriculturists keep their own orchards and berry bushes and few ever want for fresh fruit, while many are even specializing in that line. Then, why not combine bee-keeping with fruit-growing, even if for home consumption only, and have some of the busy workers to help gather the nectar, which is going to waste all through the country for lack of nature's workmen?

A beginner will find it interesting, as well as profitable, to work a few hives of bees, but, as in any other businesses, things should be studied carefully and, if possible, with a few suggestions from a practical bee-keeper or from a reliable book on the subject.

#### HOW TO START

A wise plan to start would be to secure a first swarm in a standard hive; if possible, a Langstroth, or Richardson, or any of the many hives parts of which are held in stock by any firm dealing in supplies. If an odd-sized hive is used trouble will be found in securing extra frames, sections, etc. The Langstroth is

#### W. I. Holtermann, Brantford, Ontario

used perhaps more than any other size in Canada

Italians are very suitable bees to start with, as they are good workers, generally free from moths and black brood, are large gentle bees and beautiful to look at. A great many bee-keepers prefer the hybrid and black bees, when running for comb-honey because they finish up the cappings much whiter, leaving a small air space between the honey in the cell and the capping, while the Italians cap close and have the section watery in appearance. But, as a rule, hybrids and blacks are small, hot-tempered insects, not quite suitable for a beginner, who is perhaps a little doubtful of his own safety.

When handling them first prepare yourself with a veil of some variety, one with a black front is preferable as things are more easily observed through black veiling. Gloves or mittens of any kind are very unhandy and make many cross bees through awkwardly manipulating the combs. The operator will soon find that if he uses his smoker at the proper time he will have few really cross bees that are angry enough to sting the hands.

#### USE OF SMOKER

Before opening the hive, give one or two puffs at the entrance, and gently smoke over the top of the frames as the

Rough and Ready Yard of Movable Langstroth Hives Apiary of Mr. R. F. Holterman, Brantford, Ont., in Orchard of Mr. A. Lambkin, St. George, Ont.

cloth is drawn off the top; be sure and smoke all the top over or there may be a surprise from a corner that has not been smoked at all. Smoking drives the bees to their stores and they soon fill them-

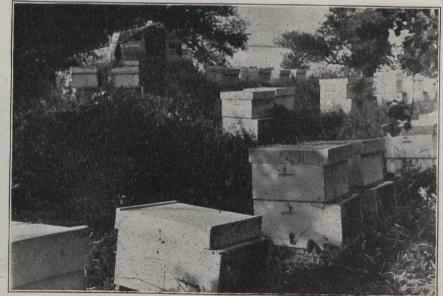
A Good Type of Hive

In Apiary of Dr. Burt, Lynn Valley, Ont., located in Orchard of Mr. A. Austin, of the same place.

selves with honey and are too distended to wish to sting at a slight slip on the handler's part. Then loosen both ends of a comb with a small screw driver or similar tool and after spreading the frames away from the one you wish to examine, it may be carefully removed. Thus the whole hive may be examined.

Do not allow the bees to sulk and hang about the entrance of a hive. Give them room by putting on a top surplus box, unless you wish increase by natural swarming.

When putting on a surplus box of any kind, always place a queen excluder of perforated zinc over the brood chamber, between it and the top super-thus shutting down the queen and leaving the top for storing honey only. Full sheets of foundation should be used when preparparing frames for the hives, because there is no trouble in securing enough drone comb naturally without allowing them to build the combs that way intentionally. Drone combs are not objectionable for storing surplus honey, but combs are



often exchanged down into the bottom or brood chamber and the queen does much useless drone laying.

#### FERTILIZING BLOSSOMS

Bees are not only a means of moneymaking to the bee-keeper alone. There are many others who profit from the busy

TWO important factors enter into the proper handling of any class of fruit —the condition of the fruit when picked and the package. Carelessness and indifference in the matter of either or both of these factors frequently result in loss to the grower when he comes to market the fruit. We will consider these factors in regard to the handling of early grapes.

Unlike many other classes of fruit, grapes will not ripen off the vines. The fruit must be allowed to fully mature and become properly colored before being gathered. The importance of the first factor then becomes apparent. Picking the crop is equally important; when the fruit is being sold for commercial purposes it is picked in the standard sixquart basket, and seldom re-packed. As stated, it must be picked when mature; consequently, it will be seen that the grape is a more perishable product than most other fruits which can be picked before fully ripened when required to ship long distances. Picking should be carefully supervised by some experienced person who should instruct his help in the matter of removing the branches from the vines, and placing them in the baskets in such a way as to make a neat and attractive looking package.

When a high-class trade is being supplied smaller and fancier packages are employed and the fruit is generally repacked in a packing house in order to insure a high-class article. In any case, when a superior and inviting package is desired, it is safer to re-pack the fruit, being careful in the operation to remove all green and broken berries. This involves extra work but, in most instances, it is work well expended.

#### SELLING INDIVIDUALLY

Many men can grow fine crops but few can market their crops to best advantage. Those growers who are situated near a good market have an advantage over growers not so favorably situated, as they can place their fruit directly into the hands of the consumer and thus secure all the profits to be realized from the sale of their fruit. The majority of growers, however, must sell through some one else. With them it is a question of reducing the number of middlemen as much as possible, and of

little workers so full of industry. Bees are one of the principal agents of Nature in fertilizing many of the blossoms which, when properly set and ripened, go to supply us with food of different varieties.

The orchard is perhaps among the most important crops affected in this way. The experienced fruit-grower likes to see the busy little gatherers at work among the bloom, because he knows that unless the blossoms are fertilized they cannot set. While there are many other ways in which the blossoms are fertilized, the bee is a very active worker along that line.

### **Marketing Early Grapes**

G. H. Carpenter, Fruitland, Ontario

securing the right parties in each instance.

#### SELLING ON COMMISSION

Selling through commission houses is, at best, an unsatisfactory system of disposing of fruit. These men, as a class, fill an important place and many growers have to resort to this means of selling their fruit. There are individuals in this class, however, who are in the business because they feel they are dealing with parties who are woefully susceptible to the "skinning" process. In adopting this system, therefore, it is well to keep close-

ly in touch with market conditions, and have your fruit reach the market in the most direct way possible.

#### SELLING TO LOCAL BUYERS

The local buyer offers a n o t h e r means of disposing of fruit which is but little more satisfactory in many ways than the former system. These systems suggest the need of grading this class of fruit. When the fruit is bought and sold in-

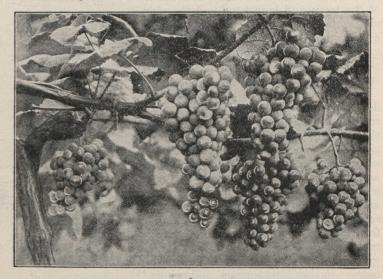
discriminately the price often is knocked down because of the presence in a consignment of the inferior product of some careless grower. The whole consignment will sell for the price of the inferior goods and the producer of a superior article will be the loser. He will receive no compensation for the extra care employed in the preparation of his fruit for market.

#### NO VOICE IN SETTING PRICES

An unsatisfactory feature about both of these systems is the fact that the grower has practically no voice in the setting of the price on his fruit. Vie would think it mighty strange if a grocer were to ask us what we would give him for a pound of tea or a barrel of sugar, or a butcher how much we would pay for a quarter of beef. Such a practice is, indeed, rare. And yet producers of fruit are so accustomed to having the prices set on their goods, that it becomes a matter of habit for them to ask a purchaser what he will give for this lot of grapes or that consignment of peaches. Is there any good reason why the grower should not set the price on his goods the same as is done in other lines of business? Market gardeners and fruit growers who have access to markets are able to set their own prices largely and there seems to me no good reason why all growers should not follow the same practice.

THE CO-OPERATIVE SYSTEM

Another system and probably the most



Campbell's Early-One of the Best Varieties of its Season

satisfactory one for all concerned is disposing of fruit through co-operative fruit associations. When a number of growers co-operate to sell their fruit, a more uniform product is put up, a better market usually is secured and more remunerative prices are obtained than when growers work individually and possibly cut one another as frequently is done. In these associations, a manager is employed whose duty it is to see that all fruit comes into the central station in good condition, and is sent out properly packed and marked according to the standard set by the association. This insures a uniformity of product. Quotations are sent out through the country and the fruit is placed through agents acting for the association. These agents are conversant with market conditions and, knowing the quality of the fruit they are handling,

(Continued on page 202)

### A Model Park for Barrie, Ontario

WITH the great strides that are being made in park development throughout Canada, there are few undertakings so thorough, original and modern as that recently initiated in Barrie, Ontario. The authorities set a high standard at the outset and determined to get the best advice procurable, in a wise faith that there should be a saving in the long run. Mr. George H. Miller, a noted young landscape architect of Boston, Mass., was retained as advising associate for his Canadian representative, Mr. C. Ernest Woolverton, of Grimsby.

Last summer, Mr. Miller visited Barrie while on a tour inspecting some work in Rochester, Hamilton and Toronto. He was greatly impressed with the future of that town and pointed out to the city officials that some day not in the far future Barrie would not only be an independent industrial junction but also a great centre for high class country estates, and that preparation should be made in advance for the preservation of the natural beauty of the town and landscape and the planning of parks and town extensions in such a way that they should have their full value as assets in bringing about the realization of the countryside's best eventual characterization.

Barrie has made a beginning in the development of Queen's Park, a ten-acre tract in the better residential section of the town. The improvements are planned in relation to the whole town plan and it is to be a "place for mental and the less violent physical exercises. a space reserved for neighborly diversion with congenial uplifting environment, a residential beauty park, a common ground for quietude, refined intercourse, rest and mental recreation, and for such athletic games as will not be competitive between teams having gregarious followings." Provision for athletic fields and playgrounds is to be made in other more suitable locations. Among the features proposed are "the great lawn," "the prom-""the outdoor auditorium," "the enade,' grove," "the flower mall" and "the ravine." Each feature correlates with the other and takes advantage of the natural existing conditions; of the shape of the tract, of topography, tree growth, natural traffic and views. There will be a central dominant feature in the form of a concrete pavilion, and there will be a concrete entrance exedra monumental in design, a concrete bridge and many minor features such as belvederes, a spring-nookery and colonade.

From the local horticulturist's point of view, the matter of planting was one that required great care because of the climatic and soil conditions and the unattractive arrangement of existing natural growth. In the landscape architect's report on this subject there is much to interest and instruct all planters and park officials of Canada. Mr. Miller writes as follows:

"The planting is used for esthetic and educational purposes and the varieties selected are those known to be hardy in the Barrie region either through their being native, tried locally by me, or recommended by the Central Experiment Farm at Ottawa. A great many attractive varieties which might thrive have been

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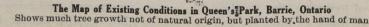
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omitted from the list, and none included that are not positively determined as above.

"The soil condition is especially suitable for a limited number of varieties, such as the Caragana, Corylus, Ceanothus, etc., which flourish in a dry sandy situation. The fact must be recognized, however, that it would be useless to expect any sufficient number of attractive groupings to be arranged that would flourish in the thin, dry, sandy soil surface of this area without some additional nutriment being supplied. I recommend, therefore, that those trees which are to be placed in the open shall be given an initial growing space of three feet in diameter and eighteen inches deep, filled with good loam, and that the unnutritious parts of the soil now in the locations be

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removed. For the bed areas, I recommend that in the autumn of the year, before planting, the surface be covered with rotted manure, about twenty cords to an acre in quantity, and that in the spring, immediately before planting time, the same shall be well spaded into the existing soil. This operation should be repeated once a year for at least three years. Precaution should be taken in the bed grading to see that no pools or water pockets are liable to form, for it has been my experience that in such situations, under the soil and climatic conditions given, there is most danger of winter killing. With the prescribed preparation of ground, proper planting and caring for the plants, there is no reason why the plants should not live and develop the desired effects within a few years. The varieties have been selected for those places for which they are naturally most suited." Then Mr. Miller proceeds to define the two different purposes of the planting as follows:

#### THE ESTHETIC PURPOSE

"While the boundaries of the park have been defined by foliage masses, care has been exercised to not injure the views into the park from the surrounding residences and thoroughfares and at the same time to furnish sufficient seclusion within the park, framing the housegables and shutting out the dirt road-surface of boundary streets as now seen from the park.

"The divisions of the park are defined by foliage masses and all the matured existing trees have been taken advantage of and conforming varieties selected to complement them in the groups. In the arrangement consideration has been given to economic values, such as that of binding root formations suitable for holding up the sandy banks of the ravine, also requirements as to sun and shade and moist and dry situations, compositions of size and color and texture of foliage and habit of growth. Evergreens have been introduced to break the winter monotony and are composed for natural and formal effects, and winter berry- and twig-values have been taken advantage of.

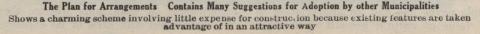
"In each division of the park a distribution and composition of color of bloom has been arranged and certain striking features made to dominate the division in season. For instance, in 'the flower mall', the two straight formal borders will be alive in the spring with the dotted rows of lilac blossoms against the yellow bloom of the taller irregular caragana in back and these will be faced with bridal wreath, the graceful branches of which later when in bloom will form long striking lines of showering white flowers.

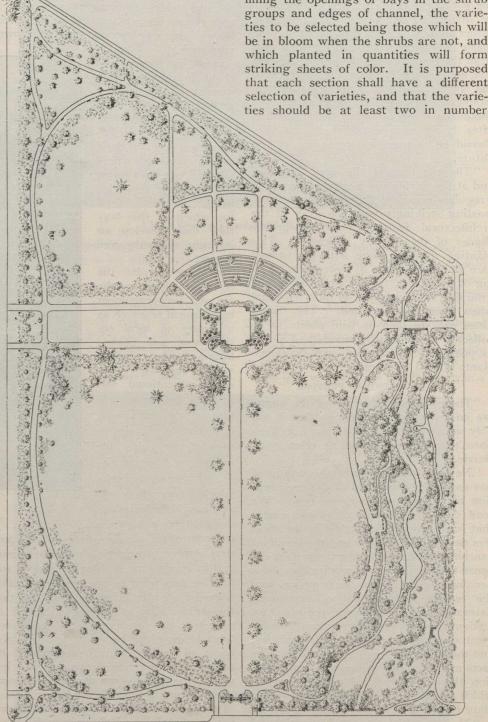
"The 'great lawn', on the other hand, 'though containing large groups with different colored bloom for different months, is dominated by striking masses of the common snowball circulated through every portion of its borders, a sight which will enlist the public interest and regard for the beauty of the park and arouse a pride in it and a desire to visit it.

"Again, the upper lawn is dominated by hydrangeas planted as border edgings so that the heavy blossoms may droop over to the lawn surface, and there are the white and pink diervillas in the lawn to the northeast, and long strips of *Spiræa arguta* by the walk leading thereto.

"In the ravine, the existing growth and shoulders of the banks prevent long views, and the winding stream channel naturally divides the whole into many parts. These parts are quite defined by the planting groups indicated on planting plan and as far as possible open grass plots have been retained. The purpose of the planting has been to make a series of these parts, each having a different characteristic.

"After the trees and shrubs are matured and the park maintenance is on an established basis, the ravine will possess an opportunity for feature planting that will make it famous. I have in mind facing with perennials, biennials and annuals the irregular borders which cover the banks and surround each grass plot, filling the openings or bays in the shrub groups and edges of channel, the varieties to be selected being those which will be in bloom when the shrubs are not, and which planted in quantities will form striking sheets of color. It is purposed that each section shall have a different selection of varieties, and that the varie-





flowering at the same time. For instance, in one section we may have helianthus forming a white sheet of flowers against the darker shade of shrub and tree foliage and before it agreeably contrasted the yellow of the golden glow. In the next section, we may have naught but the yellow and blue of the iris at the stream edges or crocuses coming up through the grass, while farther on we may be attracted by other wholesome irregular sheets of red contrasted with the white. And it is intended that this same scheme in variety shall be extended also to all the open spaces in the ravine and smaller lawn openings throughout the park, and that each section shall not be limited to one period of bloom, but rather that it be sufficiently continued to make the whole a veritable garden spot from the beginning to the end of the season and especially when the features on the larger lawn spaces are not the paramount attraction. The perennials used should be those requiring little attention after being once established and they should be of varieties generally wild in nature.

