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The Canadian Horticulturist

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AUGUST, 1906

No. 8

Our Fruit Trade With Great Britain

THERE are possibilities for an immense development of our fruit trade with Great Britain.

The conditions under which our fruit is handled by the steamship companies while in transit are, on the whole, very satisfactory.

The great bulk of Canadian fruit shipped to Great Britain is sold by auction in the large cities under circumstances that do not permit of our fruit growers being defrauded to any marked extent.

There is one great defect in the auction sale system of selling fruit. The fruit is sold as fast as it arrives. If several steamers with fruit discharge about the same time the market is glutted and much of the fruit is sacrificed, to the great loss of the Canadian growers. A few days later the market may be almost bare and prices for fruit high. Some arrangement should be made by which the quantity of fruit placed on the market each day can be regulated.

While there are a few firms in London that receive fruit by direct consignment for auction sale that are honest, there are many that are very dishonest. These latter firms defraud Canadian growers right and left. Their reputation for crooked work is so well known around Covent Garden that THE CANA-DIAN HORTICULTURIST has refused to publish advertisements from them, soliciting consignments of Canadian fruit, although they offered to pay for their advertisements in advance.

Canadian growers should have a representative in London at least, just before and during the fruit season, to act as their agent and look after the disposal of their fruit. This agent could arrange to keep the fruit in cold storage, so that it may be sold when the market

was most favorable.

Owing to the fact that a few years ago large quantities of fraudulently packed Canadian fruit were sent to Great Britain (a considerable amount of bad packing is still being done), many large wholesale firms in Great Britain, that would like to buy fruit direct from our growers, are afraid to make the venture. They prefer to buy by auction where they can have a chance to examine the goods before purchase. Were these firms sure they could depend on the quality and

packing of the fruit they ordered, they would be willing to buy direct from Canadian growers, thus saving the middlemen's profits that now go into the hands of the commission dealers and auctioneers on the other side. It should be possible to greatly develop this trade so that, ultimately, the bulk of our fruit could be placed directly in the hands of the wholesale and retail buyers.

Canadian fruit, as far as quality is concerned, when compared with the fruit from other countries, stands high in Great Britain. Properly handled, London alone could consume all the fruit Canada is now exporting.

There is great need for improvement in the packing of our fruit and in certain conditions connected with its sale in Great Britain. The first and most necessary step towards improvement

Scotland. The auction salesrooms were visited and sales of fruits from other countries watched. The large dealers, the auctioneers, the buyers, and even the grocers handling Canadian fruit were interviewed. Each and all were asked for criticisms and suggestions. Enough information of interest to our

Canadian growers was gathered to fill several issues of The Canadian Horti-CULTURIST. Owing to the importance of this information we have decided to impart it to our readers in a series of articles that will extend over several months. The subjects of the main articles will be: The Auction Sales System of Selling Fruit in Great Britain; Direct Consignments of Fruit to Private Firms; and Suggestions for the Improvement of our Fruit Trade with Great Britain.

WHY OUR MAN WENT The reason THE CANADIAN HORTI-

CULTURIST sent its representative to Great Britain to gain this information was because it realizes the vast importance of our fruit trade with the mother country, and the need for protecting the interests of Canadian shippers. There has long been a great demand for reliable and complete information concerning our export trade in fruits. While the splendid work that has been done by the Dominion Department of Agriculture, through the initiative of Prof. Jas. W. Robertson, in improving the shipping facilities for fruit in the adoption of uniform boxes and in passing the Fruit Marks Act is recognized. there is a strong feeling that an improvement is needed on the other side, in regard to the manner in which the fruit is disposed of after its arrival. Complaints of fraud have been made again and again in regard to the sale of fruit. It has been claimed that our fruit is not sufficiently advertised, and that there are far too many middlemen handling the goods for the benefit of our growers. To answer these and other statements of a similar nature there has been a sad lack of reliable, definite information. The commercial agents at intervals have made reports, but often it has happened that these reports have conflicted one with the other. Again it has been felt that these agents, with

one or two exceptions, have not been

BENEFITS THE INDUSTRY

I appreciate highly the merits of THE CANADIAN HORTICULTURIST in fostering the fruit industry all over Canada. I try to profit by the lessons given so liberally.— Auguste Dupuis, Director Quebec Fruit Experiment Stations, Village des Aulnaies, Que.

is the placing of a man in London to represent Canadian growers. This man should be appointed either by the Dominion Government or by the co-operative fruit growers' associations and the larger apple shippers now doing business in Canada.

OUR INVESTIGATIONS

These facts have become evident to THE HORTICULTURIST as a result of the trip to Great Britain made this summer by a staff representative of the paper, with the object of gaining all the information possible, concerning the transportation of our fruit and of the conditions governing its sale in the Old Country.

Our representative was in Great Britain slightly over one month. During this period he spent considerable time in London, Bristol, Liverpool, Man-chester and Newcastle, in England; and in Glasgow, Leith, and Edinburgh, in

well informed on fruit matters in Canada, and consequently were not in a position to make an intelligent report. In addition, they are supposed to look after so many other matters that fruit can be only a side line with them. For these reasons the spasmodic reports of the commercial agents have not carried much weight with the growers. This has given rise to the feeling that in many respects the interests of our fruit growers are not being pushed the way they should. The industry, it is felt, is not being advertised, both at home and abroad, as it might. The Dominion Dairy Commissioner, who is also the Dominion Fruit Commissioner, visited Great Britain last year. He has made

a report concerning the cheese and butter trade, but, so far as we have heard, he has had nothing to say regarding the export fruit trade. Why were the fruit interests overlooked?

It was with the object of gaining information on these and similar points that we arranged to have our representative visit Great Britain. We hope that the information that has been gained will be of value and importance to Canadian fruit growers and that it may lead to much needed improvements being made. While some of the conclusions we have reached may be open to correction, we believe, in the main, that they are well founded. There is one thing, however, on which we are

more convinced than ever. That is that the fruit interests of Canada will never receive the attention they need and deserve, at the hands of the Dominion Department of Agriculture, until they have an independent fruit commissioner of their own who will not be forced, when it comes to introducing new lines of work, to first gain the approval of the dairy commissioner or the head of any other branch of the government service. The first of the reports by our representative will be published in our next issue. It will deal with the conditions under which perishable products are handled by the steamship companies. The reports to be published in subsequent issues will deal with questions of similar importance.

Picking and Packing Peaches

THE opinion is held by many growers that peaches should be picked on the green side of maturity to ensure the best keeping quality. Investigations show this opinion to be erroneous. Experience teaches that peaches keep best when picked fully mature, yet not ripe. The proper stage of maturity is when the peach is well colored, full grown, but yet firm, and when the ground color takes on a faint yellowish tinge.

After green peaches are picked, the process of ripening proceeds more quick-

more quickly than the latter. Furthermore, peaches that are picked too green will shrink rather than ripen; poorly colored, shrivelled peaches bring the lowest price; they do not attract the customer; they never acquire that fine quality, or that aroma that is characteristic of highly colored, well-matured specimens. Last season, peaches that were altogether too green were shipped to Winnipeg.

Oftentimes we see peaches, originally high grade, showing the effects of bad

become discolored. Peaches should be placed in the picking basket with much more care than is usually practised. Fruits of all kinds, should be touched by the hands as little as possible, for every evidence of such handling detracts from both their shipping and market value.

GRADING AND PACKING

The successful transportation of peaches depends largely upon the manner in which they have been sorted and packed. Pressure of space forbids more than a passing mention of some ideas on these points. A word in particular for the benefit of those, and there are many, who practise packing peaches on end. This system of packing is almost universal in our peach districts.

The point or apex of the peach is the most tender part of the fruit, as it ripens first. When peaches are packed on end, they are apt, almost sure, to become crushed through pressure of the upper layers and, when the baskets are piled, by the weight of the upper tiers. This bruising of the tender end of the peach hastens decay and is one reason why promising, well-selected specimens sometimes fail to reach their destination in good condition.

Peaches should be packed on their sides and packed firmly to prevent change of position and bruising while in transit. The rosy cheek of the peach should be placed uppermost, and all the peaches in the package should point the same way. Some growers may contend that peaches cannot be packed on their sides in the 11-quart basket. Even so, it is not the fault of the peach; it is the fault of the basket.

THE CLIMAX BASKET

The Climax basket is a satisfactory package for some kinds and grades of fruit, but for all classes and grades that require systematic packing, or "laying up" as some persons call it, it is not to be compared with some of the styles of packages used in the United States.



A Crate of Select Georgia Peaches

A six-basket carrier of Elbertas. showing a 2-1 pack. The photo was taken in the great Hale Orchards, of Fort Valley, Ga., by Mr. G. Harold Powell, Department of Agriculture, Washington, D.C.

ly than in the case of more mature specimens of the same variety, and the chemical changes that are constantly taking place within the fruit progress rapidly. Green picked fruit, therefore, reaches the end of its life in storage or in the refrigerator car as quickly, or even

handling. This condition may be due to poor methods of picking or to subsequent rough handling in the packinghouse or on the market stand. When picking peaches, the picker must be careful not to grasp them too tightly, or he will bruise them and cause them to



A Useful Branch of the Service in the British Columbia Fruit Industry (Photo furnished by Mr Maxwell Smith, Dominion Fruit Inspector, Vancouver.)

The unsuitableness of the Climax basket for fancy packing is, probably, one of the reasons why peaches are usually packed on end. The sides and handles are not sufficiently rigid to admit of any pack other than what would be termed in Georgia or California a straight 4-4, three layer pack. This is the simplest of all the peach packs, and, apparently, is the only one known to many of the packers in the Niagara district. The cause is easily found.

While a score of different packs can be put in the Climax basket, the foregoing is the only one that can be reasonably expected to keep its place. The practice of spreading the handle when the cover is put on, loosens the fruit and, as a consequence, a fancy pack would be spoiled. Even the customary 4-4 pack often reaches its destination in a disordered state. The Climax basket is objectionable also, in the fact that the flimsy leno cover permits tampering with the fruit. It also allows dust and dirt to enter. Still, the Climax basket is the accepted package, and it rests with the fruit grower to make the best of it. The time will come in Ontario, how-

The time will come in Ontario, however, as it has in nearly all the States across the line, when better packing and a better package will be demanded for the best class of peach trade. Personally the writer would recommend the adoption of the six-basket carrier, shown in the accompanying illustration.

THE SIX BASKET CARRIER

It is light and strong, holds threequarters of a bushel, gives good ventilation, is neat in appearance, and with the divider, six baskets and cover, the cost is not great. It is put together with strong wire staples, well clinched on the inside. The panel heads afford a sure grip to the hands, and damage from breakages rarely occurs. When loaded in cars, the shape of the package permits a perfect fit; the tiers are separated for ventilation by means of inch slats tacked across the ends of the package. The HORTICULTURIST would like to hear the opinion of peach growers regarding this package as a substitute for the Climax backets.

Bud Orchard Trees in August

The usual time for budding is in August, although it may be done any time during the growing season, when the bark peels easily. Top budding is an important operation in the secondary cure of orchards. Varieties that have been planted and found not suited to local and climatic conditions, or to the demand of the market, may be worked over by means of budding with some variety of desired merits. It may be employed to reform the tops of trees that have been found not true to name.

The process is not a difficult one. Buds of the desired variety are taken from vigorous growing, healthy shoots of this season's growth. If selected from bearing trees of known worth, so much the better; there is less danger from degeneration—purity being ensured—as such a practice tends to breed up rather than down. The upper buds on the shoot usually are discarded, as are those at the lower end. The remaining portion of the shoot is termed

a "stick." The leaf blades on this stick are then removed, but the petioles are left to serve as a handle for the buds, which are located always in the axils of the leaves. When the sticks are thus prepared, they should be placed, butts down, in a bucket of water, and covered so as to keep them fresh. They should be used as soon as possible.

The budder takes a shield-shaped bud from the stick, and inserts it in a Tshaped incision which he has previously made on a limb of the tree that is to be budded. A ligature of string or raffia is then applied, with moderate pressure, to hold the bark firmly over the bud. In about two weeks the buds should be united, and the bandage may be removed. The buds should remain dormant over winter. In spring, as soon as the buds show signs of growth, the top of the stock must be cut back close to the bud. By this means, a new and profitable top may be secured in a comparatively short time.

Very few apples are being planted in this district. It is claimed that this section is better adapted to the more tender fruits, and that the apple section will be found more largely in the northern and eastern counties in the near future, if not already there.—W. H. Bunting, St. Catharines.

We have set out several acres of orchard during the past few years. In purchasing the stock we had nothing to do with agents, we found greater satisfaction from dealing direct with reliable nurserymen.—W. H. Crews, Trenton.

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Handling Apples for Export*

R. W. Shepherd, Montreal, Que.

IN Quebec the leading and most profitable apples are Fameuse, McIntosh Red and other highly colored and highly flavored varieties that are of delicate texture. They are too delicate to be handled in a blundering, slipshod fashion, if the best prices are to be realized. The way the finest Fameuse apples are handled from the time they are picked until they are shipped, would cause one to think the fruit was as hard as a Ben Davis or Lawver, instead of being an apple with the thinnest of skins and the most delicate texture of flesh.

