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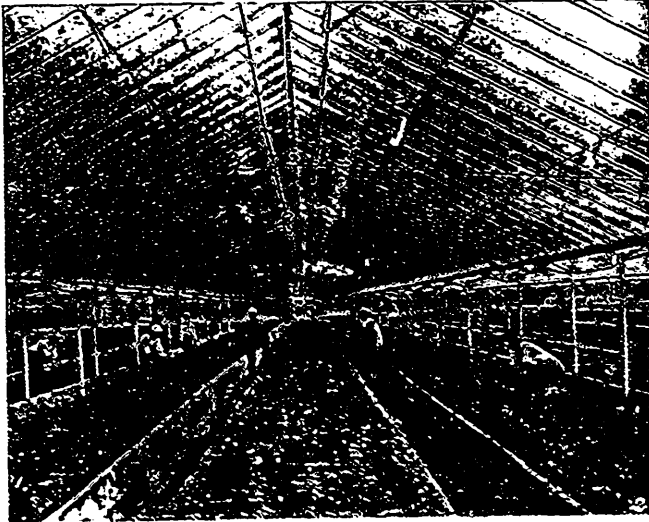
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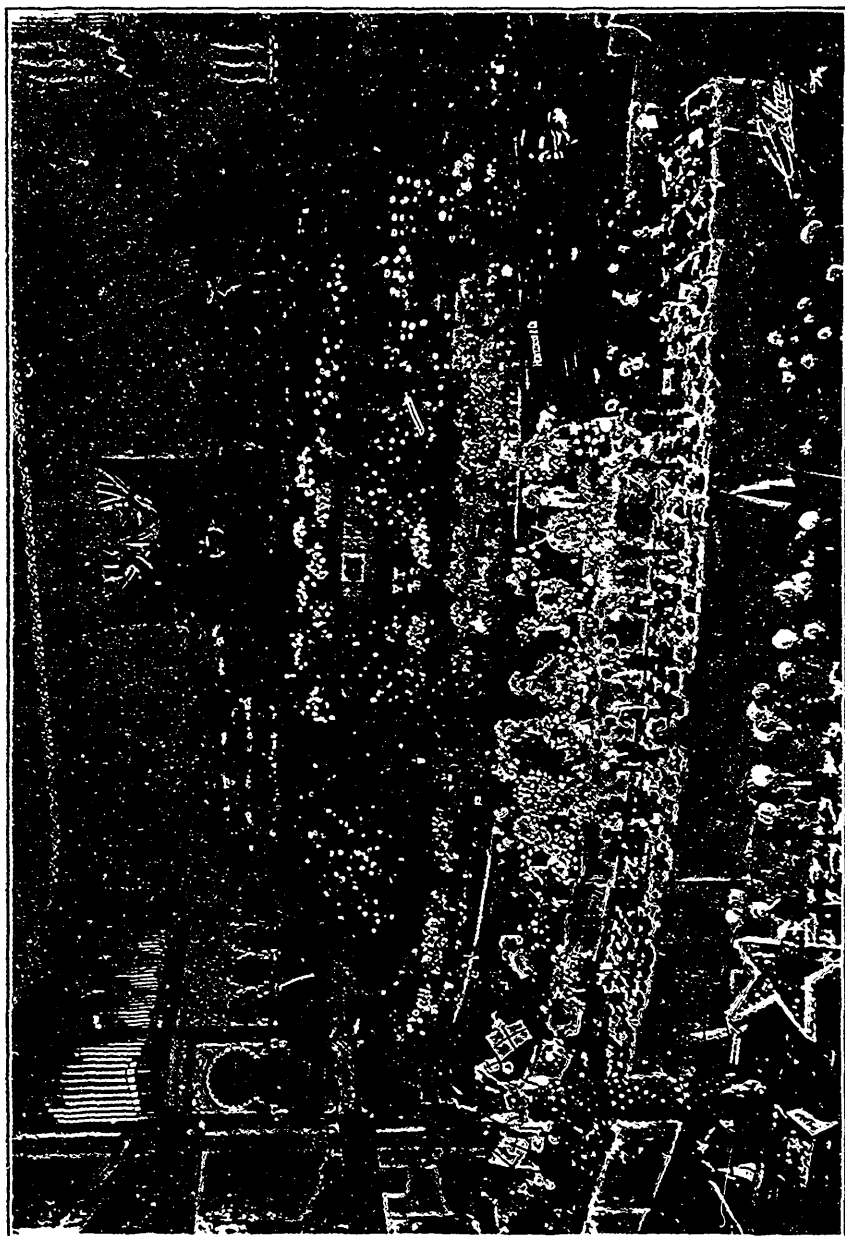
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This Illustration Gives a Slight Idea of One of the Views at the Recent Ontario Horticultural Exhibition

The Canadian Horticulturist

DECEMBER, 1905

VOLUME XXVIII



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THE ONTARIO HORTICULTURAL EXHIBITION

GREAT was the success of the second annual Ontario Horticultural Exhibition held in Massey Hall, Toronto, November 14-18. The total number of entries was more than double the number made last year, and the interest shown in the exhibition was much more marked. This exhibition promises to become an annual event of national importance and will be of great value in advancing the horticultural interests of the country.

The exhibits of fruit were more than twice as numerous as last year and the quality was much superior. It was the best exhibition of the kind ever held in Canada. The display of flowers was a revelation. While the number of entries was but little larger than last year, the character of the blooms was much superior. Experts pronounced it the finest exhibition of flowers ever seen in the Dominion and one of the best ever held on the continent. This year, for the first time, prizes were offered for vegetables, and the results were most gratifying. Over 300 entries were made and the excellent quality of the exhibits and the attractive manner in which they were displayed made this one of the best features. The apiarists maintained the high standard of the exhibition by a very fine display of honey. As a combined show it is doubtful if the exhibition has ever been surpassed by any other ever held on the continent. When it is remembered that this was only the

second attempt the splendid success of the effort will be realized.

The exhibition was formally opened on the afternoon of the first day by Hon. Nelson Monteith, Minister of Agriculture, who showed clearly that he realizes the vast importance of the horticultural interests of the province and that he is anxious to promote them. Speeches were made by Mayor Urquhart, of Toronto; Mr. W. H. Bunting, of St. Catharines; Mr. A. N. Brown, of Wyoming, Del., and by one or two others.

Five conventions were held during the exhibition. Most of them were largely attended and all were important. They included the annual convention of the Ontario Fruit Growers' Association, the first annual convention of the Ontario Vegetable Growers' Association, a pomological convention, a gathering of representatives from the horticultural societies of the province, and the Bee Keepers' convention. Over 300 people holding standard railway certificates attended one or more of these meetings. This is an evidence of the interest taken in them.

GATE RECEIPTS SMALL.

In only one way was the exhibition disappointing. That was in the attendance of the citizens of Toronto. On this account the gate receipts were several hundred dollars less than it was hoped they would be and caused a deficit the directors have since had considerable difficulty in overcoming.

It is expected, however, that every dollar of expense connected with the exhibition will be paid in full without its being necessary for the management to appeal to the government for any further financial assistance. Plans are being laid, already, for a

still larger and better exhibition next year, to which excursions will be run from all parts of the province. A full description of the recent exhibition and an outline of the proceedings at the various conventions is published in this issue.

SPECIAL FEATURES OF THE FRUIT EXHIBITS

THOSE who argue that apple growing in Ontario is on the wane had only to examine the fruit display to have their minds disabused of that thought. The general exhibit of fruit in quantity and quality was something of which every Canadian should feel proud. A marked improvement over last year's attempt was noted in every section, but in the commercial packages the greatest advancement was evidenced.

Mr. P. J. Carey, of Toronto, who judged the boxes and barrels, told *The Horticulturist* that the exhibit was fully three times as large as last year's. He also claimed that the demonstrations given by Mr. Boies, of British Columbia, in the different fruit sections had much to do with the improvement in packing. Last year not more than five per cent. of the exhibits were up to the mark, while this year fully 75 per cent. were in good shape. The chief defect was that the packages were slack. Some growers have not learned to adopt the special system, out of the 60 possible ways, that will give the proper fullness of package. So numerous were the entries and so close the competition it took the judges two days to complete the work.

The county exhibits added greatly to the appearance of the tables and proved valuable from an educational standpoint, while the work that can be accomplished, by forming local organizations, was evidenced by the displays from fruit growers' associations. These and the exhibits from the experiment stations were closely studied by

those who intend setting out young fruit trees.

Perhaps the most surprising feature of the show was the specimens from the Central Experimental Farm, Ottawa. Mr. W. T. Macoun had 115 plates of apples and 20 of grapes. These showed the characteristics of the different sorts, nearly all of which are new or little known. The most promising of a collection of 16, all of Canadian origin, were McIntosh, Scarlet Pippin, Fameuse, Baxter, Canadian Baldwin and LaVictoire. Some Wealthy seedlings showed the variation that is common to seedlings. Crosses made by using McMahon White as female and Scott's Winter as male, also showed vast differences. Some resembled the female in appearance and the male in keeping qualities, while others retained the qualities of the female and acquired external appearances similar to the male. The object of these crosses is to get a hardy variety of good size and quality that will keep all winter.

Of the varieties extensively grown Mr. Macoun recommended Milwaukee, McIntosh and Pewaukee Russet, a new American seedling, as the most hardy for the Ottawa section. Bethel, too, has a good appearance, but is a shy bearer. Many new Russian seedlings show extreme hardiness, but they lack quality. The best are Sklianka, Winter Arabka and Bogdonoff.

To mature grapes in that northerly section the vines have to be laid down and covered with soil. Over 90 varieties matured large bunches of delicious fruit. Brighton,

Vergennes, Lindley and Herbert are among the best.

Useful information was given at the Women's Institute tent, by Misses Shuttleworth and Lillian Gray, in demonstrating the easier methods of putting up fruits. It was explained that there is no necessity for the busy housewife to stand over a hot stove, as almost every kind of fruit can be put up in cold water to advantage. Rhubarb, gooseberries, plums, currants and other fruits were easily done in this way, and may be used at any time during the winter. Tomatoes, when ripe, may be peeled and put in a sealer of cold water and the whole set in a kettle of cold water and heated but not boiled. When done in this way they are excellent for slicing at any time. Competition in jars of apples, strawberries, cherries, pears, apple jelly, etc., between the branches of the Women's Institutes, brought out a fine collection of preserved fruits.

The Ontario Agricultural College, of Guelph, had a collection of insect and fungous diseases, weeds, apples, etc., in charge of Messrs. T. D. Jarvis, B.S.A., of the entomological department, and H. S. Peart, B.S.A., of the horticultural department. Mr. Jarvis had specimens of the common insects and fungi that attack our orchard and garden crops, nicely mounted or bottled; while Mr. Peart had supervision over a collection of 56 varieties of apples from the young orchard at the college.

The Lake Huron Experiment Station was represented by beautifully preserved specimens of berries, currants, and cherries. A special display was made of such varieties of apples as Spy, N. W. Greening, Ribston Pippin, Wealthy, Pewaukee, Grimes' Golden, Russet and Tallman Sweet which are adapted to that section. An exhibit of apples from the Algoma station included Wolfe River, Gideon, Longfield, Alexander and Wealthy, besides some Russian varieties, such as Borsdorf and Winter Arabka.

Simcoe station was represented by some very fine specimens of highly colored Wolfe River. Spy, Salome, Fallawater, Stark, Pewaukee and Peerless, a new variety of great promise, were also well represented. A magnificent collection of currants bottled in formalin, showing branch, leaf, and fruit clusters, made the exhibit from the Burlington station one of the most attractive. The more desirable varieties, such as Mann, Spy, Russet and Baldwin formed showy pyramids. From the St. Lawrence station McIntosh, Scarlet Pippin and Fameuse were most prominent. Trenton station had the largest collection of apples. There were not sufficient tables to place all of them. Ben Davis, Fallawater, Stark, Yellow Bellefleur, Gano, Fameuse, Trenton and a new variety, Coo's River Beauty, were represented by large specimens of fine quality. A general collection made by Secretary Woolverton from all the stations showed the leading dessert varieties, the leading commercial varieties, and undesirable varieties grown in Ontario.

Entries for the county competition were received from 14 counties, but owing to the delay in sending the prize lists and to the varieties not being suited to some of the districts only eight were represented. In Oxford the County Council refused to grant the required sum, but Messrs. Alex. McNeill, of Ottawa, and J. C. Harris, of Ingersoll, put up the necessary fee in order that that county should be represented. Five prizes were awarded. Hastings had the honor of winning first place, with fruit chiefly from the orchards of W. C. Reid and Lewis Miles. Lambton, Ontario, Lincoln and Kent came in the order named for the other prizes.

The St. Catharines Cold Storage Company won the red card for best general collection exhibited by a society or a fruit growers' association. The next best were shown by Norfolk Union Agricultural Society, Chatham Fruit Growers' Association,

Orillia Horticultural Society, and Leamington Horticultural Society, and awards were made in the order named. In this class the Chatham association had a very attractive exhibit, but it lacked variety of specimens and was composed of packages that were of little commercial use.

The display in the general competition comprised varieties representing every section of Ontario where apples are grown. There was a marked difference in the quality of the same variety when grown in different sections. For color, size, and genuine fine quality the specimens shown by Mr. C. W. Challand, of Marburg, Norfolk county, were far superior to any other collection on the tables. His six varieties of winter apples, comprising King, Spitzenberg, Newton Pippin, Greening, Spy and Baldwin were hard to beat. In several classes specimens were shown for size rather than quality. In dessert classes, particularly, judges should be more careful in awarding prizes to large specimens. In Great Britain dessert apples are only called such when less than three inches in diameter. Criticism was offered regarding the placing of three varieties, dessert, fall, or early winter apples. The prize was given to Blenheim, King and Wagener, over beautiful specimens of Fameuse, Wealthy and Scarlet Pippin, that are much more suitable for dessert purposes. A few promising seedlings were exhibited, among them a good cooker by Mr. W. C. Reid, of Belleville.

In commercial packages Mr. Challand's fruit again merited special mention. The majority of the prizes were carried off by Mr. Elmer Lick, of Oshawa; Biggs Fruit and Produce Co., of Burlington; Mr. J. B. Guthrey, of Dixie; Chatham Fruit Growers' Association, and Forest Fruit Growers' Association. Other winners were C. L. Stephens, A. R. Dawson, W. C. Reid, A. D. Harkness, H. Jones, N. Brown and W. M. Robson.

An exhibit made by the Fruit Division, Department of Agriculture, Ottawa, was in charge of Fruit Inspectors Carey and Gifford. A general display of popular packages for the different fruits, packing tables and demonstrations were important features of the show. Mr. Carey presented a handy home-made press, made of a framework of wood and two bands of iron to go over the box. The pressure was supplied by standing on a lever. Some criticism was made of the circle for the ordinary press on the barrel head on account of it being so small that sometimes the head is broken. It was recommended that the circle be made with a wing on either side to catch the edges of the pieces where the grain runs lengthwise.

A collection sent by Mr. Wm. Harris, of Day Mills, Algoma, showed that Pewaukee, Alexander, Duchess, Wealthy, Gideon, Haas and several Russian varieties thrive in that northern section. The fruit display was twice as large as that made last year, and it was of a most valuable educational nature.

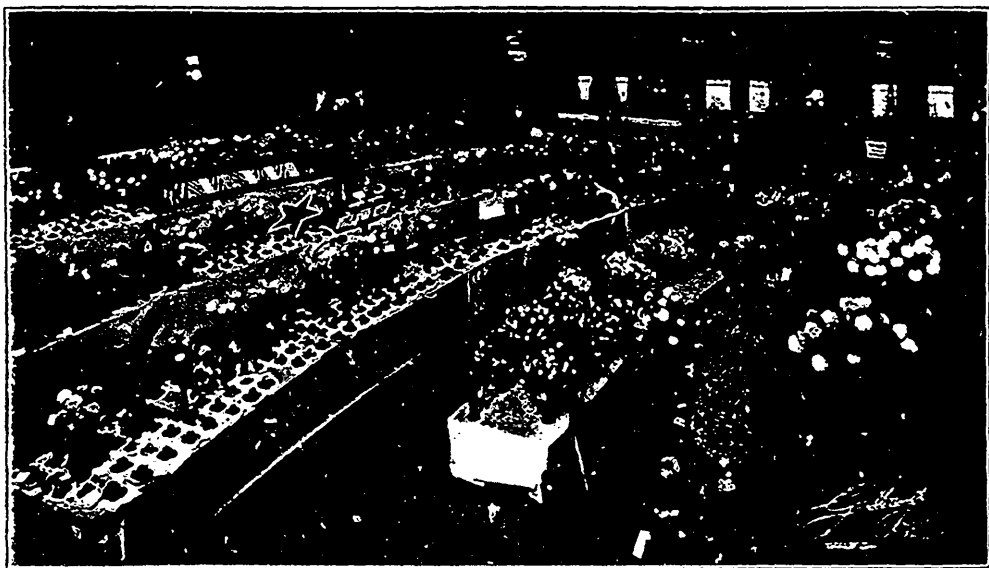
THE FLOWER EXHIBIT A CREDIT TO CANADA

SO magnificent was the sight, as one entered the hall, presented by the display of flowers it called forth an unconscious exclamation of delight. The immense stage was a mass of plants and bloom while most of the tables throughout the hall bore exhibits of beautiful cut flowers.

