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The "Safety" Fruit Picker

does away with ladders and climbing, and ensures safety to the operator and avoids bruising of the fruit.

The "Safety" Fruit Picker will save money in clearing up your trees, and is the "proper thing" for picking "Exhibition" fruit.

DESCRIPTION

The "Safety" Fruit Picker consists of a rubber covered wire hood, attached to a 12 foot pole, which grasps the fruit the same as the human hand, tilts it up and a single twist releases the fruit and drops it down the chute into a canvas bag at the waist of the operator without bruising or coming in contact with other fruit. It can be operated by a woman or child as easily as by a man.

The pole is bamboo, which insures lightness and stability, and is divided into 8 and 4 foot lengths, which are adjustable and can be used for large or small trees, at the pleasure of the operator. The wire spring, which holds the mouth of the chute in position, allows for the interference of the branches. The whole outfit weighs only 2 1/2 lbs.

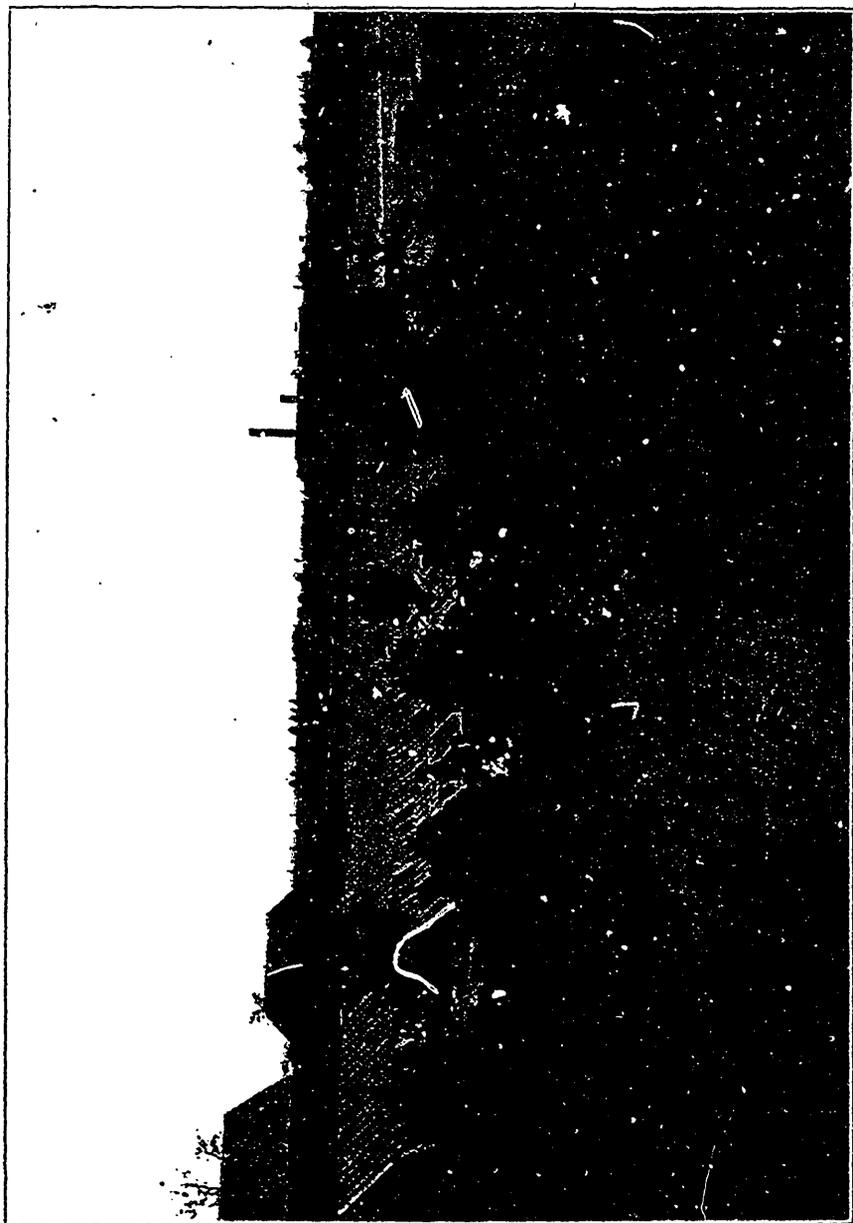
The bag is made of canvas duck, and is attached to a steel wire frame, which conforms to contour of the body, and is strong and durable and holds half bushel of fruit; is held in position by a wide canvas strip, which goes over the shoulder with an adjustable snap to secure it, and which is easily detached to facilitate the emptying of the bag when full.

Price, complete, \$2.00

The Safety Fruit Picker Co. of Ontario,
Ridgeville, Ont.
Limited.



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



A Fruit Farm and Vegetable Greenhouse and Garden Near Leamington, in Essex County, Ont.

On page 315 of this issue appears an interesting interview with Mr. J. D. Fraser, of Leamington, Ont., who has gone in for the raising of vegetables for the early markets on an extensive scale, and whose greenhouses are here shown. Mr. Fraser has six houses, part glass and part cotton, 210 feet long by 10 feet wide; two 150 feet long by 9 feet wide, and one 167 feet long by 31 feet wide. He has made an invention which enables him to drive up beside his greenhouses and throw in or remove dirt through the sashes. The illustration shows some of these sashuk open.

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WIDE AWAKE BRITISH COLUMBIA FRUIT GROWERS

A. M'NEILL, CHIEF FRUIT DIVISION, OTTAWA.

THE Province of British Columbia is progressing very rapidly in the matter of fruit growing. The climate (we might say climates, for British Columbia has several) has much to do with this advancement. The islands, coast and lower mainland are particularly adapted to small fruits, though excellent fruit trees are also grown in large sections of this country. The semi-arid inland valleys are particularly adapted, under irrigation, to the cultivation of apples, plums and cherries. With the development of the various schemes for irrigation it is not at all improbable that in the near future British Columbia will supply fruit enough to meet the demands of the prairie provinces.

Another most potent cause for the excellence of the methods employed in British Columbia is the fact that many of the fruit growers have gone into this province quite lately totally unacquainted with fruit growing, having, however, considerable capital. These men are not loaded down with a quarter of a century of prejudice, but come to their work fresh and willing to imbibe the latest and best from books and from their most successful competitors in the business. This will account for the fact that on the average the methods of British Columbia are infinitely ahead of those of the average fruit grower in eastern Canada.

In the Okanagan Valley irrigation is almost a necessity. This determines, to some

extent, the nature of the product, as well as the methods employed in producing it. Clean culture is almost uniform. Where water has to be conveyed for many miles in an artificial water bed, constructed at great cost, it does not take long to convince the fruit grower that he should not waste it upon grass and weeds.

EARLY FRUITING.