The picker's baskets should be lined with burlap or something similar, and the pickers should be taught to handle the fruit like eggs. Packing tables with coverings of canvas, instead of boards, should always be used and the full baskets emptied carefully. The sorting and packing is best done in the orchard, as by that means the fruit gets less handling and is less knocked about. There are occasions when it is expedient to put fruit intended for boxes into barrels (with a little hay or straw in the bottom of each barrel) and the barrels can be carried in a spring wagon to the fruit house to be packed in boxes the next day or on wet days. The best plan is to put Fameuse apples in the export packages as soon as possible after picking.

When the packing is done, it is advisable to store the packages without delay in some cool place for a week or 10 days. My plan is to put all packages, whether cases, boxes, or barrels, in cold storage for a few days before shipping. This is one of the principal essentials to successful and profitable exportation of the finest Quebec apples. Frequently we have warm days in the month of October, when the thermometer runs 70 to 75 degrees. How can apples reach the other side of the Atlantic in good order if they are picked and packed in a temperature of 70 degrees, kept in a warm shed for a week or two, and then put into the warm holds of vessels to be kept there for 10 or 12 days? If the fruit is thoroughly cooled before shipping, it will arrive at the English market in fine condition.

It is most important that the fruit should be in good condition when it leaves. It costs money to put it in cold storage, but it pays to do so. It pays to do it most years even with No. 2 Fameuse packed in barrels. I have proved it repeatedly. Last season No. 2 Fameuse and Wealthy, sent to Quebec market, realized \$2.00 a barrel:

but the same fruit, after having been *A paper read at the annual convention of

10 days in cold-storage and shipped to Glasgow realized 15 to 16 shillings a barrel, which is equal, after paying all expenses, to \$1.10 to \$1.25 over the net prices on the Quebec market. Hundreds of barrels of No. 2 Fameuse were shipped last season from Montreal to England and Scotland to be sold at three to six shillings a barrel. This is shown by the market reports. This great loss was caused by the fruit being carelessly handled, carelessly packed and shipped in a heated condition. The fact that prices on the other side are high, as they were the past season, is no reason why blunders should be made in this foolish fashion. Nothing but loss can follow such practice, whereas, if a little more care and intelligence were exercised, the results would have been a handsome

The use of cold-storage prior to shipping apples is not advocated because I



The Shepherd Apple Case

am interested, either directly or indirectly, in any cold-storage company, but because of practical experience, which has shown the advantages derived from thoroughly cooling fruit before sending it to England. With apples of hard texture (winter apples) this precaution is not so necessary. Many large exporters say that the trouble and expense is too great and that in many cases it is utterly impracticable. My experience has proved that apples cannot be shipped year after year without the shipper noticing the advantages derived when fruit arrives on the other side in good condition. The commission men soon let you know if the barrels are wet, slack or damaged in any way.

Wet condition is caused by shipping the fruit in a heated state; slackness may arise from bad packing or because of some of the fruit becoming bad, causing a shrinkage, which makes the fruit move in the barrel. Apples that are not handpicked and sound should not be shipped in a No. 2 barrel; in fact, as much care should be taken to

pack a barrel of No. 2 apples as a barrel of No. 1. Canadians use great intelligence in handling and packing bacon, cheese and butter, but, with few exceptions, the same careful attention is not paid to our apples.

Root Pruning Fruit Trees

There are times when root pruning is of value in the successful culture of fruit. When the trees are growing luxuriantly and producing wood at the expense of fruit, the practice of root pruning will tend to check growth and promote fruitfulness. The operation is not difficult, nor dangerous when rightly done, but the beginner should start on a small scale or employ an experienced man to do the work for him.

The operation consists in digging a trench around the trees at a distance of three to eight feet, according to the size of the trees, and chopping off most of the large roots. Good judgment is required in the work. Too much mutilation of the roots might give disappointing results. Enough should be done, however, to check vitality. The trench should be refilled, and, if convenient, with poorer soil than was taken out.

The best time for root pruning is in August. It may be done earlier in the season, but the object of root pruningthe change from wood buds to fruit buds —is effected better at this time than any other. Root pruning may be practised, also, on trees, even shrubs and bushes that are susceptible to frost and winter injury. By checking the growth, they will endure severe weather without injury.

Prune Raspberries in August

W. G. Horne, Clarkson Ont.

The raspberry, when planted on welladapted soil, is, perhaps, as remunerative as any fruit we grow. With ordinary cultivation, and manuring every second year, a patch, once established. may stand twenty years or more. I have one that has been picked 16 years and this year it is fruiting as well as

Many growers neglect their raspberry patches. After the crop has been gathered the bushes are left often without care until the next spring. On this year's canes is borne next year's crop. Cleaning out the old canes only when convenient is not good practice. The old canes should be pruned out as soon as possible after the picking. They are far easier to cut at that time and it is better for the new cane.

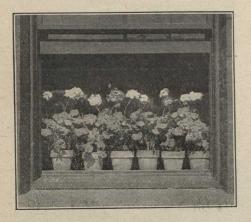
Topping off the canes had better be done in the spring than early fall. Young shoots that grow from fall topping generally winter-kill. Raspberries are being planted more and more each year. The best all-round variety is the Cuthbert.

the Pomological and Fruit Growing Society of the Province of Quebec, held last December.

Geraniums for Winter Bloom in House or Office

W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa

THERE are few plants which can be made to give greater satisfaction during the winter months than the geranium, for if the plants are properly cared for and the conditions of temperature, light and sunshine are favorable, abundant bloom may be obtained from early in the winter until



Geraniums in Bloom

This photo was taken from the outside of the Horticulturist's Office, C.E.F., Ottawa, and shows the appearance of the bloom to the passer-by (Photo by F. T. Shutt, C.E.F., Ottawa)

it is time for bedding out in the spring. The geranium suffers less from insects and fungous diseases than most house plants, which is another inducement to cultivate this beautiful flower. Anyone who has a suitable window in his house or office can obtain abundant winter bloom if the following treatment is given: This method refers only to old plants that have been in the house all winter, or in the bed all summer, and is recommended for those who do not wish to take time to care for the plants in pots.

Plants that have been blooming all summer are usually too large for transplanting into pots in the autumn, or if not too large are too "leggy" from being grown close together in beds. But, for the average person, these are the most available, and they may be treated in such a manner that good results will follow. In order to make the plants stocky and of good shape, and capable of producing abundant bloom, they should be pruned back to within six inches or less of the ground about a month before the plants are likely to be killed by frost. If they are not well headed back they will be leggy, as buds will only break from the upper parts of the stems. By the time there is frost, shoots will have broken along the old stems and the plants will bloom sooner than if the pruning is left until they are put in pots.

We have had the best results from the use of rather large pots, six inch giving good satisfaction. While bloom may be obtained a little earlier by using smaller pots, the plants have to remain in them so long—from September to

May—that they become pot bound, and are not satisfactory or sightly in late winter and early spring when flowers are

much appreciated.

The soil for the pots should not be very rich, as plants will make vigorous growth in comparatively poor soil, and will bloom sooner. The mistake is too often made of using rich soil, resulting in a large amount of sappy growth, with few or no flowers. It is from the firm or partially ripened wood that the best bloom is produced. Good loamy soil with enough sand mixed with it to make it rather open will be found quite satisfactory. It should not be of such a character that it will bake, for after watering for several months, unless the soil is of the right texture, the surface becomes hard and the plants do not thrive well. When the plants are dug it is usually necessary to reduce their size so that they will go nicely into the pots. roots, also, may be shortened in, so that they will not be crowded in the pot and so that the plant may be set well down; as the lower it is in the pot, the less leggy the plant is likely to be if the shoots do not come from the lower part of the stem. The soil is made firm about the plant, and the pot filled with soil to within about half an inch of the

One of the greatest mistakes made by many who grow plants in houses is that too much watering is done. The geraniums will not make much growth for several weeks after planting, and during this time they should be given comparatively little water-just enough in fact to prevent them from becoming dry. At no time should the soil be soaked, as much water will tend to make sappy growth with few flowers. Each pot should be treated individually, when watering, and the plant watered only when it needs it. Too often all the plants are watered at the same time, and at regular intervals without regard to the needs of the individual plants. Some plants do not need as much moisture as others, as they are not making as thrifty a growth and do not transpire so much moisture. Plants should not be watered until the surface of soil has become dry.

It will be necessary to do some judicious pinching back of the new growth early in the winter when the plants are growing thriftily, to induce them to throw out additional shoots, as the more shoots there are, the more bloom there will be later on. One should sacrifice some of the earlier blooms rather than neglect pinching back, as a plant well covered with bloom is so much more



Geraniums in Bloom, inside view, Horticulturist's Office, C.E.F., Ottawa (Photo by F. T. Shutt, C.E.F., Ottawa)

top. The plants should now be well watered and put in the shade for a few days, after which they may be placed in the window where they are to remain, and here it may be said that light and sunshine are absolutely essential if satisfactory results are to be obtained, hence a southern window should be chosen and the plants put as near the glass as possible. A cool room is much better than a warm one for geraniums. In a warm room the plants grow beyond bounds and do not bloom well.

satisfactory than one with only one or two trusses, even though obtained earlier.

The time when the geraniums begin to bloom will depend very much on the time when they are cut back the previous summer and on the variety, but if judiciously planned there should be bloom from January until May. Some of the most satisfactory varieties for winter bloom are: Jacquerie, Cardi, Phyllis, Lilian Duff, Dryden, Severin, Gettysburg, although there are many others which succeed almost equally as well.

Three Good Begonias for Hanging Baskets A. Alexander, Hamilton

In this large genus of greenhouse plants, the three, of which illustrations are given, have been found very satisfactory for hanging baskets in an amateur's greenhouse. They are growing

Begonia, "Mary"

in wire baskets about 18 inches in diameter. The baskets are lined with sphagnum moss, and they are growing in a soil composed of equal parts of loam, rotted leaves and decayed hotbed material and a few handfuls of



Begonia Manicata

clean beach sand, the whole put through a fine sieve. They were in bloom, as shown in the photos, from the middle of April to the beginning of June, and made a very fine display in the house. I am not quite sure if "Mary" is the

I am not quite sure if "Mary" is the correct name of the one so called. Its leaves are nearly round, of a rich olive green on the upper side and reddish

underneath. It sends up an immense number of slender, delicate pink colored flower stems, each with great numbers of rosy pink blooms.

"Manicata," whose foliage is not so striking as its cousin "Manicata aurea," is a more profuse bloomer. Its habit and color of stem and flower is very cimiles to "Many"

similar to "Mary."

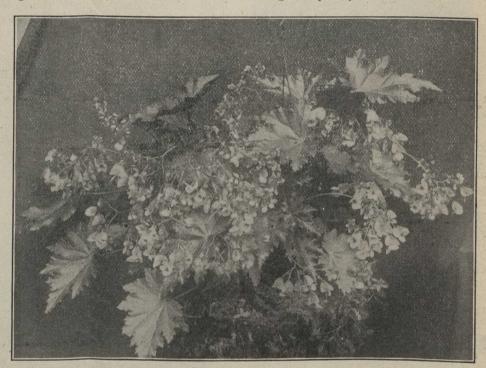
"Paul Bruant," which, when young has some tendency to adopt the upright habit, when growing in a basket seems to know what is expected of it, and gracefully leans over the sides with its very elegant foliage so beautifully cut and sends out its heavy bunches of bloom, which are beautiful in every stage of their development.

After blooming, these plants are hung outside under the shade of an

as near Toronto as Holland Landing and Bradford.

"The best success can be had with these plants by collecting them immediately after they are done flowering," said Mr. Manton, "or by marking the spots where the plants were located, and digging after October 1. Spectabile and acaule do not thrive under ordinary house culture. For forcing it is advisable to dig them in October and plant them in pans as close together as the crowns can be placed, or in pots well drained and containing an abundance of sphagnum moss. They should be put in cold frames where they can be got at when wanted. By putting them in the greenhouse two months before Easter, bloom can be had almost equal to the tropical orchids.

"These wild specimens do exceedingly well in the open garden if they are given plenty of moisture and leaf-



Begonia, Paul Bruant

apple tree during summer. About the beginning of September some fresh soil is added, and they are again hung in the greenhouse. The plants shown have been in the same baskets for two years.

Wild Orchids of Canada

"Orchids can be found in Canada by the thousands," said Mr. Thos. Manton, of Eglinton, recently to a representative of The Canadian Horticulturist. "Cypripedium spectabile, Cypripedium acaule, Cypripedium pubescens, and Cypripedium parviflorum," said Mr. Manton, "are very common in the valleys of the Trent river, in Muskoka, in the lagoon between Port Arthur and Winnipeg, in New Brunswick, and in Northern Quebec. They can be found

soil or sphagnum. It is advisable to have them shaded from the afternoon sun, but they need full light. Nearly every hardy plant nurseryman in England and in other European countries catalogs Cypripedium spectabile and Cypripedium spectabile alba, and offer them at prices that prove they can be grown successfully. Almost all collections of herbaceous plants in England contain specimens of these."

THE CANADIAN HORTICULTURIST would like to receive photographs of unusually pretty window boxes, flower gardens, or plants and shrubs of unusual size covered with bloom. If you have any favorite spot in your garden that is worth photographing give The Horticulturist a chance to enjoy it.