A framework built high up on the wall at the back of the stage was covered with lovely orchids. Below this was shown banks of palms and chrysanthemums, while along the edge of the platform were displayed exhibits of cyclamen, begonias Glorie de Lorraine, and primulas. Vases of cut chrysan-

themums were also shown on the platform and added greatly to the beauty of the general effect. The chrysanthemum, being queen of the autumn flowers, naturally predominated in the exhibits. This grand flower was shown in various ways. One of the specimens had flowers measuring slightly over one inch in circumference, and

Entries in the carnation classes were numerous, and the competition was keen. Enchantress again won the honor of being the best light pink. Mrs. T. W. Lawson carried off the award offered for the best dark pink. In the red and white sections honors were about evenly divided among the different varieties shown. Some wonderful



A Portion of the Fruit and Floral Exhibits at the Recent Ontario Horticultural Exhibition

brought to mind the plants our grandmothers grew. Blooms that measured 19 inches in circumference were also shown and bore tribute to the wonderful advancement that has been made in the cultivation of this grand flower. Chrysanthemum plants were shown that had but a single flower, while others bore as many as 150 blooms. Those shown by Messrs. Steele, Briggs Company, and Mr. Alex. McHardy, of Toronto, were splendid specimens.

In the rose section every one's favorite, the American Beauty, was the most prominent. The new crimson rose, Richmond, had many admirers, the color, foliage and stem of those shown being as near perfect as could well be desired.

creations of the florists' art were shown in the section for made-up work.

The dining tables set complete for eight persons were a center of attraction. They were judged by Mrs. Mortimer Clark and several society ladies, who decided that the table exhibited by The Rosery, of Toronto, won first prize. The decorations of this table consisted of orchids, lily-of-the-valley, asparagus and Maidenhair ferns. The handsome silverpiece in the center of the table was tastefully arranged with these flowers, and at each plate was placed an orchid button hole bouquet for gentlemen and a corsage display of lily-of-the-valley for the ladies. The settings of this table complete were worth over \$1,500.

The judging was very satisfactorily done

by Mr. Jos. Bennett, of Montreal, who judged the plants and cut chrysanthemums, and by Mr. Robert Flowerday, of Detroit, who decided who should have the awards in the roses, carnation and made-up work. Mr. Flowerday expressed the opinion that Canada has nothing to learn from the United States in the growing or arrange-

ment of flowers. It is unfortunate that the exhibition is held at a time of year when it is impossible for amateur flower growers to take a prominent part. The exhibition, however, was started mainly with the idea of promoting the fruit interests, and the dates of the show have to be arranged accordingly.

VEGETABLE EXHIBIT A SURPRISE

The vegetables were shown in the basement and their attractive appearance and exceptionally fine quality caused many exclamations of surprise. A wide table, running almost the entire width of the basement, had been reserved for these exhibits, but proved too small, with the result that many of the vegetables had to be shown along the floor at the side of the table. Down the center of the table were arranged pots of chrysanthemums in bloom, that added greatly to the general appearance. Altogether there were 306 entries..

The best exhibits were made in the cauliflower, citron, cabbage and onion sections. The first prize Swede turnips were pronounced to be the finest ever exhibited in Toronto. They were shown by Mr. R. J. Taylor, of Brantford. An exhibit of cauliflowers, made by Messrs. McKay, of Doncaster, was far better than any one could expect at this season. Two lots of Brussell's sprouts, shown by Messrs. Brown and Dandridge, of Humber Bay, were of excellent quality and were greatly admired. Messrs. W. Harris, J. G. Brown and J. B. Guthrey captured the cream of the prizes in onions.

Some very fine white plume celery was shown by Mr. T. Benstead, of Strathroy. The winning bunch was the best that has been shown in Toronto for a long time, being splendidly bleached.

A yellow table squash, shown by Mr. R. J. Taylor, of Brantford, attracted general attention, it being of exceptionally fine quality as regards weight in proportion to size. Some larger squash were shown that did not weigh nearly as much. Some salsify, shown by Mr. T. Delworth, of Weston, was of very fine quality.

The two classes that gave the judges the greatest work were the Danvers onions and Paris Golden celery, in each of which there were large exhibits. The prizes offered for artichokes brought out a large exhibit, including specimens of both good and poor quality. Messrs. Rush and Delworth divided the honors.

Inasmuch as this was the first exhibition ever held under the auspices of the Ontario Vegetable Growers' Association, it was felt that the display for a first effort was a most creditable one and that another year it can be greatly improved.

ANNUAL MEETING OF THE FRUIT GROWERS

THE secretary's report, given at the annual meeting of the Ontario Fruit Growers' Association, held in Toronto November 14-16, showed the association to be in a flourishing condition financially and otherwise. The constitution was revised

and officers elected as follows: President, James Scarf, of Woodstock; vice-president, Ed. Morris, of Fonthill; secretary-treasurer, P. W. Hodgetts, of Toronto; directors—Messrs. R. B. Whyte, of Ottawa; A. D. Harkness, of Irena; H. Jones, of Maitland;

W. H. Dempsey, of Trenton; Wm. Rickard, of Newcastle; E. Lick, of Oshawa; M. Pettit, of Winona; E. Morris, of Fonthill; H. H. Groff, of Simcoe; J. L. Hilborn, of Leamington; A. E. Sherrington, of Walkerton; T. H. Race, of Mitchell; G. C. Caston, of Craighurst; W. H. Bunting, of St. Catharines; A. McNeill, of Ottawa; W. T. Macoun, of Ottawa, and Prof. H. L. Hutt, of Guelph.

At the opening session the directors discussed the question of educating the fruit growers by demonstrations and orchard meetings, or any means that would result in a better quality of fruit being produced. Some thought that the horticultural societies should pay more attention to fruit and that growers should be notified when a society in that district was holding a meeting. Others pointed out that societies could not materially benefit fruit growers. The good work done by orchard meetings arranged by Mr. G. A. Putnam, Superintendent of Farmers' Institutes, should not be overlooked, but more of this is needed, and it was suggested that an energetic man, specially interested in fruit growing, be appointed to act with Mr. Putnam to arrange for more frequent meetings and demonstrations. The formation of cooperative associations and the offering of county prizes at exhibitions were considered important features.

The finding of the committee appointed to report on matters connected with *The Canadian Horticulturist* was favorable. In a discussion in regard to *The Horticulturist* the members agreed that the magazine has been greatly improved. The report of the committee was unanimously adopted.

AT THE EVENING SESSION.

Hon. Nelson Monteith, Minister of Agriculture, presided at the evening meeting. In his address as chairman he referred to the change of conditions since the time of Ontario's pioneer settlers when fruit was

considered a luxury to the present when it is a necessity. Farmers were advised to practise intensive rather than extensive farming. The advisability of some recognition being given to those who propagate new varieties was mentioned as a stimulant to thorough investigative and scientific work.

Questions in horticulture were treated by Mr. Alex. McNeill, Chief of the Fruit Division. The best means of fittingly honoring distinguished horticulturists was dealt with. Mr. McNeill suggested that a suitable biographical address, referring to the work of the late Mr. D. C. Beaddle, be put in the annual report of the Fruit Growers' Association. It was recommended that such varieties of apples as McIntosh Red, Ontario and Baxter should have their histories written so that future generations would know their origin, characteristics and qualities.

The good work of the Transportation Committee before the railway commissioners, and the educational value of such shows as the Horticultural Exhibition were referred to. Mr. McNeill said that the past season taught fruit growers that there should be a systematic and regular report made giving the record of crops and results so that the prospects each year might be compared from month to month. This season buyers operated early and profits that should have accrued to the producers went to the dealers. He urged the growers not to sell until the market conditions were known and not to allow false reports, written by incompetent reporters, to influence them. It was pointed out that Ontario growers supply the local markets, but that they must work hard to gain a strong hold in the markets in the Canadian Northwest in competition with British Columbia and the western States, and also, to increase their trade with Great Britain.

Fruit growing in Great Britain was discussed by Mr. W. T. Macoun, of Ottawa.

The system of land tenure does not induce fruit growing on a large scale. Ireland is progressing rapidly, especially in producing cooking apples. Labor is cheap and this means cheap production. Experiments conducted for 12 years with sod and cultivated orchards showed the disadvantages of sod in comparison with the cultivated orchard.

In an enthusiastic address by Mr. A. N. Brown, a practical grower from Wyoming.

Some ideas on plant breeding were given by Mr. H. H. Groff, of Simcoe, who said that new varieties are not secured by gradual development, but that by persistent crossing the type can be broken and a new type established.

REVISION OF THE CONSTITUTION.

On Wednesday, November 15, the revision of the constitution was taken up and the by-laws passed with a few slight changes. A most important change was



A Portion of the Exhibit of the Ontario Fruit Experiment Stations

Delaware, the fruit growers were advised to cooperate as do other professions. Mr. Brown claimed that special attention needs to be given to the marketing of the fruit. The best results come from cooperation in every branch of the industry. By cooperation in Delaware the growers have forced the buyers to come to their orchards and buy their fruit, paying cash, and have induced the railway companies to supply peach trains with fast engines that have the right of way over passenger trains. Special progress has been made, also, in the potato industry by cooperation on the part of the growers.

made that makes it possible for cooperative fruit growers' associations to become affiliated with the Fruit Growers' Association on the payment of 75 cents per member. Branch associations can be formed throughout the province on the same basis. An amendment to have the executive committee to consist of two members appointed by the directors to act with the president, vice-president and secretary, was deemed wise, because a quorum can be secured with less expense and good members can be retained from year to year. Considerable discussion developed over the notice given regarding the annual meeting. It was finally car-

ried that notice should be given through the public press and by circular letter at least two weeks before the annual meeting. Notice of an officers' meeting is to be served 10 days beforehand instead of a week as heretofore. In future a quorum for the transaction of business for the association comprises 10 members, instead of seven as formerly. Another change, that was objected to by some members, was the one that allowed the payment of the expenses of delegates to the annual convention for the whole time the convention is in session. Formerly the delegates were allowed two days' expenses. A strong effort will be made to materially increase the membership through local branch organizations.

Questions in connection with transportation will be looked after by Messrs. Bunting, Thompson, E. D. Smith, W. L. Smith, H. W. Dawson and R. J. Graham. The cooperation committee comprises Messrs. Sherrington, Thompson, Johnson, Ross, Peart and Lick. A committee was appointed to look after the appointing of an expert to direct the work at the experiment stations. Other committees are the New Fruits Committee and the Historical or Biographical Committee.

In the afternoon new ideas in spraying were discussed by Mr. A. N. Brown, of Wyoming, Delaware. Mr. Brown referred to the ravages of the San Jose scale in that state and accounted for its wide spread, during the past season, to the fact that the wet season nullified the effect of the spraying and also to the shade trees and ornamentals being so thickly infested that a new migration to the fruit trees could not be prevented. He claimed that this enemy must be met in the fall, when the larvæ forms are most susceptible, as well as in the spring, if it is to be kept under control. Summer spraying is not effective because the foliage prevents it being done thoroughly. The use of lime sulphur and salt in the

fall had resulted in some trees throwing their buds. For this reason he advised leaving the salt out. Petroleum is harmful, too, in the same way. The safest mixtures known in Delaware are two combination washes, one called Kil-o-scale, and the other Scalecide. The latter is perfectly soluble and costs no more than the lime-sulphur wash. Reports from 21 states say that it is effective.

It was pointed out by Mr. Brown that the ordinary hand pump cannot generate sufficient force to give the desirable mist-like spray. Power pumps are a necessity. Nozzles and sizes of extension rods, too, have much to do with the nature of the spray. The bore of the tube must be large and the friction reduced to a minimum by the absence of angles. With proper care and feeding of the soil quality can be put into fruit just as well as into an animal.

THE MINISTER OF AGRICULTURE.

Hon. Sydney Fisher referred to the prevention of the spread of the San Jose Scale by close inspection and fumigation of nursery stock. Reasons were given for placing the chief of the fruit division under the dairy commissioner. The perfect organization of those engaged in fruit growing in California and the consequent satisfactory state of the fruit trade of that country were cited, and the farmers were advised to work harmoniously and cooperatively so that high grade fruit may be produced. This fruit should be put up in a uniform attractive package. With proper methods of packing and handling Ontario growers should capture a large percentage of the trade in the west. The Fruit Marks Act has been leniently enforced in the past, but the growers and packers know what is wanted and in future it will be strictly enforced.

In the report of the new fruits committee Prof. H. L. Hutt, of the O. A. C., Guelph, said that promising seedlings are found from time to time, but perfection has not

yet been reached. Four new seedlings from Gravenhurst were promising. One was a seedling from Duchess but had better keeping qualities. Another, of the Wealthy type, was a prolific bearer when young, and kept well on into the winter months. A seedling from a Guelph garden was of the Colvert type but the fruit was of longer season. A seedling peach from

thorough test is given before any new varieties are recommended.

Mr. Norman Jack, of Chateauguay Basin, Quebec, the Quebec Pomological Society representative, told of the advancement made in spraying and in methods of picking, packing and transportation. He said that no hard and fast rules can be laid down regarding cultivation, as much depends on the season.



P. W. Hodgetts. B.S.A., Secretary Ontario Fruit Growers' Association.

Hamilton, of Crawford type, was no better than many standard varieties. Mr. Wm. Orr, of Fruitland, sent a seedling peach that was large and free-stoned. It was of fine quality and superior to any of its season, the second or third week in October. At the Central Experimental Farm, Ottawa, Mr. W. T. Macoun has been crossing with the object of obtaining a variety with quality as high as McIntosh that will keep all winter. It takes time, however, and a

BENEFITS OF COOPERATION.

The members of the cooperative committee then gave their report on the season's work. It was clearly shown that the cooperative organizations have come to stay and that the growers in the different sections realize that it is the most satisfactory way to handle the crop. Mr. Sherrington referred to the advantage to be gained by having the apple crop packed and marketed through the local associations and regretted that in many sections where organization had been effected there was no fruit to do business with. In most cases the members of the association pick their own crop and take the fruit to a central packing house where it is graded into firsts, seconds and culls. Some growers said that such associations could never be formed in their sections because the farmers would not, or could not, find time to harvest the crop.

"The Burlington Association," explained Mr. A. W. Peart, "works on a different basis. Each member picks and grades his own fruit and his name and address is branded on each box, together with a common brand for the association. All the fruit has been handled in boxes for 15 years. A manager is appointed and paid according to the number of boxes handled."

That barrels can be obtained at a much lower cost than formerly was shown by Mr. D. Johnson, of the Forest Association. That association employs a cooper and obtained barrels for this year's crop at 28

cents. When the association was formed, the growers used to grade and pack their own fruit, but it was found that every grower had a distinct idea as to what were XXX and what XX. Now they have 75 members and the fruit is brought to a central packing house. Much missionary work in the line of spraying has been done through this association with good results.

Mr. W. D. A. Ross, of the Chatham as-

sociation, reported that individual packing was unsatisfactory and that for four years their fruit had been brought to a central packing house. Cooperative power spraying is done and the cost of the spraying deducted from the returns for the fruit. Good results have been secured this season from sales to Glasgow, f. o. b. at Chatham.

The remaining sessions will be reported in our next issue.

WHAT THE VEGETABLE GROWERS DID

THE convention of vegetable growers, the first held under the auspices of the recently formed Ontario Vegetable Growers' Association, was not largely attended, but great interest was shown in the papers and discussions. Two of the most interesting addresses were those given by Mr. A. McMeans, of Brantford, on the Cultivation and Marketing of Cauliflowers, and by Mr. J. L. Hilborn, of Leamington, on Growing Vegetables for the Early Markets. Extracts from both of these addresses are published in this issue.

A paper by Prof. R. Harcourt, of Guelph, on Fertilizers for Vegetable Growers, was read by Prof. F. T. Shutt, of the Central Experimental Farm, Ottawa, who on its conclusion answered many questions asked by the growers. An extract from this paper appears on another page. Prof. Zavitz, of Guelph, gave a most instructive talk on the results of experiments he has conducted, at

the college, in the growing of potatoes. These experiments had for their object the ascertaining of the best size of potato to plant for profit, the depth at which potatoes should be planted, the distance apart for planting to give the best results, etc. A summary of the results will be published in *The Horticulturist*.

Mr. W. T. Macoun, of the Central Experimental Farm, Ottawa, described experiments that have been conducted at the farm in Ottawa, in the growing of vegetables. Prof. T. D. Jarvis, of Guelph, dealt with Injurious Insects that Affect Vegetables. A brief talk that was fully appreciated was given by Mr. A. N. Brown, of Wyoming, Del. Short addresses were also given by Prof. F. C. Harrison and Mr. H. S. Peart, of the Agricultural College at Guelph. After each address scores of questions were asked the speakers and the value of the convention greatly increased.