"The planting at the main entrance and at the pavilion is mostly evergreen in irregular formality, the dark greens contrasting strikingly with the gray of the architectural features and the bronze shades of the shrubs indicated. This planting must be done with the utmost care and the exercise of taste in the spacing of the plants, for the irregular formal grouping of evergreens is most effectual when properly executed. The arbor vitæa are specified as wild plants to be collected in the nearby woods and as far as possible low-branched, well-developed plants should be sought.

#### THE EDUCATIONAL PURPOSE

"The educational values of the plants are so many and so obvious that I will only mention a few of the more striking ones that appeal to me as relating to Barrie.

"Never in the history of this continent has so much been heard of the conservation of natural resources as now. We read daily the reports of tragic wastes that have been accomplished in the reckless destruction of trees and the resultant exorbitant prices of lumber, resultant expense with which municipalities have been penalized in getting water supplies, and the resultant exhaustion of permanent natural power for industry, the resultant amount of arid land and resultant impairment of natural transportation facilities, and the losses by floods and freshets. The facts are appalling and on their presentation there is a lack of public response which only bespeaks an inability to appreciate the truth.

"The great mass of this continental people never has had an appreciation of the value of natural growth with which

the lands have been covered, and to-day it is regrettable that there is not a keener awakening, but it is not surprising when one stops to think how little recognition the practical study of the subject has been given by the public authorities. I believe that one of the greatest agencies for preparing the public mind for a sympathetic consideration of the subject is permitting the public to become more intimate with the subject matter, to know trees and natural growth, see the limitations and the time that nature requires to effect a worthy growth, and how easily the process is impaired by the ruthless hand of man. And there is no greater agency through which to bring these things to the sympathetic attention of the great body of the people in our cities and towns

who wield so much power in legislation than in having rich masses of this natural growth as part of their daily environment, having it in their own entrustment and on their own public lands where all own, see and know the different varieties being reserved, and for which in this way they may develop an inherent sympathy and respect.

"There is also the scientific phase in the aid and encouragement to botanical research as a matter of local enlightment and contribution to the complete world records. Another educational value is in the demonstration of the individual, collective and relative uses of a considerable number of hardy varieties of trees and shrubs which are mostly native and can be adapted to use on home grounds, a

demonstration which satisfies a prospective planter in selecting what he wants and in being sure of what he orders and that he gets what he does order. In this regard I wish to bring to your attention the advisability of having attached to each tree and shrub group an easily seen label bearing the botanical and common name of variety and the source of its nativity. This should prove a great stimulus to the private ornamentation of home grounds and the consequent beautification of the town. Moreover, an acquaintance with the native varieties will make them recognizable in woodlands whence they can be selected with little or no expense.

#### One of our Oldest Gardens

The views of the Perth garden which appear on this page and the next, take one back to the stirring times of 1812. The Matheson garden is but one of a number that might be mentioned in connection with the taste, skill and expenditure that have combined to make the town of Perth a reputable centre in things pertaining to advanced gardening. After the war of 1812, families of means came together to make Perth their home. The home included a garden. The garden included the hedge and the sun dial. It was a larger matter in those days to send to Philadelphia for seeds, plants and seeds than it is to-day. But wherever the best was to be had Perth sent for it, and set it forth to bloom and beautify.



One of the Oldest Gardens in Canada The home of Miss Matheson, Perth, Ont.

> There is an old lilac in Miss Matheson's garden that people climb to the roofs of surrounding buildings to get a view of in spring. It is a marvel of profusion and beauty. A Salem grape is another wonder in the garden. The perennials are many.

> The Horticultural Society of Perth is one of the most active in Ontario, and probably no other county capital in the province of Ontario will surpass Perth in the cleanness of her streets, the attractiveness of her gardens, and the culture of her best citizens.

Send garden photos for publication.

### The Best Narcissi for House Culture

TE would be bold indeed who would select from the family of Narcissus any one and say, "this is preferable to all others for house culture," although we may say that the paper white grandiflorus presents strong claims to that distinction. Its powerful and early blooming qualities, its ease of culture, its spotless purity of color and its sweet delicious fragrance, entitle it to consideration in this respect. The accompanying photograph was taken when the buds were just bursting into snowy whiteness and will convey a fair idea of how ten or a dozen would appear when all were in full bloom.

This flower may be grown in several different ways with almost equal success,—in pots of soil, in glasses of water, in sand and water and in a combination of soil, sand and water. We will consider the methods in the order in which we have named them.

#### GROWING IN POTS

To grow in pots, put one bulb in a four-inch pot, or three or four in a sixinch pot, merely covering the bulb with the soil. Any good rich loamy soil to which has been added sand in the proportion of sand one part, and soil three parts, should give good results. The best loam is that made from well rotted sods, although good garden soil will answer. If fertilizer is added, let it be old rotted manure from the cow stable made fine and mixed thoroughly with the soil, or pure bone flour in the proportion of three-quarters of a pint to the bushel of soil, mixing thoroughly.

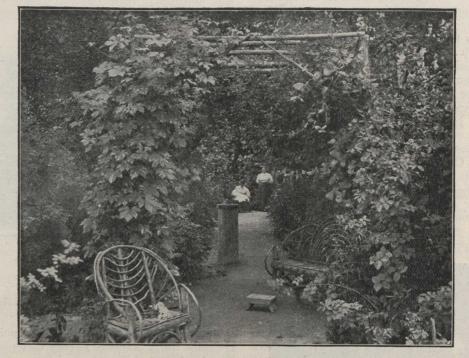
Good drainage must be provided as all early spring flowering bulbs when grown in the house require plenty of water, but it must be given often and not allowed to stand and become stagnant and sour the soil. Good drainage will dispose of all surplus water. Where this is provided the soil will always be in good condition no matter how often the water is applied, provided that the plant receives plenty of sunlight and fresh air.

One reason why many persons fail in their efforts to grow early spring flowering bulbs indoors is because the soil is allowed to alternate between dry and wet. We must imitate as far as possible the conditions under which they bloom when in the open ground at which time the soil is always moist if not quite wet. But this frequent watering applies only to bulbs in a good growing condition. While the bulb is in the dormant state the soil must not be more than moist for if kept too wet the bulb is liable to rot.

After planting the bulbs, whether in soil, sand or water, they should be set away in a dark closet or corner of the cellar for two or three weeks until root formation has well started. This is not

#### C. M. Bezzo, Berlin, Ontario

absolutely necessary but it disposes of them until top growth commences and they present a better appearance. The pebbles placed around the bulb to hold it in position. When grown in pebbles or sand, the bulbs may be placed so close



A Leafy Bower in a Garden in Perth, 'Ontario

writer has brought them to the light all the way from one to six weeks with equal success.

#### GLASSES OF WATER OR IN SAND

To grow paper white narcissus in water they may be placed singly in hyacinth glasses with the water just touching the base of the bulb, or in vessels partly filled with pebbles or sand with the base of the bulb resting on the sand and larger that they almost touch each other. If glass is used for this purpose it should be coloured as root formation takes place much more readily when the light is not too strong. Always use rain water for growing narcissi in glasses of sand and allow the water to come merely above the ground. Change the water occasionally to keep it fresh.

The best way to grow this flower is in a



Flowers and Plants of Many Kinds Make This Garden a Place of Beauty and a Joy

combination of soil, sand and water. Place in the bottom of the vessel to be used, an inch or so of good rich loam or soil from the compost heap. The soil cannot be too rich, the only requirement being that the fertilizing element is thoroughly decomposed and ready to be taken up and converted into plant and bloom as soon as roots and soil come together. Over this, place clean sand to the desired depth upon which place the bulb, holding in position with pebbles. Allow the water to come up just high enough to be seen above the sand.

Paper white narcissus may be forced into bloom within four weeks from the time of planting. By starting to plant in September and planting at intervals during October and November, blooming plants may be had throughout the winter; or the last planting may be made in October and the blooming period regulated by the temperature of the room in which they grow. Heat will hasten the blooming period and, if the plants are coming



Paper White Narcissus

on too quickly they may be retarded by placing in a cooler room.

#### About Peony Varieties Rev. Andrew B. Baird, Winnipeg

There are half a dozen distinct varieties of peonies from which the hundreds of varieties now offered for sale are descended. These species differ in the shape of the leaf, in the smoothness or hairiness of the stem and in the color and shape of the flower.

The most distinct of these is the oldfashioned "piney" familiar to our childhood ( $Paonia \ officinalis$ ) with its foliage dark green above, light green beneath and with dark crimson flowers. This is a native of Switzerland. The others come from Siberia, Southern Europe, the Himlayas and the tree peony from China.

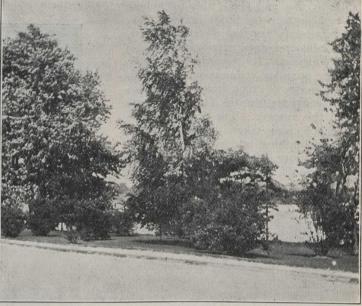
One of the features in which improvement has been most noticeable is fragrance. The old "officinalis" had a pungent and rather disagreeable odor. Now new varieties possess the greatest diversity of perfume — Marcelle Dessert and Madame Boulanger have the fragrance of the rose, Humei is cinnamon-scented,

the Nymph has the fragrance of the pond lily, and others recall the heliotrope or the violet.

It is to be hoped that some local dealer will make a specialty of peonies and will carry a good stock of, say, at least a dozen of the best varieties. While the number of the advertised varieties runs up into the hundreds, it must be admitted that most of the differences are in the names rather than in the flowers. The range of colors is not great; it runs through white, pink, the various shades of red and three varieties more

d hedge is required, and blooms freely if e left unpruned. The foliage is a bright green right up to severe frosts, but prun-

stands pruning well, if a somewhat low



purple, with two or Isolated Overgrown Shrubs Spoiling Fine Trees and Clogging Vistas of American Falls three varieties more In Queen Victoria Park at Niagara Falls. See page 198.

or less yellow. My own collection numbers some thirty plants of twenty varieties. The kinds that I would specially recommend will be given in a later issue of THE CANADIAN HORTICULTURIST.

#### Hedges for Western Homes S. A. Bedford, Manitoba Agricultural College

For the city or town, a hedge can with advantage be planted on each side of a walk or driveway leading to the residence. For this purpose a low-growing fine-sprayed plant should be used, as a coarse hedge would obstruct the view and look out of place.

The native snowberry, with its tiny biossom in summer and pretty white fruit in fall is excellent for the smallest sized hedges. It takes kindly to pruning and can be kept down to one or two feet in height. The native spirea, found all over the prairie, is another excellent plant for this purpose. It makes a hedge a little taller than the former and is covered with showy flowers in early summer. It stands pruning well and there is no difficulty in getting it to thicken out at the base. It is suitable for a hedge from three to four feet high and is well adapted for planting beside wide walks or narrow roads, leading to a residence.

In the city a hedge is often required for the purpose of a dividing line between two neighboring houses, where a fence would look unsightly. For this purpose it should be somewhat taller than the other two hedges I have mentioned, but still neat and compact. Nothing is better for this than the purple lilac. It ing must be frequent if a shapely hedge is required.

For the purpose of a screen between the front and rear of a house, nothing is better than the caragana, if properly pruned, but this shrub is difficult to train unless taken very young. It should be planted in the hedge row when one year old and cut back severely at once. It will then start to branch close to the ground, and make a handsome hedge. Owing to the soft silver foliage and bright yellow blossoms, this is a very attractive hedge plant.

To serve the purpose of a fence parallel with the sidewalk, caragana, lilac or wild rose can be used. The latter requires very frequent pruning, otherwise it quickly becomes unsightly. For foliage effect our native red willow (Cornus) is excellent. It grows readily from cuttings and is a bright red color even in winter. For a contrast, our native buffalo berry is excellent. The foliage of this plant is a bright silver color and its small fruit nearly covers the branches in the autumn.

#### **Dwarf Apples**

Can dwarf apples be grown successfully in the Grimsby district?—A. R., Grimsby, Ont.

Dwarf apples can be grown as successfully about Grimsby as anywhere else in the province of Ontario. Dwarf pears are grown there quite extensively. The large nursery firms in the Niagara district offer dwarf apples and pears for sale.

Give trees in the nursery plenty of room if you want them to be stocky.

#### September, 1909

### Lawn and Garden Hints for September

THE first frosts of fall may be expected about the middle of the month. Injury to plants may be prevented by a little foresight. When frosts threaten, water the garden thoroughly, as the dampness will help to keep the temperature from falling too low. Covering the plants with cloth or paper will also prevent injury from light frosts.

#### THE VEGETABLE GARDEN

When frosts come gather all remaining fruits from tomatoes and squash vines. Tomatoes will ripen in a dry place. Store squash where the temperature is cool and the atmosphere dry. When pulling squash leave a short portion of the vine attached to them.

Continue blanching celery with earth or boards. If for early use, be sure and have all the stalks in each bunch close together before banking up.

Sow winter varieties of radish at once. They may be harvested before freezing time and stored in sand in a cool cellar.

Spinach for early spring use may be sown now. Use the prickly or winter spinach for this purpose. Protect through winter with straw or other covering.

Plant Egyptian tree onions about the middle of the month. They will furnish the first onions next spring.

Late in the month give the rhubarb bed a good coating of manure. They require plenty of plant food.

Sow Chinese mustard and tuberous chervil. The former will furnish a salad plant for use late in fall. The latter is a herb for spring use.

Lettuce for forcing in the house may be sown now. Plants will be ready for use late in November.

#### NOTES ON FRUIT

After harvesting raspberries and blackberries, the old canes may be removed, but the best practice is to leave them until spring so that they wi'l help to hold the snows of winter for the protection of the new growth.

Currants and gooseberries may be pruned any time after the leaves fall. New plants may be set out in autumn. These fruits may be propagated by means of cuttings taken in fall and stored.

Black-caps and purple raspberries may be propagated this month by means of tip-layering. Place the tips of the canes under the soil and fasten them there by firming with the feet or by placing on them a clod of earth. They will root and be ready for transplanting next spring.

Remove the webs of fall webworm by cutting and destroying the branches upon which they have been made, or by burning on the tree with a torch.

#### THE FLOWER GARDEN

Dig the bulbs of tigridias and garden caladiums early in autumn. Dry for a few days and then store in a temperature of about 50 degrees.

Spring flowering bulbs may be planted towards the end of the month. Plant in beds that are well prepared and enriched.

Gather the ripened seeds of any flowers that you wish to reproduce. Dry them slowly for a few days then store in a cool dry place.

House plants that have been growing outdoors should be taken inside when the temperature of the house is about the same as that outdoors. Do not put in pots that are too large and avoid watering too freely.

Perennials that were started from seed

early in spring may be planted in the border late this month or early in September. Late perennials may be divided and transplanted.

#### FLOWERS INDOORS

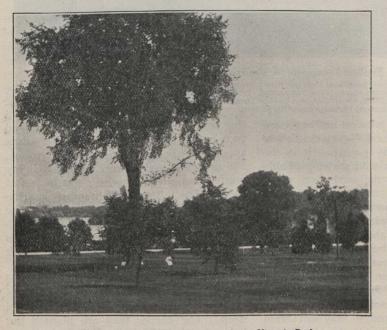
Some bulbs for house culture should be planted now. In a siz-inch pot put three tulips, hyacinths or daffodils; or put six crocuses or snowdrops. Place the crowns of the tulips and daffodils about one inch below the surface of the soil. Hyacinths may project above the surface. Place plenty of drainage material in the pots. Soak with water and then store in a cool dry place.

Seeds of sweet alyssum may be started in pots or boxes any time in fall. Why not experiment with the growing of other annuals indoors and tell your experience through the columns of THE CANADIAN HORTICULTURIST?

If you have a conservatory or greenhouse, repair the benches and heating apparatus this month. Pot Bermuda lilies and freesias. Sow seeds of calceolaria and cineraria. Sow a few seeds of indoor sweet peas and of stocks. Many other things may be grown for winter bloom. Send questions to the question and answer department of THE CANADIAN HORTICULTURIST.