Lawn and Garden Notes for August

In the home garden and on the lawn during August many bad weeds will be trying to go to seed. When a weed matures seed, it produces a lot of them. Many thousand seeds may come into existence from one plant. Weeds are constantly trying, not to outwit, but to outwork the amateur gardener. They are determined workers, persistent and indefatigable. They are, however, not invincible. Constant clipping or spudding on the lawn, and hoeing in the garden, will keep them within bounds.

TESTS FOR MELONS

Melon time is coming. The person who buys a muskmelon or a watermelon should know how to choose a good one. The first point in judging a muskmelon is the weight. A heavy melon is a good melon, but it also must be ripe. One of the best tests for ripeness is the odor. A ripe melon is tempting, fragrant and spicy. A sound, sweet melon usually has a rough surface and deep furrows. The color between the furrows should not be too green, or it will be underripe, nor too yellow, as it will be soft and mushy.

A watermelon also should be heavy. A ripe watermelon will sound hollow when thumped with the knuckle, but this is only practicable in the early morning, for the same resonance is noticeable in a large, unripe melon during the heat of mid-day sun. If the "belly," or lower surface, is yellow and blistered the melon is ripe. Pressure on the melon to hear it crack within is objectionable, as it injures those that are ripe as well as those that are green.

THE KITCHEN GARDEN

Nearly all seedsmen issue special summer catalogs. Why not send for one and see what can be sown in the garden in August, so as to have fresh vegetables for the table as late as October and November?

String beans, early maturing peas, flat early turnips, radishes and other quick growing vegetables may yet be sown. If sown at once, in southern Ontario, there is still time to grow small cucumbers for pickles. These are always a delight to the thrifty house-wife, and are more than relished during the cold winter. Try some this year.

As the seasons for greens is about over, why not force the season and plant beets for autumn greens? Select some good variety of quick maturing qualities. Young beet leaves will be relished late in the season.

Blanch the early crop of celery, which now should be well matured.

Corn Salad is something everyone should grow for salad next March and April. Sow about the first of September in drills half an inch deep, and six inches apart, in rich ground. As the

plants are for cutting when young, the seed may be sown pretty thin. Before the cold weather sets in, protect with clean straw. It is cut during early spring for salads, and as such is most excellent.

If sown in August and left undisturbed till spring, salsify will be twice its ordinary size. The culture and care given it should be about the same as that given carrots. Before sowing, soak the seed for 12 hours in warm water.

Lettuce may be sown for growing in hotbeds or cold frames for Thanksgiving. If the weather is fine it may be grown in the open, but late lettuce is safer in the cold frame. Sow seed in the open and transplant later.

Make a cold frame if you haven't one. Experiment with it, and get nearer to Nature. It is an easy method of securing home-grown vegetables in late fall when they are too expensive to buy in the markets, and unobtainable in any other way. Lettuce, spinach, radishes, and many things may be grown. Give The Horticulturist the benefit of your experience later, and also send along a few photographs.

Chevril is a vegetable unknown to many of our readers. It is a very rich herb, similar in growth and flavor to parsley, and should be found in every kitchen garden. It is sown and treated like parsley. Sown in late August, the seeds lie dormant till the following spring. The roots are boiled or eaten in stews, much like carrots, but of a vastly different flavor. Plant now; do not delay until next spring. The seeds, when kept dry over the winter, sprout very poorly, or not at all.

If you have too many onions in August from spring sowing, the small bulbs may be harvested and kept until next spring as sets for early planting. Welsh onions being grown for their leaves only, should be sown in August or September for salad or seasoning in early spring.

If the weather is hot during August keep the soil in the vegetable garden well stirred to prevent evaporation of moisture. Add water frequently and cultivate as soon afterwards as the soil can be worked.

AUGUST WORK WITH INDOOR PLANTS

What would be nicer than to have Bermuda lily blooms at Christmas time? Long look ahead. Better start them now and you will not regret it. Roman hyacinths and paper-white narcissi also are grown easily for Christmas. Pot the bulbs in August, water once, and plunge them in a frame or in the cellar. Cover with coal ashes and see that frost does not reach them. In about six weeks they may be brought into the light. The season of bloom may be lengthened by bringing only a few pots into the light at one time.

If early flowering freesias are wanted, plant a few bulbs about the last of August. Put four or five bulbs in a four inch pot. Use ordinary good potting soil. Water thoroughly the first time and repeat only when the soil requires it. Keep the pots outside in semi-shade until the middle of September, then remove them to the house.

Sow primroses, cinerarias and calceolarias now. These will repay your trouble and expense by giving a profusion of bright-tinted flowers.

If young plants of coleus, heliotrope and geraniums are wanted for the winter now is a good time to strike the cuttings.

Petunias for winter bloom may be had from those outside by cutting them back to within a few inches of the roots. Two weeks later pot them into small sized pots.

ASTERS

Early asters bloom in August. Seeds that were planted in Toronto this year in March produced bloom on July 10, These were given a rich mellow soil which produces large flowers on long slender stems. Asters will grow fairly well on rather light soil, even if not very rich. Should rust attack the plants spray with ammoniacal carbonate of copper. If the weather is very dry during August, flowering asters should be well watered.

Why not transplant some of the wild species of asters to the perennial borders in your garden? These conspicuous blossoms in the woodlands and fields are boon companions to golden rods in form and color, but surpass them in brilliancy. When transferred to the garden border they become particularly attractive and the flowers grow much larger and more profusely. They can be transplanted with safety either in fall or early spring, and will establish themselves to their new surroundings with little care.

PARASOLS FOR PEONIES

To protect peonies from the scorching sun of August, an amateur we know gives each a small Japanese parasol, the handle of which is pushed into the ground near the root of the plant. This shades the plant during the middle of the day, and can be taken away at night; in the early morning it can be replaced over the plant.

TO REVIVE CUT FLOWERS

Cut flowers are constantly sent by express and through the mails, but seldom in such a fashion as to preserve their bloom and freshness. To revive them, put them into warm salt water, to which has been added a few drops of sulphate of ammonia.

RENEW PANSY PLANTS IN AUGUST

An excellent way to keep up the stock of any good varieties of pansies is by

taking the old plants during August and cutting off the young shoots which are around the base, many of which you will find already supplied with roots. Plant them in a small prepared plot of rather sandy soil in a shady place. Keep them well sprinkled, and they will soon root and make vigorous plants to put in winter quarters, ready for next spring.

Pansies may be grown from seed. For April bloom, sow now in cold frames. Bellis, or English Daisy, may be grown similarly.

CUTTING FLOWERS FOR EXHIBITION

Flowers cut for exhibition purposes should be immediately placed in a pail or large jug of water and put away in a

part. Food for the day is supplied by sulphate of ammonia, a few drops of which should be added to the water put in the vase. At night put the flowers into some dark cool place---say a pantry, as it is not good either for the flowers or for the household that they should remain all the time in the living rooms.

BUDDING ROSES

The tops of undesirable rose bushes may be changed by budding. August is the best time to do the work. At this period the bark of nearly all varieties peels with greater facility, making it easy to insert the bud. Near the base of the new growth make a T-shaped incision. Into this insert a shield-

ance of spring delays. PREPARE FOR FALL MULCHING Lawns should be mulched in the fall, and now is the time to prepare the material. The common practice of using coarse stable manure is objectionable; it is unsightly, foul-odored, and introduces weed seeds. A more effective and lasting mulch for lawns is one recommended by Wm. Hunt, O.A.C., Guelph. It is an earth mulch, composed of equal parts of good clean soil and well-rotted stable manure. The materials should be obtained in August and turned over occasionally until October, then spread on the lawn. Wistaria Chinensis In August and September, depending on the locality, the Chinese wistaria

heat than by winter cold. Spring plant-

ing is the customary practice, but if

followed by a summer drought it is

often disastrous. Planting in late fall is not advisable, because the evergreens

do not become firmly established before

winter. The best time to plant is, per-

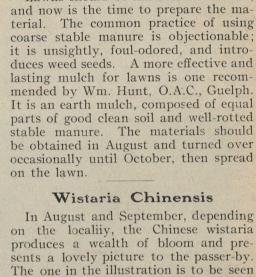
haps, in August, but see that the roots

are well protected from exposure to sun

and wind. The evergreens will have

plenty of time to become settled before

winter, and you will avoid the annov-



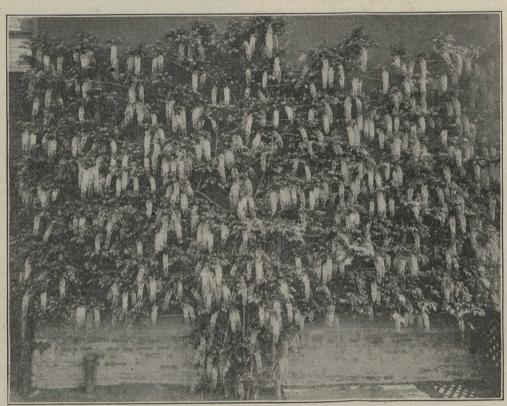
at the residence of Mr. R. A. Lucas, of Hamilton, Ont. It is Wistaria Chinensis cœrulea, and is over 20 years old. With its graceful racemes of lavender flowers hanging in profusion from the almost leafless branches, no climber is more

tender in color or more beautiful. It is one of the few vines that will twine around large supports, pillars of verandas or arbors. At one time Mr. Lucas' wistaria used to grow close to the wall of the house, but the sun burning the young leaves and tendrils, it did not thrive. It is now on a trellis, 10 inches from the wall, and is growing vigorously. The wistaria, illustrated, blooms profusely for about two weeks. The length of the season of bloom depends on the weather; when the days are bright, dry and calm, the bloom is more lasting. A warm soil and a sunny posi-tion are the conditions most desirable for the production of flowers. A severe pruning when dormant, cutting back

require filling, is necessary also to ensure freedom of bloom the next season. There is nothing more graceful than the silky blooms of the single poppies nodding on the apex of their long wirv stocks like some tropical butterflies that a passing zephyr might waft from their airy perches.-N. S. Dunlop, Floral Dept. C.P.R., Montreal.

the previous season's growth to about

two buds, except where vacant places



A Chinese Wistaria in Hamilton

cool place until taken to the exhibition. Cut them early in the morning on the day of the show, before the sun shines on them very much.

KEEPING CUT FLOWERS FRESH

Cut flowers, when properly treated, can be made to look fresh for three or four weeks. Every night take them out of the water and thoroughly rinse the stalks under a faucet, removing with the fingers any decomposed matter. Then put them to bed for the night in a basin of strong soapsuds, but be careful not to allow any water to touch the blossoms. The soapsuds supply a certain amount of nourishment. In the morning rinse the stalks under the water again, and as each blossom is arranged for the day in the vase of fresh water, snip off a tiny portion of the stalk with a pair of scissors. Always carefully trim away any faded

shaped bud cut from a new shoot of the desired variety. Tie the bud with string or raffia. In two or three weeks the raffia should be cut. The bud remains dormant during winter. In early spring the stock should be cut immediately over the bud, so that the flow of sap will be thrown into the bud and force its growth as rapidly as possible.

THE PURPLE BEECH

If your newly-planted blood-leaved beech fails to put on its darkest hue the first season, do not blame the nurseryman for not selling the proper kind. The first leaves of the purple beech, after transplanting, are a light copper color. It is only after it is well established that the full dark purple color comes.

PLANTING EVERGREENS IN AUGUST

Many expert gardeners believe that more evergreens are injured by summer

Vegetables for Exhibition Purposes*

THE culture of vegetables, at all times a most interesting study, becomes more so when the object is the exhibition table. As exhibitions at which vegetables figure prominently are held principally in the fall, I shall confine these few remarks mainly to those varieties that are in season at that time of the year. Now we will say the exhibitor wishes to take a collection of 12 varieties which is ample to test any person's skill. The following is a good selection for a dozen varieties: Celery, leeks, onions, potatoes, carrots, beets, cauliflower, parsnips, turnips, tomatoes, brussels sprouts, lettuce, or, should string beans, peas, sweet corn, or egg plant be available they would give a larger selection.

The varieties chosen should be good types of their respective sorts. I do not care much for the squash family as exhibition vegetables. They represent no extra amount of skill in their cultivation. Anyone can grow squash if they have a manure heap. The same applies to other kinds that do not represent much skill. The different sorts of spinach, including Swiss chard, which I do not suppose one person in a dozen would eat if anything else were available, also salsify and Jerusalem artichokes, do not figure very high as exhibition

vegetables.

I have placed celery at the head of my list of 12 varieties. There is no vegetable that calls for more skilful cultiva-

tion than first-class celery. It should be large, without being pithy, or hollow, have a good-sized heart, be well bleached and free from rust and blemishes. A good time to sow seed for the produce to be in good shape late in October is in early May. I prefer to sow in boxes and place in a greenhouse in gentle heat. When ready, prick out into cold frames or anywhere in four or five inches of soil on a hard bottom where water is handy, as they require lots of it. The plants will be ready for the open ground by June 15, and no opportunity of a showery day or so should be lost ingetting them out. If the weather is dry, water must be given in abundance if good results are expected.