The control which the orchardist has over his trees contributes to the early fruiting of nearly every variety of tree, and probably the dry atmosphere has much to do with the perfect pollination of fruit blossoms. The setting of the fruit is usually what an eastern fruit grower would call phenomenally heavy, and has led to another orchard practice, almost unknown in eastern Canada, namely, thinning of the growing fruit, even on apple trees. It would strike the average Ontario or Nova Scotian grower as a waste of money to pay a man \$1.25 a day to pull good apples off a full grown apple tree, but this is the common practice in British Columbia, and one which is a necessity.

The one fruit tree that is not thinned is the cherry. I took a branch of May Duke cherries, a foot long, from the orchard of Mr. Pridham, of Kelowna, and found that there were 154 perfect cherries on it. Apparently there were dozens of branches that could have been selected from the same tree quite as heavily loaded.

The dry atmosphere probably accounts for the absence of fungous diseases in apples, cherries and plums, but it is the excellent cultural methods that have to do largely with the fine quality of the fruit. Here again the influence of the environment is very clearly to be seen. The local market is a comparatively small one. Everything is packed for the distant markets. Hence, great attention is given to grading and packing. Their teachers in this were the Americans in California, Washington and Oregon, who by long and costly experience had demonstrated that it did not pay to ship inferior or over ripe fruit.

The fruit grower of British Columbia, profiting by this experience, spends time and thought upon packing and packages that would seem wasteful to an eastern grower, but the result of this is seen in the prices which they obtain for their fruit. Calgary markets give about \$2.50 per box for British Columbia fruit when they only give \$4 per barrel for Ontario fruit.

There is no reason why the apple growers of Ontario should mix different grades, and ship in barrels, fruit, which if properly packed and graded, would equal in every respect the British Columbia fruit. It is very true that the eastern orchardist has a larger proportion of No. 2 fruit than the British Columbia grower, but there is comparatively little difference between the best fruit of Ontario and the best fruit of British

Columbia. The difference is largely in the intelligence, skill and care of the growers.

HIGH WAGES.

Surprisingly high wages are paid to laboring men. For ordinary orchard work \$1.25 to \$1.75, with board, per day was given. Some of the larger plantations have expert fruit men from the Pacific states to whom the owners pay salaries that professional men in the east might envy.

Many of the larger estates on which cattle feeding was tried are being broken up into small lots devoted to fruit growing. The delightful climate, where the temperature rarely goes, even in the coldest weather, down to zero, and that only for a few weeks in the year, has attracted many farmers, who have accumulated a competency in Manitoba or the Territories. The next largest class would be comparatively wealthy Old Country people. All these make most desirable citizens.

The social conditions are not those of a primitive settlement. There is an air of refinement and leisure everywhere which bespeaks not only culture but material prosperity. Libraries and lawn tennis flourish with the fruits. Churches and schools are well equipped and generously supported. Parks and home grounds abound, where trees, grass, flowers, rocks and water are worked into beautiful landscape effects not easily duplicated in the east. It is not a mere figure of speech to say that British Columbia is the California of Canada.

Grain in the Orchard.—Many advocate leaving grain in the orchard in the fall for the mice. They claim that when there is plenty of grain the mice will eat it and leave the trees alone. My experience has been that when I leave any vetch on the ground that has seed in it the mice will gather in great numbers, more than they otherwise would, and that they will girdle

the trees just the same.—(Jos. Tweddle, Fruitland, Ont.)

Draining Orchards.—I might as well go out of business as give up tile draining in my orchards. One of the drains stopped up one spring and I lost 15 trees through the water backing up.—(Adolphus Pettit, Grimsby, Ont.)

SODA BORDEAUX (BURGUNDY MIXTURE)

FRANK T. SHUTT, M. A., CHEMIST, EXPERIMENTAL FARMS.

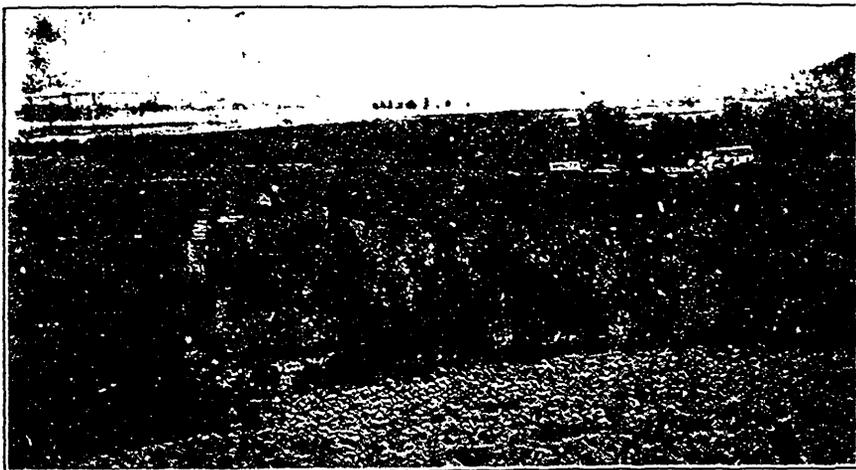
DURING July a number of reports were received, both from Ontario and Nova Scotia, stating that serious injury has resulted from the use of Soda-Bordeaux on apples, plums, cherries and peaches. These communications have been accompanied by requests for information respecting this newly-introduced mixture. A brief account of certain experiments recently conducted at the Experimental Farm, Ottawa, may, therefore, be of value and interest to fruit growers generally.

In Soda-Bordeaux, or Burgundy mixture (suggested as an alternative for the ordinary Bordeaux mixture for potato blight and rot), washing soda (carbonate of soda) is substituted for lime in the preparation of the spray. Two formulæ have been recommended:

	A.	B.
Copper sulphate (bluestone) ..	6 lbs.	4 lbs.
Washing soda (carbonate of soda)	7½ lbs.	5 lbs.
Water	40 gals.	40 gals.

A simple calculation will show that the proportion of bluestone to washing soda is the same in each, but "B" is a more dilute preparation.

As far as the writer can learn, paris green, white arsenic, or some other arsenical compound, had been added to the Soda-Bordeaux in every case in which injury was reported from application to fruit trees. When paris green is mixed with ordinary Bordeaux mixture it is not dissolved, but remains in suspension, and experience has shown that no injury results from the use of such a spray. When, however, paris green is added to Burgundy mixture it is partly dissolved, owing to the alkaline compound more or less corrosive to foliage. It has long been known that soluble arsenical compounds have this injurious effect upon foliage, and consequently cannot be used in insecticidal mixtures. It follows from this consideration that the addition to the Burgundy mixture of a solution made by boiling white arsenic and sal soda (resulting in the formation of arsenite of soda), as practiced by some, would render the spray extremely injurious. For these reasons it might well be conjectured that the addition of paris green or arsenic in any form to the Burgundy mixture would render it unsafe for use on fruit trees.