FRUIT GROWERS AND THE TARIFF

A COMMITTEE representing the Ontario Fruit Growers' Association appeared before the tariff commission on November 17 and asked that no reduction be made in the duty on fruits imported into Canada. It was suggested that a decrease in the tariff on sugar would be in the interests of the fruit industry. The committee consisted of Messrs. W. H. Bunting, of St.

Catharines; A. W. Peart, of Burlington; Robt. Thompson, of St. Catharines; D. Johnson, of Forest, and T. H. Race, of Mitchell.

The decision to have a deputation wait on the commission was precipitated by an address delivered at the fruit growers' convention by Mr. W. L. Smith, of *The Weekly Sun*, and by an announcement made during

the discussion that followed that Toronto dealers had asked that the tariff on fruits be reduced.

Mr. Smith urged the fruit growers not to cut themselves loose from the sympathies of those engaged in mixed farming by endeavoring to have the tariff increased, and pointed out that the agricultural population should work together. Each year finds so much more exported from Canada than is imported that the foreign market governs the price. He claimed that as far as fruit growing is concerned it is impossible to increase the selling price by increasing the protection. There are few American fruits that come into competition with the Canadian product, and if the home-grown crop is handled in as careful a manner as the fruit from the States, Canadian growers will be able to balance up later in the season. The tender fruits from the States come when we have none, and as soon as the home crop is ripe the imported goods are not wanted because the quality is inferior.

According to Mr. Smith, a high tariff increases the price of what is to be bought without increasing the value of what is being sold. He cited the case of baskets. Less than three years ago logs were taken across the line, made into baskets, which were shipped back and sold at a lower price than Canadian manufacturers charged, despite the fact that duty had to be paid. One man in the St. Catharines district was \$300 out of pocket on account of the duty on the baskets.

It was pointed out that an export trade is required for our canned goods. To get this trade it will be necessary to reduce the cost of production. A reduction in the price would, also, increase home consumption. The tariff on sugar hinders the development of this industry. The cost of sugar used in canning amounts to one-third the total cost of the goods. Under a reasonable tariff sugar would be much cheaper.

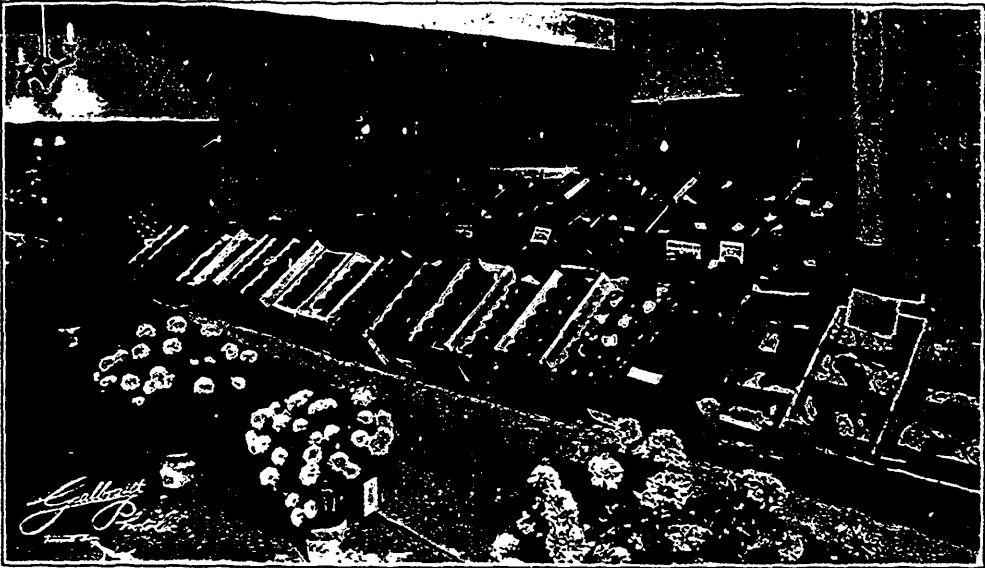
Statistics from the sugar making countries in the south show that the raw sugar can be produced at one and one-half cents a pound. At that price over \$100 an acre can be realized from the land devoted to sugar cane. There is no reason why refined sugar should not retail at three cents, or slightly more. The encouragement of the beet sugar industry in Canada was termed a misfortune, as it cannot prove a success unless under a high tariff or a high bounty.

Mr. Smith concluded by impressing on the growers the fact that a decrease in the price of sugar would cause more fruit to be preserved and canned and stimulate the demand for fruit, which is a health-giving food. He urged that it is not possible to increase the price obtained for fruit by putting the tariff wall higher, but that such action merely imposes a burden on the consumers.

In the discussion Mr. H. Dawson, commission dealer, of Toronto, claimed that it is well to have the consumers acquire the habit of eating our tender fruits before the home crop is ready for market. He pointed out that our chief imports of fruit and vegetables are made in June and July, and that our exports are 1,000 per cent. more than our imports. The fact that the year of low tariff was the year strawberries were cheapest was referred to, and it was noted that low prices mean enormous consumption. Better transportation facilities were mentioned as being more desirable than increased tariff.

Mr. J. L. Hilborn, of Leamington, thought the tariff should be such that it would help to even up for the duty paid on certain implements that have to be used by fruit growers.

It was suggested by Mr. W. Armstrong, of Queenston, that if it could be arranged to admit American products free up to a certain date and shut them out after Canadian fruit is ready for sale that the Cana-



A Corner in the Basement Where the Commercial Fruit Packages Were Shown.

dian grower would benefit as a result.

Mr. Jos. Rush, of Humber Bay, claimed that only the doctors benefit by the importation of this American "stuff." As long as only good products are sent we can compete, but our prices have to be in keeping with the quality of our fruit, and the majority of consumers take the cheaper goods from the States.

"If we have a surplus of fruit to send out," said Mr. W. H. Bunting, of St. Catharines, "we find a wall practically prohibitive, and if we wish to buy implements we are again at a serious disadvantage. Besides, climatic conditions are against Canadian producers. Our seasons are short and the winters severe. A producer may succeed when hampered by one drawback, but three are too many."

Mr. Jos. Tweddle, of Fruitland, referred to the loss annually owing to the difficulty of getting labor. He claimed that the protection afforded manufacturers made it possible for them to pay high wages and keep the laboring men away from the farmers.

Mr. Caston, of Craighurst, claimed that considerable money could be made out of some varieties of apples by shipping them to the northern states where it was not for the duty.

While the discussion was going on it was reported that local fruit dealers had been before the tariff commission, which was sitting in Toronto, and had asked for a reduction in the duty on American fruits coming into Canada because these importations did not injure sales from Canadian producers whose fruit was not ripe when the foreign stock arrived.

The fruit growers were unanimous in adopting a resolution that the duty should not be reduced, and a committee was appointed to lay the facts before the tariff commission. This ended the discussion.

THE CASE PRESENTED.

On the Friday evening following this discussion the deputation from the association laid its case before the commission. Mr. Bunting, in introducing the deputation, read the following resolution: "That we,

the committee appointed by the Ontario Fruit Growers' Association, in convention assembled, would respectfully urge upon the tariff commission that it would not be in the interests of the fruit industry of Canada if any reduction should be made in the

duties on fruits coming into this country. That, while the fruit growers do not ask for an increase in the tariff on imported fruits, they would request that wherever possible specific be substituted for ad valorem duties."

(Continued on page 486.)

RASPBERRY CULTURE

RASPBERRIES and Their Culture was the subject of an entertaining talk by Mr. A. E. Sherrington, of Walkerton, at one of the sessions of the pomological convention. Many valuable points were brought up by Mr. Sherrington in the discussion that followed. Many varieties have been tested by Mr. Sherrington, who recommends Herbert, Marlboro and Cuthbert as being the most suitable varieties for his section of the province. The recommended varieties vary slightly from year to year because different conditions suit different sorts, and new ones are being experimented with each season. The Herbert is one of the seedlings from the collection of Mr. R. B. Whyte, of Ottawa. During the past season it has given excellent results. The first fruit was picked July 17 and the last August 11. In that time 565 ounces were taken off a 20-foot row. The quality was fine and it has proved to be a good shipper. The Cuthbert, however, was placed as the great standard variety, although outclassed in yield. The first fruit was harvested July 19, and 347 ounces were picked by August 14, when the crop was done. It is hardy and a vigorous grower, and in great demand in all sections.

Marlboro was found to be a shy bearer and to produce a dry crumbly fruit, lacking in quality. In 29 days from July 13 the crop harvested was 330 ounces. Turner came in July 11 and yielded only 257 ounces. On July 13 the first Phoenix were picked, and by August 14 the crop harvested amounted to 380 ounces. The fruit is

small, but as a rule there is a heavy yield of good quality.

Black raspberries have been a comparative failure recently owing to the work of anthracnose. Hilborn was the hardiest and best. Conrath comes in earlier, but is not so hardy. Older was perfectly hardy, but is not recommended because the fruit is shiny black and the demand is not so brisk when the characteristic bloom is lacking. It, also, has a very short period of ripening. During the past season the crop was taken off in four pickings, from July 18 to August 1, and six plants yielded 161 ounces. The quality is not good.

Growers were advised not to set out hybrid bushes, as there is no commercial demand. Golden Queen was a very good variety, but is not needed. The same is true of such purple sorts as Columbian and Schaffer. The Columbian is the hardier, but not of such good quality.

It is necessary to have the ground thoroughly cultivated and perfectly free from grass before setting out the plantation. Cultivation and fertilization are the two main factors in having a good crop. Spring planting was recommended as being much ahead of fall planting. It is always best to have the plants set deeply because the roots are surface feeders and they should be kept down as low as possible. The most approved method is to make a furrow with the plow and then turn out another along the same bottom. The bushes can be set in this trench and the roots covered well.

Rows six feet apart give good satisfac-

tion. The suckers are allowed to spread until a hedge-row is formed 30 to 36 inches wide. A space of three feet is maintained between the rows. This system is convenient for working with a horse cultivator, and specially adapted to growing between the orchard trees. A suitable arrangement is three rows of berries with the outside rows nine feet from the trees. When the orchard rows are 30 feet apart this gives satisfaction.

FERTILIZERS.

A fruit plantation needs plenty of fertilizers. Some growers rely solely on the commercial fertilizers. It is true that this avoids weed seeds, but it also results in a deficiency of humus and a compact surface soil. Wood ashes and barnyard manure, at least every two years, keeps the soil in good condition if sufficient cultivating is done. Shallow cultivation is best. Mr. Sherrington used the plow in his plantation one season and ruined the whole patch. The roots gradually come near the surface and plowing cuts the roots that supply the nourishment. A one-horse cultivator, that works the ground up two or three inches,

used once a week, or oftener in dry weather, was recommended.

PRUNING.

No summer pruning is done in Mr. Sherrington's orchard, as such practise causes late laterals and numerous suckers. If there is time all the old wood is taken out in the fall; if not, this work is done in the spring after the fruit trees have been pruned. At the latter time, also, the canes are cut back. Great judgment is required in the distance to cut back. In some cases the canes have made rank growth. If there is a sufficient number of buds low down the canes can be cut back much more severely than if the buds are higher up. All canes that are damaged by frosts are removed. The canes are thinned out, leaving the strongest ones four to six inches apart.

From following such methods satisfactory results were obtained during the past season. From 23 rows, 300 feet long, in a young apple orchard, about 3,600 boxes were harvested, and the returns netted seven cents a box. According to Mr. Sherrington, a good yield is 3,000 to 4,000 boxes from an acre.

THE CURRANT PLANTATION

SEVERAL years' experience in the culture of currants have resulted in Mr. A. W. Peart, of Burlington, being classed as an expert in the growing of that class of fruit. Experiments have been carried on by him at the Burlington station, and the members of the Fruit Growers' Association were given the benefit of his work along that line in an interesting paper presented at the annual convention of the Fruit Growers' Association last month.

THE BEST SOIL.

After years of testing, Mr. Peart has concluded that a rich, moist, cool soil gives best results. In case the soil is very fertile satisfactory returns can be had among the

orchard trees. When the bushes are shaded there is not the liability to scald that is found in the open, especially with the red varieties.

Better results are obtained from wide planting. The distance apart depends on the variety. As a rule the reds may go closer than the blacks. For the average plantation 6 x 6 or 6 x 7 is advisable. Fall planting should never be practised unless the soil is naturally well drained. If the land is low and wet the plants heave and are found lying on the surface in the spring because they had not time to become established before winter caused the growth to cease.

Mr. Peart usually prunes the bushes in the spring, but does not object to fall pruning if there is time. March is the best month. The old wood is cut out and the strong young shoots cut back, leaving sufficient canes to give a good crop. All wood over three years should be removed, and if the bushes are making vigorous growth the three-year-old wood may go, too. The reds bear on previous year's wood, but the blacks do not. For this reason the blacks cannot be cut back so closely. The bush form is recommended rather than the tree form, where the currant borer is found, because in the tree form, if the borers attack one stem, the whole bush is lost.

The varieties were classed as desirable, doubtful, and undesirable. The sorts placed under these headings are found to differ greatly from year to year. Among the red currants there are two classes of bushes, one of which has a much darker foliage than the other. The lighter green ones are the more rugged. The varieties of reds recommended are Cherry, Wilder, Prince Albert, North Star and Fay's Prolific. Naples, Saunders, Lee's Prolific and Collins' Prolific give best results among the black varieties tested. Undesirable red currants include Belle de St. Giles. The

berry is large, but the bushes are unproductive. Brayley and Versailles are also undesirable. Among the whites the White Grape is productive, but White Imperial is highest in quality.

For some time there was a poor demand and correspondingly low prices for currants. This last year or two, however, has seen a change, and many growers have realized encouraging profits. With ordinary planting 1,200 bushes can be set on an acre. These easily average three quarts a bush, which gives 3,600 quarts of fruit from an acre. Recent prices have netted over three cents a quart after paying for packages and picking.

In the discussion that followed the presentation of Mr. Peart's paper, Mr. Joseph Tweddle, of Fruitland, said that there was a tendency to plant currants too close. One of his plantations was planted 6 x 4. Bushes have been removed until they are wide enough apart to permit work being done among them with a team, and he realizes three times the crop.

In reply to questions, Mr. Peart said that a plantation should be profitable for about 10 years. Rich soil is claimed to produce a rank growth that is liable to be killed back during the hardships of winter.

WINTER CARE OF DORMANT PLANTS, BULBS AND TUBERS*

WM. HUNT, O. A. C., GUELPH, ONT.

THE care of the numerous varieties of plants, bulbs and tubers, that add so much to the beauty of home surroundings in the summer time, and that require a period of rest or partial rest during our long winters, is one that presents many very difficult problems to the plant lover. The unattractive appearance of plant life when in a dormant condition often tends to induce even the most enthusiastic plant lover to forget

sometimes the absolute necessity there is to still apply a small portion of the care we are so willing to give these plants when they are resplendent in all their summer beauty. Too often, also, our attention is so much taken up with the care of the winter flowering plants or bulbs that we forget our now dull and dingy looking summer friends and leave them to take care of themselves.

A little wholesome neglect is sometimes

* Extract from an address delivered at the convention of delegates from horticultural societies held last month at the time of the Ontario Horticultural Exhibition.

beneficial to plant life, but when it comes to utter neglect and carelessness, even to plants in a resting condition, sorrowful regret at the loss of our summer favorites is the inevitable result of our inattention. Lack of knowledge as to the requirements of plants when taking their winter season of rest, is another factor that is accountable, oftentimes, for failure in wintering-over plants. Possibly there is no one phase or period of cultivated plant life that is less understood or that information is more eagerly sought for by plant lovers than this resting period. A lower temperature and a less bountiful supply of water, or the withholding of water altogether in some instances, are the principal factors in inducing rest or partial rest in plant life. How much or how little of these factors to give or to withhold from the plants is the great problem to solve.

POT HYDRANGEAS.

These plants are of Japanese origin, and are of a deciduous or leaf-shedding nature. Towards autumn, when the blooms have become rusty looking, the plants should be watered less frequently than in the summer until the leaves show signs of decay, when only sufficient water should be given them so as to keep the soil barely moist.

Keep the plants outside in the open until they have been exposed to five or six degrees of frost a few times, when before severe frost the plants can be lifted underneath the veranda or into a shed for a time before being put into the cellar, basement, or a cold room for the winter. A rather moist cellar with a temperature of 40 to 45 degrees will suit the hydrangea. If the atmosphere of the cellar is very dry or furnace heated, wrap the branches of the plants in several thicknesses of burlap or coarse sacking, tea matting, or similar material.

Sprinkle the wrapping about once a week with water. This will keep the wood or growth of the plant from shrivelling, an es-

sential point in wintering over the hydrangeas successfully. Laying the plants down in a box and covering with dead leaves is a very good plan in a dry cellar, but watch out for mice, or they will soon ruin the plants underneath the leaves. I have found excelsior wood-packing fibre, or even fine shavings, a good substitute for leaves and not so likely to attract mice.

FUCHSIAS.