#### Asparagus Pests James F. Nicholson, Ottawa

When old asparagus beds are badly attacked by rust, the best way is to destroy or break them up and plant in a fresh location. The disease may be held in check by frequent sprayings with Bordeaux mixture or by cutting the affected parts off and burning them. Young plants from seeds, kept well fertilized, will



Spotty Planting and Clogged Vistas in Queen Victoria Park Poor specimens of trees obstructing an otherwise fine lawn. See page 198



Wretched Planting in New Portion of Queen Victoria Park at Niagera Falls Small, bare, poorly planted beds which are not only in bad taste but difficult to care for

withstand any disease or fungus better than old beds which have been neglected.

For wire worms at roots, dress the bed with salt and place pieces of carrots and potatoes below ground to attract them.

The asparagus beetle injures the tender shoots and make them useless for market. These insects may be held in check by poultry turned into the beds, or cut down all volunteer growth in early spring so that the beetles will lay their eggs on new shoots which are cut every few days before the eggs are hatched. Another remedy for the larvæ is air-slaked lime, dusted on the plants in the early morning while the dew is on, which will destroy all grubs with which it comes in contact.

After the cutting season is over, burn the tops off the bed as it is the surest way to burn all weed seeds, insects and eggs which may have been deposited during growth.

#### The Potato Harvest

L. H. Newman, Sec., Canadian Seed Growers' Association

The best time to dig potatoes is as soon as the tops have died, except in cases where disease has gained headway. Where such is the case it is considered advisable to leave the potatoes in the ground in order to give them an opportunity to show any infection before storing. A potato digger should be available where any considerable area of this crop is to be harvested. Several of these machines are now on the market and may be purchased at a comparatively low price. One of the best machines is that known as the "Ellard" digger, made by W. J. Ellard, Ottawa, and costing \$70.00.

#### STORING

If stored, potatoes should be placed in a cool, dry, well-ventilated place. They should be brought from the field in a clean, dry condition, with all "rotten" or "scabby" potatoes removed. Mr. Macoun of the Central Experimental Farm, Ottawa, recommends that a special bin be constructed in such a way as to facilitate the greatest circulation of air throughout the pile. This may be done by nailing slats a little apart on upright pieces about six inches from the walls. The floor of the bin should also be raised and constructed of narrow boards with one inch space between them.

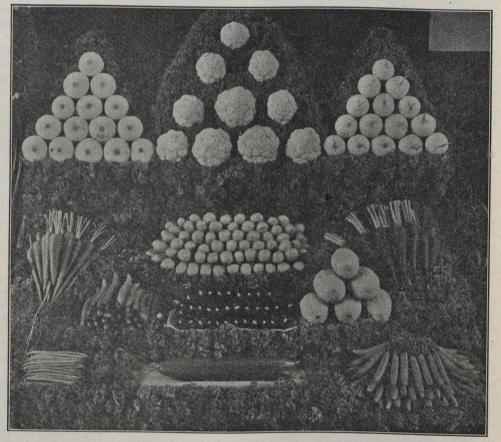
#### MARKETING

As a rule it is more profitable to market potatoes as soon as harvested than to hold them. Circumstances and prices alone can determine the best course to follow in connection with this matter. Where a community develops a name as a large producer of high class potatoes of one type or variety buyers are soon attracted to it and offer remunerative prices. Very often, however, the growers are able to dispose of their product themselves to best advantage. The demand for high class seed every spring opens up an outlet for large quantities of potatoes to be used for seed purposes. This is a trade which requires special development yet is one which presents splendid opportunities for the right men.

#### Growing Ginseng from Seed Wm. Gilgore, Peterboro, Ont.

Ginseng is propagated by seed and these do not germinate for eighteen months after they are ripe. Seeds planted in the autumn of 1908 do not germinate until the spring of 1910. If they are allowed to become dry they lose their vitality. In the early years of ginseng growing, it was the custom to plant the others will be eaten by insects and grubs. By the use of intelligent methods, we can aid nature whenever possible to prevent this waste. I am convinced that we can obtain a greater number of plants from the same quantity of seed by storing them.

I procure a quantity of sharp sand, which I run through a fine screen to remove any gravel that it may contain. I sow the seeds in flower pots. After separating the seeds from the pulp, I put an inch of sand in the bottom of the pot, and on this spread a layer of seed, then a half inch of sand, then a layer of seed and so on until the pot is full. When the pots are all filled, put them in a box with holes in the bottom for draining. Set



#### An Excellent Arrangement for Displaying a Collection of Vegetables

At Canadian exhibitions it is seldom that one sees a collection of vegetables well arranged. The various kinds and varieties usually are shown in a haphazard, inartistic manner. The illustration shows the Gold Medal exhibit at a Horticultural show that was held in London, England, in July, by *The Garden*. The arrangement, or a modification of it, could be adopted with advantage in this country.

seeds in the ground as soon as they were ripe and some successful growers follow the custom yet; they say that it is the natural plan. In its wild state, probably not five per cent. of the seeds ever make a plant.

Nature produces an abundance of seed. If the seeds are planted immediately after becoming ripe, they must stay a long time in the ground before sprouting. To retain the moisture and keep the ground cool, we must put on a heavy mulch of leaves. This mulch makes a fine harbor for field mice and moles. In the meantime a large percentage may rot from wetting and drying out, others will lose their vitality by becoming too dry, and this box in a hole dug in a well-drained spot in the garden. The top of the box should be six inches below the surface. Fill up with sand on top. Above this lay boards and cover all with eight inches of earth. The following September, run the contents of the pots through a fine screen. The seed comes out as fresh and bright as when first put in. Then plant them, and next summer the result will be a fine crop of seedlings.

For ordinary purposes, asparagus roots should be planted about six inches deep. The deeper they are planted the later they will appear above ground in spring.

### QUESTION AND ANSWER DEPARTMENT

#### Beetle on Cherry Trees

I am sending for identification a specimen of a beetle that has been attacking cherry and peach trees and defoliating them.—E. W., Kings Co., N.S.

The specimen sent for identification is a leaf-eating beetle, Galerucella cavicollis, belonging to the same family as the potato and cucumber beetles, etc. This insect is about one-quarter of an inch long, oval in shape, brownish-red in color, shining but not highly polished. It feeds usually on the foliage of wild cherry and is only occasionally found on the cultivated varieties. Some other members of this genus are very injurious to the foliage of various fruit-trees. Spraying with Paris green or arsenate of lead would no doubt destroy the insects .- Prof. Charles J. S. Bethune, Ontario Agricultural College.

#### Winter Injury to Peach Trees

What is the matter with some of our peach trees? They were rather severely damaged by winter killing of wood and in May we cut back very hard. They have made large, new growth, but part of the trees have a yellowish leaf, whilst other parts of same tree are normal dark green. In summer of 1908, no yellow leaves appeared, after a very mild winter. Slight appearance of yellow leaf appeared in 1907 after a hard winter. The soil is a gravelly one, and trees are three and four years old. The soil has not been cover-cropped. The snow lies very badly on it. One or two other growers have the same thing, but cnly in light soils and after winter injury. The trees have all made from three to five feet of strong new wood.—L. Bros., Nahun, B.C.

It is impossible to say with certainty what is causing the yellowing of the leaves of your peach trees without examination, but it would appear that the yellowing of the leaves is an indication of the winter injury which you refer to and which in some cases was sufficiently bad to cause the death of the limbs. Sometimes after winter injury the tissues seem to become disorganized and the branch remains unhealthy for some time without actually dying.—W. T. Macoun, Central Experimental Farm, Ottawa.

#### The Grimsby District

1. Is Grimsby a good fruit-growing district?

2. What is the average yield per tree of peaches, plums and pears? 3. Can \$1,200 yearly be realized from a

3. Can \$1,200 yearly be realized from a fruit farm consisting of 200 peach trees, 150 plum trees, 40 pear trees, 500 grape vines and one quarter of an acre of strawberries?

4. What is the price per acre for land in Grimsby?-B.H.E., Toronto.

1. While there are some districts just

as good as Grimsby for fruit growing, there are none better, except for apples. No district in Canada produces a greater number of kinds and varieties of fruits and is more free from frosts.

2. The average yield per tree is a hard question to answer, as there are so many different varieties and they do not all bear every year. It is presumed that "B. H. E." refers to full-grown trees. We have known plum trees in that district to have from twenty-five to forty baskets on in one year and so with pears, and peaches have been known to yield fifteen to twenty-five baskets per tree in one year, but not every year in any of the cases. The average for one year with another, taking different varieties into consideration, is about six baskets per tree for peaches, plums and pears.

3. A fruit farm containing the number of trees mentioned would only be about four acres. You could not average \$1200 a year from it. If the trees all had an average crop on them with high prices, it might be realized, but not every year.

4. Land in the Grimsby district is very high, good land selling from \$500 an acre and more. We heard of one grower who refused \$1500 an acre this spring. Orchards were sold this season for over \$1,000 an acre.

#### Fumigation with Cyanide

What is the best method of using cyanide of potassium in greenhouses?—M. A. R., Halifax.

Fumigation with cyanide of potassium is one of the most effective methods of destroying the white-fly, but it should be used with the greatest caution as the fumes are fatal to all animal life. Every precaution should be taken against the possibility of anyone entering the house where the gas is being used until it has been dissipated. The house should be tight and so arranged that the ventilators can be raised without entering the house. The gas is produced by the action of sulphuric acid upon cyanide of potassium in the presence of water. One ounce chemically pure potassium cyanide (98 per cent.) one and one-quarter ounces of commercial sulphuric acid and two ounces of water can be used for each 1,000 cubic feet of space.

At intervals of from 30 to 40 feet place on the walk a two-gallon earthen jar; thus, for a house 100 feet long, three jars would be required. In each jar place a proportionate part of the water required for the house and then carefully add an equal amount of sulphuric acid. (Care should be taken not to allow any of

the acid to come in contact with the clothing). The amount of cyanide for each jar should be weighed out and placed in paper bags. Screw-eyes are then fastened in the wood work directly over each jar and through these stout cords are run to the end of the house near the door where they are fastened. To the ends over the jars tie the bags of cyanide so that on the ends of the strings at the doors being released they will drop into the jars. When all is ready close the ventilators; pass to the end of the house and carefully lower the bags into the jars and close the doors. After 25 minutes open the house for at least half an hour before entering .- Tennyson D. Jarvis, Ontario Agricultural College.

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#### English Lavender

Early in the spring, I planted seeds of English lavender. They were very slow in germinating. In June, I transplanted the small plants to a larger box. They are not more than one and one half inches high now (July 23.) I have transplanted them again to the open ground. Can you prescribe for them?—Mrs. W. H. J., Madoc, Ont.

Madoc, Ont. The English lavender does not propagate very readily from seeds. Seedling plants are very slow growing. The plants will probably do better now that you have planted them in the open ground. If you have several of them, it might be as well to put one or two, singly, in three- or four-inch pots, in good potting soil. The pots should then be planted or sunk in the garden and the plants kept well watered. The plants could then be lifted out and taken into the window in the fall.

#### **Drying Ginseng Roots**

Is it a difficult job to dry ginseng roots for market?—W. N., Dartmouth, N.S.

I will give some facts from my personal experience. Last autumn I dug a quantity of roots. When they were washed, I made a bench of boards on the south side of the house. On this bench I spread out the roots. They were exposed to the full sunshine from nine o'clock in the morning until five o'clock in the afternoon. They received this treatment for a week when they were taken inside and spread on a floor upstairs where they got the draught of two open windows for about ten days more, when they were perfectly dry. Ten pounds were shipped to New York and the price was remitted in about a month from the time that they were dug. This part of the work can be done by women; in fact, they are more careful than men. -Wm. Gilgore, Peterboro, Ont.

The Canadian Horticulturist

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UNION

#### The Only Horticultural Magazine in the Dominion

OFFICIAL ORGAN OF BRITISH COLUMBIA, ONTARIO QUEBEC, NEW BRUNSWICK AND PRINCE EDWARD ISLAND FRUIT GROWERS' ASSOCIATIONS

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

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#### CIRCULATION STATEMENT.

Since the subscription price of The Canadian Horticulturist was reduced from \$1.00 to 60 cents a year, the circulation has grown rapidly. The following is a sworn statement of the net paid circulation of The Canadian Horticulturist for the year ending with Dec. 1908. The figures giv-en are exclusive of samples and spoiled copies, and of papers sent to advertisers. Some months, including the sample copies, from 10.000 to 12.000 copies of The Canadian Horticulturist are mailed to people known to be interested in the grow-ing of fruit, flowers or vegetables.

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Total for the year .. 104,337

#### Average each issue in 1907, 6,627 Average each issue in 1908, 8,695 (Increased circulation in one year 2,068)

Sworn detailed statements will be mailed upon application.

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#### QUEEN VICTORIA PARK

Queen Victoria Park at Niagara Falls is visited annually by thousands and thousands of people and should present an example of the very best taste in the treatment of a great natural piece of scenery. The treatment that it is receiving is open to considerable objection as has been pointed out in these columns many times. A representative of THE CANADIAN HORTI-CULTURIST visited the park recently to observe at first hand present conditions and to take some photographs. Some of the lat-ter are published on pages 194 and 195.

The park contains about 175 acres lying along the shore of the Niagara River and extending from near the upper steel arch bridge to a considerable distance above the bridge to a considerable distance above the Falls. It may be roughly divided into two parts, namely, a steep wooded portion and a fairly leved plateau extending from the bluff to the river's edge. The bluff is now nearly all clothed with a natural growth, but the treatment of the more level portion is makely and the state of the state of the state of the state. is wholly artificial, excepting around the Dufferin Islands which are rather rugged and unkempt

In the older portion of the park much of the planting has outlived its usefulness, at least in its present location. It should be, especially in the case of the older and larger shrubs which are already growing bare and unsightly at the base, gathered into larger clumps and faced down with finer stuff. There are several fine vistas of the Falls which are clogged with these over-grown shrubs and with poor trees, and there are many fine trees which will eventually lose their lower limbs and much of their beauty unless the interfering shrubbery and poor trees are removed from their vicinity. Shrubs when properly trimmed do not become overgrown, but the thinning should not be neglected. There are even dead trees standing as a monument to someone's lack of neatness. The judicious use of an axe would help out here considerably.

It is in the upper portion of the park that the greatest chance for improvement exists Since this part is hardly at all developed. Here there is plenty of playground room and here it is that provision should be made for the playing of tennis, cricket and espec-ially baseball, instead of allowing these sports to occupy the fine lawns in the older portion of the park.

Here also lies one of the greatest opportunities for the exercise of the art of landscape gardening that exists on the American continent to-day and yet here we find such examples of gardening as, for instance, three golden syringas (Philadelphus coronarius aurea) growing in a heart-shaped bed. And such examples of taste (?) are dotted indiscriminately here and there over the lawns. It would be as interesting to know how many people carry home ideas from these wretched beds as it is dreadful to contemplate the result of their trying to reproduce them at home.

Another practice which is open to objection is the use of gaudy annuals and dwarf evergreens in the same beds. The evergreen material used as bedding is in itself beautiful and the idea is one of the happiest thoughts in the whole park, but annual stuff should not be used alongside of it because annuals are nearly always exotics and entirely foreign to our native flora while evergreens are not only native but characteristic. If something bright must be used along with the evergreens then let it be perennial native stuff which will not only look better and last longer but will also provide an excellent example for visitors to the park.

This park has been in existence for over twenty years but it has none of the finished appearance which such an old park should have. The construction of the power plants is responsible for some of this, but does not furnish a sufficient excuse. It not furnish a sumclent excuse. It looks rather as if the park were periodical-ly overturned by changing superintend-ents and as if their views of what such a park should be were colored by their political faith. There evidently has been a vast sum of money expended in providing "jobs," but job holders are notoriously poor park builders.