One of the Fruit Farms For Which British Columbia Is Becoming Famous.

The Richter orchard and farm at Keremeos, Similkamean, British Columbia, is here shown in part. The light background is the steep side of a high mountain. On this farm the alfalfa fields yield four crops annually. Apricots, peaches, almonds and grapes, including Black Hamburg, reach perfection.

Our recent experiments comprise trials on apples, cherries and plums with the following mixtures:

"A"—Soda-Bordeaux (Burgundy mixture):

Copper sulphate (bluestone)	4 lbs.
Washing soda	5 lbs.
Water	40 gals.

The bluestone and washing soda were dissolved separately in half the total volume of water and the resultant solutions mixed. This mixture, it will be observed, contains no paris green or arsenic in any form.

"B"—Soda-Bordeaux, as above, to which was added 4 ounces of paris green.

"C"—Soda-Bordeaux, as above, to which was added a solution made by boiling together 8 ounces of white arsenic and 2 pounds of washing soda with 1 gallon of water.

RESULTS AND CONCLUSIONS.

"A"—No apparent injury to the foliage of apples, plums and cherries.

"B"—Apples: A few leaves slightly scorched at the edges. The probabilities are it will be found that the varieties differ somewhat in their ability to resist the corrosive action of this spray, but the results obtained so far indicate that its use would

be attended with a considerable degree of danger in the apple orchard.

Plums: Scorching of the leaves quite evident, though injury not very serious.

Cherries: Results rather similar to those obtained on apple foliage. It is extremely doubtful if this spray could be used for this crop with safety.

"C"—Apples, Plums and Cherries: In every instance in which this spray was used excessive injury resulted. The foliage was badly scorched, subsequently becoming crisp and falling. The damage was such as to show conclusively that this spray is quite unsuitable and dangerous in the highest degree for all classes of fruit trees.

In a word, Burgundy mixture, pure and simple, has shown itself, as far as our experiments have gone, to be non-injurious to foliage. When, however, paris green is added the spray becomes more or less corrosive to foliage and its use is attended with danger. The addition of soluble arsenical compounds, as in "C," renders the spray extremely injurious to foliage, entirely prohibiting its use."

When it is desired to use paris green as an insecticide in the spray, Bordeaux mixture made with lime only should be used.

BURGUNDY MIXTURE HARMFUL

THE Burgundy mixture, used in many orchards during the past season, has given poor results in several cases. Growers in the Winona and Grimsby districts have destroyed a great percentage of their trees as a result of its use.

"The total damage to my trees amounts to about \$1,000," said Mr. E. D. Smith, to *The Horticulturist* a few days ago. "Nearly 2,000 plum trees and 500 cherry trees have been injured. Some trees were so badly scorched that I do not think they can recover. Smaller trees received a heavier spray than larger ones, so that the younger stock was damaged the most.

"We used the proportions recommended by the leading authorities, but did not test every time with litmus. With the ordinary Bordeaux mixture an excess of copper sulphate is all that has to be guarded against. An excess of lime makes no difference. In the Burgundy mixture, however, the proportions must be just right. An excess of sal soda seems to be just as injurious as an excess of copper sulphate. It is easy to prepare, but just as easy to make a mistake in the preparation of it. The nozzles never clog, and the mixture being colorless does not discolor the fruit, but I do not think I shall ever use it again."

THE SAN JOSE SCALE STILL SPREADS

J. FRED. SMITH, SCALE INSPECTOR, GLANFORD, ONT.

THE San Jose scale is slowly but surely spreading from all the old infested spots in Ontario. Only those who have been in close touch, and have taken a keen interest in the spread of the scale, are aware of how far it has spread since the Act was passed in 1898.

When I was appointed scale inspector in February of that year it was expected by the department that all the scale in the province would be destroyed and that by passing an Act to prevent trees coming in from the United States we would soon be free from it. Instead, there is more scale in Ontario to-day than ever before.

It spreads so quietly and insidiously that it may be in an orchard for some time before the owner is aware of its presence. I do not know of a single case where scale has been found in an orchard, and where it was allowed to remain long enough to spread from the original tree, that it has been cleaned out. The reason for this is plain when you are conversant with the way it spreads. Very frequently trees nearest an infested tree are practically free from the pest, while those at a considerable distance are badly infested. It is liable to break out anywhere within a mile of the original infested tree.

Despite the fact that some of the professors of this province scoffed at my opinion that the principal means of its spreading is by the winged males I still hold firmly to that opinion. These winged males carry the infant, or larvae, from an infested tree and thus perpetuate the species. Otherwise the scale would be exterminated because the tree would soon die and the death of the scales on it would follow.

My reason for considering the male scales the chief medium of its spread is the one of choice. Some varieties of trees will stand in the midst of a very badly infested orchard and be almost free from scale, while

those around it are literally covered with it. I cannot see why some people consider it such a ridiculous idea. Take for instance the spread of the codling moth. Every one knows that its spread is by the moth herself, which flies around and deposits her eggs on the apples, not indiscriminately, but after making a choice. Every orchardist who is at all observant about insects, knows that some varieties of apples never have worms if there are plenty of others to be attacked. The moth distinguishes the varieties when the fruit is so small that we ourselves could not tell what kind it was if we did not see the tree on which it was growing.

Another reason for thinking the male scale is the culprit has been obtained from information gathered after an infested tree has been planted in an orchard. I have known cases where the tree had stood for two or three years and then, on becoming aware of the presence of the scale the owner destroyed the tree and there has never been a scale found there since. But I have known other cases where such a tree was left for a time, and just as soon as it became overloaded and a spread was necessary for the perpetuation of the species, the scales could be found not only close by but at a distance. Especially is this so if varieties near are not to its taste. In a district where the scale is bad growers frequently say, "No, you never find much scale on those trees. They do not seem to like them."

I have said that I do not know of an instance where the scale had spread from the original tree or trees, and I wish to emphasize the words "spread from," as there are. I think, somewhere about 100 places in different parts of Ontario where the scale was caught in time, and not a scale has ever been found there since. A notable instance of this came under my observation this

spring. In the year 1898 a consignment of trees was shipped to Belleville, and during inspection it was found that this carload had some scale in it. A list of all the places where the trees had been sent was secured, and everything on which scale could be found was destroyed. This spring the growers of that section became alarmed and sent in a petition to Hon. Mr. Monteith, the Minister of Agriculture, asking for an ex-

amination, and I was ordered to go down. I made a careful examination of those places most convenient to Belleville in which the scale was found in 1898. Although it is now seven years since those trees were destroyed, which would give the scale time enough to make an appearance, still I could not find a single scale. The fact, however, remains that there is more San Jose scale in Ontario than ever before.