These require very much the same treatment as the hydrangea, but the tender cultivated varieties of these plants will not endure as much frost as will the hydrangea, although two or three degrees of frost will not injure them materially. A moist atmosphere in a cellar where a temperature of 45 degrees prevails will suit fuchsias when resting. The soil in the pots of both hydrangeas and fuchsias should never become dust dry even in a low temperature.

UNCOMMON SHRUBS.

Amongst the evergreen shrubs that can be used very effectively for out-door decoration purposes in summer time and that are seldom seen here, although very common in England and Europe, are the Ancubas, the Myrtle, Japanese Euonymus, Lauristinus, and the Bay Tree. All of these require very similar treatment to the oleander in winter. The mistake is too often made of treating specimens of these evergreen plants in the same way as deciduous plants are treated. Keep all of the plants just named in a temperature of 45 to 50 degrees, avoiding by all means a dry furnace-heated atmosphere. Better a cool damp root cellar for them where there is some light and the temperature near to freezing point all winter than in a dry arid atmosphere. All of these plants are becoming popular for summer and winter decorative purposes.

In giving the temperature and other requirements of the plants I have been speaking of, conditions and temperatures have been named that can usually be found

around every home, rather than conditions not usually attainable by amateur plant growers, such as a cool greenhouse or underneath greenhouse benches.

Always endeavor to ascertain the conditions that surround the plants you are growing where they are found growing naturally, and then give them as nearly as possible the

same conditions, when they are in a resting condition, as well as when they are in a growing state. The natural conditions and surroundings pertaining to plant life may be moderated or intensified oftentimes, but to diametrically oppose these conditions, as is sometimes done, means disappointment and failure will inevitably ensue.

EVERGREENS

DAVID Z. MORRIS, BROWN'S NURSERIES, ONT.

WHEN all the other leaved friends of our lawns and roadsides have deserted us, and the chill winds of winter blow, we have but the evergreen to remind us of their departed beauty. When this class of trees is mentioned most people think only of the commonest sort of conifers—the Norway Spruce—and it is only of comparatively recent years in this country that the more rare and beautiful varieties have come into popularity; and the endless possible combinations both of themselves and with deciduous trees have come to be appreciated.

Their use has long been quite general in European gardens and nurseries, which difference may, to some extent, have been due to the milder climate, and the popular idea here that their culture in our rigorous rugged zone was out of the question. The writer can recall no more perfect specimens of a large range of varieties of evergreens than that to be seen at the experimental station in Ottawa.

The best results depend very largely on

judicious handling of the young stock from the minute it is taken out of the nursery soil till it is again firmly planted in mother-earth. No class of trees is more susceptible to cold, or drying winds, and for this reason they should be carefully protected



Evergreens in the Arboretum at the Experimental Farm, Ottawa.

from exposure of any kind. The roots should be dipped in a puddle of clay and carefully burlapped for shipment. Spring planting, rather later than other classes of ornamentals, seems to succeed best. Much also depends on the nature of the soil, a sandy loam being best adapted to their rapid and luxuriant growth. When setting out,

a judicious amount of water will help to revive the plant, but even this may be easily overdone and result in a mistaken kindness, for the soil must not be kept wet and soggy. When grown in a mucky nursery soil, it is best to handle the choice varieties with a ball of earth secured in burlap.

The selection of a somewhat protected spot is very desirable, especially in the case of the more delicate varieties, such as the junipers, retinosporas, and taxus. Exposure to severe, or constant winds, will prove injurious to these.

The most effective, pleasing, and lasting results in the planting of evergreens may be had by judiciously grouping them, with reference to their contrasting colors and shapes, at the same time distributing these groups over your grounds so that they may be as suggested—effective in winter when the field is all their own. The tall spindling junipers, grouped with spreading, heavy-growing spruce or hemlock; the feathery silvery or golden retinosporas, together with the squatty-growing *Juniperus Canadensis*; backed up by a few leafy Balsam Fir, breaking the sky line—what combination of ornamental trees could be more effective, either contrasted with deciduous growths or standing out against the snow covered ground and the leafless branches outlined in white.

The long list of quite hardy conifers makes it possible for one to assemble specimens that cannot fail to interest and instruct students and admirers of fine ornamental plantings, just as a collection of paintings or other works of art, and is an unending pleasure to the owner as well as to all beholders.

Among the spruce the Norway is always with us. The Douglas and Hemlock of feathery structure, and the Colorado Blue are among the most hardy and attractive. The Nordman and Concolor, of the Silver Fir class, are hardy and distinct, and should

be prominent in every collection where sufficient room is afforded for majestic specimens.

Junipers seem to demand more care than any other class of evergreens, though when once established many of them are quite rugged. The Irish we all know. Then these in the Alpena Nana—low-branched and spreading in habit; the Virginiana or Red Cedar; and the Sabina, of dwarf growth, and also the beautiful golden and silver Japan, will lend life and variety to any mass of foliage.

Of the pines the Austrian and Pondorosa stand out in the open and alone. The Scotch, the White, and the low-down Mugho pines are equally desirable, but of slower and more moderate growth.

The yews comprise many unique and beautiful varieties, but they verge on the tender class and should, if planted, have some protection from wind and alternate freezing and thawing. This is a point that seems not to be appreciated by many. That is: that if a plant is so situated that it may remain frozen throughout the winter until the opening of spring, it will survive, whereas if the warm sun can occasionally strike the bark and the frost partly come out repeatedly, the result will be a loss. This is particularly true of evergreens and rhododendrons.

The arbor-vitae form a class specially valuable on account of their dense growth and hardiness for hedging or screens, though many of these are quite showy as single specimens. Among the former, of course, is the Occidentalis or American. Of the latter class *Pyramidalis*, *Globosa* and Hovey's Golden and Tom Thumb are quite hardy, and should be given a place.

Some of the retinosporas will, with slight protection until well established, endure our southern and middle Ontario winters, and on account of their peculiar beauty and effectiveness are well worth the trouble. The

hardier varieties are *Aurea* and *Argentea*. To make a complete and attractive planting, as well as an economical and lasting result,

the evergreen is just as essential as the perennial or the deciduous class, and may be truly said to be a joy forever.

WATERING HOUSE PLANTS

ALMOST everyone is anxious to have some plants in the windows or on centre tables, and very few homes can be found without some geraniums, fuchsias, begonias or other common plants. Palms, ferns, rubber plants, etc., too, are becoming common. Many plant lovers, however, lose several fine specimens each season from various causes. In many cases failure is due to injudicious watering. Some enthusiasts are too lavish with water, while others allow the plants to become too dry.

The professional florists exercise great care in supplying their plants with water. They have learned from experience how essential to success judicious watering is. While talking to a representative of *The Horticulturist* recently Mr. Thos. Manton, of Eglinton, one of Ontario's best known florists, said: "There can be no fixed rule laid down for watering plants. In dry,

warm weather they need twice as much as when the air is cool. The best way to learn whether water is required or not is to rap on the side of the pot. If there is a hollow sound the soil is too dry. A thorough watering should be given or none at all. I always add water until it begins to run out at the bottom of the pot. If the pot sits in a saucer or jardiniere all the water that runs through should be thrown out. Stagnant water is very injurious to any plant. It is well to put a handful of gravel in the bottom of the jardiniere so that in case some water does run through the flower pot does not sit in it.

"Great care must be exercised in the fall when fires are first started, and again in the spring when warm weather allows fires to be dispensed with. After fires are started much more water is needed. In the spring the quantity can be decreased."

GREENS FOR CHRISTMAS

C. B. M.

THE same apparent cheer is never in the household as strongly as at the Christmas time, and any evidences that may be displayed along that line, in the way of decorations, are always welcome. Many new and novel decorations for table use and window wreaths are looked for, and the following may be of use or offer some timely hints.

Holly, mistletoe and evergreens enter largely into the Christmas decorations, and of late years potted plants and cut flowers as well are fast becoming popular. The fern dish lends itself well for centerpiece table decoration. Filled with sprigs of holly covered with the red berries, and

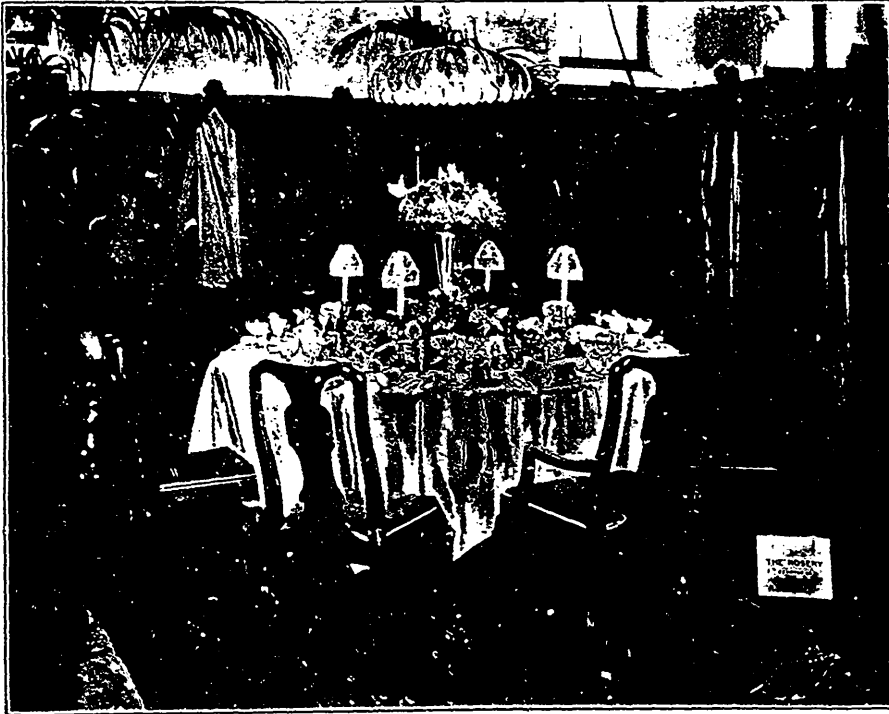
placed on a round mirror, surrounded with arbor-vitae or other Christmas green, it makes a simple but effective centerpiece for the table. Any well formed, not too tall fern, or palm, placed in a pot covered with scarlet crepe paper, finished off with a band of red satin ribbon and smart bow, makes a pleasing addition to any table. The pot thus decorated may be placed on a round mat of moss or bank of holly.

Another pleasing variation is found in a large, low, white basket, filled with red roses, the handle of which is tied with a large scarlet bow having a bright sprig of holly thrust through its loops. Distribute the roses among the guests after dinner.

A hollow, six-pointed star may be made of tin and filled with holly and mistletoe. At each point of the star, place a silver candlestick holding a wax candle, covered with a red paper shade. The red crepe paper bells, easily secured from the local florist at a small price, are also, used extensively to hang over the table. They may be suspended from the light over head. The bells, of different sizes, hung with red streamers, may be used in the archway between the large hall and living room. They make a very effective decoration when the rooms are thrown together for entertainment. Large bows of red satin ribbon may be artistically tied and placed at the opposite corners of a table, and small sprigs of holly, laid at intervals on the table, mixed in with the ribbon and a dashing centerpiece of

holly, make a pleasing and easily arranged decoration. The long strips of arbor-vitae will readily adapt themselves to almost any decoration that may be required and make a beautiful showing when mixed with the red of the holly.

Nearly every one has a different idea regarding the decoration of the Christmas tree, that all-important event in a household, and these ideas have to be governed according to the circumstances and means available in each individual household. Strings of popcorn, tinsel, little candles, apples and oranges hung on the boughs of the trees, with the lace cornucopias filled with tiny candies and popcorn, all have had their place from time immemorial and will continue to do so as long as Christmas trees are in vogue, which will be always. Tufts of



The Table That Won First Prize in the Decorated Table Competition

The decorated tables at the Ontario Horticultural Exhibition attracted a great deal of attention. The fittings of this table, which was shown by The Rosery, of Toronto, were worth over \$1500. A description of the table is published in this issue.

cotton sprinkled with mica or coarse salt (which is cheaper by far and more satisfactory) are often used to represent snow, and if the trees are to be lighted with the candles the effect is more pleasing to the small folks.

Wreaths of Christmas greens are still seen in the windows of rich and poor alike for many days before and after the all-important day which they are to celebrate. The fashion, if such it may be called, is in some localities on the wane, but it is still popular in many sections. Many persons decorate these wreaths with large scarlet bows which, if deftly tied and of the right kind of ribbon, add much to the decoration.

There are many ways of tying these bows. For a wreath of evergreen, which is less expensive than one of holly, much more trimming may be used. The ribbon chosen for the purpose should be the exact shade, or as near as possible, to that of the holly berry. The soft louisine ribbon is the easiest to manage and produces the most graceful effect when tied. A large bow of two loops and one end, placed at the top of the wreath, and extending in one piece of ribbon, over

to about an angle of 45 degrees, where it ends in another similar bow, is perhaps a novel way of tying. A large bow of four or five loops and two ends of the same length, tied to the lower part of the wreath and let hang in their own way, and a round bow of five or six shorter loops, with two ends, one to each side of the wreath, are each in themselves well adapted for evergreen wreaths. One medium sized bow for a holly wreath is sufficient. It is easier and more satisfactory to fasten the ribbon to the wreaths after the bows are made, sewing them on from the underside of the wreaths with a wire or black thread.

The wrapping of Christmas gifts, in white paper, tying them with narrow silk ribbon or fancy cord, and placing a small sprig of holly in the ends or loops of the bow, wrapping the whole in a heavy paper for transportation purposes, is now almost universal. The more dainty effect secured and the more the individuality of the sender is conveyed to the recipient, the nearer we will have come to the blessedness of giving, rather than of receiving.

CAULIFLOWERS AND THEIR GROWTH *

A. M'NEANS, BRANTFORD, ONT.

"I WAS asked to select a subject to subject to speak on at this convention, and I selected the cauliflower, because I have been growing it for the last 10 years. You have heard Alfred Herbert's definition of a cauliflower, 'A cabbage with a college education.'

"Men's ideas change. The grower who a few years ago was disposed to sneer at books and 'book farmers' now turns for information to the printed page. How easy it is to tell in a few short sentences that which we have been years in finding out.

Knowledge comes slowly and laboriously from the fields, and yet the closest observation of the character of a plant, its habits, likes and dislikes, and the habits of its enemies seldom goes unrewarded. Much has been written on the cauliflower, and yet it is a stranger to many a garden and is almost unknown in some markets.

"To grow cauliflowers successfully it is necessary to have good loam or sandy loam with loam predominating. It should be made as rich as we know how to make it. Where it is obtainable, I know of nothing

* Extract from an address delivered at the first annual convention of the Ontario Vegetable Growers' Association, held in Toronto at the time of the Ontario Horticultural Exhibition.

better than successive applications of well-rotted stable manure. Plow as early as the first of May. By plowing early we preserve the moisture. When the first sign of weeds appears give a harrowing or cultivation. For your seed bed choose your piece of ground early and plow as early in the spring as possible, harrowing when any signs of weeds appear. About May 15 give a thorough cultivation, harrow well and put on your planker or roller.

"I prefer the plank, as it gives a nice, mellow, smooth seed bed. Do not be afraid to pay a high price for seed, and if possible secure seed that has been grown north. I consider Danish seed better than German.

"Of late years one of the chief faults has been that the germinating power of cauliflower seed has been very low, and whether the fault is due to the seedsmen or in the breeding up of the higher type I know not, but, this I do know, that, generally speaking, it takes one ounce of seed to produce 1,000 to 1,500 plants, and in sowing the seed I sow one ounce to about 400 feet of drill.

"Before the plants break the ground there should be a good supply of tobacco dust on hand. This is one of the best preventives I know of for that little bug that is so destructive to cabbage and cauliflower plants. Put it on while the dew is on the plants. It takes about five or six weeks for the plants to grow to the right size for transplanting.

"It is not good policy to set the plants too small. They should have a good, strong, stocky growth and will be more hardy and live better in an unfavorable time if their growth has been moderately slow in the seed bed. It is never best to crowd cauliflower in the field. Give them plenty of room and you will get better development. For the Erfurt I plant the rows three feet apart and two feet apart in the row.

"A few days before transplanting manure

and plow your ground again, harrow well and put on your planker so that your surface is smoothed off nicely, select a cloudy day or after a rain to put your plants out, or if the weather be hot and dry take the afternoon, say from three o'clock, and evening for doing your work. If the soil is too dry, draw water and wet each place a little before setting the plant. Generally there is no need to draw water, as if the ground has been worked properly it will be moist enough to set out the young plants.

"The cultivation should always be level and should be run fairly deep the first and second times, and after that quite shallow. Cultivate as long as possible without breaking the leaves. Cauliflowers if left to grow without covering are not worth anything, but if covered at the proper time will generally come out nice and white.

"Commence to tie them up when the heads are the size of a coffee cup, taking two rows at a time. I use a strong three-ply twine. The tying should be done while the cauliflowers are dry and during the warm part of the day while the leaves are limber. Most people prefer to tie their flowers up tight. I like to leave them as open as possible just so the sun will not spot them, so that when cutting them you can look down and see how they are doing.