The salvation of this or any other park under public ownership lies in an administration entirely removed from politics. At the present time, when there are scores of trained men available who not only have a thorough botanical and horticultural education but also have the principles of good design inculcated in them, as well as a knowledge of practical and economical landscape construction and maintenance, there is no longer any excuse for placing such a treasure as Queen Victoria Park into the hands of an engineer, a postmaster or a politician. Until this idea dawns upon those in authority a good share of the annual appropriation might as well be thrown over the Falls with an equal expectation of attaining the end for which it was appropriated and for which the people have a right to look.

#### MORE EDUCATION NEEDED

We are informed by the railway station agent at the town of Simcoe, Ontario, that 20,000 apple trees passed through his hands for the farmers of the county of Norfolk in the spring of 1909. This is but one evidence of the many rapid strides that are being made in the development of the fruit industry in Ontario. Along the north shore of Lake Ontario, in the Georgian Bay dis-trict, in the Lake Huron section, along Lake Erie, and in the middle counties, as well as in the Niagara peninsula, more spraying is being done every year, more orchards are being cultivated, more trees are being pruned, and more inquiries are being made by growers in these districts for help in the destruction of insects and fungous diseases in the orchard. The rapid development of the industry and the great desire for knowledge that is being expressed, shows the need for more education.

The practice and the theory of horticulture in all its branches is demonstrated and taught at the Ontario Agricultural College, Guelph. This is a provincial institution, and the government, by generous appropri-ations, makes it possible for a farmer's boy to receive a splendid education at little expense. The professor of horticulture at the present time is making a business trip through California, Oregon, Washington, British Columbia, and our own Northwest Territories, looking for information along fruit lines that will be useful to the students in horticulture at the college.

The college is receiving more and more inquiries each year in regard to spraying, the life history of insects and the remedies for their destruction, and the best methods to destroy fungous diseases, and more and more each year fruit growers are sending their sons to the college to spend at least two winters, studying those subjects that will be useful to the boy on the fruit farm. The wonder is that the college is not crowded with students who are interested in orchard management. The orchard has become, more and more, an important adjunct, and in special fruit sections men are making a good living out of the orchard alone. We would call attention therefore, to the courses that are being offered at the Ontario Agricultural College, as outlined on page 203, of this issue, and we trust that when the opening day, September 14, comes round, there will be hundreds of young men who are interested in fruit enroll themselves as students at that worthy instituion.

#### INCREASED GRANT NECESSARY

The new Ontario Act governing the Horticultural Societies of the province has been in operation now for about three years and is giving general satisfaction. It is working out in one direction, however, in a manner that may prove disastrous to a considerable numebr of societies unless steps are taken The immediately to improve the situation. government grant made to the societies under the present Act is distributed to them in part in proportion to their membership. This forces societies in order that they may hold their own to increase their membership. Those societies that do not increase their membership suffer decreases in their government grants. As a result of this clause in the Act, the societies have been putting forth every effort to increase their membership, with the result that during the past two years, their membership has been increased by over 50 per cent. As the total government grant to all the societies has not been increased, the societies are being forced to carry a greatly increased membership on grants, that on the average are no larger than they were several years ago. The burden is becoming so great that a

The burden is becoming so great that a number of the societies are finding it a hard struggle to continue their work. The government grant to the Horticultural Societies of the province should be increased by at least \$3,000. There is no organization in the province that is doing more beneficial and educational work in proportion to the assistance received, than the Horticultural Societies. The societies should take this matter up energetically and leave no stone unturned to show the provincial government how absolutely essential it is that the provincial government grant shall be increased to a sum commensurate with the work that they are doing.

#### AN UNNECESSARY BURDEN

There is a feature of the fruit commission business in Toronto that should be corrected. Commission merchants in that city demand cartage fees of one cent a basket and three cents a crate upon all fruit shipped to them for sale, in addition to a commission of ten per cent. for selling. The growers of the Niagara peninsula feel that the cartage charges are an imposition. Expressions of this feeling from some of the growers appear elsewhere in this issue. Toronto commission men appear to be alone in requiring a fee of more than 10 per cent. Montreal does not impose it, nor other cities, so far as we know.

It is claimed that seventy-five per cent. of the fruit that is sold by commission merchants is hauled away by the buyers, but the commission men offer no rebate to growers on this account; they keep the money that is paid for work that in many cases is not done. Even when the fruit is delivered by the commission men, it is not reasonable to make the growers pay for it. That is the commission man's affair and not the grower's. The latter's share of cartage operations is done at his end of the line. It would be just as reasonable for the retail dealers to impose cartage charges on the commission men as it is for the commission men to charge the growers. In other lines of business such a thing would not be thought of. The ccmmission merchants of Toronto should drop this charge.

The article and diagrams that are published in this issue under the heading, "A Model Park for Barrie, Ontario," contain much information for park builders and suggest means whereby many of our cities and towns may be made more beautiful. More parks and better parks are necessary. They are valuable assets to a municipality. In all of our towns there is more or less waste ground that could be turned into parks and pleasure places. It is to be hoped that Barrie has initiated a movement towards a new standard which other towns will adopt.



That the virtue of modesty is a good one, cannot be denied; that its adoption by the publishers of THE CANADIAN HORTICULTURIST is not in the interests of fruit growers and of the publication is the opinion of one of our friends in British Columbia, as the following letter intimates:

"Your premium offers are varied, good and attractive, but you don't try quite enough to convince the people that THE CANADIAN HORTICULTURIST is necessary for them. You let the excellence of the paper speak for it—a sure way but slow. Tell the fruit growers from time to time that you alone stand for the development of Canadian orcharding, improvement of transportation, recognition of merits of Canadian fruit in the markets of the world,-that you are "it" and are indispensible to every one, amateur or professional, who grows fruit in Canada. Intimate to British Columbia Intimate to British Columbia men that you are ever ready to help them in any or all of their peculiar problems. Remind them that you are the organ of their provincial fruit growers' are the association. In short, your paper is deserv-ing genuinely of some "hot air,"—just a lit-tle more of the tactics of your American contemporaries who allure Canadians to subscribe. Not that the American journals should not be read by Canadians. One should learn whatever he can, and the Americans can teach in many things; but, this Canadian publication should be in every Canadian's hands.

"There are enough fruit men in Canada to make your mailing list as large as at Of course, you have other classes present. of readers to interest, but my remarks apply only to fruit growers. When I look over some of your fine recent issues, I think of what many Canadians have missed by not reading them. Your paper has improved 200 per cent. as a national fruit publication in the last two years, and I'll bet that right now there are thousands of fruit men in our country who, because they don't know, consider it just one of these Canadian papers asking support solely because it is Canadian. They have not been convinced that every number contains something vital to their business interests, some things that American papers purposely don't give them.

We appreciate the words and advice of our correspondent. It has been our aim to make THE CANADIAN HORTICULTURIST national in character, and therefore equally valnable to our readers in all parts of Canada. Besides being the official organ of most of our provincial fruit growers' associations, THE CANADIAN HORTICULTURIST is also the personal organ of every horticulturist in our great Dominion who desires to avail himself of the opportunities that it affords for acquiring and disseminating horticultural knowledge and wisdom.

The illustration on the front cover of this issue shows a part of the beautiful grounds at "Dunain," the home of Mr. Barlow Cumberland, Port Hope, Ont. The hedge is of cedar and the arched gateway leads to the kitchen garden. Scenes similar to this one are wanted from all parts of Canada.

#### Pollenizing Plum Blossoms Wm. H. Moore, Scotch Lake, N.B.

Several years ago, on the old homestead, a sort of superstitious information was given by a neighbor that if wood ashes were thrown upon plum trees when in full bloom they would insure a crop of plums for that year. The trick was performed and a good crop of plums resulted. This was with some old-fashioned red plums. The farm is now under a different management and this spring I gave the occupants the same information. They threw ashes upon the blossoms as high as they could reach. The result is that plums set where the ashes were applied, and that very few set above where the ashes reached

From these two experiments, it is apparent that this method of treatment is of great benefit if one wishes to secure a crop of plums. I have made some enquiry among local fruit growers but not one had heard of this wrinkle nor could any person be found who could even surmise how it could possibly be of any use. Later, I made a short study of "Plums and Plum Culture," by Wangh, and have concluded from the information gleaned from that book, that the mystery is about solved.

It is found, in plum growing, that it is well to have planted near each other different varieties of plum trees to better en-sure the setting of the fruit, as it may happen that the pollen may not be ready for distribution, that is, the anthers may not be ready to set the pollen free at the same time that the stigma is ready for pollina-By throwing the fine ashes against tion. the blossoms, the anthers may be broken and the pollen distributed upon the stigma or made ready so that when the insects visiting the flowers are gathering the nectar they too may greatly aid in pollenizing the This plan will work with varieties flowers. having the stigma ready before the pollen is, but should some have the pollen ready first (if there are such) then this method would be of no use. Perhaps some of the plum culturists who may chance to read this may be able to throw more light upon the subject.

The first plum trees set out on my farm were set this spring. The blossoms were well treated to a liberal supply of ashes and there are quite a number of plums set and not a single pith or blight. The varieties are Moore's Arctic and Lombard.

[Note.—It has been demonstrated by experiment (Waugh) that plum pollen is not transmitted through the air by the wind in sufficient quantities to insure cross-pollination. A similar conclusion is drawn from experiments conducted in apple orchards by the Oregon Experiment Station. The practice of throwing ashes on trees may increase the distribution, but it is scarcely practicable on large plantations. The information given by Mr. Moore is interesting. Expressions of opinion regarding it from others will be welcomed for publication.—Editor.]

Items of interest from all the provinces are wanted for publication.

### The Pre-cooling of Fruit for Shipment

E XPERIMENTS conducted by the departments of agriculture of Canada and the United States show conclusively that fruit should be cooled before shipment. The fruit should be placed in the storage room or in refrigerator cars with the least possible delay after picking. Unless this is done, the full benefits of cold storage facilities on board ship are not secured. At the last convention of the Ontario Fruit Growers' Association, Mr. J. A. Ruddick, Dairy and Cold Storage Commissioner, Ottawa, directed attention to the importance of this point in an address on our export trade in early apples and tender fruits. In the course of the address, he said, "In nine cases out of ten when fruit reaches its destination in bad condition, it is because it had not been delivered to the transportation companies in fit condition to carry safely." On being asked if apples should be placed in cold

had to be removed, and the heat which was generated while the fruit was ripening at that rapid rate had also to be removed.

"The refrigeration of fruit is a very different thing to the refrigeration of butter, where you can put the temperature down as low as you like; but if you put on sufficient refrigeration to put the temperature down quickly you would have the cold air coming into the chamber far below freezing point, consequently freezing the fruit which it immediately came into contact with. The engineer has, therefore, that difficulty to contend with, that he cannot use the full power of his refrigerating machine in a chamber used for chilling fruit. He is aware of the critical temperature, about 32 degrees, and that it is not safe to have cold air coming in at a lower point. If he were trying to chill a chamber filled with butter or meats or any frozen goods, it would not make any difference; he could

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198 Diagrams that Illustrate the Value of Cooling Fruit Before Shipment

storage before being packed, Mr. Ruddick said, "If you pack warm apples in barrels and put them in cold storage, it takes a longer time to cool them down than it would if they were in open packages. Cold fruit does not bruise as readily in packing as warm fruit does, and that is also a consideration."

In his evidence before the Select Standing Committee on Agriculture and Colonization at Ottawa, Mr. Ruddick further emphasized the importance of having the fruit properly cooled before it is placed on board the steamer. He exhibited illustrations of two thermograph records (as shown on this page) of shipments made on the S.S. "Ionian" last September.

In pointing out the lessons to be learned from these records, Mr. Ruddick said, "The temperature of the room in which the fruit v as cooled before being put into the chambe s, went right down to 36 degrees and ran fairly even throughout the voyage. In the other, the temperature started at 60 degrees, and it was four days before it was down to 40 degrees. The heat in the fruit then put on the full power of his machine. That is why it is so difficult to manage the chilling of fruit. This shows the importance of having the fruit cooled before it is placed in a chamber like the cold storage chamber on the steamship."

chamber on the steamsnip. A study of the foregoing remarks and of the accompanying illustrations should convince fruit growers and shippers. No refrigerator car yet constructed can give quick refrigeration and no cold storage chamber on a ship can do so without injuring the fruit. The Dominion Department of Agriculture intends to continue its assistance to fruit growers in this matter and in affording facilities for the ocean carriage o ffruit in small quantities. The announcement appears in the August issue of THE CANADIAN HORTICULTURIST.

Cold Storage For Apples.—Attention is directed to the space facing our first reading page, taken by ad. of the New Brunswick Cold Storage Company, Limited, St. John, N.B. There are few businesses which may be expected to appeal so readily to the apple exporter. Space should be arranged for well in advance. These people can take only 50,000 barrels, and that is a small part of a good crop. Stock should be sent direct from the orchard. Arrange exactly how you want your goods stored, whether by season or the month. Give specific directions as to your stowage, whether on heads, face down, or bilge, or on bottom with heads removed. Parties who have tested the St. John house have only good words for the facilities offered, and good foremen can easily get plenty of help, with one or two years' experience as packers, resident in the winter port. Parties shipping boxed apples will find mills turning out an excellent article right at the storage doors in St. John. As shipments from this house may be routed direct to London, Liverpool, Glasgow. Manchester, Belfast, Bristol, Havre, Rotterdam, Hamburg or Capetown, little is left to be desired as to accommodations. All the Montreal lines run to St. John in winter.

#### **Ontario Horticultural Exhibition**

#### P. W. Hodgetts, Secretary, Toronto

The Ontaria Horticultural Exhibition will be held this year in the St. Lawrence Market Arena, Toronto, November 9 to 13. An entire change will be made in the interior plan of decorations and the placing of the various products which go to make up this magnificent show. Present plans are to have a central aisle leading from the main door right through to the rear of the hall, making the arches overhead gradually smaller so as to apparently increase the length of this aisle.

this aisle. Among special exhibits will be single specimens of our four leading varieties of apples, namely, the Spy, Baldwin, Greening and King, for which the big prize of \$10.00 will be offered in each case. These have been donated by prominent men in the horticultural world in Ontario.

Special arrangements are also being made for a large exhibit of all kinds of orchard implements, spraying mixtures, etc., both from the United States and Canada. The CANADIAN HORTICULTURIST has kindly donated a full-page advertisement which is to be divided into two prizes for the best new inventions for orchard and for garden use.

With a more favorable year the present season than last, the commercial florists expect to put up one of the best exhibits of 'mums, roses and other flowers that has ever been seen in Toronto. The floral arches will be a special feature of their creation. Altogether the show promises already to exceed in beauty and also in utility any of the previous exhibitions. The prize lists are now printed and copies may be obtained from the secretary, Parliament Buildings, Toronto.

Photographs of fruit harvesting scenes are wanted for use in THE CANADIAN HORTI-CULTURIST.

The engravings on pages 192 and 193 were loaned from the report of the Horticultural Societies of Ontario, by Mr. J. Lockie Wilson. The photographs from which they were made were furnished by Rev A. H. Scott, Perth, Ont.

To harvest the fruit crop easily and rapidly, it is necessary to have strong ladders. It is bad policy to use clumsy ladders, such as usually are made at home. A ladder that will give satisfaction is the "Perfect" fruit step ladder. Read the advertisement of the Stratford M'fg Co., Stratford, Ont., that appears on another page of this issue.