Large onions and leeks are exhibition vegetables and the culture is practically identical, except that the leeks require earthing up to blanch them. Onions and leeks cannot be too large for show purposes, and to produce large roots very early sowing is indispensable. February is none too soon to sow in heat in a greenhouse. They must be pricked off into boxes when large enough to handle and kept growing on, gradually hardening off and planted out in very rich soil in the garden in May. These plants are very gross feeders and must have very high cultivation to bring them to a high state of perfection.

Potatoes for exhibition should be of medium size, clear in the skin and have shallow eyes. Very large specimens are more than likely to be hollow in the middle. Carrots and parsnips must be large and have very clean skins and uniform tapering roots. Beet roots and turnips should be of medium size, inclining to small rather than large, as big specimens of these are useless unless it is for cattle feeding.

Cauliflower should be of medium size with very close and clean white heads. Tomatoes must be of medium size and very round, not corrugated, and should be ripened on the plant. Brussels sprouts, a very telling vegetable when good, should be large and solid, not open and ragged. Lettuce also must be large and very solid. Needless to remark, the whole collection should be presented on the exhibition table as fresh as possible and no pains should be spared to keep them so, for if wilted or stale in any way, it would go strongly against them.

Now as to manner of staging. The collection should be made as artistic as possible, not merely a dish of each kind placed on a bare table in straight lines. This method does not appeal to me. Instead, a background should be formed of the larger kinds and the smaller grouped in front of them; no receptacles such as dishes, etc., are necessary. The group should be nicely trimmed off with fresh parsley. It is surprising, with the exercise of a little ingenuity in arrangement, what a beautiful effect can be produced even with a collection of vegetables.

Bean Blight and Bean Rust

IN July, THE HORTICULTURIST published a portion of a bulletin on bean diseases recently issued by Prof. H. H. Whetzel, of Cornell University, Ithaca, N.Y., Bean Anthracnose was thoroughly discussed. The following extracts on bean blight and bean rust, taken from the same bulletin, also contain valuable information for bean growers.

BEAN BLIGHT

"The blight is a bacterial disease. It is caused by a minute parasitic plant (Bacterium phaseoli) in form and habits of life quite unlike the anthracnose These tiny bacteria have no mycelial threads and no spores. Each little cell is a plant in itself. The first evidence is usually to be observed in the leaves. These show large brown dead patches, often spreading through the entire leaf. When wet, the spot is soft and watery, but when dry, becomes

*Extracts from an address read before the Morris Co. Gardeners' Society, New Jersey, by John Heeremans.

papery and brittle. On a badly blighted patch the leaves become dry and curled, as if scorched. Judging from some observations made last season, it seems likely that insects are in most cases the agents by which this disease is carried from plant to plant.

'Through wounds or by way of the stem the bacteria find their way into the pods which, if young, may shrivel and die. In the larger pods they produce spreading watery spots which finally become more or less discolored but never sunken and black as in the case of the anthracnose

TREATMENT OF BLIGHT

"No method of treating the seed to prevent the blight has yet been proposed and properly tested. Professor Barlow, of the Ontario Agricultural College, Guelph, has demonstrated that the bacteria are readily killed by exposure for 10 minutes to water heated to 122 degrees Fahrenheit, while dry beans can endure such a temperature for some time without injury. While this gives some promise of success the treatment is open to many of the objections raised in the case of the anthracnose.

"The sorting of seed affected with blight is very questionable. Owing to the fact that blight-affected seeds are often not discolored, it is manifestly impossible to sort them from the healthy ones. The safest method is to discard all seed known to have come from fields

that showed the disease.

"In regard to destruction of diseased tops and rotation, Professor Barlow says: 'A field where beans have sickened with this disease is unfit for growing beans for at least one season, as the germ lives over at least one winter in the stems and leaves left on the ground. How long such a field may remain infected is unknown, for we do not yet know whether the germ can live and increase in the soil where no beans are growing, although this is probable. Bean straw from infected fields may be burned. If it is fed to animals or used in bedding, the manure should be returned to the field on which the beans grew, and not spread on fields free from the disease.'

SPRAYING

"At the New Jersey Experiment Station, Dr. Halsted has experimented for a number of years with several spray mixtures for the prevention of bean blight. The Bordeaux mixture of the strength recommended for the anthracnose has been found to be very satisfactory. Probably a larger number of applications will be necessary for the blight than for the anthracnose.

BEAN RUST

"The true rust of beans is, like the anthracnose, a fungus disease. It differs from the anthracnose, however, in many important respects. The most important difference from the grower's point of view is that it is a much less common and destructive disease. It occurs only on the leaves of the bean, rarely on the stems and pods. Except in very severe cases, it does not materially injure the leaves.

TREATMENT OF RUST

"While this disease is not common and is rarely destructive, yet it is desirable that it should not become well established on a farm. Under very favorable conditions it might become sufficiently abundant materially to injure the crop. Therefore, it is well to learn to know it and so be able to stamp it out whenever it appears. Since the disease winters only in the diseased tops, it is readily exterminated by burning all diseased plants after the beans are harvested. When beans are sprayed for anthracnose this disease will also be controlled."

Muskmelons

W. G. Horne, Clarkson, Ont.

In a recent issue of The Horticulturist, Mr. Emory, of Aldershot, complained of the shipping of green melons to market. The Toronto melon market has been almost killed through the sending of melons that were hardly fit for pigs to eat. To grow good melons, the land must be rich, warm and sandy. Cultivate well as long as growth of the vines will permit; after that, don't interfere with the vines. When gathering the crop, avoid tramping on the vines. The fresher the vines the better the flavor of the fruit.

Many people do not know when a melon is ripe. When ripe, a crack will form around the stem, which will cause the melon to fall away when the stem is touched. For long distance shipping, melons may be pulled as soon as the crack around the stem is visible. When pulled then, however, a little of the flavor is lost. Melons won't ripen off the vines; they will turn yellow, but tasteless. The favorite melon is the Rocky Ford.

Growing Dutch Set Onions

J. W. Rush, Humber Bay, Ont.

THE plan I adopt for growing Dutch set onions is as follows: I select a very rich piece of ground, that had grown beets last season, as land suited for early beets is suited for Dutch set onions. Then I apply a light dressing of well-rotted manure at the rate of 50 tons per acre. Plow this under seven inches, then harrow with the Acme harrow, which both levels and crushes the soil into tilth and puts it in good shape for planting.

I mark out the rows 18 inches apart and sow sage seed in the rows. Then I plant the onion sets in a double row one inch apart each way. Cover two inches deep and tramp well. Two weeks after planting the onions and weeds will be showing nicely. Then I plow the ground and sow about June 20 long blood beets for winter. This leaves the land ready for onions in the spring.

Ashes as a Fertilizer

Prof. F. T. Shutt, M.A., Ottawa

How much wood ashes should be applied at a time on a vegetable garden? How are they best applied?—Market Gardener, Humber Bay.

Fifty to 75 bushels of hardwood ashes per acre constitutes a fair application. Some market gardeners use more than 100 bushels per acre, but before using such a large quantity it should be ascertained, by experiment on a small area, if the return justifies the expenditure. Much depends on the



Dutch Set Onions as Grown near Terento

Where land is valuable and taxes high, as near a large city like Toronto, vegetable growers must practise intensive methods in the growing of their crops. Every square foot of land must be kept busy every day during the season of growth. There must be no idle room. This illustration gives an idea of inter-cropping and double-cropping, as practised on the truck farm of Mr. J. W. Rush, Humber Bay, Ont. Spinach is shown and onions, and in the rows with the onions sage is grown.

take an iron rake and rake lightly across the rows of onions; this takes some of the soil off the top of the onions and upsets the weeds. I have a pony 12 hands high, and a boy 12 years old, and a harrow cultivator, and away they go twice a week up and down the rows. The result is shown in the accompanying illustration.

I planted 500 lbs. on half an acre this spring and started bunching on May 24. I pull the largest three times a week, and put 12 onions in a bunch, selling at 40 cents per dozen bunches. After the onions are sold, the sage is nicely up, and if taken care of ought to be a good crop. I have followed this plan for many years. I also prepare the land for spinach the same way as for onions. After the spinach is sold

nature of the soil and its past history as regards manures and crops.

The ashes may be spread broadcast on the plowed land in the spring and well harrowed in. This will ensure their thorough incorporation with the soil before planting, and at the same time leave the available plant food within easy reach of the young rootlets.

Market gardeners can reap a handsome profit early in the season by selling wholesale, but later on when the glut comes it is better to retail from the wagon.—H. E. Reid, Toronto.

I change the ground for each crop every year if possible.—Jas. Gibbard, Doncaster, Ont. Defin after A

OUR QUESTION AND ANSWER DEPARTMENT

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

White Strawberries

I am sending a few white strawberries, with plants, for examination. About two years ago I found the original plants growing wild, and am now cultivating them. What is your opinion of them?—T.A.C., Baltimore, Ont.

The white strawberry received is a representative of the alpine or perpetual class (Fragaria vesca). The stems are erect and strong, and the leaves are thinner and lighter in color than those of other types. The berries when received by The Horticulturist were very ripe and soft, but larger in size than is usually seen in wild specimens, due probably to the influence of the two years' cultivation. The seeds of this class are very prominent, not sunken in the flesh. The samples were too ripe to determine the firmness and quality.

Cultivated forms of alpine strawberries are rarely seen in this country. They are grown extensively in Europe, and the writer has seen them growing to perfection in South America. Under cultivation they attain above medium size, and the quality is high. They are deserving of more attention in home gardens, but are not likely, in competition with reliable red berries, to prove of commercial value in this country. It would be well, however, for Mr. Chapman to follow up the work he has already begun. Good cultivation and careful selection of plants when transplanting will bring about a marked improvement.

Strawberry Leaf Spot

I am sending to The Horticulturist for examination some strawberry leaves that are diseased. What is the matter with them?—Alex. G., Niagara-on-the-Lake, Ont.

The strawberry leaves are affected, with what is commonly called the strawberry leaf spot. This is a fungous disease that is widely distributed, but does comparatively little injury on plantations that are fruited only one year. On old patches it does considerable damage. When the leaves are badly diseased, the crop of fruit is materially affected; the plant is weakened in growth and made almost worthless for the following season. For badly rusted beds, heroic measures must be adopted. Soon after the fruit is gathered the beds should be mowed, and the tops covered with straw or the old mulching and the whole burned. For plantations that are not badly affected, the disease may be kept in check by spraying with Bordeaux mixture. The spraying should commence in the spring as soon as the leaves unfold, and be repeated until the blossom appears.

Gooseberries and Currants

Can gooseberries and red currants be shipped successfully to Winnipeg?—F.W.G., Grimsby.

With ordinary care in harvesting before too ripe, these fruits can safely be shipped long distances. It is advisable, however, to ship red currants in the crate of 24 quart baskets rather than in larger bulk.

Planting Cedar Hedges

I planted a cedar hedge last spring, and although most of it has done nicely, a small proportion of the trees have died. I proposed replacing the dead ones with new shrubs this month, but have been advised that the month of June is the only month in which they can be planted with assurance of growth. I write to The Horticulturist for advice, and also take this opportunity of congratulating you on the excellence of your splendid magazine. It is worthy of the support of every Canadian.—Mrs. J. G., Smith's Falls, Ont.

Cedars can be planted any time between spring and fall. I have planted them in August with good success. May or June, when growth is just starting, is, perhaps, the safest and best season. The important point is to plant them when there is no danger of the roots drying out. The roots of evergreens are more or less resinous; when exposed to the air this hardens, chokes up the cells, and the trees die from suffocation. When transplanting, keep the roots from drying and thoroughly water and shade for a few days. It is advisable, also, to puddle the roots by dipping them in thick mud; by so doing, they will stand almost any hardships. The reason that the cedar hedge at Smith's Falls died out is due, probably, to exposure of roots before planting. Without appearing so the trees may have been half dead before they were planted.

Cedars Near Apple Trees

The cedar tree is said to be injurious to apple orchards. Please explain.—E.M.C., Picton.

There is serious objection to the use of red cedar as a wind break for apple orchards, on account of its being one of the two host plants of a fungous disease which produces what are commonly known as "apple rust" on the apple and "cedar apples" on the cedar.

Troublesome Wandering Jew

What is the cause of the leaves of Wandering Jew turning black when cut from the plant and put in a vase of water? I have several sprigs placed in a vase of water, and the ends of the sprays have begun to turn black and wither. Plenty of water is in the vase, and no sunlight strikes the leaves.—M.C.B., Toronto.

The sprays mentioned probably have been taken from a plant growing in dense shade, or in a very high temperature. Using cold water to start these sprays sometimes will cause them to turn black. Cut the ends of the stems off, and remove the black leaves, then place the ends of the stems in water having a temperature of about 65 degrees, Change the water about once a week. Extreme changes in surrounding conditions are usually the cause of the trouble mentioned. Partial shade, heat and moisture are the conditions that suit these plants.—Answered by W. Hunt, O.A.C., Guelph.

Flowers for August

Are there any flower seeds that, sown the first of August, will produce flowers this fall?—C.B.M., Burlington, Ont.

Flower seeds are uncertain sown as late as August. Much depends on the weather conditions in the fall. The following are annuals that produce their flowers quickly after sowing, and might give some flowers before frost: sweet alyssum, calendula, calliopsis, candytuft, larkspur, marigold, mignonette, eschscholtzia, gypsophila, balsam, nasturtium, and Shirley poppy. For climbers, scarlet runners and convolvulus. A few plants of petunias or verbenas planted out would be likely to give far better results than the seeds mentioned.