"The cutting involves considerable care and judgment, and must not be neglected, for money is often lost by not attending to the cutting at the right time. There are two methods in common use; one is to cut, trim and pack in boxes or baskets in the field as you go along. The other is to cut below the bottom leaf and cart to the barn to trim and pack. By cutting below the bottom leaf it stops the growth of the stalk, while if you leave any leaves on that stalk it lives and draws nourishment from the soil. I use the latter.

"I take six rows and do the third and

fourth rows first, that is cut and tie up as I go along; then I come back on the first and second and any heads that I cut I drop

in the row I did first. The fifth and sixth rows are treated in the same way. I leave the twine on till I trim them in the barn."

GROWING CUCUMBERS FOR EARLY MARKETS *

J. L. HILBORN, LEAMINGTON, ONT.

OUR soil is well adapted for growing a few varieties of vegetables. Most of you, I suppose, grow for the local market. Ours are entirely for shipping; we do not try to sell anything in town. Everything goes by express and the express company gets every year \$1,300 to \$1,400 from us. We grow cucumbers, melons and tomatoes chiefly. I will start with early cucumbers.

It would be useless to attempt the kind of business we are doing without some form of greenhouse to start with. We start all our plants in some kind of greenhouse. There are some 40 greenhouses within two miles from my place. New ones are being built every year, and these houses are used for starting plants to be moved outside. Tomatoes are grown in some of them. We start to grow our plants about the first or second week in March.

The chairman: "What variety do you grow?"

Answer: "We have been growing two varieties, the White Spine chiefly, and Arlington. I would prefer something of the same nature with a deeper brighter green. Bervcy's Extra Early White Spine is an early variety and of fairly good size.

"The seeds are started in flats, and when the third leaf is on we transplant them into other flats. We use a flat two feet long and one foot wide and about three to four inches deep. Formerly we used a much deeper flat, but we have found that using less soil is better. The way we discovered this was, that my little boy made some boxes two inches deep and picked out some of the

cull plants and set them out in these boxes and every one of his plants beat ours. He used just about an inch and a half of soil and he got more stalky plants. After he had been doing this for three or four years we began doing it and we found that we got a much better rooted and more stalky plant, and we cut all our trays down. That goes to show that we may learn from people whom we think know much less than we do.

"What I say about cucumbers will apply to all the plants that we grow. We use the same plan for transplanting. We transplant the cucumbers in rows, using a stick, something like the head of a wooden rake, in which I have fingers. I make the holes with that."

Question: "What distance apart is it best to have the plants?"

Answer: "The first time put them two by three. With the cucumbers, when they begin to crowd, we put them into larger beds and boxes. I would rather transplant them twice if I had time. The oftener you transplant them the better root you get. You can get a thick, stalky, clump of roots and a more stalky plant and one that will resist checking very much better by transplanting two or three times.

"The man behind the hose has a wonderful lot to do with the plants. I like to let my plants dry out pretty well before I water them and then give them a good wetting and allow them to thoroughly dry again before watering them. Watering too often makes a soft plant that will not stand transplanting."

Question: "What object do you aim at

* Extract from an address delivered at the first annual convention of the Ontario Vegetable Growers' Association, held in Toronto at the time of the Ontario Horticultural Exhibition.

in hardening the plants and then forcing them on again?"

Answer: "We do not let them dry out enough to check them; I like them to dry out pretty well. If you water too often it is impossible to get a hard, tough plant."

Question: "Do you water the leaf or the ground?"

Answer: "I put it right on with the hose, all over the leaf and all. I like to water when it will not reduce the temperature of the house too much. In the morning, just as the sun is coming up, is the best time, but, when we get busy, we water in the evening as well. We use five and six-inch pots and boxes, largely five inches by five inches and five inches deep. We use a good many that are six inches square. In either case we put two plants in the box. We try to get the plants a good size. They run perhaps one and a half feet long before we transplant them."

Question: "You have them in blossom before you put them out?"

Answer: "Yes. It is necessary, of course, not to give them any check in moving them. We are planting a number under cotton. We have a fence about seven feet high to the north and west. To the east there is a bit of grove and to the north. I think it will repay any vegetable man to put up a wind break. It is just like moving 100 miles south."

"We have boards two and a half feet high on one side and eight inches on the other, and use rafters one by four and connect with an angle iron. You can set them up very quickly, ours are 210 feet long and covered with cotton. We put the cucumbers in as soon as the danger of frost is over, about the first or fifth of May, and these cucumbers come in about 10 days later than those planted in the greenhouse. We keep the cotton over them for a while and then start hardening them off."

"We have to spray them to prevent the

blight. We use the Bordeaux mixture the same as we use for melons. We have about 2,500 yards of cotton, and most of it is used for cucumbers. After we have the plants out under the cotton if frost threatens (if it is a windy night you will not get frost, but on a still clear night it is very easy to tell if it is going to freeze) if you have water connection just put on your hose and sprinkle your cotton about dark, while it is freezing, and the water will freeze on the cotton and then you will have a covering tighter than any glass house. It is practically air tight and it will stay so until the frost is over. I have found that to work splendidly and we have very little loss from frost."

The chairman: "How is this ground prepared before you put these plants out?"

Answer: "We open the furrows and put the rows in these 12 feet spaces. We open out the furrows with a plow and then put on the harrow and harrow it, then we plant in the hollow and we mulch well with rotten manure. Cucumbers want a great deal of water. We use an inch hose and let the water run through it as fast as it will. We mulch after we plant."

Question: "How do you draw the manure down?"

Answer: "We have a roadway between every two beds and the mulch is carried in trays. It is not a very good job to carry it in. Most of it is thrown directly from the wagon. It is easy to water, and the mulch of the manure prevents the ground from drying out and retains the water so that the plant gets the most of it. We just water the strip and cover with manure, and by running the cultivator once every 10 days or two weeks between the rows we prevent the ground from drying out."

Mr. Dillworth: "How do you run the cultivator when you have these scantlings?"

Answer: "We lift these off; it only takes a short time. We can take them off our beds and have them cultivated in about two hours."

Question: "Do you spray your cucumbers?"

Answer: "Yes, with the Bordeaux mixture."

Question: "Does that prevent blight on them?"

Answer: "Yes."

Question: "What strength do you use?"

Answer: "Four of coperas and six of lime to five gallons of water."

Question: "What time of the year are you past danger from frost?"

Answer: "It varies considerably; we usually start moving our tomatoes out in the field about the third or fourth of May, and we have never had a plant frozen after moving them outside."

Question: "What about cucumbers? Do you grow any outside from transplanting?"

Answer: "Yes. We start these about the first or tenth of April and transplant them the same as the others. We try to keep them as much out of the wind as possible. Above all things get your cucumbers where there is not much wind, if you can."

Question: "Do you train up those that you grow under glass?"

Answer: "You can grow twice as much in the house by training."

Question: "What is the best method of pruning?"

Answer: "I do not profess to be an expert; we prune very little. If we find the laterals are getting too numerous we prune some of them. We allow them to run and branch as they like till they reach the glass, and then nip them. We use poles to run them, sloping a little, and then we run twine along to hold them."

Question: "In the house I am building I intend to try poultry netting."

Answer: "I have only one fault to find with that, and that is to get the cucumbers to come down through it."

Voice: "I use three-inch mesh."

Mr. Hilborn: "I want a coarser mesh."

Mr. Dillworth: "What provisions do you make for pollenising the blossom?"

Answer: "We use a camel's hair brush on the first that come, but we endeavor to encourage the bees to come in. If we can get an old bumble bee to come in he will do more than a honey bee."



Mr. Joseph Rush, Humber Bay, Ont.

Mr. Rush is first vice-president of the Ontario Vegetable Growers' Association and an officer of the Toronto Branch of the Association. He is one of the best known vegetable growers in the Dominion.

Member: "I keep a hive of bees in the house."

Mr. Hilborn: "I intend to do that next spring."

Question: "Do you use raised benches or solid benches?"

Answer: "These are raised benches. In some houses we have solid beds and I like them best."

Question: "How close together do you plant in the house?"

Answer: "We put the plants about

three feet apart in the row, one plant to a place. Those that we grow for the green-houses, we only grow one plant in the box.

Our beds are about six feet apart and we run two rows in them. The houses are built for growing tomatoes."

RESULTS OF THE POTATO ROT

THE potato rot has caused great loss this year to Ontario growers. Reports from different sections show that the percentage of affected potatoes varies from 15 to 60, according to the nature of the soil.

The development of this disease has been particularly rapid during the past three or four seasons, and this fall many fields, on which the yield was good, are rendered practically worthless on account of the large percentage of affected tubers. The crops on low clay land in many counties are scarcely worth harvesting. Carloads reaching Toronto from Simcoe, Dufferin, Wellington and Ontario counties show that the disease has wrought great havoc in those counties. Not only has dissatisfaction been felt by the growers, but the dealers in cities and towns have had endless trouble with their customers. The result has been that they are purchasing their supplies elsewhere. For several weeks New Brunswick growers have been able to furnish all that has been required.

Some of the leading produce merchants on Colborne street, Toronto, who handle potatoes were interviewed by a member of The Horticulturist staff. "Early in the season," said Mr. J. J. Ryan. "I handled Ontario potatoes, but the prevalence of rot caused so much trouble that I decided to get my supply elsewhere. The red potatoes seem to be more subject to this disease than the white stock. The potatoes came in looking all right, but after standing about a week nearly half of them were rotten. Since early in September I have imported about 100 cars loads from Wellington, N. B., and in that quantity I have not noticed a bag of bad ones. I am handling 10 cars a week.

"The price was about the same there as here, but the Americans are beginning to look to that province for part of their supply, and the result has been a slight advance in price. Besides, colder weather forces the freight cost up because the cars have to be lined to prevent the potatoes from freezing."

"About September 1," remarked Mr. C. Barrett, "some car loads arrived from central Ontario in which 225 bags out of 400 were bad. Since early October I have got my supply from New Brunswick. There is practically no rot in that province. Dealers from the eastern states frequently buy much of their stock there when the supply is scarce across the line. In case that is done to any appreciable extent this year the price is liable to be raised so high that we cannot afford to import from there and we must then be content with what Ontario has produced."

"Car loads received from different parts of Ontario earlier in the season," said Mr. Ferrier, of Ferrier & Co., "contained 15 to 50 per cent. rotten potatoes. During the first week in November I received some which were not so bad, but I do not know of any section free from rot. We have imported large quantities from New Brunswick. The growers in that province send a white potato, the Green Mountain, known here as Delaware. It is of much better quality than Ontario stock, and the consumers willingly pay 25 cents a bushel more for it. They will pay higher prices for that variety when there is no disease in the Ontario crop.

"Ontario farmers do not realize that they are losing ground in the potato market. They have not learned that they must

change seed frequently and use commercial fertilizers rather than barnyard manure. In New Brunswick and Maine a crop of 300 or 350 bushels an acre is not uncommon. The planting is done with a machine that is equipped with a fertilizer sprinkler as well. Twenty dollars an acre is not counted extravagant fertilizing. Ontario growers must change their methods or lose the market."

By way of aiding the growers to prevent the loss entailed by the rot, the bacteriologi-

cal department of the Ontario Agricultural College, which has been studying the disease for the last year, would like to ascertain if the disease in various parts of Ontario is similar to the one with which it has been working, and which caused so much damage last year, and hence would like farmers troubled with this disease to mail an affected potato and state at the same time if they were troubled with the soft or wet rot last year and to what extent the rot is present in this season's crop.

VEGETABLE GROWERS BEFORE THE TARIFF COMMISSION

DEPUTATIONS from the Market Gardeners' Association of the province of Quebec, and from the Ontario Vegetable Growers' Association waited on the tariff commission during October and asked for greater protection.

The members of the Ontario association who waited on the commission when it sat in Toronto, asked for the following duty: Cucumbers, 15 cents per dozen; celery, 15 cents per dozen; cabbages, three cents each; beans, other than dry, 40 cents per bushel; tomatoes, two cents per pound; onions, dry, 40 cents per bushel of 50 pounds; potatoes, 25 cents per bushel; water melons, five cents, and musk melons three cents each, other vegetables not enumerated 25 per cent. ad valorem.

The Quebec Market Gardeners' Association appealed to the commissioners when it sat in Montreal and asked for much higher duties than did the Ontario association. Its demands were as follows: Cucumbers, 25 cents per dozen; lettuce, 25 cents per dozen; celery, 25 cents per dozen; egg plant, 25 cents per dozen; green beans, peas and spinach, 50 cents per bushel; tomatoes, 5 cents per pound; onions and potatoes, 25 cents per bushel; green cabbage, 3 cents per head; cauliflower, 3 cents per head; radishes, 10 cents per pound; parsley and

watercress, 25 cents per pound; watermelon, 5 cents each; musk melon, 3 cents each; salted vegetables for pickle, 1 cent per pound; other vegetables not enumerated, and green corn, 25 per cent. ad valorem.

The deputation from the Ontario association was introduced by Mr. A. Campbell, M. P., and Hon. J. W. St. John, M.L.A., and included Messrs. A. McMeans, of Brantford; J. L. Hilborn, of Leamington, and Jos. Rush, of Humber Bay. A number of other well known growers were in attendance, including Messrs. John Atkin, of Sarnia; Geo. Syme, jr., R. Lankin and F. F. Reeves, officers of the Ontario association.

In introducing the deputation Mr. Campbell pointed out that while the growers were aware that a general increase in the tariff would result to their benefit they realized also that the consumers' interests must be considered, and therefore, were moderate in their demands. The existing duty affords little protection. Large quantities of vegetables are shipped into Canada, a considerable proportion of which are in a damaged condition. These vegetables are often passed at too low a valuation. If the industry was properly protected it would increase enormously.

Hon. Mr. St. John stated that the growers need a specific and not an ad valorem duty. The United States growers supply the Canadian markets with their goods early in the season and obtain high prices. By the time their own markets are glutted and the Canadian vegetables are ready for sale they dump their surplus on our markets forcing the prices down to almost nothing. Their poor cabbages, for instance, are sold at such low prices that the Canadian growers are unable to obtain as much for theirs as they are worth. If the surplus stock could be kept off the Canadian markets the desires of the Canadian growers would be satisfied.

Hon. Mr. Fielding asked if the superior quality of the Canadian vegetables was not their best protection. Hon. Mr. St. John replied that it would be were both classes of vegetables placed on the market at the same time, but the poor vegetables from the United States are offered first and force down the price, and later the Canadian vegetables, of better quality, are unable to advance the values.

Hon. Mr. Fielding asked if the vegetable growers are not as well-to-do and making as good a living as any other class of the community. Mr. McMeans replied that if they are it is because their women and children often have to help out with the work. Were the vegetable growers to engage only male help and pay the same wages the manufacturers do they could not earn a living. If the tariff were increased and the price of vegetables thereby advanced slightly it would make it possible for the vegetable growers to give their children the education they should receive.

Mr. J. L. Hilborn stated that within two miles of his place there are some 40 greenhouses and thousands of acres of land devoted to early vegetables. The industry, although seriously handicapped, is increasing rapidly. It would increase tenfold

were it properly protected. Last summer the growers sold two carloads a day all over Ontario. At the beginning of the season their tomatoes sold for one dollar a bushel, but later, owing to the United States surplus, the price dropped rapidly until it reached the point where it was not profitable to even pick the crop.

Hon. Mr. Fielding asked if a duty of \$1.20 a bushel is not rather high on tomatoes that sell for one dollar a bushel down. In reply it was pointed out that Florida tomatoes are selling for five dollars for crates containing three-quarters of a bushel each. Mr. Rush stated that when tomatoes sell for 25 cents a bushel, as they often do, two cents a bushel is a mere trifle. Beans were cited by Mr. Rush as a vegetable Canadian growers have practically given up growing owing to the United States competition.

The representatives of the vegetable growers made a strong case, and it was evident the members of the tariff commission were impressed with the information brought forward. Hon. Mr. Fielding stated that it was evident the vegetable growers have a grievance.

SUBMITTED A STATEMENT.

Both associations left with the commission a typewritten statement setting forth their demands, as follows:

The association respectfully submits to your honorable commission the following considerations:

1. Since many years our agricultural classes have complained upon reasonable grounds, in regard to the unrestricted importation into Ontario of large quantities of American vegetables, principally of early vegetables, to such an extent that the Canadian producer, the market gardener, who has invested considerable capital in this industry and employs many hands in its maintenance is seriously crippled in his efforts to earn a living.

(Continued on page 487.)

WHAT PEOPLE SAID ABOUT THE EXHIBITION

DURING the progress of The Ontario Horticultural Exhibition, held in Toronto last month, The Horticulturist gathered the following expressions of opinion from leading people present:

This is a grand exhibition. The display of packages and packing is a desirable educational feature.—(C. M. Honsberger, Jordan Station.

It is a great exhibition and a credit to Ontario fruit growers.—(J. C. Harris, Ingersoll.

It is a fine display and shows the variation of color from south to north. The exhibit of boxed fruit is specially striking.—(Norman Jack, Chateaguay Basin, Que.