#### Cartage Charges in Toronto

In addition to their regular commission of 10 per cent., the Commission men of Toronto require cartage fees of one cent a basket and three cents a crate. This is discussed editorially on page 198. A number of protests against these fees have been sent to THE CANADIAN HORTICUL-TURIST and the travelling representative of of THE CANADIAN HORTICULTURIST who refarms around Lake Ontario from Burlington to Grimsby reports that complaints are general. The following letters state the situation and express the common feeling:

A. W. Peart, Burlington : "The growers feel that the cartage charges are an undue and exceptional burden." R. C. Fowler, Burlington: "The injury

reflected on the grower is the fact that, in addition to 10 per cent. commission, he has to pay cartage charges without any com-pensating advantage. The commission men say that they put this charge on to defray the cost of delivering the fruit, but we have no guarantee that they deliver it. A great deal of the fruit is taken from the fruit market by the retail dealers when it is bought, but I never heard of any rebate being made on that account. It is manifestly unfair to charge the grower with the festly untair to charge the grower with the delivery of fruit when he receives no bene-fit. They should charge the retail dealer who benefits by the delivery, supposing, of course, that they do deliver. I prefer to sell my fruit to the buyers in Burlington, rather than to hand it over to the commis-sion man in Toronto to send me what he sees fit in return. The reason given by the commission men in their circular was that commission men in their circular was that 10 per cent. was not enough for selling and delivering the fruit." J. A. West, Aldershot: "The growers

emphatically resent the extra charge of cartage and it is the general idea that it is a regular fraud; but, owing to the fact that they will not combine, they have to pay. Further, they declare that if the commission men do not get the cartage di-

commission men do not get the cartage at rectly, they will indirectly. "The reason why the commission men say that they are compelled to charge is slightly altered to suit different districts. For this district the fruit is sent to Toronto by rail and delivered by the express company into the market, so the commission men spin a yarn about their large establishments, the bookkeepers, delivery men and horses that they have to keep to sell the fruit and *deliver same when* sold to their customers; and one commission man said that if he sold one crate of melons for 50 cents and only made five cents commission, how could he pay for that crate to be delivered five miles, which, he said, was often the case; this single crate trick certainly gulled a good many of the growers. I have before me an advice from a commission man in Toronto on which there are 27 baskets and 21 crates sold for \$65.35 .express charges, \$3.55, commission, \$6.53, cartage, 90c., leaving a nett amount of \$54.37; practically 20 per cent. leakage. Of course, the cartage of 90 cents does not look much, but when you come to facts, such as these—there are five growers within approximately one mile radius and each had close upon 2,000 baskets of cherries, total-ling 10,000 at one cent a basket, which makes a net gain of \$100 to the commission man.

"The Niagara district cannot ship inland to distant points after Friday, so the grow-ers send all the Friday's stuff by boat to Toronto and this is delivered only on to the wharf; therefore, all fruit not sold has to be carted up to the market by the commission man's own team. Probably this fact was the origin of the cartage charge.

Wm. F. W. Fisher, Burlington: '(1) We deliver at the railway station, load fruit on cars and pay charges to destinaticn. At this point obligation for any class of men in the world but farmers ceases. Either the commission man or the purchaser should take charge of it at this point.

"(2) I do not consider it honest to impose on people because they happen to be in one's power. This is stolen money. "(3) Commission men say there are so

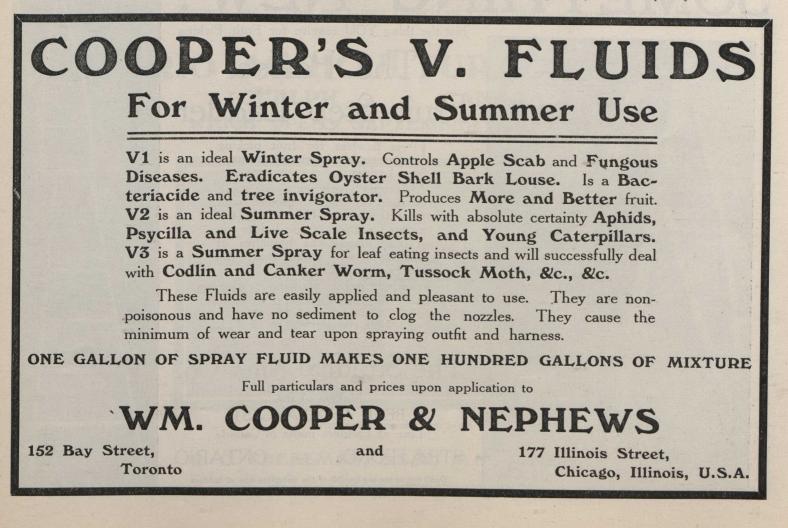
many in the business that 10 per cent. is not enough on their business. It does not seem to have occurred to any of them that they might go out of business.

(4) They do not deliver a large portion of the goods but just pocket the money.

"(5) If necessary a straight amount should be added to the per centage com-mission."

About Apple Orchards .- An up-to-date book for all persons who are interested in the growing and handling of apples is "The American Apple Orchard," by F. A. Waugh. All the various operations from starting an orchard to marketing the product are discussed in a concise and practical manner. The work is complete in all details. It deals with apple culture as practised not only in the United States but also in Canada, many references to Canadian methods being recorded. The book is pub-lished by the Orange Judd Company of New York. The price is \$1.00, postpaid. For copies, address the Horticultural Pub-lishing Co., Peterboro, Ont.

When writing to THE CANADIAN HORTI-CULTURIST, please write on one side of the paper only and write plainly.



#### Alaska-Yukon-Pacific Fair

A representative of THE CANADIAN HORTI-CULTURIST visited the Alaska-Yukon-Pacific Exposition the last week in July and, while it is impossible in the space at our disposal to give a very comprehensive description of the grounds and exhibits, a few things particularly impressed our representative.

The Fair while not as large in extent as the other World's Fairs held in recent years has its advantages to the visitor, being very compact and necessitating less fatigue in order to see the same number of exhibits. The natural advantages of the location from the scenic standpoint, excel any previous exhibition of the kind held on this continent, and the landscape gardening and floral displays on the grounds are superbly beautiful.

To the Canadian visitor, perhaps the most interesting displays might be considered those of the Canadian building, the Grand Trunk Pacific, the Forestry building and the United States government building, not forgetting the excellent bureau of information provided by the Vancouver World, in their unique headquarters representing a Hudson Bay Company's Bastion.

The Dominion government display in the Canadian building, is one which reflects great credit on the officials in charge. The tasteful decorations not only give evidence of great skill on the part of the artist, but of careful attention to the proper illustration of the resources of the country. If any fault is to be found in this building, it might be charged to the orchard scene cn

the left hand side, which represents an eastern apple packing demonstration, where the fruit on the painted side is gradually merged into a collection of the real article nearer the observer. In this immediate vicinity the painted scene displays an orchard with abnormally long barrels and absurdly tall Canadians, and apple trees planted appar-enly about six feet apart, all of which is a libel even upon the eastern orchardist, but this might be charitably overlooked if there were another scene representing the modern system of apple packing in boxes, such as is practised in our best orchards, not only in the east but also in British Columbia. The fresh fruit display is highly creditable and helps to convince the careful observer that things have advanced somewhat since the orchardist who painted that scene, ceased operations.

#### Society for Hort'l Science

The Society for Horticultural Science will hold its annual meeting at St. Catharines, Ont., on Monday, Sept. 13, immediately preceding the meetings of the American Pomological Society which occur on Sept 14, 15 and 16. The Welland Hotel will be headquarters for the Society. The program will be one of the best which the Society has ever had.

will be one of the best which the Society has ever had. Dr. L. H. Bailey, Director of the Experiment Station and Dean of the Department of Agriculture of Cornell University, will discuss "The Field of Research Work in Horticulture." Dr. E. W. Allen, of the Office of Experiment Stations, Washington, D.C., will discuss "The Adams Fund in Its Relation to Investigations in Horticulture." Dr. H. J. Webber, of Cornell University, will outline the work being carried on there under the Adams Fund Act and Prof. S. B. Green, of St. Anthony Park, Minn., will outline the work being done under this act at the University of Minnesota. There will be several other papers, but these were not definitely arranged for in time for publication.

#### Marketing Early Grapes (Continued from page 189)

are able to dispose of it to best advantage. This system of selling fruit has many advantages, some of which have been enumerated. Each member of the association has a personal interest in the working of the society. The number of middlemen through whom the fruit must pass is reduced to a minimum and all profits are divided proportionately among the members of the association.

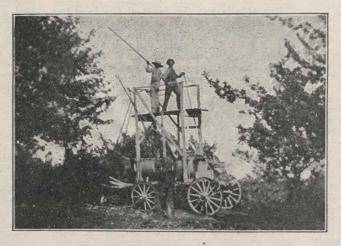
The successful growing of fruit and the profitable marketing of that fruit are entirely different problems. A man may be able to grow good fruit; yet, he may be lacking in ability to market that fruit to good advantage. The great point is to put the fruit up in an attractive package and, if catering to a private trade, stamp it with the name of your farm. Let nothing but good fruit go under that stamp and, when once the name becomes recognized as the sender of good and guaranteed fruit, the matter of sale will be easy. This point is the result largely of the success of the co-operative associations and of private enterprises.



September, 1909

#### THE CANADIAN HORTICULTURIST

# **Does Your Orchard Pay?**



Spraying Outfit Last year one Ontario grower made a net profit of \$3.00 per tree from 32 acres of apples.

### YOU CAN DO IT TOO and WE CAN SHOW YOU HOW

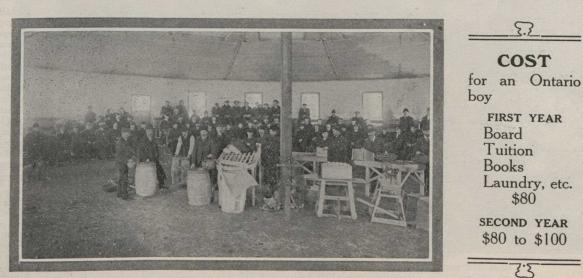
If you cannot come to college yourself, send your son. He ought to be well informed concerning the selection of land for fruit; varieties; budding and grafting; preparation and application of sprays packing, handling, shipping, etc. This important branch of Horticulture is taught to all First Year Students at the:--

### **ONTARIO AGRICULTURAL COLLEGE** GUELPH - - CANADA WHICH OPENS SEPTEMBER 14th, 1909

Send To-Day for a Calendar. It will be sent to you free and will give complete information concerning the cost of course, subjects taught, etc.

5.2\_\_\_\_

September, 1909



Demonstration in Packing

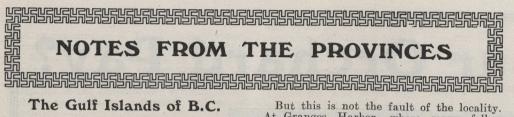
G. C. CREELMAN, B.S.A., M.S., President

203

5.2\_\_\_\_

COST

\$80



#### W. J. L. Hamilton.

Great crops of all kinds are raised on the Great crops of all kinds are faised on the islands, that stretch from the shores of Saanich peninsula up to Nanaimo, on the east coast of Vancouver. Wheat yields as much as 50 bushels to the acre; potatoes, up to 16 tons; cereals and all kinds of roots and other crops, in like abundance; and fruits

other crops, in like abundance; and fruits succeed to perfection. Heavy crops of ber-ries of the best quality and bountiful crops of apples, pears and other tree fruits are produced where attempted. Salt Spring Island is the largest of the group, being about 20 miles long by six to eight wide. Salt Spring Island butter from our Creamery, and Salt Spring mut-ton from our hillsides, are held at a pre-mium in our markets, but Salt Spring Island fruit, which should be our staple pro-duct, is of minor importance. Why is this? The answer at first seems strange. It is due to the fact that Victoria's surroundings of which this is a part, form the earliest

of which this is a part, form the earliest settlement in the province; hence, at first, Hudson's Bay Co's employees—miners, sailors, fishermen and all trades except fruit growers-settled on the land, and because, before fruit tree diseases were known, the finest orchard produce could be raised. Antiquated methods are still followed in some induated memory are still followed in some in-stances, Spraying is contemned. Scale, scab and aphis are, in consequence, in evi-dence, and naturally much second rate fruit is produced.

But this is not the fault of the locality. At Granges Harbor, where many follow modern methods, and at the South End, where some do the same, fruit of all kinds, second to none, is raised and marketed. Unfortunately, many do not yet realize that the troubles of years' accumulation cannot be cured in a day, that one spraying will not turn an old orchard into a new one not turn an old orchard into a new one, and so, many a wail on the hardship of comand so, many a wall on the hardship of com-pulsory spraying is heard. "Fruit grow-ing doesn't pay as it is," say they. "So, how can it pay if we have to go to the cost of spraying several times a year?" Let this be an object lesson to others.

#### Kootenay Valley, B.C. E. W. Dynes

The following letter from Mr. W. A. Birman, Thrums, B.C., which appeared in the Nelson Daily News, shows what can be done with strawberries even on a very small patch of ground:

"I would like to say a few words on the much talked of strawberry question. I came to this country about 19 months ago and bought a partly improved ranch on which were two acres of strawberries. Part of these had already borne their third crop. Last year, I picked the fourth crop but was one of the shippers through the old asso-ciation and obtained very small returns for the fruit. A part, however, I shipped directly and obtained for them a fair

price. I then plowed up all my strawber-ries except those on 56 square rods of ground.

"From this small patch I sold 87 crates of berries, which netted me, clear of express charges, \$215.30. This amount of express charges, \$215.30. This amount would have been considerably larger if the plants had been younger and in their first year of bearing instead of the fifth. The picking was all done by myself and my family. In addition to this we harvested eleven loads of hay and looked after other crops on the ranch. This seems to me to prove conclusively that large profits can be realized from Kootenay fruit lands when realized from Kootenay fruit lands when farming is carried on in a business like way.'

#### Saskatchewan Angus MacKay

Small fruits were never so abundant and fine as they have been this year. No late spring frost injured the blossoms, and rain fell during the fruiting season in sufficient quantities to give the very best fruit of all sorts. Strawberries and raspberries have been especially good. In a few cases currants and gooseberries were more or less injured by the currant maggot (*Epochra Canadensis*), but on the whole the yield and qaulity have been exceedingly fine. Wild fruits-strawberries, raspberries, gooseber-ries and Saskatoon berries-have been, like the cultivated varieties, extremely abundant over the entire province.

In larger fruits, crab apples and wild and cross-bred plum trees are well loaded and very promising. Large apples, cultivated plums and cherries have not yet succeeded in any district, although reports claim a few apple trees in bearing in some favored localities.

In the vegetable and root line, no year

#### FONTHILL NURSERIES Herbaceous Perennials FOR Fall Planting Achillea-the Pearl Aegopodium Coreopsis Delphinium (Larkspur) Dianthus (Sweet William) Digitalis (Foxglove) Funkia (Day Lilies) Gaillardia Helianthus Iris (Japan and German) Phlox Paeonias Shasta Daisy Fancy Grasses No garden is complete without a border of OLD FASHIONED PERENNIALS. Hardy, easy to grow, planted once planted for

BLOCK OF PERENNIAL PHLOX AT THE FONTHILL NURSERIES

PHLOX, PAEONIAS, DAHLIAS, etc., in named varieties. Send for our DESCRIPTIVE CATALOGUE it will interest you. ORDER

Campanula (Canterbury Bell)

all time.

We are offering the largest list of these in varieties of recent introduction ever offered in Canada.

September, 1909

NOW FOR FALL PLANTING. SALESMEN WANTED to sell our High-class Nursery Stock. WRITE US. TONE & WELLINGTON, TORONTO, ONT.

THE CANADIAN HORTICULTURIST

in the past has surpassed this for large crops of every known variety suitable to the climate. In all probability the qual-ity of some of the sorts may not equal that of drier seasons; this refers chiefly to the of drier seasons; this refers chiefly to the potato crop, which at present promises a record yield, if the tops are any index of what the crop will be. Cabbage, cauliflow-er, beets, carrots, onions, peas, corn and so on, are all far ahead of former seasons, tending to make this a record year for the paratche graden. Flowers bits all close are vegetable garden. Flowers like all else are surpassing themselves this year in beauty, brilliancy and abundance.