—Answered by Wm. Hunt, O.A.C., Guelph.

To Kill Horseradish

How can I get rid of a patch of horseradish?

—C.A.R., Guelph.

Plow or dig so as to expose roots to the action of frost in winter. Next spring grow an early hoe crop and cultivate well. Follow this with a cover crop of clover. Plow under the following spring and grow another hoe crop. Cultivate incessantly that season, and you will kill out the horseradish.

Spinach for Fall Sowing

Which is the best variety of spinach to sow in fall for early spring use?—M.M.W., Jordan, Ont.

The prickly or winter spinach is the best variety for the purpose. Other hardy varieties that may be used are Victoria and Flanders. The seed should be sown before the middle of September. During the autumn the plants will grow and attain fair size, and on the approach of winter they should be protected with a covering of straw.

Peach borer should be sought for and destroyed where found.

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OUR EXPORT COMMERCE IN FRUIT

Many fruit men do not appreciate the increasing significance of our export commerce in fruits. The exportation of fruit and the receipt of profitable returns in exchange involves one of the delicate features of our international trade. The fruit grower, the dealer and the shipper at home, and the commission man and the retail dealer abroad—every person concerned in the business—are subject to considerable speculative risk. The uncertainty of abundant crops in Canada, the probability of good crops in other fruit-producing countries (which has a material influence on the value and the extent of our exportations), the problems of packing and transportation, and many other difficulties, tend to make our export fruit business a commercial problem of more than ordinary importance.

Canadian producers and shippers of fruit may be proud of the increase in our export trade since the Fruit Marks Act became law. During the past five years the value of our export apple trade has increased nearly 100 per cent. This increase is due, not only to our natural resources and the natural trend of trade development, but also to the fact that the individual grower is slowly but surely finding out, by the bitter experience perhaps of unprofit-able returns, the value of honest, modernized methods in growing, harvesting and marketing the product of his orchards.

Safe commerce in fruits depends on the essential quality of the fruit we have to sell, and of the value that we may get for it. High grade fruit is always in demand. It is only inferior grades that go begging for a market. Commercial reports, the world over, show this to be the case. How many fruit growers fully realize the force of this fact? The few who do, and who produce a class of fruit that is a little better than the other fellows', are the men who succeed.

What they want in England first of all is soundness and good keeping qualities, and nearly uniform size throughout the package. Flavor is an essential feature of prime fruit; but, in the list of export varieties, it is a secondary consideration. Apples when packed for export must have good shape, medium size, high

color, and good keeping qualities. Uniformity in appearance and size means a good deal. [Constant improvement in this respect is essential to the general progress of our fruit industry. For the export trade we must have uniformly good fruit throughout the package; fruit in sound condition with good keeping qualities for the dealer and consumer; and then superior quality for those who are ready to pay extra

Export fruit should be sent in comparatively large lots of one sort and of one variety. There should not be too many varieties in one consignment. One reliable variety will give more satisfactory results and better returns than a medley of varieties of unknown, and perhaps, inferior merit. Varieties behave differently in cold storage and in transit; hence, when shipping, one variety in a consignment is better

than a number.

The proper package in which to ship fruit is also an important question. Observers who have seen Canadian apples handled on the Liverpool docks emphasize the necessity of strong barrels, well bound with hoops. perts uniformly advise the use of the eight-hoop barrel. While the barrel meets the cus-tomary demands of the trade, there is also a market for fancy apples packed in boxes. By packing high grade apples in boxes a direct appeal is made to the more select retail trade of the kingdom. Wrapping such apples singly with paper adds to the appearance and increases

the probable returns.

Successful commerce in fruits depends, also, upon the nature and efficiency of the means at hand for transportation. Ocean transportation involves two questions: the question of To secure rates and the question of service. low rates fruit shippers must make regular shipments, and in such quantity that the transportation people will be forced to recognize the value to them of the fruit business and treat it accordingly. Efficient service in transportation—careful handling, proper storage apartments, low temperature, and good venti-lation—will insure the safe delivery of fruit. No sort of provision for safe carriage, however, will carry fruit safely that does not start in a condition that will give it a fair chance. Transportation companies may provide conveniences and the provisions for safe carriage, but the grower must exercise care, skill and honesty in the production, harvesting and packing of his fruit, if he expects it to arrive at its destination in marketable condition, and to command top prices. It behooves the Canadian fruit grower, therefore, to pack his fruit honestly, to deal fairly, to ship packages uniform within and without, and to conform willingly to the business methods of the British purchaser.

THE NIAGARA STATION SOILS

The report of THE HORTICULTURIST, in the July issue, on the new experiment station soils has been borne out by actual mechanical analyses. An editorial representative of The Horticulturist personally secured ten samples of the surface soil with underlying subsoils, twenty samples in all, and sent them to Guelph for analysis. Six of the samples with accompanying subsoils, twelve samples in all, were taken from the original Rittenhouse farm, the first farm presented to the Ontario Government by Mr. M. F. Rittenhouse, of Chicago. Two other samples with subsoils, four in all, were taken from the Harris farm, the second presentation to the Government; and the remaining two samples with subsoils, four in all, were taken from the Culp farm, across the road from the farms already donated, and on which it is understood Mr. Rittenhouse has given the Government an option.

A close examination of the analyses, which Mr. W. H. Day, of the Physical Department, has been kind enough to furnish, shows the need for an additional area of sandy soil. The lightest soil on the farm contains only 56% of sand; the subsoil beneath this is variable, one

sample analyzing 67% sand, and another, only 50 yards distant, 25% sand—a clay, and in this case hard panal at that. The soil in the ravine, according to the analysis, is comparatively low in organic matter; it is not a rich muck, as supposed; it is a fair loam. As stated in our July report, the largest part of the original Rittenhouse farm comprises clay loam, incumbent upon a clay subsoil containing only 14% of sand. The Harris farm, also, contains very little light soil. In fact, the analyses show the soils on the two farms to be even heavier than reported by us from our eye survey

Contrasted with the foregoing the soils on the Culp farm are ideal. While low in organic matter, they are high in percentage of sand. This is the desirable type for peaches, English cherries and small fruits. We would therefore again urge the necessity of the purchase of the whole or a portion of the Culp farm, upon which the Government has an option at \$100 an acre. Such an acquisition would provide the soil so necesan acquisition would provide the soil so necessary for experimental work in many important

classes of fruits and vegetables.

TOO MUCH FRAUD

Those who sell their apples on the trees to dealers should be very careful in making an agreement. Irresponsible buyers, and even some who are not considered so, take advantage of technicalities to the very great loss of the fruit grower. Take a case in point. A farmer in Middlesex county sold his apples at a price per barrel, the grower agreeing to do the picking. The buyer was to furnish the barrels and do the The price of apples declined, and the packing. The price of apples declined, and the price of barrels advanced so rapidly, that the dealer could get no profit out of his bargain, and the apples were left in heaps under the trees until they were caught by frost. The grower sued on his contract, proving that he had done his part in delivering the apples picked. The courts held, however, that as they were sold at so much per barrel, the contract was not complete until the apples were placed in barrels

and, consequently, the grower lost his suit.

The general public are not aware of how large a number of men there are who, practically, make a living by practices which must be considered fraudulent in connection with the buying of apples. The true remedy is the formation of cooperative associations and the selling of the fruit, picked and packed ready for market, to thoroughly reliable men who will pay cash at the time of delivery or give security that will be recognized at the banks. Nothing else should be accepted by the growers.

One of the active agencies recently organized for the keeping clean of the streets of a busy city, was that of the Clean City Club, started enty, was that of the Clean City Club, started this year in Chicago. This organization became very popular in a short time, and within a few weeks after organization had upwards of 1,000 members. The club was divided into two groups, comprised mostly of children, each under the direction of a captain. Among the rules adopted by the club were the following: Pick up at least one piece of paper from the street every day. Clean your own back yard and porches and try to interest the boys and girls next door to do the same. Keep at least one flower in your window. Be smiling and clean yourself." The interest such work creates in the keeping of the individual homes, as well as the city, neat and attractive, is one of the best results that follows public effort of this nature. We have societies in some of our cities, notably London and Hamilton, that are doing excellent work along similar lines. are needed. There are dozens of horticultural societies in Ontario that could branch in this direction with advantage to themselves and to

Throughout Canada and the United States, the Niagara district of Ontario is noted for the fruits and product of its soil. The Niagara

District Horticultural Exhibition, to be held at St. Catharines on Sept 14-15, should be made to bear out this reputation. It should be made representative of the entire district, so as to advertize, in a comprehensive and striking manner, the extent and character of its resources and possibilities. St. Catharines, on those dates, should be a rallying place for fruit, vegetable and flower growers, far and wide. The best that can be produced in the district should be exhibited, with the idea of bringing out the educational features that are so necessary to the success and purpose of horticultural exhibitions. The management is showing commendable enterprise and their efforts should be heartily supported by the growers, as it is for the benefit of the growers that the exhibition is to be held.

Journalism has its compensations. During the past month The Horticulturist has been the fortunate recipient of various donations of fruit. Mr. R. H. Lewis, of Hamilton, kindly remembered our failing and favored us with a basket of luscious cherries, which, in the absence of the editor, unfortunate occurrence, were devoured by members of the staff. Mr. Robert Thompson, of St. Catharines, was so generous as to send us a crate of prime strawberries—about the best we have ever seen; and from Helderleigh, the famous fruit farm and nurseries of E. D. Smith, M.P., Winona, we received a large basket of Black Tartarian cherries. How nice it is to have friends among the fruit growers!

An international conference on plant breeding is being held in London, England, July 30 to August 3. Since 1899, two conferences of this nature have taken place, one in London and one in New York. To the third in London, plant-breeding specialists from all parts of the world have been invited to attend. Every effort has been made by the council of the Royal Horticultural Society, under whose auspices the conference is taking place, to make the event a pleasant and profitable one. There is no subject associated with the care and development of plants respecting which there is so much need of greater knowledge, as that of the production of new varieties and new forms. International plant breeding conferences will do much to solve some of the difficulties, and to broaden the ordinary conception of these things.

The former associate editor of The Horticulturist, Mr. J. Albert Hand, B.S.A., resigned recently to accept a position with E. D. Smith, M.P., of Winona. The best wishes of The Horticulturist follow him in his new work.

Items of Interest

Mr. J. W. Bigelow, supt. of the hort. dept. of the Dominion exhibition to be held in Halifax this fall, writes us that the prize list was prepared largely in the interests of Ont. fruit growers. Large prizes will be given for grapes, peaches and other fruits not grown in N.S. Ont. growers will find it to their interest to exhibit. Special prizes are offered also for competition between the various provinces of the Dominion.

The Orillia Co-operative Fruit Assn. has been formed recently. The members intend to pack their apples in a central packing house, and to ship by refrigerator car to Winnipeg. The officers are: Pres., J. Ryerson, M.A.; v.-pres., Wm. Bacon; sec.-treas. and manager, R. A. Lehmann; additional directors, Alex. Cuppage and R. B. Anderson.

In the govt. spraying experiments at Meaford, Bordeaux mixture was used in the proportions of 4 lbs. blue stone, 5 lbs. lime, 4 ozs. Paris green, to 40 gals. water; instead of 8 ozs. Paris green, as mentioned in the July issue of The Horticulturist. Also, lead arsenate was used, not lead acetate. The mistake occurred in the copy, and was not due to any error on the part of The Horticulturist.

Prince Edward Island Letter

Rev. Father Burke, Alberton

THE orchard meetings which, late as they were, covered the province in their ex-tension, in the month of June, were not as well attended as one could have desired; but because of the places in which they were held for the most part, and the extra busy season, can be said to have been fairly successful. Instructor Burke, nobody doubts, understands thoroughly his business. It is to be regretted that the dept. at Ottawa has so far refused to make his position permanent, and thereby contribute in the only sane way to effective horticultural instruction amongst us. We had at the outset, through Dr. Jas. Robertson, a yearly engagement with our inspector; that was done away with when he retired. We are sure that there is no one around the dept. at Ottawa who claims to know agri. dept. at Ottawa who claims. P. E. I. needs better than the late commissioner, no one more sincerely desirous of helping the agricultural interests with us to the place they must attain when an enlightened and vigorous policy brings to us the prosperity which we need and is ours by right.

Only the other day we remonstrated on this instructor business; only the other day the new sec. of agri. for this province urged on the powers this great need, and by the looks of things there is no very proximate intention with the dept. of meeting the well-expressed and urgently pressed wishes of the people. The inspectors of B.C., Ont., and N.S., have annual engagements and are helping out very materially the instruction propaganda in their respective provinces. We have a circular (No. 7) issued by Mr. Maxwell Smith in B.C., which is or ought to be invaluable to horticulture there, giving as it does the result of his experience in planting varieties suitable to that country. Eastern inspector-instructors have not attempted anything of the sort that we know of. They

might well do so. And P.E.I. could most profitably employ Mr. Burke all the year around in this work. No one understands it better. Will the minister not harken to our petition in the matter?