New Heads for Cherry Trees

J. L. HILBORN, LEAMINGTON, ONT.

What is the best plan to deal with my lot of 25 cherry trees? They are thrifty and measure one and a half inches through the trunk. I procured them two years ago from the corners of the fences. They grew from the common cherry. I would like to grow new tops of the latest and best varieties. Shall I do it by budding or grafting, and at what time, and should the work be done in a different way from apples?—(J. G. Walt, Wicklow, Ont.)

The cherry cannot be grafted so far as I know. The tops might possibly be changed by budding in early August, but I do not think it advisable to try it. I would grow them as they are, as that is a good variety. The Montmorency is considerably larger, finer and later, but I do not think it practical to change such large trees. They are always budded the first season of their growth.

Picking and Handling Apples

W. H. DEMPSEY, TRENTON, ONT.

APPLES require great care in gathering and handling if the most is to be made of them. They should never be picked until they are matured, well colored, and of full growth yet firm. They should, however, be picked before they have commenced to decay or fall from the tree ripe.

I have found that apples picked under the conditions described, and placed in the fruit house the same day, will keep better than when green or over ripe. When green they are subject to scald in the barrel or box if

the temperature is warm, and if there is any fungus on them it will continue to develop. I have seen hundreds of barrels thrown out from this cause. If over ripe a great many will be found to have decayed by shipping time and many more will decay before they reach the market, and arrive in a wet, waxy condition.

I Have 1,200 Plum Trees in bearing, including 60 or 70 varieties. There are two distinct classes of plums, the Domestic and Japanese. The Japan class has a positive brilliant color with a certain pineapple flavoring. It is also claimed to be more exempt from plum rot and the attacks of the curculio. In the domestic class the best varieties are Lombard, Reine Claude, Glass Seedling, Bradshaw, Niagara and Imperial Gage. Of the Japan class the leading varieties are Abundance, Burbank, Willard, Chabot and Satsuma.—(A. W. Peart, Burlington, Ont.)

If Trees Are Overloaded so that they cannot bear fruit to maturity it is better to thin the fruit in August than put props under each limb. The prop I prefer is the removal of the fruit. If the tree has such a load that it cannot hold it up without splitting, by all means remove enough to bring the tree through without injury, so that it will be in a condition to fruit the following season instead of having to wait a year or two to recover from the overload.—(W. H. Dempsey, Trenton, Ont.)

SUMMER APPLES IN COLD STORAGE

G. B. ROTHWELL, B. S. A., OTTAWA, ONT.

DURING the summers of 1903 and 1904 I conducted several experiments with summer apples in a refrigeration building of the Hanrahan type. Two main objects were kept in view: first, to illustrate the advantages of an efficient type of ice refrigerator to the farmer; second, in accomplishing the above end, to show the value of storing non-keeping varieties of summer apples. In the working out of the latter, owing to a number of experiments being suggested by the differing conditions encountered, the work resolved itself into the handling and methods of storing apples.

The apple used, in the majority of the experiments, was the Duchess of Oldenburg. This apple is largely grown in eastern Ontario and in the eastern provinces, and is a typical mid-summer apple. The fruit is medium to large in size, of a light yellow color striped with bright red, and has, when mature, a very agreeable semi-acid flavor. It is, at best, a poor keeper, retaining its flavor and texture only a short time after maturing, if kept under ordinary temperatures. For this reason and because of its popularity on local markets, especially in more northerly districts, it was chosen as a basis for experimentation.

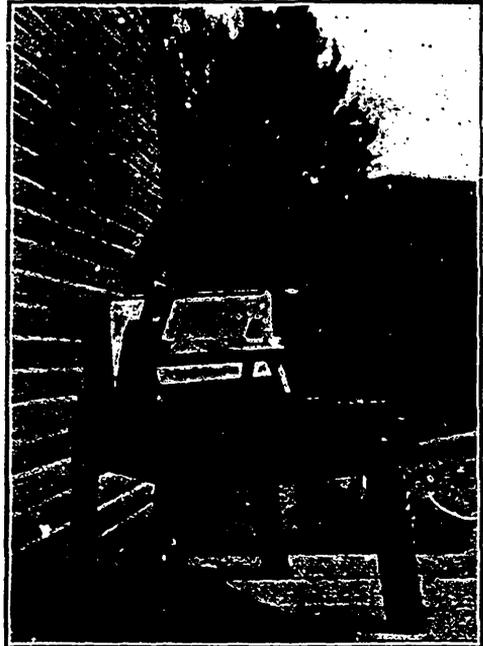
METHODS OF PACKING.

Four methods of packing were adopted: (1) Stored in ordinary bushel boxes; (2) ditto, each specimen being wrapped in a quarter-section of unprinted newspaper; (3) wrapped in tissue paper and again in waxed paper similar to that used in wrapping butter; (4) packed in small kegs of sawdust. Sixteen bushels were stored, four separate pickings and four separate packing methods.

Pickings were made on August 4, 15, 25, and September 1. The apples picked on August 4 were immature in every way, being only slightly colored and acid in flavor. Those picked on August 15 were also im-

mature but were fairly well colored. Those picked on August 25 were almost ripe, lacking only the yellow tinge to being fully colored and being only very slightly acid in flavor. Those picked on September 1 might be said to be dead ripe.

The two first lots, immature when picked, retained their immaturity throughout. On November 15 several were spotted on the green or uncolored side, the spot somewhat resembling a sun-scald. They still retained their acid flavor, but shortly after lost even this and became flat and tasteless. The lot picked on August 25 were, on December 15, perfect in texture and flavor, although they had at this date evidently reached their limit of keeping. Shortly after a distinct falling off in flavor was noticed. Those picked on September 1,



Ready For Pressing—No. 1.

A handy device used on Coldstream Ranch, Vernon, British Columbia, for the packing of fruit, is here shown. The box of fruit that can be seen is ready to be pressed so that the ends of the cover may be firmly nailed. Before applying pressure by means of the bar of wood over the box the small wooden frame work, leaning against the box, is placed on top. The pressure is applied on this framework to prevent injury to the fruit. As this framework is not as long as the box there is plenty of room at the ends for nailing.

dead ripe when stored, were, on November 15, lacking in both texture and flavor. They were soft and in some cases discolored and the flavor was becoming flat.

THE EFFECT OF WRAPPING.

Comparing the unwrapped apples with those wrapped; on November 15 no decay was found in the latter, while in the former two or three specimens were removed. The flavor of the wrapped specimens was, if anything, slightly better than the other. The third lot, wrapped more carefully in double wrappings of paper, showed a perceptible improvement over the newspaper-wrapped lot. However, it is doubtful if the extra gain was worth the extra trouble and outlay. Sawdust was found, in this case, to be a very undesirable material in which to store fruit.