#### Winnipeg A. J. Richards

Most of the houses of Winnipeg have a garden not only with a view to having a "back-yard beautiful," but from an economic standpoint as well. That Winnipegstandpoint as well. That Winnipeg-ers are lovers of beauty in nature is eviers are lovers of beauty in nature is evi-denced by the pride they take in showing visitors their boulevarded streets, cemeteries and numerous parks which are kept in splendid order under the able supervision of Mr. G. Champion, Parks Superintendent. Cosmopolitan as Winnipeg's population is, drawn from the British Isles, eastern Can-ada, the United States and most of the countries of Europe-there is a tig that

countries of Europe—there is a tie that binds them all in their citizenship, and that is a love of gardening. No matter in what

quarter of the city you rample there are plenty of gardens to admire. In the residential districts, where the merchant prin-ces reside—Broadway, Crescentwood, Fort Rouge, St. Johns—the grounds surrounding the mansions are in keeping with the mansions themselves, having fine lawns with tastefully arranged flower beds in which are grown most of the annuals and peren-nials it is possible to grow in this city. These wealthy citizens, like their less fortunate brothers, vie with each other in keeping abreast of the times in all matters pertaining to gardening, with the result that there is no city of the size of Winnipeg that can boast of prettier residential sections.

In the north end where "foreigners" predominate, vegetable gardens surrounding houses of any or no design are the order, and as the residents are mostly of Teutonic extraction, bringing with them from their old homes a love of "Sauerkraut," the national dish of their country, cabbage, which is an essential ingredient, is grown more than any other vegetable and a good part of every garden is devoted to cabbage culture whilst the other vegetables are grown in smaller quantities and are grown successfully, so that the table expenses of these peoples are kept at a low figure during the greater part of the year. This is a big thing when it is considered that the average number of persons living in a house is from 10 to 15.

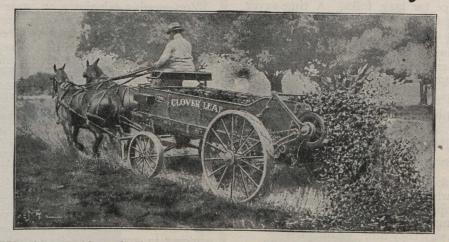
In the centre of the city where the houses

are close togther and population thickest, the back-yards as a rule are large enough to contain good-sized gardens, either flower or vegetable, and with a little labor and a small outlay can be made to yield a crop of vegetables that materially reduce table expenses, for it has been proved beyond doubt that the soil of Winnipeg will grow most vegetables, or if a flower garden is preferable, as good results can be obtained from a pleasurable standpoint by planting flowers, as from a profitable one by growing vegetables.

On the outskirts of the city where the population is mostly made up of working men, is where the advantages of gardening are most apparent. There, large gardens, and intense cultivation of both flower and vegetables is the order. This is especially so in Weston, the home of the C.P.R. shopmen, where a cottage gardening association men, where a cottage gardening association was formed last June and a successful ex-hibition was held in August. This year an earlier start is possible. The association is in a flourishing condition and the mem-bers are busy looking after their gardens in anticipation of the show to be held at the end of the season. To foster artistic and systematic work, the association is offering prizes for the best kept lawn and garden, best flower garden, and best kept vegetable garden. garden.

The advantages of gardening are so many that one could go on writing indefinitely about them. In Winnipeg where all are

You Don't Get Full Value Out of the Manure When You Spread It by Hand



**SPREADING** with a machine pulverizes and makes the manure fine, and the first shower washes it all into the soil. There is no loss—none of it washed away. It is in condition for the roots of grains and grasses to lay hold of it and get the benefit from it. You ought to spread manure with an

## I. H. C. Manure Spreader

You will be able to cover twice the surface and

get practically double the value from the manure that you are getting by hand-spreading. It is the only way to keep up the fertility of your soil without buying commercial fertilizers. You are not only able to keep your farm in a high state of fertility with the manure produced upon it, but the work of careading the manure is out in two work of spreading the manure is cut in two.

The I.H.C. Manure Spreaders are right-working, light-draft machines, either one of which will spread the manure of your farm for many years with the least annoyance and the least possible outlay for repairs. The **Cloverleaf** is an endless apron spreader. The **Corn King** is the return apron style. You can spread slow or fast, thick or thin as wanted. Each spreader is made in several different sizes spreader is made in several different sizes.

Any International Agent in your town will supply you with a Spreader Catalogue. Call on him or write nearest branch house for any further information you may desire.

CANADIAN BRANCHES: Brandon, Calgary, Edmonton, Hamilton, London, Montreal, Ottawa, Regina, Saskatoon, St. John, Winnipeg. International Harvester Company of America,

in a hurry to get rich (or apparently so), it is gratifying to note that time is found to enhance the attractiveness of the back-yards by cultivating them, and instead of unsightly and unsanitary rubbish heaps, well-kept gardens are the order. It is worthy to note that the seedsmen report this season the biggest demand for flower and vegetable seeds from the citizens in the history of the city.

#### **New Brunswick**

Editor, THE CANADIAN HORTICULTURIST,— In reply to your marked expression of interest in New Brunswick horticulture, I would say, from a three years' observance here, that a very considerable portion of the Province is adapted to fruit growing. This is proven by what nature has already done unaided by man in growing the apple, plum

#### and cherry, where seeds were dropped by birds and other means about the fields and forests. These are the farmers' object lessons. Unfortunately the farmers leave the matter there and say, "if these have grown so well, what further need of culture?" But we are living in a time when higher quality is demanded and the trees should give a product, in half the time of waiting.

September, 1909

A half century ago, the late Mr. Sharp

"I would as soon think of mowing my hay with an old fashioned scythe as try to conduct my farm successfully without a telephone."

" I always thought a telephone was a handy thing to have in the house.

"But I looked upon it as a luxury—a step-saver and a convenience for lazy folks. A time-saver for the business man who sat at his desk and talked over the phone to a score of people during the day.

"I never realized how much more necessary it was to the farmer in his isolated position—how much time and money it saved him.

"Before I put this instrument in my home, I considered a telephone an expense—now I know it to be an investment that pays big interest.

"I wouldn't be without a telephone now, for it certainly saves my time and makes money for me.

"Through it I am in immediate touch with everybody with whom I do business—the general store, the farm implement shop, the produce buyers —I can talk things over with anyone I wish, no matter how far away they are.

"Then think of what it means to my wife and girls. They look upon the telephone as their best friend—their fleet-footed messenger in time of trouble or sickness—their bearer of news and social messages to friends on distant farms.

"Yes, the women folks certainly wouldn't be

without the telephone now they know what it does for them—and it would have to cost many times what it does before I would part with it."

You need a telephone on your farm—you are enough of a business man to realize what it means to you in dollars and cents. You can worry along without it of course—just the same as you can run your farm without labor-saving implements—but you are losing money every day you do.

Yes, you need a telephone on your farm—but it must be the right telephone. A poor system is worse than none at all.

The Northern Electric system and equipment is what you want. Ninety-five per cent. of the telephones used in Canada are made by them. They have overcome all the difficulties that their imitators have yet to meet.

If you have a telephone at all you should have one that you can depend upon—one that is always working in good order—one that will carry messages clearly and distinctly no matter what the distance. That is what you get when you install Northern Electric apparatus.

Write for our Bulletin No. 2216. That will tell you just how easy it is for you to secure perfect telephone service. Write to-day.

MONTREAL Cor. Notre Dame and Guy Streets TORONTO 60 Front Street West

Manufacturers and suppliers of all apparatus and equipment used in the construction, operation and maintenance of Telephone and Power Plants.

and manufacturing co. limited

REGINA WINNIPEG 599 Henry Avenue VANCOUVER 424 Seymour Street of Woodstock, who was one of Nature's noblemen in horticulture, planted commercial orchards and was successful in growing better fruit. He proved that the inland portions of this province would grow fine fruit in plums and apples. At his death, a period of indifference followed, but a revival has set in again. This year at least a dozen persons have planted 500 winter apple trees; two or three, 1000 each; and many more, 100 apples each; and the principle of cultivation is taking root in the general mind.

The two chief difficulties are the need of deep tile drainage, three to four feet deep to take all standing water from the roots and the need of bi-monthly stirring of the soil or a buckwheat crop growing rich and strong about the trees. Small fruits are a great success and are in strong demand. In fact, general agriculture is improving under the government's stimulating influence. The farmer is encouraged to grow a larger product and more valuable on less acreage.

Around the Bay of Fundy heavy tidal waters, the Petticodiac muddy stream, the Straits of Northumberland and the great St. John and Kennebec, both fresh water rivers, are the best areas for the higher grades of apples as the extremes of heat and cold are greatly modified. Here can be raised the qualities that England uses and that her markets call for. On the whole, the outlook for progress is good even in the export trade.

export trade. I wish that THE CANADIAN HORTICUL-TURIST was circulating more widely here so as to inculcate more system in the work, both in the country and in the cities. Many of the city people live all the summer months in their cottages in small places and in the country. This is a regular feature of the people of St. John, year after year. They are planting orchards and gardens and beautifying these places and are the leaders in making a more beautiful New Brunswick.—W. C. Archibald, St. John, N. B

#### Nova Scotia P. J. Shaw

The apple crop now promises to be considerably smaller than last year. Reports from the Annapolis Valley state that the season has been very dry and apples have fallen in consequence, especially in orchards receiving little or no cultivation.

No one can say how much the loss from this cause will be, nor how much short this year's crop will be, but it is certain the crop is not going to be as large as was anticipated earlier in the season.

#### Annapolis Valley East, N.S. Eunice Watts

The apple prospects are good, but trees are not so heavily laden as the show of blossoms predicted; many failed to set, and the dry weather caused fruit to drop. Red Astrachan and Duchess were the first to be shipped to local markets. A report from western Kings says that some orchards have been damaged by hailstones. Various kinds of caterpillars, including those of the tussock moth, fall web worm, and others are plentiful.

The raspberry crop has been affected by the drought but rains came at the latter end of the picking. Blackberries look promising, but did not commence to ripen before the rains. Most flower gardens are unusually bare and dried up for this time of the year.

Tomatoes were bringing \$1.25 a basket for the first shipment in August. Most vegetable crops are late. In the vicinity of Waterville, Kings Co., the farmers are meeting together for the purpose of forming a co-operative fruit packing company, which is not received favorably by some of the dealers but the orchardists hope that the company will be an accomplished fact by this fall.

Budding is now in full swing where it is practised, but to most people it still seems to be a mysterious operation.

#### Annapolis Valley West, N.S. R. J. Messenger

We have been suffering from the most severe drouth for years. Orchards that have been properly cultivated have not suffered much, but in uncultivated and 'neglected orchards the apples have both dropped badly and are also small. That there will be a lot of small apples in the valley this year is generally conceded. There will be little spot and few wormy apples but lots of No. 2's.

Insects have been very numerous this year. First the canker worm did much damage, then the aphis proved quite a nuisance to the orchardists. This seems to have been noticed all through the valley and it is difficult to reach it with spray, since its habit of living curls the leaf about its feeding ground and protects it almost wholly. It is to be hoped that our winter spraying will destroy the eggs of this pest. In connection with this, there are this year a great many small, wrinkled, deformed apples and some of our farmers think it is a result of the work of the aphis. Just how the eating or sapping of the leaves would affect the apples in this way I cannot understand. In my own orchard, which was winter sprayed, there is little aphis and I have seen many of these deformed apples on trees entirely free from aphis.



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This is just the season to get the most benefit from thinning fruits. The fewer apples that are left on the trees this dry weather the nearer marketable size will the remaining ones grow. The difference be-tween those thinned and not thinned is al-

### **Montreal**

#### E. H. Wartman, Dominion Fruit Inspector

Montreal as a fruit distributing point shows wonderful activity at this season. On July 29, Aug. 2 and 5, 29 cars of California fruits were sold by the Montreal Fruit Auc-tion Co. J. J. Callaghan, auctioneer, beats all records by selling eight cars of California fruits in three quarters of an hour. These 29 cars were sold within a week, aggregating in cash \$30,000. The California fruits nears plums neaches nectoring and grapes are particularly fine in quality and well packed. As the individual fruit is wrapped and closely packed in boxes and crates tends to its keeping quality, the percentage of wasty boxes is very small. When we try to supply our city wants and country orders a large stream has to continually come in to meet the emergency. Think of 56 cars of United States strawberries coming to our market before our own are ready to pick. When we add our banana trade and lemons, oranges and melons, the aggregate is very large. Well, what about our own domestic fruits

this year? Cherries and raspberries are coming in large quantities. The quality has been very fine. Conditions have been so good in grading, fullness of baskets and boxes, and general honesty of packs, that they have caused a confidence in the minds of buyers, and fruit men here declare there has been a large and profitable volume of business all around. The apple crop on Island of

Montreal does not look too promising cr in the eastern townships either, where you hear the growers say, "I usually have 200 hear the growers say, "I usually have 200 bushels, but this year I will have to buy." Nevertheless, I am of the opinion that we will run far over the million mark for export in apples this year. It becomes all persons in the fruit trade of our Dominion to do his or her best in the building up of an ever increasing fruit trade of honest repute.

#### Vancouver Island, B.C. F. Palmer

Small fruits are almost over, although a few loganberries are still being sold locally. The crop of small fruits has been an exceptionally good one, due to the unusually late rains.

Sweet cherries are over. The sour cherry crop is only medium, but the fruit is of excrop is only medium, but the fruit is of ex-ceptional size and quality. Nine-tenths of the cherry crop is being shipped to the north-west, through the Progress Fruit Packing Co. This Company is doing very good work and is securing from \$3.00 to \$3.50 per 24 pound crate of cherries, for the growers.

Plums and prunes give promise of a good crop. Early plums, such as Clyman and Peach plum, are being gathered now. The prune crop is also to be handled by the P. F. P. Co.

Apples are light in most districts, due to a dry fall last year; consequently, the trees did not have vitality enough to set the fruit this spring Early apples such as the Yellow Transparent and Duchess, are already being sold locally. Pears give prom-ise of being a record crop. The trees are heavily loaded with fine, large fruit. Bartlett's are especially good.

#### to the orchards on the mainland, did very little harm here, due to the proximity of the ocean. A good average fruit crop is expected; also, as fruit is so scarce on the mainland, unusually high prices are assured.

#### Similkameen Valley, B.C. J. D. Harkness

Orchardists here await with much inter-est the proposed action of the Department of Agriculture in establishing an experistations in British Columbia. Not only the growers themselves, but the department agent, who has been travelling through and examining the fruit valleys, is of the opinion that nothing short of a chain of stations will adequately meet the needs. It is found even now that expert horticulturists from the coast or the Fraser Valley who essay to address audiences in the in-terior find themselves at sea and their advice inapplicable, and vice versa. So radical are the differences of climate and other conditions even within short distances that it would be well to have at least half a dozen experimental stations, even if they were small, rather than one or two large farms. Also, a travelling instructor in irrigation would be a very useful functionary. The knowledge of most orchardists on the subject is very elementary, and their previous

experience nil. With the exception of peaches and tender grapes, a fair crop of nearly every kind of fruit is assured. The summer's growth has served to show that the effects of last interiments and and were not winter's entirely abnormal cold were not so great as was feared at first. Such a winter had not occurred in a lifetime, and may not occur in another lifetime, but it has served at least one useful purposse, in showing what varieties are hardiest, and in show-

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#### THE CANADIAN HORTICULTURIST

ing that by proper control of growth and irrigation, damage from inclement weather can be guarded against. Where trees were put to sleep for the winter, so to speak, they were found to come through well, but a late undergrowth stimulated by irrigation endangered their life. On the other hand it is stated that to withhold water entirely in the fall may cause damage from winter In the fail may cause damage from winter drought, which would seem to imply that a wetting just before freezing time would do good. This is a sample of the many prob-lems that confront the irrigator, on which he would like to get authoritative information.

Work was resumed this summer on the railway line through the valley, and the rcad is now about completed westward as far as Princeton. As a result, settlement and mining are stimulated. Both the G.N.R. and C.P.R. have strong survey parties at work in the Generate mountains, and prowork in the Cascade mountains, and pros-pects are brighter than for some time past for the long delayed direct rail connection of the Simillemore with the Free Velle of the Similkameen with the Fraser Valley and the coast.