PARLIAMENT AND THE APPLE BARREL Senator Ferguson, of this province, by far the best authority on fruit matters in the senate of Canada, made some judicious remarks when the act to amend the Marks Act was up for consideration. He thoroughly agreed with the opinion expressed by us in this column before, that "No. 1" should be our best brand of apples and as near perfection as "Fancy" now exacts. He did not like the definition of No. 2, but accepted it as coming from the conference of eminent Canadian horticulturists that met at Ottawa. It permits two varieties of fruit in a package, and that was undesirable. Sir Richard Cartwright, who had charge of the bill, agreed with Senator Ferguson; but as No. 2 was a grade not likely to ever see the other side of the ocean the bill was passed as originally drafted by the conference. It has since received the assent of Gov.-General Grey, and What has become of the barrel ques-Questioned by Senator Ferguson in the senate as to whether the Dominion conference decided on the 96 qt. bbl., Leader Scott said that he knew nothing of it, and had consulted the minister of agri., who also knew nothing of Strange!

The apple outlook is good; that is, the early and fall apples have fixed well. There was a wet, cold period when late varieties were in bloom, and as that period is only over, there might be danger in saying that the later fruit has fixed as well as the early. We hope that it has, however. Cherries are abundant and so are small fruits. Plums look very shy. Insect enemies are much in evidence.

The Northwest Fruit Trade for This Season

J. J. Philp, Winnipeg

AVING dealt with the question of packing and packages very fully in the last issue of The Horticulturist, and which referred principally to small package fruits, I will now discuss the packing of the apple crop. First of all, however, a few words on the prospect for a demand for Ont. apples. I have taken pains to secure all the information possible, and am now in a much better position to write with confidence than I was a month ago.

In dealing with this subject there are several features to be taken into consideration. What is the quantity available for shipment at the place of growth, what is the quality of the fruit, and what is the probable cost going to be? The reports secured are almost unanimous that the several conditions affecting these factors are very favorable.

At this end we need to find the purchasing capacity of the market to which these goods are to be consigned. Here, too, the conditions are very favorable. Indeed, to such an extent is this true, it is going to tax the ability of Ont. to supply the demand, provided always that the fruit is put up in a proper manner; viz., well selected, properly graded, nicely marked, and last, but not least, honestly packed.

There is the danger of one or more of the markets becoming congested, through the consigning of too great a number of apples at once. This is a danger that is always to be faced by the man who consigns his fruit; more especially when it is taken into consideration that it is in this class of fruit that the greatest laxity as to

methods and care in grading prevails. Let no man say, therefore, that he has been misled by any optimistic reports of the writer; if, under such circumstances, he is up against it when he comes to receive his returns.

The danger of such a state of affairs is confined almost entirely to early apples, peaches, plums, pears, and grapes. One reason why it occurs less frequently in the fall and winter apples, is owing to the fact that they are of a more durable nature. If they do not meet with an immediate sale they can be held for the market to clear.

It is beyond the power of any one to correctly compute the purchasing capacity of this market. It is bound to be large. For this reason the acreage is largely increased. Crops as a whole never looked better, and the number of consumers also is very much greater than they ever were at any time in the history of this country. There will be no difficulty from lack of funds.

Lastly, let me urge upon everyone (and don't forget that this means you), to whom is entrusted the duty of packing any fruits for any market, to guard well the responsibility that is placed upon you. Remember that your character is written on every package more indelibly than it could be with any pencil. Thus it shall be in the future. Instead of the execration and contempt that has been heaped on the packers of the past, your praises will be sung by thousands to whom you are unknown, and the truth of the proverb be illustrated: "By their works shall ye know them."

Fruit Crop Conditions in Quebec

Auguste Dupuis, Village des Aulnaies

AST of the city of Quebec the apple crop will be much less than last year. Many thousands of bushels were sold last year, by orchardists of the counties of Rouville, Vercheres and Chateauguay, at nearly all stations on the I.C.R. from Levis to Campbellton, N.B. The apples were in bulk, varieties mixed, wind falls and bruised to fair apples. They sold for 50 to 75 cts. a bush. Several thousand bbls. R.I. Greening, Baldwin and Spy also were brought from Montreal to all towns and villages; from Montreal to all towns and villages; Levis, St. Charles, Montmagny, Kamouraska, Riviere du Loup, Trois Pistoles and Rimouski taking the largest quantity. Most of these apples came from Ont.; none were first grade, all No. 2 or below. More will be needed this year, and more of better quality. Merchants prefer to large the party of the contract o deal directly with Ont. growers rather than buy through a middleman.

APPLES

This year's prospect for apples in Quebec, by varieties, is as follows Red Astrakan, light; Tetofsky, fine; Duchess, extra good; Wealthy, good on young trees, light on old ones; St. Lawrence, very light; E. Golden Russet, very light; Wolfe River, very light; Fameuse, medium, scab in some trees; Roxbury Russet, medium; Alexander, light; Y. Bellefleur, medium; Y. Transparent, good; Transparent de Croncels, good; and Iowa Beauty, light.

CHERRIES AND PLUMS

On both shores of the St. Lawrence, east of Quebec city, the cherry crop is a failure and the plum crop very light. L'Islet, Kamouraska and plum crop very light. L'Islet, Kamouraska and Montmagny counties have a sufficient crop of Damson, Reine Claude and other European plums to supply the Quebec market and the villages east. Lombard, very light crop, except on young trees; Bradshaw, medium, fruit very large and fine; Grand Duke, good; Pond's Seedling, good; Washington, light; Green Gage, none; Gueii, light; Favorite hative, medium; Y. Egg, good; Prune d'Agen, extra heavy; Mirabelle, good; Early Red, medium; Moore's Arctic, light, except on young trees; Hudson River Purple, fair; Quackenboss, medium; Coe's Golden Drop, medium.

Small fruits: Strawberries, garden and wild, good crop; raspberries, good; gooseberries,

INSECTS AND DISEASES

Aphids are plentiful. Trees in nurseries, Aphids are plentiful. Trees in nurseries, growing luxuriantly, afford abundant food. Aphids are destroyed easily with tobacco solution, sprayed often. Codling moth and caterbillars are not numerous. Curculios seem to pillars are not numerous. Curculios seem to have been destroyed in 1903-4. Rose bugs have given much trouble, on light soil, every-I am surprised at their absence on rose bushes, on loamy or clayey soil, separated from the former by only a few acres. Cherries are attacked by a small black insect living on tender twigs; small red ants keep them company. Worms are appearing on pear leaves. No apple worms this year. Blight appeared on dwarf pears; defoliation, burning the leaves and pruning lightly had a good effect. Scab is affecting Transcendent crabs.

ANOTHER REPORT

The following notes were taken from a letter written by Mr. D. L. House, Stanstead Co.: "There is only a fair prospect for apples. In exposed localities, on the hills, the crop is light. The plum crop is a failure, also cherries.

WESTMOUNT, MONTREAL

Mr. R. Brodie: On the Island of Montreal Fameuse apples will be about half a crop; they are free from spot and large in size. Duchess, Alexander, Montreal Peach, and Montreal Strawberry promise a full crop; Wealthy and McIntosh Red, one-third of a crop. Montreal melons and tomatoes, a good crop.

The Trade in Early Apples

A. McNeill, Chief, Fruit Division, Ottawa

The prospects for a fair crop of early apples in Canada are good. This fruit, in years gone by, has never been considered as profitable commercially as the winter fruit. old adage that every dog has its day. To my mind, the day of the early Canadian apple is at hand. Two markets are opening for which large quantities of early apples are required, namely our Canadian western provinces, and the markets of Gt. Britain. As far as the fruit grower is concerned, they may be considered together. Both markets will require a careful cooling of the fruit before the time of shipment in refrigerator cars, and in the case of Gt. Britain cold storage on shipboard.

The people of the west are buying early apples in increased quantities, and the demand this year will be even greater than usual, owing to the shortage of small fruits, not to speak of the most extraordinary increase of population during the last 2 or 3 years. I predict that the west will soon take all the early apples that we are now growing, and will take them at even a higher price than will be paid for the winter varieties.

A careful inquiry has shown me that the orchardists of Canada have been planting very few early varieties for the last 15 years. The demand has been increasing very rapidly these last 2 or 3 years, and consequently, higher prices are being paid by the consumer than

formerly.

The English fruit crop for early apples is only middling. Even if it were better, there would still be a demand for Canadian apples. The comparative regularity of our packing

and grading, and the fact that they are handled in large quantities through regular dealers in the large centres, give them a preference over home-grown fruit in the English markets; which, perhaps, the intrinsic quality of the fruit would not justify. We can hope, therefore, to do a large business with Gt. Britain, as well as with our western provinces in early apples. This trade in early fruit is essentially apples. This trade in early true to escalarly a box trade. The sooner our orchardists learn the art of box packing, the better it will be for them. This fruit cannot be handled in bbls. profitably. Baskets may be used for local markets, but are not a proper package for long distance shipment. The co-operative assns, and large dealers who are prepared to handle this fruit through central packing houses, will this fruit through central packing houses, will reap a rich reward as a result of their forethought.

Ont. is not taking advantage of her chances with reference to the western trade. There was a splendid opening this year for small fruits, and had the Ont. growers been prepared to ship in carload lots, they could have captured the market, and in all probability would have held it. We have the opportunity now for early apples, but they must be grown clean and be properly packed.

Nova Scotia Notes

G. H. Vroom, D.F.I.

The weather for the past few weeks has been fine and dry. Since June 10, there has been very little rain. The fruit crop has suffered slightly, but not seriously as has been reported. fine dry weather has been in favor of clean fruit.

Notwithstanding that "spot" is quite prevalent

in some sections, the fruit in general is fairly good in quality. Gravensteins are inferior and good in quality. Gravensteins are inferior and old Ben Davis is scabby. Baldwin, Blenheim, King, Nonpareil, Falawater, Stark and Ribston are looking well. Under favorable circumstances, N. S. should export 400,000 bbls. of good apples this season. In Aug., one can bet

In well-sprayed orchards the fruit is fine quality; yet, I am continually meeting fruit growers who do not believe that spraying does any good. One of the worst pests we have in N. S. is the "green apple worm." This worm eats a hole in the side of the young apple, sometimes as far in as the core. It ruins a lot of the best fruit. It is a common thing for one worm to spoil a dozen apples. The pest is light green in color, has five white lines running lengthwise on its body, and, when full grown, is 11/4 The tent caterpillar also did considerable damage; fruit growers must reckon on this pest

Barrel and Box Supply

To ascertain the opinion of manufacturers of boxes and bbls. on the relative value of these packages for the shipment of apples, The Horticulturist wrote to several well-known firms. A few replies were received in time for mention in this issue. For publication in the Sept. issue, THE HORTICULTURIST invites letters on this subject, not only from manufacturers, but also from growers and shippers.

In a letter to THE HORTICULTURIST, the W. R. Thompson Co., Teeswater, Ont., wrote: "Bbls. are preferred to boxes. We anticipate no shortage of either. Ruling prices are about 35 cts. for bbls., and proportionate for boxes.

The Sutherland Innes Co., Ltd., Chatham, Ont.: "The demand this year for apple barrel stock is greater than it has been for 3 years. We have not made a single carload of box shooks for apples this year, and there does not seem to be any inquiry for them in Canada or the eastern states. As far as we can learn from the fruit packers, the box has not been a success for the export trade, not so much on account of the cost, but the apples do not arrive at their destination in good condition. In and Cal. boxes are used extensively for packing apples, but we do not reach this trade, so we do not know how the percentage of bbls. and boxes will usually run. We understand, however, from a great many of the fruit packers, that the boxes are principally used for both domestic and export trade, but at considerable

expense and principally for fancy fruit.

"All of the eastern shippers have learned by experience that the bbl. is the best package for apples, in fact, some of them have had very

costly experience trying to ship apples in boxes.

"The packers are demanding a very good bbl. this year, some of them even going to the bbl. this year, some of them even going to the extent of using flour bbls. for apples, which is unnecessary, as a good, first-class package, suitable for carrying fruit, can be made out of selected No. 2 staves or "mill run" stock, with 1st class hoops. The principal thing in making a satisfactory package is to use good, heavy staves made out of straight grain stock with good sound heading, and the very best hoops.

"The prices for bbls. this year are governed

by the locality and quality. A good apple bbl. can be bought in Toronto and neighborhood can be bought in Toronto and neighborhood at 35c. to 38c., according to whether it is a 6 or 8 hoop bbl. This will give an idea of the standard price for 50 miles around Toronto. The bbls. cost more where they are made further away from the source of the supply."

A letter from Taylor & White, St. John, N.B., said in part: "There is no demand for boxes for packing purposes. The prevailing price for bbls. is 24 cts."

Enclosed find \$1 for my subscription to The Canadian Horticulturist. Having read a copy of the paper, I consider it most interesting and up-to-date, as well as instructive to gardeners, amateurs or professionals.-John Kirby. Vancouver, B.C.

Good Average Canadian Fruit Crop

ROM present indications, the fruit crop of Canada may be regarded as a good average. In Ont., the plum crop is a failure; pears promise a medium crop; peaches, average. Cherries are practically done. Fall apple indications point towards a good crop; winter apples, only medium. Small fruits are producing large yields. The grape outlook, also, is promising.