Similar experiments were made with the Langford Beauty and the Fall St. Lawrence. Both are typical varieties of non-keeping, early fall apples. The Fall St. Lawrence apples were placed unwrapped in three bushel boxes, each box representing a different packing. Some were picked on September 12 and were rather immature. These did not improve as the storage period advanced. Others picked on September 18 were almost perfect. They had reached their limit on December 1, but were then perfect. Others picked on September 27 were fully matured. They lost their flavor earlier than did those of the former lot.

The Langford Beauty specimens were also placed, unwrapped, in bushel boxes. They showed the same tendencies as the other varieties. The earlier picked lot retained their immature flavor throughout the experiment. Their texture also remained perfect throughout. Those picked on September 7 were almost fully mature and were perfect on November 15, but had then reached their limit. The peculiarity of this variety seemed to be its early loss of flavor, the texture remaining firm.

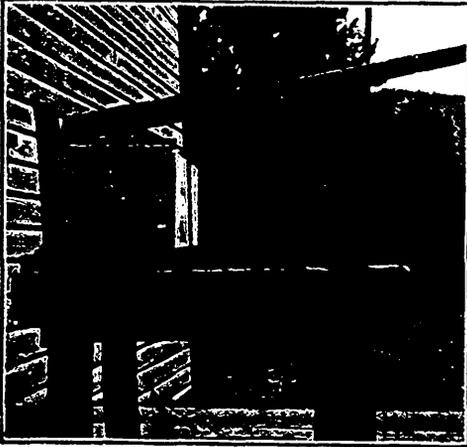
BENEFITS OF WRAPPING.

A separate experiment was carried on with the Tetofski apple to ascertain the benefits of wrapping fruit. The Tetofski is a very early variety, and it is found particularly difficult to keep it for any length of time after maturity. Consequently it is a very suitable variety with which to test more fully the benefits of wrapping. The apples were placed in four bushel boxes on August 1, when they were almost ripe. The same methods of wrapping were employed as in experiment 1, namely, (1) unwrapped, (2) wrapped in newspaper, (3) wrapped in tissue paper and waxed paper, (4) packed in sawdust.

The results obtained were practically the same as with the Duchess apple, with the exception that these apples, being soft and easily bruised, were even more benefited by the protection afforded by the paper. These apples, under any method of storage, could not be kept for more than one month. September 1 is about their limit of keeping. On this date the wrapped specimens were perfect in appearance and flavor. The unwrapped specimens were discounted considerably by bruised and spotted specimens. Sawdust, again, proved very undesirable as a storing medium.

THE POINTS PROVED.

The experiments show conclusively that the early apple is very greatly benefited by some protective covering. Although this is especially the case with the early apple, many late varieties, such as the American Russet, are similarly benefited. Where apples are stored in small quantities for private use or held for fancy trade, wrapping should be resorted to. A layer of ordinary newspaper surrounding an apple prevents it from injury by jarring, rubbing, or slight pressure. It lessens the liability to damage from sudden excesses of heat and cold, in cases where the temperature may be influenced from external sources; it



Ready For Nailing—No. 2.

This shows the pressure being applied and the bar or handle being held in position by being caught in a tooth of the iron rod standing up from the end of the stand. The cover is ready to be nailed on. Notice the manner in which the box is stamped. (These photographs are printed through the courtesy of Mr. Alex. McNeill, Chief of the Dominion Fruit Division.)

checks transpiration, isolates specimens in which rot or scab may appear, and has sufficient influence over the fruit to amply repay for the trouble of wrapping. Where large quantities are stored, however, such a practice would be out of the question.

THE HANDLING OF FRUIT.

Careful handling before storing is the most important phase of the industry. No matter how perfect an apple may be on the parent tree, a slight bruise given when handling and magnified during its storage period very greatly lessens its value when removed from storage. Experiments conducted with Duchess and Tetofski showed clearly the benefit of careful handling. It must be remembered that the low temperature of a storage exerts no "mysterious influence" over fruit. It cannot heal bruised apples nor remove scab or rot. It can, however, check the spread of a disease, or also, the injury caused by a bruise, but these influences are rather over-estimated. If the apple is to leave the storage and reach the consumer in perfect condition it must necessarily enter it in that condition.

The importance of storing as soon as the

fruit is picked cannot be too strongly emphasized. It is a very common practice among growers to allow the fruit to remain in "pits" or piles in the orchard, previous to storing it. An experiment was suggested by just such a case. The owner of the apples in question claimed that this delay exerted a considerable influence over the ultimate keeping qualities of the apples. It is easily shown that an apple picked when almost ripe, will, if allowed to remain under ordinary conditions, ripen much more rapidly than if it were allowed to remain on the tree. The effect of severing it greatly accelerates the speed of the changes involved in the maturing process. This being so, the ill effects of piling apples in the orchard are very apparent and an easy explanation is afforded for the behavior of the fruit in the experiment. Not only did the fruit ripen more rapidly, but its maturing was still further quickened by the heat of the ground and by any heat and moisture developed in the pile. Immediate storage after picking is one of the essentials to successful fruit storage.

COMMERCIAL VALUE.

The value of storing early apples for commercial purposes is a most important question. Experiments made indicate that the practice of holding over such an apple as the Duchess for comparatively long periods would be a risky procedure. Such an apple cannot be stored for a much longer period than a month or a month and a half, leaving a reasonable length of time for disposal after removal. The real virtue of the early apple is that it is early. It has no other outstanding points of superiority over the fall varieties, and would stand but a poor chance if brought upon the market in competition with them.

A long storage may not be advisable, but great benefit may be derived from one of shorter duration, especially where the fruit is to be disposed of on local markets. In

eastern Ontario, where the early apple is so widely grown, the crop ripens "all in a heap," as it were, and must be disposed of with due haste before it deteriorates. The grower must content himself with prices which make the handling of such varieties unprofitable. Hundreds of bushels have

been sold for as low as 25 cents per bushel simply because a quick sale was imperative. Two or three weeks later similar apples sold at 35 to 50 cents per bushel. The employment of some method of cold storage would have made the delaying of sale possible, and resulted in great gain to the producer.

Actual Co-operation

THE value of cooperation is recognized by the members of the Kootenay Fruit Growers' Association, of Nelson, B. C., which was formed last year and has accomplished excellent work. The objects of the association, as announced in a circular which Secretary Thos. Morley has sent to the fruit growers in the Nelson district are as follows: To encourage the growing of choice fruits and vegetables; to secure to the fruit growers and gardeners of the Kootenay district, who are members of the association, all possible advantages in the marketing of their produce; to create a demand for the produce of the association; to use their combined efforts for the prevention of plant diseases and insect pests; to prevent the importation of infected nursery stock; to collect and distribute information of value to its members; to secure by co-operation the lowest prices on fertilizers, crates, boxes and such other supplies as may be required; to secure lower freight rates, and to expedite the delivery of the produce of its members.