#### **New Fruit Organization**

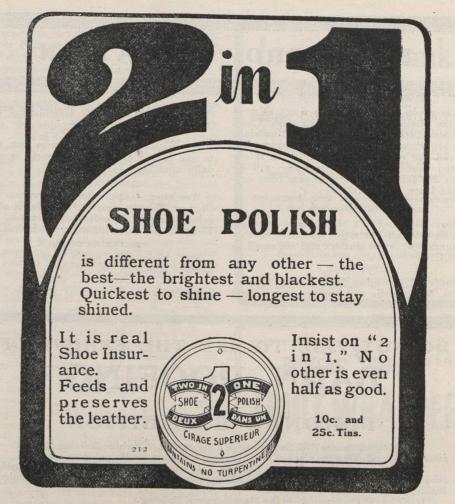
A meeting of fruit growers was held at A meeting of 14th growers was held at St. Catharines, Ont., Aug. 7., as the result of the efforts of Mr. J. B. Berry, of Rapid City, Man., and Mr. J. Jones, of Win-nipeg, who during the past few weeks have been endeavoring to form a co-operative company of fruit growers to ship their fruits to the west, there to be disposed of by their own paid officials without the aid of any middleman between the grower and the retailer. A company was then and there formed which is to have a capital of \$100,000 when fully completed, divided into 5,000 shares of \$20 each, and steps were taken to get it incorporated without delay. The company proposes the erection of a

large cannery and jam factory which will take all the stockholders' surplus fruits,

take all the stockholders' surplus fruits, thus obviating to some extent the gluts which occur from time to time, especially in the local markets. The provisional directors, pending incor-poration, are Messrs. W. H. Hough and George W. Keyes of St. Catharines; Mr. A. M. Harris, of Port Dalhousie, and Mr. James Marlow, of Grimsby, who together with J. B. Berry have been formed into an executive committee pro tem. The chairman is Mr. A. M. Harris and the secretary-treasurer, Mr. H. T. Hern of Port Dal-housie. housie

For Business and Pleasure.-Farming is a business proposition and it is becoming a business proposition and it is becoming more so every year. To make the most of it, business methods must be employed. Trusting to luck is a poor policy. The farmer must keep in touch with the modern trend of life and of effort. The telephone helps to do this. It puts the farmer in easy communication with outside conditions and influences. It is a processary adjunct to communication with outside conditions that influences. It is a necessary adjunct to successful farming. Not only for business purposes is the telephone valuable, but also for making farm life more pleasant. It makes the household happy. The young folks and the old folks can talk with their friends who are miles away and while rocks and the old folks can talk with their friends who are miles away and while away happy moments. Picnics, trips, par-ties and other festivities can be arranged quickly and conveniently. There are many ways in which the telephone brings new life into the home. Every farm household should have a telephone.

Readers of THE CANADIAN HORTICULTUR-IST are invited to send requests for information on horticultural topics that interest them most





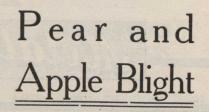
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The apple crop prospects are not as good as was predicted at blossoming time. There has been little change in the situation since last report, except that rains in August im proved the outlook considerably. It is expected that the sample generally will be small but fair in quality. Reports from correspondence are as follows:

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

Bear River .- Fruit crops below average. Apples set well but some varieties, notably Gravenstein, set in clusters and are small.— W.G.C.

#### KINGS CO., N.S.

Wolfville .- Judging from present appearances, Nova Scotia will produce over 500,000 barrels of apples of good quality for export. \_\_J.W.B.

CHARLOTTE CO., N.B.

St. Stephen.—Apples promise one third to one half a crop. Codling moth is unus-ually abundant.—C.N.V.

CARLETON CO., N.B.

Woodstock.-Apple crop is very poor. Crimson Beauty, our early apple, is almost a total failure; New Brunswick apple, from 10 to 25 per cent. of a crop.—H.G.N.

TERREBONNE CO., QUE. Ste. Adele.—The apple crop will be an average one.—D. W. Grignon.

ROUVILLE CO., QUE.

Abbotsford .- Apple crop w.ll be light

### DO NOT FAIL TO SEE THE EXHIBIT OF **BARN ROOFING** AT THE **TORONTO EXHIBITION**

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Don't forget the location-in the Manufacturers' Building.



# Let's Get Acquainted

In order to introduce The Canadian Horticulturist quickly to all Fruit and Vegetable Growers and Amateur Gardeners in Canada, who are not now subscribers, the

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Provided that the regular subscription rate of 60 cents a year or \$1.00 for two years) is received by us this month. These subscriptions will extend from October 1909 to December 1910, in the case of one year subscription, and to December 1911 when a two year subscription is taken. Cut out, fill in and send immediately the following form :-

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with quality fairly good. Buyers are paying \$1.35 to \$1.50 on the trees. The plum crop is light .--- E.A.B

#### CHATEAUGUAY CO., QUE.

Chateauguay Basin .-- Where spraying has Chateauguay Basin.—where spraying has been carefully done, apples are comparative-ly free from spot but codling moth and plum curculio have done much damage in some localities. Fruit has fallen off con-siderably but the remainder are good size and color. Leaf blight is more prevalent and color. Leaf blight is more prevalent this season than ever before. Very few ap-ple buyers are around yet. No. 1 Duchess are selling from \$2.50 to \$3.50 a barrel. Prospects are for a medium to light crop of fall and winter apples.—N.E.J.

#### HUNTINGDON CO., QUE.

Covey Hill.-With the exception of a few orchards of Fameuse, apples in this district are almost a total failure. The curculio has done a great deal of damage. No apple buyers have been here yet. Duchess that were sent to Montreal, netted about \$1.00 a barrel.-G.B.E.

#### STANSTEAD CO., QUE.

Massawippi.-Fruit crops are below the average. Owing to the drought, early apples are below average in size. Winter apples are good and free from spot.-G.P.H.

#### HASTINGS CO., ONT.

Belleville.—A light to medium crop of winter apples is expected. Some growers have sold by the lump for good prices.— F.S.W.

#### DURHAM CO., ONT.

Newcastle.-Apple crop is variable. Some orchards are heavily laden and others very light. Many apple buyers are operating and a number of lump sales at high prices have been made. Prices started at \$1.00 on the trees and have increased to \$1.50 and aven bicker. Need, all archard have on the trees and have increased to \$1.50 and even higher. Nearly all orchards have been sold except those belonging to members of the Newcastle Fruit Growers' Association. The quality of apples generally will be clean. Bartlett pears are a full crop of excellent quality.—W.H.G.

#### ONTARIO CO., ONT.

Oshawa-Unsprayed orchards show worms. Aphis has done serious injury. Buyers are after apples. Many have been sold at \$1.00 a barrel on trees or by lump. Some buyers have offered up to \$1.50 for good varieties only.-E.L.

#### PEEL CO., ONT.

Clarkson.-Apples both early and winter will be a fair crop but a large number will be undersized and ill-shaped. Some buyers are offering \$1.25 for No. 1 and No. 2's and a few orchards have been sold by the lump. Raspberries turned out well and prices averaged 10 cents. Lawton berries are a good crop; pears, fair crop; grapes, good.— W.G.H.

#### HALTON CO., ONT.

Burlington.-Apples have formed in clusters on many trees and, if not thinned, will be small and poor in quality. In pears, Bartletts show a medium crop; Duchess, light; Kieffer, medium.—W.V.H.

#### LINCOLN CO., ONT.

St. Catharines.-The crop of peaches will be fairly good; grapes, good; pears, med-ium; apples, light; plums, fair; tomatoes, excellent.—G.A.R.

#### LAMBTON CO., ONT.

Forest.-Since rains, apple crop is looking fine. Codling moth rather prevalent but well controlled by spraying. Fall apples are a light crop.—A.L.

BRUCE CO., ONT.

Walkerton.—Apples are looking a little beter but there will be many small ones,

somewhat spotted. Buyers are offering 75 cents to \$1.00 on trees. Plums generally will be light.—A.E.S

#### ESSEX CO., ONT.

Ruthven.—Peaches are a splendid crop. Pears are good. Apple crop will not be full, and will be poor in quality.—J.O.D.

#### MANITOBA

St. Charles.—Raspberries are a fair crop. Red currants were badly affected by currant fly and dropped from bushes; black currants, good crop. Plums and crab apples are heavily loaded with fruit which is maturing under favorable conditions.— D.W.B.

#### SASKATCHEWAN

Prince Albert.—There is every prospect of a fine crop of fruit. The wild fruit was bountiful, raspberries, blueberries and cranberries being in great abundance.—G.T.B.

#### KOOTENAY CO., B.C.

Nelson.—The pear crop is considered good; apples, two-thirds of average; plums, good; peaches, poor.—J.E.A.

#### NEW WESTMINISTER CO., B.C.

Hammond.—Crop of black currants and gooseberries, good; early blackberries, light; late blackberries, fair; plums, fairly good; Italian prunes, medium; peaches very light. Almost all varieties of apples will be light and rather scabby.—C.P.M.

#### NANAIMO CO., B.C.

South Salt Spring.—Apples will be a short crop owing to a late frost in May, about the first on record. Wealthy apples with me are a fair crop. Pears are short with Bartlett the best; plums, short; prunes, half a crop; sour cherries, fair; blackcherries, good; Loganberries, full; walnuts and filberts, heavy.—W.J.L.H.

#### Quebec Pomological Meeting

The 17th anual summer meeting of the Pomological and Fruit Growing Society of the Province of Quebec, held at La Trappe, Que., on Aug. 24 and 25 was one of the most successful in the history of the association. The gathering was a representative one, fruit growers from the principal fruit sections of the province being present.

The Trappists are agriculturists, having about 500 acres of their 1,000 acre-estate under cultivation. Their fruit plantation covers some 70 acres and is in excellent condition. Professor Reynand is doing valuable work for the province, not only through his demonstration commercial orchard, but also in the good quality of information imparted to the 40 odd students in attendance at this college. The fruit crop is excellent, the trees on the whole being well covered. The fine stock of cattle indicates thoroughness in all branches and one is impressed on all sides by the fact that the Trappist Fathers are successful scientific farmers.

President Reynand welcomed the fisit growers of the province to La Trappe. It's expressed satisfaction that through the cooperation of the Right-Rev. Father Abbot, he was able to entertain the association during their stay at La Trappe. Fourteen years ago a similar meeting was held here and since that some of the then active members have disappeared. As these have gone new members are coming along to fill their places, imparting new life and energy to the society and adorning the horticultural interests of the province. A similar evolution is evidenced in not only this particular but also in respect to varieties of fruits which are taking the place of older ones which in their day served their purpose well. More attention should be paid to selection of variations in varieties in the propagation of our principal fruits and also in the use of good strong stock, for grafting on.

Forestry and its influence on the agricultural and horticultural problems deservedly was receiving more attention, for, in order to protect ourselves and develop the best agricultural and horticultural conditions, this subject must receive the thought and careful consideration of all fruit growers.

Lack of knowledge rather than lack of good-will retarded advancement in horticulture, concluded the president. Definite and concrete examples were looked for by those interested in fruit culture, and the aim of such institutions as Macdonald College and the community of the Trappist Fathers is to give this knowledge on a sound and practical basis. This community 25 years ago started in the virgin forest and the result shows what well directed effort will do.

The regular programme of the meeting was followed. Dr. J. Od Beaudry, presented an able paper on "Melon Culture." This paper will appear in full in a later issue. Professor Blair outlined the method followed in developing the Montreal market melon. He advised more care in the selection of strains, some of which were much better than others. Mr. Brodie followed, dealing with many of the good points of Dr. Beaudry's paper.

Capt. R. W. Shepberd's paper on the Fameuse was a plea for more care in the selection of the best strains of this variety. He thought the variety in some instances showed marked signs of decline. This may be due to selection of scions indiscriminately, or to the use of stock which was not vigorous. It seems that the lack of vitality may also be due to lack of care in the development of the orchard. No doubt all of these factors contribute in a certain degree to the lack of vitality which is more or less noticeable in the trees of Fameuse now planted. Mr. Shepherd thinks the Fam-euse should be considered the best variety for this province and that every effort should be made to keep it up to its old standard. Some effort should be made to encourage nurserymen to propagate from the best and most productive strains ..

The address by Rev. Father Athanase, of La Trappe, on the cultivation of tomatoes and the canning of same was well presented. This paper will appear in a later issue. It contained many points of great value, especially in regard to the profits from this crop when home canned.

In discussing the reason why we loose money in the handling of orcnards, Mr. R. Brodie thought more care should be paid to spraying, pruning, cultivation and marketing. Without careful attention, the result of years of work may not return a profit. He had yet to know of a year when, if the proper attention were given to these essentials, profit would not result. More care in selection of varieties and care in selection of the location were of prime importance.

Some other valuable papers were read. These will be reported in part or in full in the next issue of THE CANADIAN HORTICUL-TURIST.

A resolution was passed unanimously and heartily thanking the Trappist Fathers for their kind hospitality, for the manner in which they facilitated the business of the sessions, and for their work in the interests of Quebec horticulture. A resolution was carried asking the government of Quebec for \$1,000 to defray the expenses of getting up an exhibit of fruits for Great Britain this fall.



- LIMITED -

Mention THE CANADIAN HORTICULTURIST

CANADA

HAMILTON

September, 1909

#### **Ontario's Export Apple Trade** P. P. Farmer, Toronto

When in England last winter, I learned some things that may help to improve On-tario's apple trade with Great Britain. There is there, as elsewhere, the common ordinary produce which sells cheap, and the selected well-packed commodity which com-mands from the common on attraction mands from the consumer an attractive price—a price away above that which is in proportion with the cost of production Superior quality of commodity, practically speaking, always gives the greatest returns for the cost of production and marketing and this is true especially where the cost of transportation is a large factor in the cost of the commodity laid down at the market. It costs no more to transport a box of apples which sell for twelve shillings than it costs to transport a box which only sells for five shillings.

There is also another very important advantage in supplying the market with a high-class product. It has been proven time and again that if you supply a market with desirable commodity, the fact any that the consumers see this offered for sale makes them desire to purchase it, and when they buy it and use it, that very offering of this product for sale, creat-es in itself a demand. This is particularly true of the banana trade, which has been extended so successfully by this method and it applies directly also to the apple situation. A few apple growers in Oregon have been putting up choice apples in a neat and been putting up choice apples in a neat and attractive package, and have been offering the same to the British public through the high-class fruit stores. They have been ex-tending their trade to such an extent that the Oregon Newton Pippins have a reputa-tion as the standard apple on the British market.

An appreciable number of Ontario apple growers could co-operate and pack certain varieties of Ontario apples in bushel boxes, each apple carefully wrapped and each apple carefully selected to a size, so that there would not be different sizes of apples in the same box, and then ship these apples to a

commission firm with whom they had previously negotiated and arranged to have this specially selected fruit offered for sale in some of the best fruit stores in the United Kingdom. They could arrange to send a regular supply so that these stores, whether they be few or many, could continually display in the sight of their customers, this superior fruit, familiarizing them with the fruit and the varieties, but more particularly with the name of the brand under which the apples will be sold. Time would bring to the growers co-operating in this movement, a substantial trade and increased profit.

The reason that I suggest shipping through a commission firm is, because there will be opposition to such movement if an attempt is made to enter the market direct. The men in the apple business in England are too strong a factor to ignore. The Ontario growers who co-operate might find it advisable to purchase a partnership or a controlling interest in a commission firm operating at Covent Garden or to establish a commission firm of their own. When the trade was firmly established, it would be possible then to do away with the com-mission firm, if thought advisable, and ship direct to retailers; but, at the present time in such a movement as this, it would be necessary to avoid any antagonism on the part of the commission men. These apples should be clearly marked with a brand or name of the firm so that the consumer would get into the habit of looking for apples put up by this organization. The Oregon apple growers are adopting a method somewhat similar to this, and, as a result, their apples bring a top price in the English mar-ket, retailing in December last at four pence per pound.

I have said nothing regarding the increased profit which would accrue to the growers by saving the fees of the middle men. That has been discussed so often, from time to time, that it need scarcely be taken up here. The attractiveness of our fruit as it reaches the consumer will be the largest factor in increasing the consumption of the same.





Beecrintive Booklet

Write

tor

THE MODERN CANNER CO., Canadian Branch, St. Jacob's, Ont.