This exhibition should be of the greatest value to the country. The people are shown what can be grown in Ontario orchards and what are the best methods of packing. Together with the flowers it is an excellent display.—(Elmer Lick, Oshawa.

For quantity, color and variety it is a great show. The citizens of Toronto do not know what they are missing or more would come to see the display.—(Robert Thompson, St. Catharines.

The quality of the fruit is much superior to that shown last year. Altogether there is a marked improvement.—(W. E. A. Peer, Burlington.

This is the best show in the history of the Fruit Growers' Association. The worst feature is that it is not better patronized by the citizens of Toronto.—(W. W. Hilborn, Leamington.

It is the finest show of its kind ever held on this continent. Everything is attractive and the commercial packages and displays from the experiment stations are decidedly educational. A special advance has been made in the canned fruit exhibit. This will tend to educate the people to use such goods.—(Prof. H. L. Hutt, O.A.C., Guelph.

The show is grand in every respect. The pyramids of fruit are very attractive and

the exhibits from the experiment stations better than usual.—(W. H. Dempsey, Trenton.

It is the best display ever made in Canada and decidedly creditable to the fruit growers of Ontario.—(W. H. Bunting, St. Catharines.

This exhibition should prove a great benefit to the grower who takes the trouble to investigate and follow out the points demonstrated and suggested. The appreciation shown by the citizens of Toronto is not very encouraging. Many growers have spent \$30 or \$40 to help make this show what it is, and the citizens will not spend a few cents to see the display.—(W. Armstrong, Queenston.

The commercial display is magnificent. This show should result in an enormous increase in the consumption of apples and other fruit in this city.—(W. L. Smith, Toronto.

The transition since the first meeting of the Fruit Growers' Association is something remarkable. The display from the different experiment stations is very encouraging.—(A. M. Smith, St. Catharines.

The vegetable exhibit exceeded my expectations 200 per cent. as regards the number of exhibits and their quality. If this exhibition becomes an annual affair the vegetable growers will fill the basement of Massey Hall with their exhibits.—(A. McMeans, Brantford, Ont.

The exhibits of vegetables greatly exceeded my expectations. They are a great credit to the exhibitors and to the management of the show.—(W. G. Carter, Dovercourt, Ont.

The exhibit of vegetables is a decided success and the quality is excellent.—(T. Delworth, Weston, Ont.

It is the best exhibit of vegetables I have seen in Canada. I did not expect to see as good vegetables at this time of year.—(J. Gibbard, Doncaster, Ont.

FRUIT GROWERS STILL DISSATISFIED

HON SYDNEY FISHER, Dominion Minister of Agriculture, while addressing the members of the Ontario Fruit Growers' Association, at their annual convention last month, took advantage of the occasion to explain his reason for placing the chief of the fruit division under the control of the dairy commissioner. The explanation of Hon. Mr. Fisher did not convince the fruit growers that the arrangement he has made is in the best interests of the fruit industry. It would not be far from the mark to say that there was not a fruit grower present who was fully satisfied with the reasons given by Mr. Fisher for arranging his department as he has.

Hon. Mr. Fisher said in part: "The fact that the chief of the fruit division is under the dairy commissioner does not hinder the work connected with that branch being carried out in the best interests of the fruit growers. It is simply a case of administration for efficiency. The Dominion and Provincial Governments have done their best to help the producers and, by working in conjunction, one department has not duplicated the work of the other. The Ontario department has charge of all educational work, while matters pertaining to interprovincial and foreign trade come under my jurisdiction.

"The development of the fruit industry made it necessary, a few years ago, to arrange for improved transportation. Cold storage and refrigerator cars were needed. At that time such facilities were used in connection with the dairy industry. For this reason the transportation of fruit was placed under the direction of Prof. J. W. Robertson, who was then dairy commissioner. Associated with Prof. Robertson was Mr. Ruddick, who was in close touch with the work. When Prof. Robertson retired Mr. Ruddick was given charge of the cold storage and the extension of markets

divisions. Inasmuch as the work of the fruit division is closely identified with the work of these two divisions it was deemed to be best to have the fruit division placed under Mr. Ruddick's supervision so that the work of all three divisions could be carried on to better advantage and to prevent the work of one division overlapping the work of another. The same staff was retained to look after the work of the fruit division, and I could not see that there was any need for a fruit commissioner. As long as the staff continues to give efficient service to the fruit growers I can see no just reason why a change in this arrangement should be made."

THE GROWERS' VIEWS.

Owing to the fact that Mr. A. McNeill, Chief of the Fruit Division, was presiding at the meeting at which Mr. Fisher spoke, and to the circumstance that Hon. Mr. Fisher was a guest of the Fruit Growers' Association, the growers present did not like to start a discussion on this matter. After the meeting many of the leading growers informed *The Horticulturist* that they would have liked to have been in a position to have expressed their views.

The following are the opinions of some of the most representative growers. It should be borne in mind that this is not a political matter as among the growers, whose views are here given, are well known Liberals:

C. M. Honsberger, Jordan Station, president Niagara Peninsula Fruit Growers' Association: "I would have liked to have expressed my views to Mr. Fisher as the present arrangement seems like an unjust transaction and an imposition on the fruit industry. The fruit interests are of too great importance to be dovetailed in with the dairy or any other division."

Mr. Robert Thompson, St. Catharines,

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THE HORTICULTURAL EXHIBITION.

The success that attended the second Ontario Horticultural Exhibition, held last month in Toronto, must be gratifying to those who have the best interest of horticulture at heart. While the attendance on the part of the citizens of Toronto was disappointing it should be borne in mind that it is impossible to gain the support of the public for an institution of this nature in the course of only one or two years. Everything has to grow and prove its right to be patronized, including, even, The Ontario Horticultural Exhibition.

The most encouraging feature was the fact that those who attended were delighted with the show. This means that another year they will return and bring their friends with them and thus greater development may be anticipated. The various conventions, held at the same time, were a most valuable feature. As the years go by, and the exhibition becomes better known, it will be found that these conventions will grow rapidly in importance and attendance.

Next year an effort should be made to run excursions to the exhibition from all parts of

the province. It will be possible to do what could not be done this year, that is guarantee half rates over the railways. This will mean a much larger outside attendance. In this work the horticultural societies and branch fruit and vegetable growers' associations will be able to take a prominent part. This year's effort indicates that the exhibition has been firmly established and that its future is bright.

THE NEW ASSOCIATION.

The representatives from the horticultural societies of Ontario acted wisely, last month, when they decided to form a provincial horticultural association of their own. The arrangement that has prevailed in the past, by which the horticultural societies were supposed to hold a joint convention with the fruit growers' association, has never been satisfactory. The fruit growers' association was formed, principally, for the promotion of the commercial fruit interests of the province. Horticultural societies have an entirely different field of work along the line of the development of amateur horticulture and civic improvement. The two bodies would never have been brought together had it not been for the desire of the directors of the fruit growers' association to receive the assistance of the horticultural societies in the publication of their official organ.

The formation of the Ontario Horticultural Association means that in future the fruit growers' association will be able to devote its whole time and attention to its special field of work while the horticultural societies will have an opportunity to take up important matters that have been neglected in the past. Both bodies should profit by the change and nothing but good result. May the life of the new Ontario Horticultural Association be a long one and fruitful of much good work.

FRUIT GROWERS' NEW CONSTITUTION.

The change that has been made in the constitution of the Ontario Fruit Growers' Association is in the right direction, although experience will probably show that the new constitution can be greatly improved. The fact that the cost of membership has been so great as to prevent branch fruit growers' associations from becoming affiliated with the Ontario association has been a serious weakness to the latter body. This defect, by means of the change that has been made, has been overcome in part although it is doubtful if many of the local associations will care to join the provincial body even on the terms now offered.

Before the Ontario association can expect to have many branch associations it will have to realize that the latter must be given much more by the parent body than it receives in return and that the local bodies must be given considerable say in the management of the provincial organization. This latter is the plan that has been adopted by the Ontario Vegetable Growers' Association. It will be interesting to see which plan gives the best results.

Although the Ontario Vegetable Growers' Association has been formed only eight months and is receiving a government grant just one-third as large as that of the Ontario Fruit Growers' Association, it already has a paid-up membership of 225 with branches at Toronto, Hamilton, St. Catharines, Brantford, Leamington, Chatham and Sarnia. The directors of the Vegetable Growers' Association have prepared a plan of work that should greatly strengthen the association, during the coming year. The Fruit Growers' Association will have to bestir itself if it does not want to be relegated to second place.

Two handsome ferns have been given The Horticulturist by Mr. A. Gilchrist, of Oaklea, West Toronto Junction. One is a specimen of the new *Nephrolepis Barrowsi*. The other is a well grown plant of *Nephrolepis Scotti*. Both are splendid ferns and Mr. Gilchrist has been voted the thanks of the staff for his lovely donation.

The words of praise, expressed at the recent convention of the Ontario Fruit Growers' Association, over the improvements that have been made in The Canadian Horticulturist are appreciated as being a recognition of the efforts we are putting forth to make this paper one of which our readers may well feel proud.

Mr. S. Batcheler, of Leamington, Ont., was recently forwarded a nice premium by The Horticulturist for having purchased goods from the Webster Floral Co., of Hamilton, and for having told them that he saw their advertisement in this paper. It pays to patronize our advertisers. Try it and see.

Could you give any of your friends who are interested in fruit, flowers or vegetables a nicer Christmas present than a year's subscription to The Canadian Horticulturist. Think it over.

When buying from our advertisers don't forget to tell them that you saw their advertisement in The Canadian Horticulturist.

Fruit Growers Still Dissatisfied

(Concluded from page 483.)

president St. Catharines Cold Storage and Forwarding Company: "We would prefer to have a division under a separate head and not subordinate to any other, so that when we want anything we will have a man at the head of the fruit division who will be in touch with our needs and who will be in a position to take action without having to consult the head of any other division. The Dominion department has given us all that we require so far, but we feel that this may not always be the case. It is like putting any other man than a farmer in as minister of agriculture."

Mr. A. E. Sherrington of Walkerton, manager Walkerton Fruit Growers' Association: "Owing to the importance of the fruit industry it is absolutely necessary that the fruit division

shall be separate and distinct from any other. After listening to the remarks of Hon. Mr. Fisher in regard to the fruit growers of Canada asking and demanding that a fruit commissioner be appointed at Ottawa, and hearing his statement that the present arrangement will not injuriously affect the fruit interests, I am of the opinion that no matter how good a man Mr. Ruddick may be, he is not in as close sympathy or touch with the fruit growers of the Dominion as the man in charge of the fruit interests of the Dominion department at Ottawa should be."

Mr. W. A. Peer, of Freeman, secretary of the Burlington Fruit Growers' Association: "I listened to Hon. Mr. Fisher's explanation of his reasons for placing the fruit division under the dairy division, but it failed to convince me that his action was in the best interests of the fruit growers. The fruit industry is developing so rapidly it warrants the appointment of an independent commissioner."

Mr. Murray Pettit, of Winona, president Niagara District Fruit Growers' Stock Co., Limited: "Would the dairymen or live stock breeders be satisfied if the chief of their divisions were placed under the chief of the fruit division? They would not, for they would realize that such an arrangement would place their industry in a secondary position. As fruit growers, we cannot but feel that if our industry is to receive the encouragement it should, it should have at its head a man who is in close touch with our needs and who is in a position to act without having to consult a person who is known to lack experience in fruit growing."

D. Johnson, president Forest Fruit Growers' Association: "The fruit growers of Ontario cannot help but feel, in spite of the very reasonable explanation of Hon. Mr. Fisher, that their interests have been placed in a secondary position when their worthy chief has been placed under the control of the dairy department. While we greatly respect and admire Mr. Ruddick personally, yet we are strongly of the opinion that our interests will be largely sacrificed by not having an independent fruit commissioner. The fruit division requires great extension rather than curtailment, and I have no doubt if our present chief is given proper support and liberty of action that the fruit industry will be much helped."

The Tariff Essex Growers Want

The vegetable growers of Essex county have asked for an increase in the duty on certain products that come into keenest competition with the crops produced in that district.

Tomato growers asked for 25 per cent. on a minimum valuation of two cents a pound. It was requested that the tariff on cucumbers be made 25 cents a dozen, cabbage two cents a head and melons three cents each.

I have noted quite an improvement in The Horticulturist, and wish you every success in your efforts to further improve it.—(W. Hewitson, Fruitland, Ont.)

Fruit Growers and the Tariff

(Concluded from page 466.)

Mr. Bunting claimed that the tariff that has been in operation since 1897 has been satisfactory to growers and not a burden to the consumers. The fruit industry has increased since 1897 until now there are 350,000 acres in orchard and garden in Ontario. The annual production of apples is about 11,000,000 barrels. In that time the prices have decreased to the consumer although the introduction of such pests as the San Jose Scale as well as the higher wages paid the laborers have increased the cost of production. The improvements in packing and efforts made to develop trade in the Canadian northwest were referred to. If the tariff is reduced the United Statesers would flood our market when they had a surplus and fruit growing in Canada would be rendered unstable.

A specific duty was requested in place of ad valorem because it is more definite, and does not leave a chance to send goods in at a low nominal price. The duty on plums is 25 per cent and on pears 20 per cent. A change to one and a half cents a pound and 25 cents a bushel, respectively, would make the rate practically the same as is imposed on our products going across the line.

In reply to a question from Hon. Mr. Patterson regarding the local dealers claiming that a reduction in the tariff would not hurt the growers, Mr. Bunting explained that the growers looked for a fair margin of profit on part of the crop, and on account of its being perishable it could not be held over. It was necessary, therefore, that the growers obtain the prices that prevail before the market is glutted by the southern crop.

The extent of the fruit industry was referred to by Mr. A. W. Peart, of Burlington. The total value of orchard and garden lands in Ontario was placed at \$40,000,000. The increase in production, and the consequent decrease in profit during the past few years was materially increased by the cost of labor which had advanced owing to protection to the manufacturers enabling them to pay high wages. The fact that canning factories and box, barrel, and basket factories depended on the fruit industry was also alluded to.

The high price of sugar was taken up by Mr. Robt. Thompson, of St. Catharines. The following resolution was read: "That this association believes it to be desirable, and in the interests of the fruit industry and the general public, that a reduction should be made in the tariff on refined sugar." The need for an outlet for our surplus crops, and the necessity of cheap sugar to assist the canners to compete on foreign markets was emphasized. Last year jams and jellies to the value of nearly \$1,000,000 were imported and these were made from fruit sent from Canada and manufactured where sugar was cheap.

Mr. D. Johnson, of Forest, declared that the fruit growers should be encouraged in every way possible. If Canadian canners could secure sugar and glass at the low price that a

reduced tariff on these articles would ensure, our increased trade in canned goods with our Canadian northwest and with foreign countries would benefit the growers as well as the consumers. A large percentage of our apples is allowed to go to waste each year that would be canned if conditions were more favorable.

During the hearing the commissioners showed their interest in the fruit growers' requests by asking questions bearing on the points brought up by the different members of the committee. The case for the fruit growers was presented by the committee in a most able manner.

Fruit Convention Notes

The Ontario Fruit Growers' Association appointed Messrs. H. Jones, E. Lick, W. H. Bunting, R. Thompson, Murray Pettit, A. W. Peart, J. L. Hilborn, D. Johnson and A. E. Sherrington to represent the fruit growers at the Dominion Conference that is to be held in Ottawa in February.

An illuminated address was presented to Mr. W. H. Bunting by the association, showing the hearty appreciation of the growers for the businesslike manner in which he has labored in the interests of the fruit industry.

A resolution was passed fittingly recognizing the good service rendered by Mr. Alex. McNeill, as president of the association and as chief of the fruit division at Ottawa.

The able manner in which Canada and her fruit interests were represented at the St. Louis Exposition was referred to in a resolution congratulating Mr. T. H. Race on his good work.

A welcome visitor at the fruit growers' meetings was Mr. L. B. Rice, of Port Huron, Michigan, who represented the Michigan Horticultural Society. On behalf of that society he wished Ontario's efforts every success and extended a cordial invitation to the Ontario Fruit Growers' Association to be represented at their convention in Grand Rapids, December 5 to 7.

The benefits to be derived from educational work through the Farmers' Institutes and educational features at the fairs and exhibitions were recognized by the growers, and a resolution was passed asking Mr. G. A. Putnam, superintendent of the institutes, and Mr. H. B. Cowan, superintendent of agricultural societies, to extend this work.

A resolution was passed by the fruit growers instructing the delegates to the Dominion Conference to urge the federal parliament to place express rates within the control of the Railway Commission. The express rates, at present, are exorbitant.

The executive of the Fruit Growers' Association were instructed to wait on the proper railway official to try to secure the privilege now accorded agricultural societies, of free return tickets from their annual convention without regard to the number in attendance.

Please accept congratulations on the grand publication you issue under the title of *The Canadian Horticulturist*.—(Harry H. Davey, *The Fruit World*, Melbourne, Australia.)