In Que., a fair crop of early and fall apples is expected. Cherries are a failure and plums very light. Small fruits are yielding well. In P.E.I. the apple outlook is fair; plums are shy;

small fruits, abundant.

The reports of Ont. crop correspondents for THE HORTICULTURIST, show the situation in the various counties. Further reports of the outlook in N.S., P.E.I., Que., and the West, are published in this issue under separate headings.

ESSEX COUNTY

Leamington.—Shipping of early peaches will begin Aug. 1. Cherries are done. Grapes promise a good crop; no rot yet developed. Plums and pears, also, look well. The apple crop will be a good one.—E. E. Adams.

KENT COUNTY

Chatham.—There is little change in fruit prospects since last report. Apples and pears look well. There will be a few peaches. There has been some dropping in apples, but not enough to thin them materially.—W. D. A. Ross.

LAMBTON COUNTY

Forest.—The winter apple crop promises to be medium to light. Orchards, properly cared for and sprayed, have a good crop of clean fruit, but the uncared for ones, which are in the majority, are poor. Our association will have a good crop of fine quality, the result of a bylaw that requires all members to spray at least four times. Fall apples promise a good crop, but as winter varieties are grown almost entirely, fall fruit will have little effect on the trade. fall fruit will have little effect on the trade.-D. Johnson.

WENTWORTH COUNTY

Fruitland.—Raspberries are at their best, both red and black are a good crop; quality and size never better. Cherries are done. Black and red currants are a good crop, above the average, and the quality is very fine. Kittatinny blackberries promise a large yield of good

fruit. Plums are few and far between; according to the acreage, the crop is almost a failure. So far, the rot has not been serious. Peaches, fine in quality and a good average crop. Pears will be an average crop. Grapes promise a good crop; no rot so far; if it does not appear, and nothing else attacks them, grapes will be a paying crop this year.—C. C. Pettit.

HALTON COUNTY.

Burlington.—Raspberry crop is good; except old patches, hurt by frost. Cherries have been a full crop. Red currants, less than average. Black currants are a full crop. The sample is extra good in all these fruits. Plums continue to drop carely constitute to the constitute of the co ple is extra good in all these fruits. Plums continue to drop, scarcely any left on trees. Peaches are light. Apples, free from spot, sample good. Greening and Baldwin, average crop; Spy and Mann, full crop. Ribston, Ontario, King, light. Early Harvest, Astrachan, Transparent, full crop. Pears will be an average crop.—W. V. Hopkins.

PEEL COUNTY

Clarkson.—Early apples have dropped badly; winter apples, not a full crop. Strawberries were two-thirds of a crop; prices were highest we have known for many years, more than making up for shortage in crop.—W. G. Horne.

SIMCOE COUNTY

Craighurst.—Early apples, especially Duchess, will be a full crop. Fall apples are promising. Winter apples promise only a medium crop. The fruit so far is clean. Raspberries are almost a total failure; canes killed to the ground. Blackberries are slightly better. Cherries and plums, a total failure. Altogether, a very discouraging year.—G. C. Caston.

HASTINGS COUNTY

Belleville.—Winter apples promise a medium crop. Summer and fall varieties are more plentiful.—F. S. Wallbridge.

GREY COUNTY

Clarksburg.—In general, Georgian Bay or-chards have been neglected; where well cared for, there is a fine crop. Winter apples will be a medium crop and promise good quality. Fall apples will be medium or better, where well cared for. Pears, light, not half a crop. Plums and peaches, a total failure. Cherries are a full crop; quality excellent. Small fruits, sufficient

for local demand. Grapes, badly winter killed, will be a poor crop.—J. G. Mitchell.

GRENVILLE COUNTY

Maitland.—The apple crop will be on the light side this year. Fameuse, the principal variety grown, continues to give promise of a medium yield; the fruit is growing rapidly and taking on color. There was some injury in June by the tussock moth. There has been very little development of "spot" and, with favorable weather, prospects promise a crop of good to first-class quality. In 1905, the orchards were free of spot until the 3rd week in Aug., when it

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57 BRANCHES THROUGHOUT THE DOMINION

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developed at a terrific rate, destroying the quality of 90% of the fruit, in some orchards that had not been sprayed. We should profit by past experience and spray all Fameuse orchards at least once more this year to insure perfect fruit. A clean crop of Fameuse always gives profit to the grower, while a "spotted" crop is absolutely worthless.—Harold Jones.

PRINCE EDWARD ISLAND

The prospects for a full apple crop here are not quite so bright. The cold, wet, sunless weather which continued through the period of pollination for late varieties has had its effect. There are very few Spys, and the whole range of winter keepers will be short. They may show up better when they come to maturity. Early and autumn varieties are already bending the boughs. Plums will be scarce; the trees have had a hard time somehow. Cherries are not plentiful. Strawberries are yielding well. Raspberries and blackberries promise a fair crop. Currants and gooseberries are in abundance. We never had more pests in prominence, both insect and fungus. All the sprayings should be carefully made.—A. E. Burke, July 23.

Niagara District Exhibition

The vigor with which the arrangements for the Horticultural exhibition to be held in St. Catharines, Sept. 14-15, are being pushed, augurs well for the success of the show. There have been several meetings of the committee of management and of special committees during the past month, and all the important arrangements have been completed. The prize lists for fruit, flowers and vegetables have been arranged, and are being printed. Liberal prizes are offered in each class. Copies of the list may be obtained from the secretary, Miss M. M. Tasker, of St. Catharines. Members of affiliated societies can exhibit free; any person can join his local society by payment of \$1 to the secretary.

A big convention of Odd Fellows, from all

parts of the world, will take place in St. Catharines, at the time of the exhibition. The members are to be admitted at a special rate, and it is expected they will be present in a body. With the object of securing a large attendance from all parts of the Niagara district, it is intended to arrange for a special train service, from Hamilton, at least, and possibly from Oakville. A number of educational features, similar to those conducted at the Hamilton exhibition last fall, are being arranged.

Committees have been at work for some time, obtaining special prizes. A large number have been secured. The following is a list of them: Peaches and pears are to be exhibited in 11 qt. bskts., heaped and covered with leno; grapes to be packed in 6 qt. bskts., heaped and covered with leno. Fruit, winning prizes, in all cases to become the property of the donor of the prizes. \$5 will be given for the best 5 bskts. of grapes, 1 each of Concord, Worden, Niagara, Lindley, and Brighton; best 3 bskts., 1 each of Globe peaches, Bartlett pears, and Delaware grapes; best 2 bskts. of peaches, 1 each of late Crawfords, and Elbertas. A special prize of \$5 worth of nursery stock for the best 3 bskts. of grapes, 1 each, of Concord, Niagara and Worden.

Concord, Niagara and Worden.

Special prize of \$2.50 for the best 2 bskts., 1° each, of Howell pears and Niagara grapes. Special prize of \$3 for best basket of early Crawford peaches; \$2 for best 2 bskts. of grapes, 1 each, of Niagara and Worden. \$2 for best bskt. of Reine Claude plums.

Special prizes of \$3 for the best bskt., each, of the following peaches: Late Crawford, Elberta, Reeves, Globe, Yellow and White peaches. Special prize of 1 year's subscription to the daily St. Catharines Journal for the best bskt. of Fitzgerald peaches; special prize of 1 year's Fitzgerald peaches; special prize of 1 year's subscription to the daily St. Catharines Standard

for best bskt. of Rareripe peaches.

Special prizes of \$3 for the best bskt., each, of Duchess, Bartlett and Bosc pears. Special prize of piece of china, worth \$2.50, for best bskt. of Louise Bonne pears. Cash prize of \$2 for

best bskt., each, of Seckel, Bartlett and Sheldon

pears.

Special prize of \$3 for best 3 bskts. of grapes,
1 each, of Wilder, Niagara, and Lindley; \$2 for
best 2 bskts., 1 each, of Worden, and Moore's
Diamond; \$2 for best bskt., 1 each, of black and Diamond; \$2 for best bskt., I each, of black and white grapes; \$2 for best bskt., I each, red and white grapes; \$2 for best bskt. of Delawares. Special prize of \$3 for best box white peaches, packed and wrapped; \$3 for best box yellow peaches, packed and wrapped; \$3 for best box St. Lawrence apples, packed and wrapped. Special prize, rug, valued at \$5, for best box Gravenstein apples, wrapped and packed.

Among amateur gardeners in Ottawa keen interest is being taken in the Lady Grey Garden awards.

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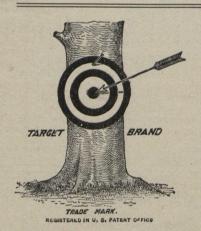
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—W. H. GIBSON, President Newcastle Fruit and Forwarding Association. 'Dead as a stone and trees looking fine."—ENOS FISHER, Jordan Harbor.

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Condition of Vegetable Crops in Ontario

EXCEPT in the case of beans, which are a failure, the condition of the vegetable crops of Ont. is good. The report in The Horticulturist for July has been borne out since then by the growth of the crop. Beans have been seriously injured by blight and anthracnose. Onions, in spite of the maggot scare one month ago, have managed to pull through a fair crop. Celery, also, in most sections, is only fair, Potatoes on low land, are slightly affected by rot; in case of continued rain, the crop may be considerably damaged; early blight, also, is prevalent in some localities. Other classes of vegetables are producing large crops. Tomatoes, although rather backward in season, are exceptionally good and the acreage is large. The following reports by crop corresis large. The following reports by crop correspondents of the Ont. Veg. Grs. Assn. show the situation in the various districts:

Early cabbage is flooding the market; also wax beans, cucumbers and bunch roots. Onions, wax beans, cucumbers and bunch roots. Onlons, usual acreage, have made excellent growth. Transplanted onion, to bunch, are a glut on the market. Tomatoes are coming in for \$3.00 a bu.; there is a big crop. Early potatoes, a good crop. Early cauliflower, good.—T. Mockett, July 21.

KINGSTON Onions are a victim to the blight; the crop is ruined. Celery is making slow growth. Potatoes, early, are yielding fairly well, no signs of decay. Those planted in early June show a slender growth and a poor crop. Beans are affected with anthracnose, which makes them useless for the table.—Chas. F. Adair, July 20.

TORONTO DISTRICT

Presentable.—Crops are looking well.—Beans

Bracondale.—Crops are looking well. Beans are almost a complete failure on account of

blight. We started to market tomatoes on June 20; they promise a large crop later. Late cauliflower and cabbage are in a healthy condition; also onions, but in small quantities. Potatoes, early varieties, are all marketed. Celery is doing well.—A. W. Shuter, July 21.

Humber Bay.—Crops are looking well. Onions that looked poor a month ago, have overcome the maggot and promise a heavy crop. Early potatoes are very good; prices, \$1.25 a bu. until July 20, then 75c. a bu. Rot has made its appearance in some places. Peas are very scarce. Butter beans are a good crop, but badly spotted Butter beans are a good crop, but badly spotted and worthless. Green beans are good, no spot 75c. a bu. Cabbage, very good, 40c. a doz. 75c. a bu. Cabbage, very good, 40c. a doz. Vegetable marrow, good crop, 50 to 75c. a doz. Outside cucumbers, good, 30c. a doz. Green house long cucumbers, \$1 a doz. Cauliflowers, better than last year, 75c to \$1.50 a doz. Tomatoes, a good crop, but late. Celery looks very well; early, 75c. a doz. Beets and carrots are very plentiful; low price, 10c. a doz. White turnips not good. Prizetaker onions are on, 15c. to 20c. a doz. bnchs of 3. I took a long drive west of here this week and was surprised to see the quantity of vegetables the farmers are to see the quantity of vegetables the farmers are growing for the Toronto market. Lots of them have from 5 to 15 acres of vegetables, such as onions, tomatoes, cabbage, parsnips, carrots, beets, turnips, squash, cucumbers and celery. The vegetable growers must grow early crops or it is a poor lookout for them.—J. W. Rush, July 21.

Doncaster.—Onions promise better than at the

beginning of the season. Early celery is doing well, some nearly ready for market. Early potatoes coming in slowly, selling at \$1.25 a bu. Potato blight is prevalent. Beans are a failure, being all spotted. Prices are very good. Cab-

bage, 25c to 40c.. a doz.; potatoes, \$1 a bu.; beets and carrots, 15c. a doz. bnchs of 3 each; beans, \$1 a bu.; lettuce, 15c. a doz.; greenhouse tomatoes, 10c. to 12½c. a lb.—C. Gibbard, July

CLARKSON

Early potatoes are looking well. Onions are doing fine; they have escaped the maggot so far. Sweet corn is doing well.—W. G. Horne, July 22.

July 22.

BURLINGTON

The crops never looked better, with, possibly, the exception of the late tomatoes. Early cabbage and cauliflowers are done; prices have been above the average. Melons, egg plants and peppers are doing fairly well; peppers, large green, promise a larger yield than last year. Onions are doing remarkably well and promise a large yield. A severe hailstorm on July 10 was very destructive to tomato, melon and cucumber vines.—J. A. Lindley, July 23.

SCOTLAND

Vegetation is behind last season. Frost des-

Vegetation is behind last season. Frost destroyed the first planting of cucumbers; the second planting is showing well for a good crop. Early potatoes are fairly good and ready for market. Tomatoes are not producing good vines. Cabbages are making fair progress. Onions are good, but the acreage will be small. Raspberries are a fair crop, but the acreage is small; prices all higher. The acreage of late potatoes and turnips is larger this season than last.—E. G. Malcolm, July 21.