Reports from eastern Ontario indicate that early hatches this season were poor and that fewer chickens on the whole were hatched and these are chiefly late. Perhaps less attention was given this year than usual to poultry raising. The high price prevailing for all grains and ground feeding stuffs make poultry raising a serious problem, especially to those who wish to make a profit. There seems to be no hope that grain will be cheaper in the future. To offset this, eggs and poultry are much more expensive.

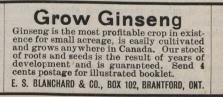
It would not be a surprise to see eggs at \$1.00 a dozen the coming winter. One man in Ottawa claims that he sold his eggs last December at 90 cents a dozen. The best way for each householder to get fresh eggs cheaply is to a few fowl. Nearly every house in our cities, towns and villages, has sufficient back yard space to accomodate a few hens, say seven or eight. A cock is not necessary because his crowing will annoy the neigh-bors and eggs for hatching can easily be obtained in the hatching season from another source. A few hens will do remarkably well fed upon the table refuse which is very often burned or wasted. The addition of a little grain to the table scraps makes a well balanced ration, in fact, the very best and, with intelligent attention to cleanliness, laying fowl can be successfully kept in a very small space. Anyone intending to begin poultry keeping or to improve their stock can do so more cheaply now than at any other time. All breeders have sur-plus young stock to dispose of at this season and will sell either yearling birds or chickens at bargain prices.

It is now time to overhaul the hen house, repair broken windows, whitewash the interior and get ready to put the laying stock into winter quarters.

I enjoy THE CANADIAN HORTICULTURIST very much, and appreciate the improve-ments being made.-P. Austin, Lambton Co., Ont.

A Dominion fruit inspector has been appointed for the Niagara district in the person of Mr. W. Furminger of St. Catharines. His duties will be confined chiefly to the tender fruits, which, in cases where the practice is not now followed, he will endeavor to have graded and packed in accordance with the demands of the law.

Professional and amateur gardeners will be interested in the "Autumn Floral Guide" for 1909 that has been issued by Dupuy and Furgeson, Montreal. It contains a full list Furgeson, Montreal. It contains a full list of the varieties of tulips, hyacinths, narcissi and other bulbs, perennials, shrubs, trees and other plants and articles for horticul-turists. The new white trumpet daffodil, "Mme. de Graaff," is offered. It is a beau-tiful flower and a strong grower. The col-lection of old-fashioned hardy perennial releasts is another feature of the catalogue. plants is another feature of the catalogue. Send for a copy.



September, 1909



Toronto, Canadian Horticultural Association ......Nov. 10-11. Toronto, Ontario Fruit Growers' Associa-

EXHIBITIONS.

#### **Toronto Vegetable Growers**

The Toronto Branch of the Ontario Vegetable Growers' Association held its annual excursion to Niagara Falls on August 5. The weather being all that could be desired, the growers with their wives and daughters were out in numbers. There were so many at the Union Station that they completely filled the train, so that the authorities held the full train back 15 minutes and sent an empty train to pick up passengers at all intermediate stations between Toronto and Oakville. Both trains were well filled, there being over 1,000 excursionists.

The trains arrived at Niagara about 11 a.m. giving a long day's enjoyment at the Falls. At about 2 o'clock, the games began at which over \$100 were given in cash prizes by the branch. The silver cup, in the tug-of-war to be competed for by the east end and west end teams, was again

#### FOR SALE AND WANT ADVERTISEMENTS

Advertisements under this heading inserted at rate of two cents a word for each insertion, each figure, sign or single letter to count as one word, minimun cost, 25 cents, strictly cash in advance.

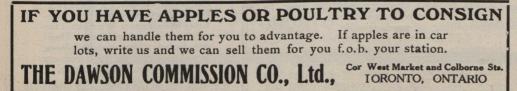
FOR SALE.—Four-year-old GINSENG garden, Farm and Stock. Terms. Address "L," Fruitvale, B. C.

MR. CHARLES ERNEST WOOLVERTON. Grimsby, Ontario, landscape architect, parks, cemeteries, pleasure, school and home grounds laid out, surveys made. Working drawings to a scale so that any gardener can work them out. Terms very reasonable. held by the west end growers, there not being enough east end growers to compete for it. Therefore, the west end growers, having won it two years in succession, will now own the cup. Among the visitors was Mr. J. Lockie Wilson, secretary of the provincial association, Toronto.—K.H.R.

Some New Forcing Houses.-The Domin-ion Orchard Co., of Rougemont, Que., are adding a block of four King Construction greenhouses to their double block of 10 houses built last year. The houses are for vegetable growing and are 21 feet 8½ inches wide by 137½ feet long. Mr. Carl Marx, of Lambton, Ont., has had remarkable success this season with his tomato crop grown in the King Construction greenhouse erected by him last season. Another grower added to the Lambton flats, noted for its success in vegetable growing, is Mr. J. J. Muligan, who has put up a King Construction green-house 25 feet  $2\frac{1}{4}$  inches wide by  $137\frac{1}{2}$  feat long. Mr. Milligan is a brother to Mr. H. Milligan who has lately acquired the Turp greenhouses, corner Dundas and Bloor Sts., Toronto. These houses, also, are King Construction. Mr. J. Brown, vegetable grower, Humber Bay, is building another King Construction greenhouse of the same size as the one erected by him last year, viz., 21 feet  $8\frac{1}{2}$  inches by 120 feet.

Cooper's Spray Fluids.—Messrs. Wm. Cooper & Nephews have had a much greater amount of success this year with their Spray Fluids than they had last year, but they are not yet satisfied that they have got the right article to make a certainty of wiping out San Jose scale. Therefore, a large number of experiments will be undertaken by this well known firm with a view of perfecting their fluids for use against San Jose scale. In dealing with oyster-shell scale, canker worm, codling moth, aphids, scab and fungi, this firm have proved their V.1. V.2. and V.3. Spray Fluids to be satisfactory. The reports and testimonials received from the fruit growers all over the Dominion prove this. In view of the large demand that is anticipated for these Fluids next season, it is probable that the price will be reduced. There is no spray made which is so easily mixed and so pleasant to use. The way this firm have gone to work in introducing these fluids should gain them the confidence and support of the fruit growers throughout the country.

A number of ginseng growers met in Toronto on April 1, for the purpose of organization and elected Mr. James Matthews of Acton, president, Mr. David Menzies, of Kelso, Ont., vice-president and Mr. P. Wilson, of 39 Lakeview Ave., West Toronto, secretary-treasurer. After considerable discussion on the aims and objects of the meeting, an association was formed to be known as "The Ontario Ginseng Growers' Association." An executive committee was appointed to draft by-laws and constitutions to be submitted at the next meeting which will be held in the Y.M.C.A. building, No. 1087 Queen St. West, Toronto, on Wednessday, Sept. 8, at 11 a.m. Growers of this plant who wish to become members of the association will please send their names and addresses to the secretary as soon as pos-

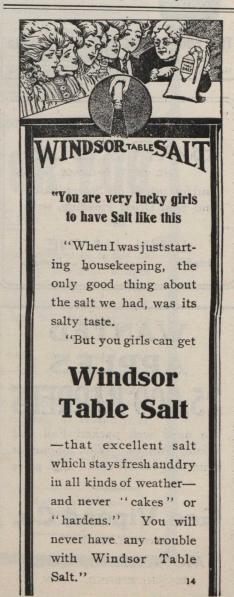


sible. The membership fee is placed at \$1.00 a year.

As the model orchard in South Queen's county, N.S., has been started only two years, it is too soon to tell what success it will have or what influence it will have in the community. As lumbering and fishing are the chief industries in this district, the object of the model orchard is to encourage the planting and proper care of fruit in gardens and small orchards, rather than the encouragement of orcharding on a large scale.—E. S. Hendry, Milton, N.S.

Further experience with the new method of cranberry culture for Wisconsin (recommended by Professor Whitson) consisting of sanding the beds, thorough drainage and clean cultivation, indicates that the frost problem in cranberry culture is now practically solved. The temperature of our experimental bogs, which have been improved in this way, is from 6-10 degrees F. higher than the overlying air, so that a frost as low as 26 degrees F. can be successfully passed. It now remains for those engaged in this industry to adapt themselves to these new conditions to secure immunity from the destructive summer frosts.—From report of director of Wisconsin Agricultural Experiment Station.

Send fruit crop reports for publication.





JOHN HAYNE Brigden, - - Ontario

## WANTED APPLES 25,000 BARRELS

We need well packed Fall and Winter Apples. Wire, phone or write your lowest cash F.O.B. price



#### Go to St. Catharines

A great horticultural week, September 13 to 17, is assured for those who attend the Niagara District Horticultural Exhibition and the meetings of the Society for Horticultural Science and of the American Pomological Society to be held in St. Catharines, Ont. Great preparations are being made for these events. The opportunity for seeing a grand exhibition of fruits, flowers and vegetables and of meeting with and hearing the leaders of horticultural thought and practice on this continent should not be missed. Excursions to various points in the Niagara District and to the Ontario Agricultural College, Guelph, have been arranged.

Among the questions that will be discussed by noted authorities are: Influence of soil and climate on varieties. Adaptation of varieties to certain conditions. The financial side of orcharding. Sulphur sprays for winter and summer use. Grading and handling winter and summer fruits. Nut culture in the east and south. Newer varieties of grapes in the east, west and south. Present status of Oriental pear hybrids. Diseases of stone fruits. Orchard management in relation to fertilizing. Demonstration orchards. Citrus culture in the Gulf States.

The Niagara District Horticultural Exhibition, which was established five years ago and which has gained a provincial reputation, promises this year to surpass all previous records. It may be taken as an unquestionable fact that never before in this country has there been such an exhibition of fruits, flowers and vegetables as will be seen in St. Catharines on these days. The fruit crop of the district is a bumper one, especially in peaches, and this exhibition, taking place when the peaches are at their best, to say nothing of pears, plums and other fruits, will tend to show what the farfamed Niagara district can produce in the fruit line.

In addition to the competitions for the regular prizes, which aggregate \$1500; there are to be competitions for the Wilder silver and bronze medals offered by the American Pomological Society. This competition is open to the continent. Exhibits of new fruits, of collections of seedling or hybrids and of fruits showing the influence of cultural methods, are especially desired. All exhibits should be forwarded, express prepaid, to W. B. Burgoyne, St. Catharines.

#### **Canned Apples for Export**

Editor, THE CANADIAN HORTICULTURIST: Now that the season for canning apples is about at hand I should be glad if you would publish the following extract from the report of the Cargo Inspector for the Dominion Department of Agriculture at Glasgow in which he refers to the condition and quality of the canned apples spipped from Canada to Glasgow last year and points out wherein some United States trands are considered by the trade to be superior to the Canadian pack. The elimination of these defects would mean a much more prfitable export trade for Canadian canners. Follows ing is a copy of the extract referred to: "There is a considerable trade in canned

"There is a considerable trade in canned apples to Glasgow, of whose requirements Canada supplies the bulk, but this year, in common with most exports from Canada, a slight falling off is observable.

"I find receivers well satisfied with consignments, and generally speaking the pack seems well handled, there being a very small percentage of blown or defective tins as a rule. This year receivers point out some defects which it might be advisable

for canners to rectify, as presently Canadian canned apples, although supplying the bulk of the Glasgow market, only occupy second place in point of quality. A New York firm's product commands from 1 shilling to 2 shillings more per case and the general opinion is that Canadians compare favorably with this firm's brand. Some objections to Cana-dian canned aples are: including defective fruit and including, in same pack and cook, hard and soft varieties, consequently tins cpen up uneven with hard and soft pieces consequences have been shown me at various periods, the tins open-ing up with brownish and clear colored fruit together. It would be a decided advantage if canning factories would cook, as far as possible, varieties of one hardness and consistency together, and softer varieties separately, and it is felt here that if can-ners would state on the cans the varieties included in the cook in would enhance the value of the Canadian pack. Some importers state that cans opened up fiavorless and hard, and one objects to what he considers the undue proportion of juice in Canadian cans, there generally being about one pound out of tins weighing six and three-quarter pounds, whereas in the U.S.A. brand "Curtis Brothers," the cans are filled with apple and just sufficient juice to cover the fruit." -W. W. Moore, Chief, Markets Division, Ottawa.

A remarkable yield of tomatoes is mentioned in the advertisement of the King Construction Co., that appears in this issue on page iv. If any vegetable growers can beat this record, they are asked to say so in a letter for publication in THE CANADIAN HORTICULTURIST.



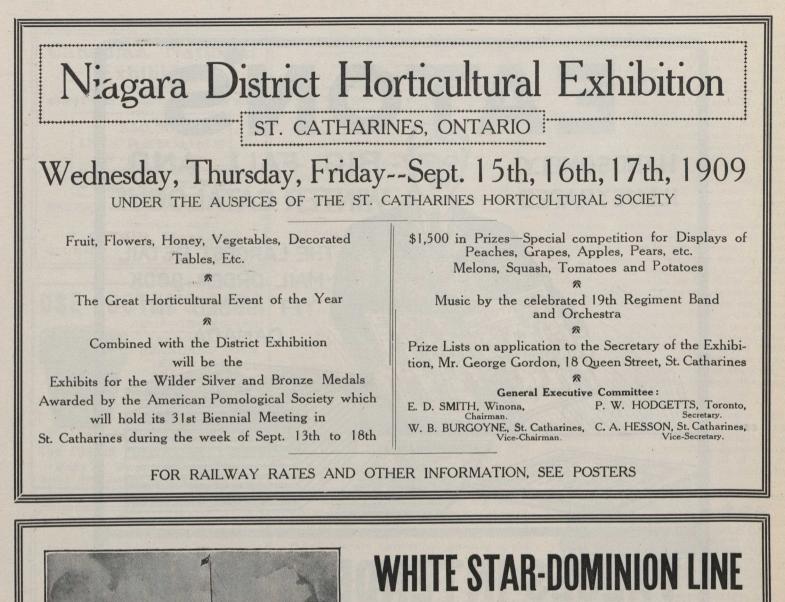


Isn't this proof positive in itself, that our goods and prices must be right? We know they are right and all we ask is an opportunity of proving it to you.



#### THE CANADIAN HORTICULTURIST

September, 1909



ROYAL MAIL STEAMSHIPS

S.S. "Laurentic," 14,892 tons S.S. "Megantic," 14,900 tons

#### MONTREAL TO LIVERPOOL

S.S. Dominion, Sept. 4th S.S. ( S.S. Megantic, Sept. 11th S.S. ( S.S. Laurentic, Oct. 2nd.

S.S. Ottawa, Sept. 18th S.S. Canada, Sept. 25th

(All above steamers carry passengers.)

MONTREAL TO BRISTOL

S.S. Cornishman, Sept. 4th S.S. Manxman, Sept. 25th.

## WHITE STAR -- DOMINION LINE

M. A. OVEREND J. W. WILKINSON Travelling Freight Agents

Favorite steamers for all kinds of perishable

cargo, having fan ventilation, cold

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Mention The Canadian Horticulturist when writing."

### September, 1909 THE CANADIAN HORTICULTURIST

# FRUIT BASKETS

We solicit your orders for Baskets in any quantity, either Car or less than Car lots.

### Stock Strictly First Class

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

### KEENAN WOODENWARE M'F'G CO., OWEN SOUND, ONT.



BEFORE IMPROVEMENT

#### This is a very beautiful New German Rose. In English "Tausendschon" means Thousand Beauties. The most sensational Climbing Rose yet introduced, not barring the great Crimson Rambler.

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## Landscape Gardening

WE are pleased to turnish planting plans, designs for formal old-fashioned and rose gardens. We have practical and artistic experts on landscape development in every branch and are glad to advise on every detail. No estate too large—no city or

town lot 100 small for us to develop according to your desires. We want you to feel free to use this department at any time. Call upon us if you desire a re-arrangement of your place. We are glad to undertake any work along this line. If our plans please you we shall be glad to supply you with stock necessary to carry out the scheme.

### Beautiful 200-page Catalogue



The New VIOLET BLUE ROSE

The New Rambler (Violet Blue), hailed by the German rose growers as the forerunner of a genuinely corn-flower blue rose, is a seedling of Crimson Rambler, very vigorous and bardy

AFTER IMPROVEMENT

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