MUST HAVE STANDARD PACKAGES

Fruit growers and representatives from the manufacturers of fruit packages met and discussed matters pertaining to sizes and shapes of packages at the annual meeting of the Ontario Fruit Growers' Association held in Toronto on November 16. Those present were unanimous in the opinion that standard sizes and standard shapes should be adopted. The growers appointed a committee to meet the manufacturers so that the matter may be brought before the authorities.

It was evident, from the discussion, that neither the manufacturers nor the growers knew the dimensions of what is termed the Ontario apple barrel. It was also clear that each manufacturer of baskets makes a basket to suit his customers.

In opening the case for the growers, Mr. Robert Thompson, of St. Catharines, said that the 11-quart basket had given satisfaction, but suggested that the six-and-two-thirds quart basket be discarded and a half basket or one with five-and-a-half quart capacity be used in its stead. He claimed that the six-and-two-thirds quart basket is not generally made now because it does not sell for more than a half basket. For that reason smaller sizes are used. The present carriers for tender fruits are not satisfactory, and the pear package requires to be improved. Standard dimensions are wanted for each size because, when only size is mentioned, each manufacturer prepares a last to suit, and perhaps no two makers turn out packages similar in shape. The length, depth and width at top and bottom must be made imperative. It was also suggested by Mr. Thompson that the 96-quart barrel, with 28½ inch stave, should be adopted in place of the larger barrels now used in Ontario.

Mr. James Innes, barrel manufacturer of Chatham, said that New York growers had shipped pears successfully in a keg with 17½ inch staves and 14 inch head. With regard to the apple barrel it was explained that staves that were not good enough to make flour barrels could be used in the manufacture of apple barrels. This is the chief reason why manufacturers turn out so many 30 inch barrels. These, however, can be cut down to the 28½ inch size.

It was pointed out by Mr. A. E. Sherrington, of Walkerton, that the people in Great Britain know the Ontario barrel to be larger than the one used in Nova Scotia, and willingly pay more for it. The merchants across the water had informed him that the size should not be changed.

A basket manufacturer said it was advisable to have a uniform size, shape, and make throughout Canada, but that steps should be taken, also, to prevent other sizes and shapes being imported. Another said that there should be common sizes, and that if any other size were made the capacity and dimensions should be plainly stamped on the outside of each package. Mr. Everest suggested that inspectors be appointed to see that the law is lived up to. He thought that in most cases the producer was to blame for the various sizes now used. This statement was challenged by Major Jas. Shepherd, of Queenston, who claimed that manufacturers go around offering the smaller baskets to the producers at easy prices.

It was pointed out by Mr. Geo. Williams, of Thorold, that, as the manufacturers have various dimensions for the different sizes now in use, samples from the factories should be submitted to the growers. A committee could then decide on the most satisfactory dimensions. It entails considerable expense to change the last on which the baskets are made. The one that looks best and packs to best advantage in a car should be adopted.

Dairy Commissioner J. A. Ruddick pointed out that something definite must be laid before the Dominion Parliament and suggested that a committee be appointed to prepare a definite request that can be further discussed at the Dominion Fruit Growers' Conference that will meet in February.

A committee comprising Messrs. Robert Thompson, A. W. Peart, D. Johnson and W. D. A. Ross later conferred with the manufacturers of packages and it was arranged that the manufacturers should submit samples, so that the committee may select the one that suits best and present their report at the conference in Ottawa in February.

Vegetable Growers Before Tariff Commission

(Concluded from page 481.)

2. The American tariff on vegetables imported from Canada into the United States is almost prohibitive, carrying both specific and ad valorem duties; the American climate enables the American market gardeners, in advance of our own, to cultivate vegetables in the open fields, at an extremely low rate of wages, and when the United States markets are sufficiently supplied the surplus stock of garden produce is shipped into this country and dumped on our markets on payment of such an insignificant duty that the competition caused to our gardeners is in many instances ruinous. The injustice of the situation is increased by the fact that the United States markets are practically closed against Canadian growers.

3. Such American garden produce arriving at Montreal and Toronto in large quantities, being the surplus stock of the United States markets, and on account of its perishable character, valued at extremely low price, and subject to an insignificant duty, is acquired at very inferior prices by Ontario importers and unexpectedly thrown on our markets, glutting the said markets and causing great loss and damage to our farmers and gardeners.

4. As a result of this wholesale, indiscriminate and unregulated importation of American produce, the Canadian markets are filled with foreign vegetables long before our crops are ready for sale, and all early vegetables cultivated in Canada are liable to fluctuation and falls in value of such extent and uncertainty as to discourage market gardening in Canada.

5. Not only have very large amounts been in-

vested here in proper equipment for the carrying on of the market gardening industry and the early production of vegetables (amounting to many millions of dollars), but many thousand families rely on the maintenance and development of this industry for their subsistence.

6. The industry is susceptible of very great extension and of furnishing a profitable and happy livelihood to a large class of our agricultural population.

7. It is to be borne in mind that the market gardeners of Canada pay considerable duties on every article that they use in their industry, on garden tools, on harness, carts, wagons, all agricultural implements, on their clothes, the materials for their conservatories and in fact all that they use for the prosecution of their industry; they do not, however, object to such conditions if a protective policy is deemed necessary in the country's interests. The market gardeners merely ask for a reasonable protection of their own interests.

8. The association in no way seeks to obtain the exclusion of American garden produce, but the enactment of such changes in the Canadian tariff, on the lines adopted by the United States in their own country, as will secure fair and stable conditions in our own vegetable markets and prevent our home market being made the dumping ground for the surplus produce of the United States.

9. A careful examination would show that our market gardeners, if encouraged, would be in a position to supply most of the requirements of our markets during the whole year with new and fresh vegetables, such as lettuce, watercress, radishes, celery, cauliflower, cucumbers, spinach, parsley, etc., at fair prices.

10. The Canadian duty on vegetables imported into Canada is as follows:

Beans, 15 cents per bushel.

Peas, 10 cents per bushel.

Potatoes, 15 cents per bushel.

Vegetables not otherwise provided for, 25 per cent.

Fresh tomatoes, 20 cents per bushel and 10 per cent. ad valorem.

11. The United States duty on vegetables imported from Canada is as follows:

Beans, 45 cents per bushel of 60 lbs.

Cabbages, 3 cents each.

Onions, 40 cents per bushel.

Green Peas, 40 cents per bushel.

Potatoes, 25 cents per bushel of 60 lbs.

Vegetables in their natural state not otherwise provided for, 25 per cent. ad valorem.

(To be continued in January issue.)

Coopers to Combine

The manufacturers of barrels, boxes and baskets throughout Ontario purpose forming a combine. They say they do not do so with the hope of advancing prices as is the case with most combines. Two years ago, when the coopers took advantage of a shortage in stocks and held out for excessive prices, the result was that the following year found cement men, millers and others using bags and sacks, while

the fruit growers adopted a standard box and agitated for the use of boxes instead of barrels for shipping fruit.

The cooperage manufacturers realize that if they supply barrels at reasonable prices they can restore their market, and it is with the purpose of reducing the price to the producer that the combine is being formed.

A meeting for this purpose was held recently in Toronto. About 20 manufacturers have signified their intention of forming a joint stock company. It is proposed to have a central office for buying and selling stock and output. In this way travellers would be dispensed with and the expenses materially decreased. Inspectors would be employed to see that high grade stock was supplied. An effort is being made to get others to join the combination. As soon as 80 per cent. of the output is under control the company will be incorporated.

Would Reduce the Tariff

The retail fruit and vegetable merchants of Toronto and London appeared before the Tariff Commission and asked for considerable reductions in the duty on certain products coming into Canada.

At Toronto the case was presented by Mr. F. C. Higgins, who pointed out that climatic conditions prevented Canadians from producing certain fruits and vegetables. In those products that are grown here he said that there is a natural protection in the perishability of the goods, and in the expense entailed in putting them on the Canadian market.

It was claimed that the existing duty of 25 per cent. on cranberries is prohibitive, and as the production in Canada is small the tariff should be reduced to \$1.00 a barrel. At present it amounts to about \$3.00. The present duty of two cents a pound on grapes was thought to be double what it should be. On strawberries the same duty was said to be excessive. In peaches it was asked that the duty of one per cent. per pound be reduced to half a cent from December 1 to August 15, and left as it is the remainder of the year.

Mr. Frank Simpson asked for a reduction on potatoes from 15 to 10 cents a bushel. It was thought the duty of 25 per cent. on tomatoes was ample. The duty on onions should be reduced from 15 to 10 cents a bushel. On cucumbers, asparagus, celery and cauliflower it was asked that the present duty be retained.

Mr. G. G. Steele presented the case at London, and said that the importations did not interfere with the fruit men. The following changes were asked for: Tomatoes, 25 cents a bushel instead of 20 cents and 10 per cent.; potatoes, reduction from 15 to 10 cents a bushel; melons, reduction from 25 to 12½ per cent.; onions, reduction from 25 per cent. to 10 cents a bushel; cranberries, restoration of old duty of 30 cents a bushel; grapes, reduction from two cents to one cent a pound, or, failing that reduction, to one cent on grapes from Spain and California; peaches reduction from one cent to half a cent a pound from December 1 to August 15.

ONTARIO HORTICULTURAL ASSOCIATION FORMED

The delegates, from the horticultural societies of the province, who met in Toronto last month at the time of the Ontario Horticultural Exhibition, decided to form a provincial organization to be known as the Ontario Horticultural Association. The objects of the association, as outlined at the meeting, are to bring the various societies of the province into closer touch with each other and to introduce more uniform and improved methods of work as well as to look after the interests of the societies generally.

The following officers were elected: President, W. B. Burgoyne, of St. Catharines; first vice-president, Major H. J. Snelgrove, of Coburg; second vice-president, Joseph Barker, of Kincardine; secretary-treasurer, H. B. Cowan, of Toronto; executive committee, R. B. Whyte, of Ottawa; R. W. Woodroffe, of Woodstock; C. L. Stevens, of Orillia; A. T. Armstrong, of Millbrook; W. Jeffers Diamond, of Belleville; A. Alexander, of Hamilton; H. R. Frankland, of Toronto; J. T. Rose, of Brantford, and Robt. Mann, of Orangeville. The president, first vice-president and secretary-treasurer were empowered to draft a constitution and to wait on the government to urge the adoption of legislation in the interests of the horticultural societies.

At the afternoon session of the convention Mr. W. B. Burgoyne described the excellent

work that has been accomplished by the St. Catharines society during the past year. With a government grant of only \$51 the society has distributed \$8 and \$9 for horticulture for every one that has been received from the government. The distribution of seed among the school children had been very profitable. A discussion of Mr. Burgoyne's remarks was entered into heartily by Messrs. Diamond, of Belleville; Barker, of Kincardine; Hunt, of Guelph, and other of the delegates. Several delegates said that they found the giving of The Horticulturist to their members had been productive of excellent results. The meeting then proceeded with the election of officers, which resulted as already given.

During the afternoon interesting addresses were given by Mr. Wm. Hunt, of Guelph, on The Care of Dormant and Semi-dormant Plants Throughout the Winter, an extract from which address appears in this issue, and by Mr. W. T. Macoun, of the Experimental Farm at Ottawa, who described some of the best features of the botanical garden at the farm. An outline of his paper will be published in The Horticulturist. The convention was considered to be a great success and the delegates appeared to be enthusiastic regarding the possibilities for good work that lie before the recently formed provincial association. A full report of the discussions will be published in the January issue of The Horticulturist.

Burlington

The annual meeting of the Burlington Horticultural Association was held at Freeman November 9th, with the president, A. W. Peart, in the chair. In his annual address Mr. Peart reviewed the work that the society had accomplished during the past season and outlined work for the future. The directors reported on the different classes of fruit grown in the neighborhood that had given the best results.

The report of the secretary-treasurer, and the auditors' report, showed that the society has a substantial balance on hand. The officers elected for the incoming year were: President, W. F. W. Fisher; first vice-president, J. S. Freeman; second vice-president, R. C. Fowler; secretary-treasurer, W. E. A. Peer; directors, D. Jardine, W. V. Hopkins, J. S. Freeman, H. T. Foster, R. C. Fowler, A. W. Peart, J. A. Lindley, W. E. A. Peer; auditors, H. T. Foster, W. H. Easterbrook; shipping committee, H. T. Foster, E. W. Lewis.—(W. E. A. Peer, secretary-treasurer.

Fruit Growers Provincial Convention

The annual meeting of the Nova Scotia Fruit Growers' Association will be held at Annapolis on December 12, 13 and 14. Among other questions the following will be discussed, Size of the Standard Barrel, Transportation, Co-operation, Spraying, and Improved Orchard Practice.

Secretary Barker, of Berwick, writes The Horticulturist that they are hoping for one or

two good men from abroad, and expect to put on a good program of local men.

It has been decided to hold the winter meeting of The Pomological and Fruit Growing Society of Quebec at Richmond, Que., December 13 and 14. Secretary Wood, of St. John, Quebec, informs The Horticulturist that the program containing full information will be out before December 1.

The British Columbia Fruit Growers' Association will hold their annual meeting in Vancouver. The date has not yet been fixed. Secretary Brandrith, of Ladner, sends The Horticulturist the following list of speakers and subjects: T. F. Patterson, B. S. A., of Vancouver. Economic Entomology; H. H. Harris, sen., of Vancouver, Floriculture; J. A. Catherwood, of Hatzic, Freight and Express Service; W. J. Brandrith, of Ladner, Varieties of Fruit for the City Garden.

Keen Demand For Fruit

Cable reports from Woodall & Co., Liverpool, England, to their agent, Mr. Eben James, Toronto, show a firm market with a tendency to higher prices for apples for some weeks past. On November 22 this firm cabled: "Prospects most favorable, 8,000 barrels selling, market active and higher. Greenings 20 to 23 shillings, Baldwins 21 to 22 shillings, Spys 21½ to 24 shillings, Russets 20 to 24½ shillings, seconds 3 shillings less." The shipments from Canadian ports to date are 648,138 barrels, compared with 534,953 barrels for the same period last year.

Exhibitions of Work Enjoyed

Many visitors at the Ontario Horticultural Exhibition were pleased to find the Air Pressure Water Systems and Wallace Power Sprayers on hand in the display of Mr. W. H. Brand, of Grimsby, Ont. Regret was expressed that the absence of power shafting prevented Mr. Brand from giving a full demonstration of the capabilities of the "Junior" machine he managed to get into the basement of Massey Hall. As it was, he explained the system employed and gave as much of a practical exhibition of it as was possible when operating by hand, rolling in 15 to 20 pounds pressure in a very short time. This, of course, was purely air. It is a free agent and indeed a powerful one.

Mr. Brand's company have a variety of outfits of all sizes and capacities and for every purpose for which a power sprayer can be used, and they are well spoken of by Messrs. E. D. and J. W. Smith, Alex. Glover & Sons, of Winoona; Wm. Orr, R. H. Dewar and C. C. Pettit, of Fruitland; Capt. Roberts, of Grimsby; Col. Ptolemy, Stoney Creek; E. G. Beckett and R. H. Lewis, of Hamilton; W. H. Dempsey, Fruit Experiment Station at Trenton; Mr. Macoun, of the Central Experimental Farm, Ottawa, Ont.; R. Jack & Sons, at Chateauguay Basin, Quebec, and others in Canada.

Over 3,000 of his Pneumatic Water Systems are in use throughout the world, some of them being in Canada. They are used by farmers of all descriptions, town residents who have no other pressure service to draw from, and by owners of high buildings wherein it is desired to further augment the fire protection by adding to the city service a private tank. Write Mr. Brand for information regarding either of these necessities. Their cost is quite commensurate with the articles. Address him at Jordan Station, Ont.

Proper Packing Important

Many fruit growers and shippers admit that before Canadian fruit can demand the best prices in Great Britain it must be properly packed. Many of the leading growers have adopted the Biggs system of packing that was shown at the recent Ontario Horticultural Exhibition in Toronto. The Biggs Fruit and Produce Co., of Burlington, Ont., make a specialty of supplying fruit growers with the very best appliances for the packing of fruit, including their press and packing table. The Biggs Co. also makes a specialty of shipping select fruit direct to any address in Great Britain without any extra cost.

A Capable Man Advanced

The Allan Steamship Company has secured the services of Mr. D. O. Wood, late with the Robt. Reford Steamship Company, as their western freight representative. Mr. Wood will be located in Toronto, and will have charge of the freight business for The Allan Company in western Ontario. A better man for this work than Mr. Wood would be hard to find. He has

been with the Grand Trunk Railway over 20 years and a number of years with the Robt. Reford Co. The long experience gained by Mr. Wood when with these companies makes him well qualified to oversee the large shipments of apples, cheese, butter, etc., handled by this firm. The Allan line has completed a chain between the fruit growers in Ontario and the consumers in Great Britain and a better man to extend the business of the company would be hard to find. This firm purposes placing several new boats on their line and will devote special attention to the export fruit trade.