ST. CATHARINES DISTRICT

Tomatoes, both early and late, are looking well and setting fruit freely. Early tomatoes are ripening, but there is not as large an acreage as last season. In factory tomatoes, the acreage Vegetation is behind last season. Frost des-

as last season. In factory tomatoes, the acreage is larger. Peas, grown largely for factory, are

MANY OF THE TREES WHICH ARE GIVING

ABUNDANT CROPS

to the growers this fall, were the product of our Nurseries. A visit to our Nurseries at this season of the year will convince you that stock sent out, bearing our trade mark, is in every way reliable



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EBEN JAMES

103 Union Station, Toronto Phone M. 5735

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an excellent crop. Beans are doing well. In canning beets, a larger acreage has been sown but the yield will not be up to the average. Sweet corn is doing well. The usual acreage of onions was planted, but poor seed and lack of help has decreased it. The acreage remaining is looking fairly well, with the onions bottoming souther clowly. Squash is grown for shipping is looking fairly well, with the onions bottoming rather slowly. Squash is grown for shipping and canning; a larger acreage; plants doing extrawell. Carrots doing well but a less acreage. Early potatoes, an excellent crop, with acreage above the average; the late crop doing well. Bugs not troublesome. Early cabbage, a good crop; late, was planted freely.—Robt. Thompson, July 23.

NIAGARA FALLS SOUTH

Vegetables are maturing before the average time. Melons, peppers, egg plants, cucumbers, tomatoes and squash have made luxuriant growth, and promise a record yield. Early tomatoes are ripening fast, the vines still growing and setting fruit—a sure sign of an enormous crop. Late tomatoes promise a big crop. Corn is looking grand, the extra early varieties just maturing: second early and evergrand. maturing; second early and evergreen, growing very fast and a fine color. Beans, offered in large quantities, are a drug on market. Second large quantities, are a drug on market. Second early potatoes, cabbage, peas, squash, beets and lettuce are very plentiful. Onions, good, promise an average crop. Planting of late cabbage and celery completed; acreage less than last year. Sowing of fall turnips and spinage now in progress. Prices: Beans, wax or green, 12c. to 20c. a pk.; beets, onions, carrots, radish, 15c. to 30c. a doz. bnchs.; cabbage, 30c. to 50c. a doz.; cucumber, 45c. a doz; corn, 15c. to 20c. a doz.; cutumber, 45c. a doz; corn, 15c. to 20c. a doz.; lettuce, head, 15c. to 20c. a doz.; peas, 60c. to 80c. a bu.; squash, 30c. to 60c. a doz.; potatoes, new, \$1 a bu.; tomatoes, \$1 to \$1.25 a bskt.; raspberries, \$2 to \$2.25 per 24 qt. crate.—Thos. R. Stokes.

CHATHAM

Onions promise a large crop, more than sufficient for home consumption. Tomatoes are

growing well, but the early fruit is a poor sample. Potatoes, good; in some sections injured by bugs. Early cabbage, very plentiful, market glutted.—Fred Collins, July 19

LEAMINGTON

Early cabbage is about all shipped. Prices have been good, selling now at \$1 a half bbl. crate. Wax beans have been a poor crop, owing to blight; prices have been satisfactory, at present 50c. a bskt. Early cucumbers, a lighter crop than usual; aphids have been bad. Cucum-bers grown under glass have been fair. Tomatoes are ripening well; the demand is excellent; prices \$1.25 a bskt. wholesale, \$1.40 retail. The outlook is for good sales throughout the season. Earliana, the leading tomato grown, is not as productive as some other varieties being tested. Early celery is now coming in. Melons are doing well, but not up to the standard. Those started under glass are doing nicely with some growers. Seed sown in the field has not done well; weather has not been favorable. The crop will be later than usual. Sweet corn also is late. Green peppers are being shipped at 75c. a bskt. New potatoes, \$1 a bu.—E. E. Adams, July 20.

SARNIA

Early potatoes, a good crop, 90c. a bu., are over-stocking the market; blight is showing slightly. Late potatoes are looking well. Early cabbage, good, but not plentiful on account of the maggot; prices 60c. a doz. Late cabbage, below the average in acreage, but looking well. Tomatoes are growing well, but late. Onion maggot has done considerable damage. Celery and cauliflower not grown extensively.—W and cauliflower not grown extensively.—W. A. Broughton, July 22.

Good Service This Season

The Allan Line service for the season 1906, is perhaps the best the shippers of Canadian per-ishables have ever had via the St. Lawrence route. The fast steamers to Liverpool are especially adapted for apples, not only on account of the speed of these vessels, but, also, because of the modern equipment which has been placed in the ships to suit the Canadian trade. The Glasgow vessels are sailing direct and being a passenger service, shippers can depend on the boats sailing on time. The carrying qualities of these ships are well known to the Canadian trade.

The Allan Line berth at the Surrey Commercial

The Allan Line berth at the Surrey Commercial Docks, London, lends itself admirably for quick delivery to the different fruit markets, such as

HEADING

I have 80,000 setts of Basswood and Hardwood Heading to turn up for apple barrel trade. First-class dry kiln in connection with plant. Parties requiring car lots or less should ask prices. F. O. B. cars at Brussels or Blyth.

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Apples for Export

Thomas Russell, Glasgow J. & H. Goodwin, Manchester J. C. Houghton & Co., Liverpool and London

Will be pleased to keep you advised regarding the condition of the European Markets. If you have any Apples for export call or write

FRED. BARKER

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Choice Apples in Boxes Will Pay

BUT you must be VERY CAREFUL in your packing, and you will need OUR AD-JUSTABLE BOX PRESS (which is operated by a screw, no lever) in order to know just when you have pressed them RIGHT. This Press is STRONG, QUICK, EASY TO OPERATE and INEXPENSIVE.

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OF ALL KINDS

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The Burlington Barrel Press with Steel Circle or Wood Head Block

Corrugated Paper

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Apple Barrel

Stock

We prepare STOCK SPECIALLY FOR EX-PORT APPLE BAR-RELS, ensuring GOOD PACKAGES ON AR-RIVAL AT DESTIN-ATION. Write us for Prices.

The Sutherland Innes Co., Limited CHATHAM, ONTARIO

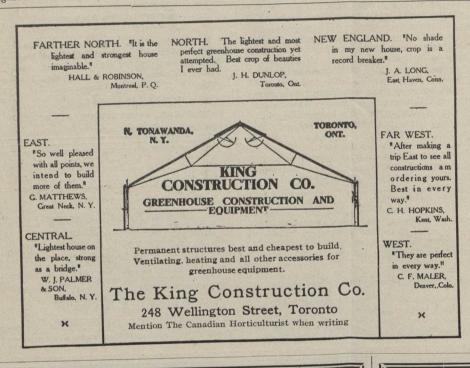
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Covent Garden, Spitalfields, the Monument, and also the Borough markets. The new warehouse, equipped especially for the Allan Line at this dock, is said to be the finest in the world and deliveries cannot be surpassed. As evidence of the satisfactory deliveries made, attention is drawn to the following letter from London, dated Sept. 9, 1905.

"We beg to tender you best thanks for the attention given to the discharge and delivery of the Californian fruit ex SS. *Hibernian*. You will be glad to learn that the fruit was landed in magnificent condition, and that it made the

best prices obtained this season. You may assured that if we can influence any consignments by your line we shall do so as the care bestowed is fully in accordance with what Mr. Simons, of Glasgow, told us with respect to the shipments made by your line to that port.—Sgnd Garcia, Jacobs & Co."

We would draw the attention of our readers to the advertisement in this issue from Mr. J. Balme, of Mexico City, Mexico. He has a large business and is thoroughly reliable in every way.



MEXICAN PLANTS

Orchids and Cacti, Bulbs and Seeds Etc.

Well illustrated and descriptive Culture Catalog sent on receipt of 10 cents in postage stamps

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Canadian Grown Trees

- ARE THOSE GROWN BY

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FULL LINE OF LEADING SORTS

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OUR STOCK IS THE
LARGEST
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We Planted Last Year Over 750,000 Apples

SEND FOR OUR
ILLUSTRATED
CATALOGUES

The Baby Rambler Rose is the most recent production in the rose line and a perpetual bloomer.

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Going to Have a Big Crop of Fruit

HAT will mean a good thing for you provided you can sell it all at good figures. There's the trouble. A big crop often means a glutted market, low prices and loss to the grower.

Why not work up a sure market of your own? There are scores of grocers and fruit dealers throughout Canada who would be glad to take your fruit at good figures if you can supply them regularly with first-class freshly picked fruit.

You can get to know these people by running a small advertisement in the Fruit Dept. of

The Canadian Grocer

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WRITE FOR A SAMPLE COPY FREE

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MARCHMENT'S Sure Growth COMPOST

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Clear Cypress for Greenhouse Work Mention The Canadian Horticulturist when writing

Items of Interest

The new Process Building at the Canadian National Exhibition will be the centre of interest for those who desire to see machinery in actual operation. The Little Giant Sprayer Co. have secured an excellent position in this building, which will be visited by many fruit

The importance of purchasing only the best breeds of poultry is often seen in the poor success attained by amateur breeders. Our readers will do well to read the advertisement in this issue of The Golden Kennels & Poultry Co., in which they offer many purchased hirds in which they offer many pure-bred birds at very low cash prices.

Classified Advertisements

Advertisements under this heading will be inserted at the rate of ten cents per line, each insertion; minimum charge fifty cents in advance.

L ANDSCAPE GARDENING, PLANS FOR PARKS, cemeteries, public or private grounds. Drawings made to scale. Any gardener may carry them out. Correspondence solicited. Chas. E. WOOLVERTON, Landscape Designer, GRIMSBY.

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PROPERTY FOR SALE—Situated in Lundy's Lane, Township of Stamford, about one mile from city of Niagara Falls. It contains twenty acres, garden and fruit in bearing, in good cultivation. Possession in December. Apply for any information to Mrs. E. J. Law, Niagara Falls South.

SITUATION WANTED—Competent and experienced gardener, for greenhouse or outside, desires permanent employment. Situation on private estate preferred. Good references. Address A. G., care of the HORTICULTURIST, TORONTO, ONT

The fourth annual meeting of the American Apple Growers' Congress will be held at St. Louis, Mo., Aug. 14, 15. Among the speakers is noticed the name of Mr. Alex. McNeill, Chief Fruit Division, Ottawa.

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Windsor SALT

is sold in practically every grocery store in Canadaand is the best.

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Three pens of laying stock for sale, \$15.00, each consisting of eight females and one male; two pens barred Rocks and one pen of white Wyandottes. A good opportunity to acquire a handsome pen for a sum-mer home. High-class young stock for sale. Write for description and prices.

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POROUS AND SMOOTH

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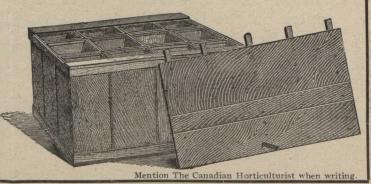
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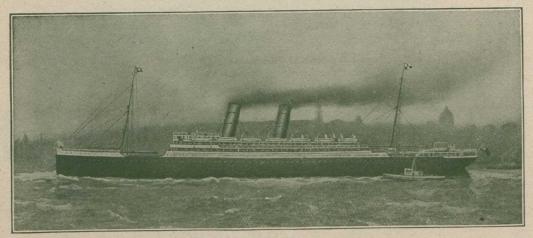
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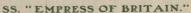
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Fri. "		Fri. "	10	Fri. " 19	Empress of Britain	Fri.	Oct.	5
	1Lake Manitoba	Wed. "	15	Sat. " 27	Lake Champlain	Wed.	"	10
Fri. "	7 Empress of Ireland	Fri. "	24	Fri. Nov. 2	Empress of Ireland	Fri.	"	19
	15 Lake Champlain	Wed. "	29	Sat. " 10	Lake Erie	Wed.	"	24
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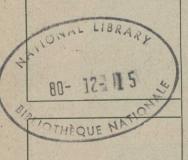
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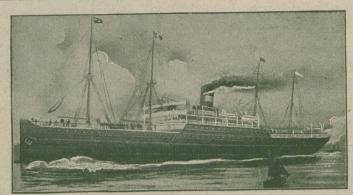
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From Montreal in Summer and St. John, New Brunswick, in Winter the favorite line for fruit and perishables—modern steamers, perfect ventilation—using sirocco fans, cold storage refrigerators

GOOD ACCOMMODATION FOR A LIMITED NUMBER OF CABIN PASSENGERS—RATES BY THE TWIN-SCREW SS. "ATHENIA" \$35.00 TO \$42.50; STEERAGE TO OR FROM GLASGOW \$25.00. OTHER STEAMERS, CABIN ONLY, \$35.00





SS. "ATHENIA," 10,500 Tons, Twin Screw

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From Montreal in Summer and Portland, Maine, in Winter cool air, cold storage, sirocco fans—for butter, cheese, bacon, apples and all perishables, use only this line

FULLEST INFORMATION GIVEN ON APPLICATION. ASK YOUR RAILWAY AGENT, OR

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