Early this season the secretary issued a circular to the members of the association and enclosed forms which they were to return to him showing the number of berry crates, collapsable berry boxes, plum and cherry baskets and crates, rhubarb crates, pear and apple boxes, etc., they might desire. As soon as the secretary had secured a list from all the members of the supplies they wished, he was able to purchase the supplies more cheaply by getting them in

large quantities. Much of the fruit of the association is sold in Winnipeg and the towns and cities of the central west.

Value of Wood Ashes

PROF. F. C. SEARS, WOLFVILLE, N. S.

How heavily should wood ashes be applied in orchards? Will they hurt a growing cover crop, or should they be applied just before turning under? If so, would they not be too late to benefit the existing crop?—(A. J. L., Ontario.

Wood ashes are so variable that it is difficult to answer this question. Analysis of ordinary Canadian hardwood ashes shows about 6.15 per cent. potash and 1.90 per cent. phosphoric acid, while soft wood ashes run little more than half that amount. This, too, is for ashes which have been well taken care of. Ashes as bought on the market run all the way from the percentage given to nothing. I should consider one ton per acre a good dressing. I should not apply them to growing cover crops. Application in the spring before plowing is better. They would benefit that season's crop because much of their fertilizing constituent is immediately soluble.

We Cannot Grow Pears or European plums in this district. I have tried Flemish Beauty and Keiffer, two of the hardiest varieties of pears, and both froze out. In plums I have tried Moore's Arctic, Lombard, Smith's Orleans, Abundance, and many other hardy varieties, but they met the same fate as the pears. I never yet had a good crop of either.—(Dr. McCallum, Smith's Falls, Ont.

A SUCCESSFUL COOPERATION ENTERPRISE

COOPERATION is in the air. The fruit growers of Ontario are alive to the necessity of cooperating more in the handling and marketing of their fruit. This is evidenced by the numerous cooperative associations that are being formed and by the various plans which are every now and then brought forward in an effort to enable fruit growers to obtain more for their crops.

The importance of the subject being thoroughly realized. The Canadian Horticulturist purposes from time to time describing various cooperative movements which are in successful operation among fruit growers. The Niagara District Fruit Growers' Stock Company, Limited, was formed 25 years ago to assist the fruit growers of the Niagara district to market their fruit to better advantage. While this company has had its up and downs, the fact that it has existed all these years and that it has increased in strength is the best evidence that it has been of value to the fruit growers of the Niagara District.

An editorial representative of The Horticulturist recently called at the head office of the company at Grimsby and had a chat with Mr. Murray Pettit, of Winona, the president of the company, and Mr. J. W. G. Nelles, the secretary. "When we started the company," said Mr. Pettit, "it was capitalized at \$10,000, but in 1894 we increased the stock to \$20,000, the shares being placed at \$100 each. We have about 100 shareholders, principally in Lincoln and Wentworth counties, although some live in Essex.

"At the time the company was formed the commission men in the leading cities had the situation practically in their own hands. They were slow in reporting sales and the growers were unable to ascertain what their fruit had realized until two or three months after it had been sold. Our first intention was to send members of the association to the different markets to sell the fruit of the members of the company.

An effort was made along this line but was finally given up, partly on account of the short fruit season, which prevented the agents from building up a trade, and partly on account of the competition with the commission men, who had the great advantage of being located in the cities.

"Gradually we changed our methods until finally an arrangement was made with the commission men in the different cities whom we knew to be reliable. We agreed to ship our fruit to these men only, and in return required them to furnish bondsmen every year. These bondsmen we insisted should be worth in their own right from \$2,000 to \$5,000 each.

"This method has been followed ever since. The commission men deduct the freight rates and charge seven per cent. commission on all sales. The regular commission is 10 per cent., but the commission men are willing to charge us less in view of the fact that they do not require to have agents in the district where our company has shareholders. The company supplies the commission men with agency books. The commission men report directly to the head office at Grimsby after each sale, the price realized daily. They are supposed to report every week and most of them do so, sending the money and a list of the sales."

PROMPT RETURNS.

"I generally receive reports," broke in Mr. Nelles, "on Tuesday. Every shareholder thus has his money by Wednesday. The contracts between the company and the commission men are signed at the beginning of the season. The commission men are given the privilege of handling all the fruit of the company sent to their city, and in return they agree to report to us weekly. The commission man who is slow in making returns runs the danger of losing the agency. We have agents in 26 or 27 cities in Ontario and Quebec. Some years

we have had as many as 34 agencies. About one-third of the cities report daily the price which is being paid and their reports are placed in the hands of the growers."

"Our members," said Mr. Pettit, "are nearly all large shippers. Most of the shareholders in Essex county live near Leamington, Kingsville or Walkerville. All kinds of fruit are handled, starting with early berries. Three per cent. covers the cost of the secretary's expenses, office rent, etc. The growers are sure of receiving the

money for their sales as the company guarantees the price.

"We ship for about 300 growers in the different counties. Our business has run from \$75,000 to \$100,000 per year. While the company is not making money, its financial basis is better than for 15 years."

Among the leading directors of the company are Mr. Murray Pettit, of Winona, president, and Messrs. A. H. Pettit, of Grimsby; Robt. Thompson, W. H. Bunting and Andrew Haines, of St. Catharines.

Likes a Shallow Box

W. V. HOPKINS, BURLINGTON, ONT.

FOR 15 years I have been shipping apples in boxes 12 inches wide and nine inches deep. I have three grades, large and small sound fruit and a number two. I am compelled to have the packing done by women. It is difficult to see well and place apples properly in this box, which is only nine inches deep, and for this reason it is a mistake to have the box deeper.

Twelve inches is rather narrow for two reasons. The larger the surface or face the better the appearance, and in turn the higher the price. A flat box piles better in the storeroom or in a car, and carries better on a wagon.

I always press so as to have a bulge in the centre of the top and bottom and put a cleat on each end to protect this. The boxes should not be piled crosswise, as then the weight comes on the bulged part of the box and the fruit is bruised.

A uniform package is needed, but I hope the new box adopted by Parliament will prove more practical than the standard basket, which is too large for cherries, currants and plums. It is necessary that time be given to dispose of the old stock of boxes before the new law comes in force.

Fruit for Huron County

PROF. H. L. HUTT, O. A. C., GUELPH.

A Huron county correspondent asks for the names of five of the best plums, three cherries and three grapes for his district; also for suggestions as to what are the most rapid growing trees for shade to plant near the dwelling.

I would recommend the following five varieties of plums as most likely to give satisfaction: Burbank, Bradshaw, Imperial Gage, Lombard and Reine Claude. These are given in their order of ripening and cover the season fairly well. In cherries I would recommend Montmorency, Early Richmond, and Windsor. The following varieties of grapes are the best representatives of the three colors, red, white, and black: Lindley, Niagara, and Worden.