A Correction

In the article Spraying Competition Challenge that appeared in the November issue of *The Horticulturist*, the omission of "as is" made Mr. Brand say blue vitriol and white arsenic were not soluble in water. The sentence should have read "In doing this it carries with it such components as Paris green, which is not perfectly soluble in water, as is blue vitriol, white arsenic, etc., but remains in a very fine but heavy powder."

Again, in the paragraph regarding how to judge as to which machine produced a proper spray the addition of the words "those who" slightly changed the meaning. This sentence should have read "The way to judge which of these machines will best perform the work is to be governed by verdicts of users of them, or see both makes in actual operation."

Fruits, Vegetables and Fute's

Great caution should be exercised in the selection of varieties, and as a rule it is not wise to purchase novelties. However, Canadian growers know that new specimens introduced by Stone & Wellington are worth having because they have been thoroughly tested before being offered to the public.

Three recent introductions have proven to be adapted to Canadian conditions. The Maynard plum, Burbank's greatest introduction, has withstood the hardships of our winters; the Ideal asparagus, a French variety, is far ahead of other varieties, producing large crisp stalks, and the Gold Coin potato, a Vermont variety, was the best yielder tested at the Central Experimental Farm, Ottawa, averaging 554 bushels per acre.

Steel Grape and Fence Posts

An attractive exhibit at the recent Ontario Horticultural Exhibition was a display of steel grape posts and fence posts, by The Canadian Portable Fence Co., Limited, of Toronto. There is a growing demand for a steel post, and this enterprising company did not hesitate, but immediately set to work to design their steel grape posts according to the ideas of the best known grape growers of Canada.

The grape posts are made on much the same lines as the well-known steel fence posts, that have made for the company an enviable repu-

tation in the fence industry. The anchor, or end posts, are rigid steel trusses, with means of tightening and adjusting tension on wires. The stationary anchorage is recommended, although the portable, being simpler to set, is frequently demanded. The line posts consist of a single angle steel upright, driven about two feet into the ground. This saves the digging of a post hole. The posts being only one and one-half inches wide take up practically no space—a matter of great importance for plowing, spraying, and collecting fruit.

The company is prepared to sell these grape posts direct to the fruit growers. Inquiries should be addressed to their head office, foot

of Jarvis street, Toronto. They have every facility for turning out these posts rapidly and economically, and solicit the patronage of the Canadian fruit grower for a home production invented in and made in Canada.

How to Grom 'Mums

Every lover of flowers is anxious to have a few chrysanthemums. Much information of value to those interested in the culture of this beautiful plant is to be found in a book prepared by Arthur Herrington entitled *The Chrysanthemum*. This work is worthy of special perusal by amateurs. It includes the

20 PER CENT. OFF

That's really the difference between our prices and those in the United States when you consider the matter of duty! If you are not one of our many customers, be sure and drop a card for one of our illustrated catalogues "*Canadian Plants for Canadian People*" out 1st March.

THE WEBSTER FLORAL COMPANY, LIMITED

FLORISTS, NURSERYMEN AND SEEDMEN.

HAMILTON, CANADA.

Horticultural Societies

WHAT HAVE YOU DONE ABOUT THE NEXT
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LET US SUGGEST SOMETHING THAT WILL SATISFY
ALL YOUR MEMBERS.

Our prices are right; the quality of our stock is the best.

J. GAMMAGE & SONS, - London, Ont.

A Handsome Premium will be Given Free to all Readers who buy goods from Advertisers.

history of the plant and a practical treatise on propagation, suitable soils, watering, cultural methods and every detail connected with producing good plants. Illustrations are given to show cuttings ready for planting and, later, ready for the first potting. Crown and terminal buds are fully discussed and well illustrated. The value of fertilizers is treated and the difference between "fed" plants and those grown under ordinary conditions illustrated.

A chapter is devoted to the preparation of plants for exhibition and judging. Specimens of bush and standard plants are shown and their culture fully given from propagation in December to the fully developed plant. Commercial culture, growing seed and hybridizing, and insect and fungus pests, with their treatments, are carefully described.

Those interested should write to Morang & Co., Limited, 90 Wellington street west, Toronto. The price of this book, well bound and containing 32 illustrations, is 50 cents.

Exhibit Attracted Attention

The education features of the recent Ontario Horticultural Exhibition in Toronto, were greatly appreciated by the large number of fruit growers who were present from all parts of Ontario. Among the many exhibits was that of the Little Giant Sprayer from Port Dover, Ontario. Mr. Perkins, who was in charge, was a busy man, explaining to interested spectators the many points in this sprayer that are not contained in any other machine.

Among the interested visitors to this exhibit were Hon. Nelson Monteith, Hon. Mr. Fielding, and other prominent persons, who expressed themselves as being pleased with the simplicity of operation and the many excellent features the Little Giant Sprayer possesses.

Mr. Perkins intimates that a number of orders were secured for spring delivery, and wishes to advise intending purchasers to place their orders at once as their doing so will enable the manufacturers to have the machines delivered in time for use in the early spring season. Delays in delivery, when the season opens up rapidly, are annoying and costly. A large staff will be kept busy during the winter manufacturing Little Giant Sprayers, and all orders placed will receive prompt attention.

The basket section in the trade exhibits at the recent Ontario Horticultural Exhibition in Toronto was ably represented by the Oakville Basket Co., which made an extensive display of the articles the firm manufactures for the fruit trade. The high quality of workmanship evident in the samples shown indicates the reason why this firm stands at the top of the basket manufacturers of Canada.

Fruit growers who heard Mr. A. N. Brown, of Wyoming, Delaware, talk on spraying, will be interested in an advertisement that appears in this issue for Kil-o-Scale. Mr. Brown stated that this insecticide has given entire satisfaction in treating San Jose Scale in Delaware.

IT PAYS —

to grow good fruit, and every grower wants

To Have the Best

We carry a full line of the very best nursery stock,

Trees, Shrubs and Vines

Write for our beautiful catalogue, and select the varieties suited to your locality.

The Helderleigh Nurseries

E. D. SMITH, Winona, Ont.

A Handsome Premium will be Given Free to all Readers who buy goods from Advertisers.

Swamped With Orders.—The Wallace Sprayer Co. informs The Horticulturist that they are now building for spring sales and are already swamped with orders. It would be well, therefore, for Canadian growers who intend purchasing one of these popular power sprayers to place their orders with Mr. Brand, their Canadian representative, at once so that the machines may arrive in time for the spring work.

I regret my subscription has been so long overdue. To prevent it happening again, I enclose check for \$5, paying up to 1908.—(Mrs. P. E. Henry, Toronto, Ont.



LANDSCAPE DESIGNING

Plans for Parks, Cemeteries, Public and Private Pleasure Grounds made

Chas. Ernest Woolverton, Landscape Designer
GRIMSBY

Drawings made to a scale, so that any gardener may carry them out. Correspondence solicited.

KIL-@-SCALE

The Great San Jose Scale Destroyer

Strongly recommended by Professors L. R. Taft, of Michigan, John B. Smith, New Jersey, and W. G. Johnson, Editor American Agriculturist.

No Cooking, Non-Corrosive

Simply add water as per directions and stir.

No Sediment to Clog Nozzle

A scientific chemical compound, largely of Soluble Petroleum, with Oil of Sulphur and Resin. Two infallible remedies combined in our soluble compound.

Write for copy of letter showing Prof. Johnson's and Mr. A. N. Brown's examination of Prof. Smith's application.

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Flowers carefully packed and shipped anywhere.

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The Chrysanthemum

Its culture for professional growers and amateurs; a practical treatise on its propagation, cultivation, training, raising for exhibition and market, hybridizing, origin and history.

By ARTHUR HERRINGTON.

Illustrated. Price 50 cents.

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By JULIUS B. HEINICH.

New enlarged edition. Price 50 cents.

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A practical guide to the treatment of flowering and other ornamental plants in the house and garden.

By EREN E. REXFORD.

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By SAMUEL B. PARSONS.

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MORANG & CO., Limited

90 Wellington Street West, Toronto.

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WANTED — SUBSCRIPTION CANVASSERS for The Canadian Horticulturist both in cities and in the fruit districts of Canada. Liberal commissions offered. Good men soon put on salary. Write The Canadian Horticulturist, Rooms 507-508, Manning Chambers, Toronto, Ont.

FOR SALE CHEAP—ONE OF THE CLEANEST and best equipped greenhouses in Toronto. Everything in splendid condition, carnations planted, excellent stock of ferns and general stock of plants, 10,000 feet of glass. Apply at once to F. C., care of The Canadian Horticulturist

No unreliable firm can get advertising space in The Canadian Horticulturist!

Be Particular
about the little things you eat.
Impure salt is just as injurious as impure milk or butter.
There is one salt you can always depend upon as being absolutely pure and whole-some—
Windsor SALT

PRATT'S "SCALECIDE" Soluble Petroleum

Guaranteed to Kill San Jose Scale Without Injury to the Tree.

Prof. John B. Smith, Entomologist New Jersey Experiment Station, writes of "SCALECIDE": "I believe that applied at the right time and in a thorough manner, this is as good, if not a better remedy, for this pernicious insect than any we have up to the present time."

Add one gal. "SCALECIDE" to 20 gals. of water, stir and it is ready for use, no boiling. Price 50 cents per gal. in barrels, 10 gal. cans. \$6.00, 5 gal. cans. \$3.25; 1 gal. cans. \$1.00. Be sure to get the BEST and the CHEAPEST. For circulars address B. G. PRATT COMPANY, 11 Broadway, New York, N. Y.

The Spramotor Co., London, Ont., Canadian Agents.

Free Green Mountain, Mc Pike, Free Campbells' Early

The varieties named above are three of the best Grapes of recent introduction. We will send a first-class, 2 year, strong, well rooted vine of one of them to any person who will send us the names and P. O. address of ten reliable men among whom we would be likely to engage a canvassing agent.

We want names of persons who have had previous experience as canvassers for books, pictures agricultural implements, etc., or of any others whom you think would succeed as agents for us.

Your name will not be mentioned to those to whom you refer us, and no responsibility will attach to you in any way.

The Grape Vine will be sent to you, free of any expense, and if this were not a bona-fide offer we would not be permitted to print it here.

A post card and a few minutes, time are all that are needed from you. Address us as below, and write names plainly, and be sure to give us your own name and Post Office.

Brown Brothers Company, Nurserymen

BROWN'S NURSERIES, ONTARIO

LIMITED

CHRISTMAS DECORATIONS

HIGHEST QUALITY

HOLLY

well berried and foliage perfect.

MISTLETOE

selected especially for our trade.

Moss and Paper Wreathing, Bells, etc.

CHOICE PALMS

Rubber Plants and Araucarias in various sizes at reasonable prices.

ORDER NOW FROM

The STEELE, BRIGGS SEED CO., Limited

132 King St. East, TORONTO

“Canada’s Greatest Nurseries”

offer, for the first time in Canada, 3 Great Specialties

Gold Coin Potato

Ideal Asparagus

Maynard Plum

See page 491 of this paper for full description, and write for Catalogue and Special Circulars with cuts.

Send 50 cents in stamps for our **HANDY STEEL SAW**; cuts iron and other hard metals, and is just the thing farmers want in repairing implements and machinery, also a handy saw for trimming trees.

Are we represented in your district? If not, why not make big money this winter selling our stock? The demand for stock is now largest in years. Write for terms at once.

STONE & WELLINGTON,

TORONTO

FONTHILL NURSERIES. Over 800 acres.

Money Given Free to People who buy Goods from Advertisers in this Issue.
See Notice in Advertising Columns.

MONEY EASILY MADE BY OUR READERS

\$10.00 will be given away free by The Canadian Horticulturist to readers who purchase goods from its advertisers. All you have to do is to tell the advertisers you read their advertisements in The Horticulturist

HOW TO OBTAIN THE MONEY

\$5 will be given to the person who buys goods to the greatest value from advertisers in this issue before December 30, 1905.

\$5 will be distributed, one dollar to each, among the next five persons making application, who have purchased goods from our advertisers.

We have secured a limited number of an up-to-date work "The Orchard and Fruit Garden," recently published by E. P. Powell, one of the best known authorities on this continent. It contains 320 pages, and is well illustrated. We will give one of these books to any of our readers who would prefer it to one of the one dollar prizes. This book retails at \$1.50.

Readers must tell the advertisers they saw their advertisements in The Horticulturist.

A valuable premium will be given to all who do not win cash prizes. A premium will thus be given to everybody who buys something from advertisers in The Horticulturist.

When applying for a prize, readers must inform this office of the name or names of the advertisers they purchased from and the value of their purchases. Application for this bonus must be made before **January 15, 1906**. Address

ADVERTISING MANAGER,

The Canadian Horticulturist, - Toronto, Ont.

The Belleville Nurseries

for hardy varieties of

**Fruit and Ornamental
Trees, Shrubs, Roses, Ever-
greens, Grape and Other
Small Fruits.**

guaranteed true to name.

25 years' experience in Eastern Ontario enables me to supply the best, where hardiness is required. Stock is right, prices right. Send list of wants for prices before placing your order.

W. C. REID, BELLEVILLE, ONT.

DON'T SACRIFICE YOUR FRUIT

place it in the

Union Cold Storage, MONTREAL

and sell when markets are favorable. See that your Fruit is well packed and use only the best stock.

Grand Trunk cars can discharge into our cold storage avoiding cartage and exposure.

Stop-off privileges on export freight.

Dry air circulation, suitable temperatures and moderate charges.

Apply for particulars

Union Cold Storage Co., Montreal

GEORGIAN BAY SHOOK MILLS Midland, Ontario. Limited

Write us for prices on

APPLE BOX and FRUIT PACKAGE SHOOKS

We will be glad to quote on any specification submitted to us.

Best attention to orders and prompt delivery assured.

CLARK & SINCLAIR FRUIT BROKERS

DUNDEE, SCOTLAND

Consignments of fine apples shipped via Glasgow have best care and attention.

CORRESPONDENCE INVITED.

Bankers: Commercial Bank of Scotland, Glasgow and Dundee.

Special attention given to fruit growers' supplies.

Veneer Apple Barrels, Boxes and Baskets

We keep on hand for prompt shipment Veneers cut to size, suitable for use for the protection of trees from mice. Price on application.

THE CANADA WOOD SPECIALTY CO.,
Orillia, Ont. Limited

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Choicest Fruit and Ornamental
Trees, Shrubs, Roses, Ever-
greens, Berry Plants

Just the varieties you want, and
they are nice.

Look over our descriptive **Priced Catalogue**, its
free. 25 years dealing direct with customers. Try us.

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Central Nurseries St. Catharines, Ont.

EVERY truck farmer
knows (or ought to
know) that POTASH
is indispensable for pro-
ducing good-paying truck
crops.

A liberal quantity of
POTASH, along with ample
amounts of phosphoric acid
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successful truck growing.

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able to every truck farmer, will be sent to
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Address, GERMAN KALI WORKS,
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We are Headquarters for
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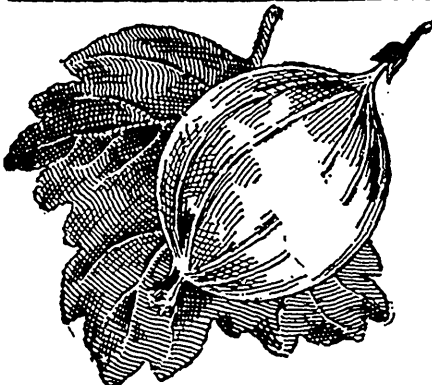
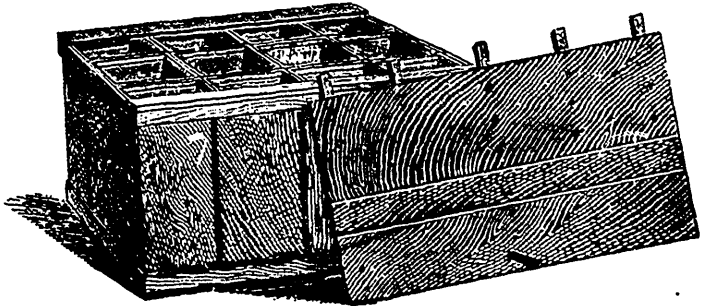
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mice during winter.

Fruit Packages a Specialty.

Send for our prices.

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Small Fruit Plants

Gooseberry, Red, White. Currants, Red,
White, Black. Raspberry, Red, Yellow.
Blackberries. Strawberry Plants. Straw-
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Garden Roots { Asparagus, Rhubarb,
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MANURE Prepared by Compost process from which fruit and nursery growers get the best results.

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Telephone Main 2510. Established 1880.

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Sure Growth Compost

Supplied to all the largest nurserymen and fruit growers in Ontario. Shipments made by car or boat. Prices reasonable.

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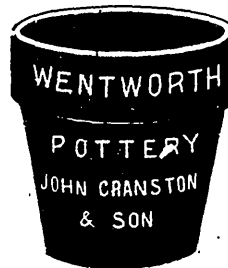
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HEAD OFFICE:
HAMILTON

Capital Paid Up - - \$2,235,000
Reserve - - - - \$2,100,000
Total Assets - - - \$26,500,000

Savings Bank at all Offices

Correspondence Solicited