The shade trees which make the most rapid growth when young are not always the most satisfactory when old, or do not usually live as long as many of the slower growing trees. The Ash Leaf maple, or as it is sometimes called, the Box Elder, or Nagundo, is one of the most rapid growing shade trees, but it is not nearly so satisfactory after 20 or 25 years as the maple or elm. The soft maple is another rapid grower, and either of these may be planted for immediate effect, but I prefer to plant white elm or hard maple if soil is suitable, and wait a little longer for results.

Judging Fruit*

W. T. MACOUN, HORTICULTURIST, C. E. F.,
OTTAWA.

IN judging fruit one of the first defects to be looked for are blemishes. No fruit should be exhibited in competition for prizes that has a worm hole, bruise, spot or any other blemish unless it is impossible to get a specimen without such, or unless the blemish is very small and the fruit perfect in every other respect.

The uniformity of the specimens is equally as important as the freedom from blemishes. Irregularity is never attractive in fruit, and the specimen which attracts the eye on the dining table, in the shop window, and in the barrel or box is the specimen which approaches nearest the typical shape of the variety in question. Furthermore, the irregularity of one specimen gives an uneven appearance to the whole, and particularly is this the case when there are only five apples together.

High color is as desirable as uniformity, and it is difficult to decide just how far from perfect uniformity, highly colored fruit may be and yet score as high as a perfectly uniform plate with only fairly colored fruit. It is sometimes puzzling to the exhibitor to know just why a plate of apples receives a prize; but all these points are carefully weighed by the judge.

The time when size was considered the first essential in exhibition fruit has passed away, at least with the best judges, and large size is only preferred when the specimens are uniform, highly colored and free from blemishes, and equal in every other respect to those a little smaller. Apples which are of good size for the variety, and perfect in every other respect, will stand the best chance for first prize, as it is difficult to get large specimens which are as highly col-



John M. Fisk

John Manson Fisk, President of the Quebec Pomological Society for 1905, was born at Abbotsford, P. Q., Dec. 13, 1836. As a boy he developed a taste for horticultural pursuits by sowing apple seeds and planting trees, and after coming into possession of his father's farm, established a nursery, where many varieties of apples, pears and plums were tested, the trees from which now form the nucleus of many a commercial orchard in his native province. He was one of the originators of the Abbotsford Fruit Growers' Association, formed in 1874, and which published the first fruit list for the province of Quebec in 1875, and ever since has been one of its leading members. The Pomological and Fruit Growing Society of the Province of Quebec was organized at Abbotsford in 1894, by representatives from different parts of the province, at which Mr. Fisk was elected its first president. Each year since he has taken an active part in the work of the society.

ored and as perfect as those a little smaller.

There is also a certain undefinable thing called "finish" about an apple which is regarded by the judge. This may be explained, in part, by a clearness of skin and a thorough maturity of the fruit. No better evidence could be given of the stability of the soil and the care in growing the fruit than the finish which the fruit has.

When comparing different varieties, quality, of course, should and does receive due consideration; especially is this the case when judging collections of fruit. In judging collections, however, the value of the varieties shown from a commercial as well as a dessert standpoint receives attention.

*Extract from an address delivered at the last annual convention of the Prince Edward Island Fruit Growers' Association.

Undersized Baldwin Apples

"A GREAT many orchards, especially those in which Baldwin apples are being grown, are producing undersized fruit," said Mr. Joseph Tweddle to an editorial representative of *The Horticulturist*. "The question," continued Mr. Tweddle, "is what is the cause? Several years ago I was handling 10 or 12 orchards on shares. For two or three years parts of them bore some fruit, which was off in color and small sized, while others produced fruit of normal size and fair color. The trees in all the orchards were sprayed in the same manner.

"I found that the orchards which were in cultivation during the winter of 1878 and 1879, when so many peach and plum orchards and vineyards were destroyed by root freezing, were the ones which bore the small sized off-colored fruit. Those which were in sod that winter escaped the root killing and bore medium sized well colored fruit. When I found this out I commenced heading in severely the orchards which were root killed, and they immediately responded by vigorous growth. In my opinion that is what is the matter with many poor orchards. I now grow crimson clover and rye and vetch, and after it has served its purpose as a winter cover it is plowed under for a supply of nitrogen and humus. Some kind of crop is sowed every year for this purpose.

A Plum and Cherry Disease

T. D. JARVIS, B. S. A., O. A. C., GUELPH.

Something has happened to many cherry and some plum trees in this section. The leaves turn yellow and have brown or blackish spots on them. They finally fall off. I understand it is a fungous disease that is the trouble. What is the remedy?—(E. C., Essex Co.

The fungous disease attacking the plum and cherry leaves is popularly known as the Shot Hole Fungus. It does considerable injury each year to the plum and cherry

trees of Ontario. If the trees are sprayed in the early season with Bordeaux mixture it will reduce the disease considerably.

Wanted—A Fruit Commissioner

THAT leading fruitmen feel strongly regarding the action of the Dominion Government in placing the fruit division under the supervision of the Dairy Commissioner is shown by many forcible letters and expressions of opinion on the subject which continue to reach *The Horticulturist*. Here are two:

A. E. Sherrington, manager Bruce Fruit Growers' Association: Owing to the vast importance of the fruit industry, I believe that it is absolutely necessary that it should have a commissioner of fruit, who shall be entirely separate and distinct from the dairy division and who shall have entire charge of the fruit branch of the Dominion department of agriculture. It is important that we shall have a fruit commissioner through whom we will be able to come in direct touch with the Minister of Agriculture, which is impossible at present, owing to its being necessary for the chief of the fruit division to consult with the dairy commissioner in regard to all matters concerning the fruit industry. We should push this matter until our desires are complied with.

D. Johnson, president and manager Forest Fruit Growers' Association: The action of the Dominion Minister of Agriculture in placing the chief of the fruit division under the control of the dairy commissioner places the former in an awkward position. It seems to me that if the chief of the fruit division was brought in direct contact with the minister he would be able to do more for the advancement of the fruit industry, which is in a discouraged condition. The large quantities of fruit which go to waste every year show the great need of something being done to improve the fruit industry.

Other industries have been helped by the Dominion department of agriculture, and many of them have been put on a paying basis. The fruit industry with all its possibilities is being neglected as is shown by the action of the Minister in refusing to give the fruit interests a special commissioner. I am in favor of fruit growers uniting and demanding that the government give them a commissioner of their own and thereby recognize the great possibilities of the fruit industry.

Soot as a Fertilizer

PROF. R. HARCOURT, O. A. C., GUELPH.

What is the best way of using soot as a fertilizer? Should it be scattered on the ground or mixed with water and applied as a liquid?—(J. G. Goble, Woodstock, Ont.)

Soot owes its value to the presence of a small and variable quantity of ammonia salts. The best house soots do not contain more than about 3.5 per cent. of nitrogen. They do not contain any appreciable quantity of potash or phosphoric acid. As there is such a small amount of fertilizing constituent in the soot, it would not pay to mix it with water and use it as a liquid.

All that is necessary is to sow it broadcast on the ground as a top dressing. It would possibly give its best results on grains, sown after the growth commences in the spring. I do not think it is rich enough in nitrogen to be an efficient manure for the horticulturist.

Direct Shipments

A LEADING Canadian fruit grower of the Hamilton district, who has recently returned from Great Britain, states that a number of the large wholesale commission firms in Great Britain are becoming disgusted with the auction sale method of purchasing their supplies of fruit, which is now followed in Great Britain. Several of these firms are anxious to get in touch with leading Canadian growers and with

our cooperative apple growers' associations, that they may arrange for direct shipments of apples and other fruit. Two of the firms mentioned are those of Veitch, Moyer and Erskine, of Edinburgh, and Watson & Co., of Aberdeen, Scotland.

Firms like these claim that when they buy their fruit by auction they are unable often to select the kind of fruit they want or fruit that is packed in the way they would like. They believe that if they can arrange with large Canadian shippers they will be able to obtain the fruit they would like. Some of these firms intend to send buyers to Canada.

Insects on Larch and Honeysuckle

TENNISON D. JARVIS, B.S.A., O.A.C., GUELPH.

My larch trees are being attacked by some greenish caterpillar. These caterpillars are very numerous and in clusters. Many of the needles have a white downy substance on them. Some small insects, some of which have wings and some without wings, appear in white clusters on my bush honeysuckle. What are the insects which cause the trouble and the best methods of combatting them?—(D. M., Peel County.)

The larvae that is attacking the larch trees is the Larch Saw Fly (*Nematus erichsonii*). I would advise spraying the trees with Paris green solution (Paris green four ounces and water 40 gallons). The white sticky substance to which you refer is likely the Larch Chermes, a very small insect common on the larch. This insect has a sucking mouth, and should be sprayed with kerosene emulsion. The clusters of insects on your honeysuckles are plant lice. These insects have sucking mouths and should also be sprayed with kerosene emulsion.

Spraying is an absolute necessity in order to attain success, and is very remunerative in return for the outlay required to make a thorough job of it. The question is how to get it done with the help at hand and keep up with other work. Power sprayers have appeared on the scene to solve this problem.—(W. H. Brand, Vinemount, Ont.)

MARKETING SMALL FRUIT

IT is a season such as we have this year which tests the grower of small fruits. Many growers find little trouble in so caring for their bushes and cultivating their land that a fair crop results each year if the weather conditions are not too unfavorable. As a rule it is not difficult to find a ready market if the crop is not very heavy. But when a bumper crop comes the business ability of the grower is put to the test and that grower who is the shrewdest and pays the most attention to supply and demand on the different markets usually obtains greatest returns for his labors.

An attempt has been made by The Horticulturist to find out how some of the leading growers in the Niagara district sell their crops and from what markets the greatest profits are obtained.

"This year," said Mr. J. A. Pettit, of Grimsby, "there was good money in the home market for strawberries. I always sell my fruit to local buyers unless it is evident they are not paying enough. I also ship some. The Ottawa market suits me best, because it is handy to ship by Dominion express from here. I seldom sell to the canners and never make a contract with them. This year the canners have paid \$1.32 per crate, but when they contract for many crates from certain growers they do not always get the best berries as the growers can make more money out of the best on the local market or perhaps by shipping them."

CANNERS PAY BEST.

"Selling berries to the canners," said Mr. J. W. S. Nelles, of Grimsby, "pays best all through. Many growers claim otherwise,

A great deal of fertilizer can be profitably used on strawberry plants if applied at proper intervals, as follows: In the early spring before planting, again late in the summer or early fall around the plants, and again in the winter or very early spring directly over them.

but 'a bird in the hand is worth two in the bush.' In many cases if they ship to a distant market they are not sure what price they may get. Many buyers here have bought whole patches to ship. It will not be long until the buying will all be done at the growing point."

"For the Marlboro raspberry," said Mr. W. H. Spera, of Bartonville, "I find best money in selling on the Hamilton market. It comes in early and demands a high price. Sometimes I ship to Ottawa or Montreal if I find localities better located for supplying those cities have not a sufficient crop. As a rule, however, the home market pays best. There is more work, however, about supplying the home market, as when the berries are shipped all that is necessary is safe delivery to the train. The Cuthbert is firmer and a better canner and greater returns are obtained by selling it to the canners, as this variety comes in after the earlier varieties have lowered the price on the open markets.

MONEY IN CURRANTS.

"My land," continued Mr. Spera, "is specially suited to growing currants. I usually sell the red currants in Hamilton at about \$1.75 per crate, but if the demand is not good there I look for other markets. I have shipped direct to Buffalo, and after paying freight and a duty of one cent per box, besides commission merchant's fees, have cleared over \$1.75 per crate. Black currants generally bring 90 cents to \$1 per 11-quart basket. For me the canning factory in Hamilton pays best because I have a big lot to sell. On the local markets a higher price might be obtained, but only 10 to 12 baskets could be disposed of at a time."

What interests me most in The Horticulturist is the names of the different kinds of fruit that do well in latitudes similar to Owen Sound. These articles are a far better guide in selecting fruit trees or plants than the fruit agent with his picture book. —(John Thomson, Owen Sound, Ont.

HARD TO GET PICKERS

GROWERS of small fruit generally find considerable difficulty each year in handling the crop. This is the case in most sections this season. The trouble was not very great with the strawberry crop, which was light in many districts, but now the raspberries are in the trouble has begun. Growers have to use different methods to secure pickers, and many of these methods are far from satisfactory.

While talking to a representative of The Canadian Horticulturist who visited his place recently, Mr. W. Walker, of Grimsby, said: "It is very difficult to get pickers—in fact, we can't get good ones. Some growers bring in Indians from Caledonia, but perhaps they only stay at one place for a day or so. They are unsettled and sometimes other growers coax them away. I hope to get all my crop harvested without experiencing any serious loss, as I have the promise of about 40 pickers for odd days.

"The cost of harvesting a crop of berries often comes pretty high. We have to sup-

ply shanties or cottages for them after paying their fares on the train or car. Of course they board themselves. Some growers give a reliable woman 50 cents a day extra to oversee the job and secure pickers. The usual price paid for picking ranges from one cent to a cent and a half per box, depending on the variety."

"We simply have to do the best we can in getting pickers," said Mr. J. M. Metcalf, of Grimsby. "We can get a few from surrounding villages. A good plan is to go back on the mountain and bring down a load of farmers to help out. We pay one and a half cents per box for picking black and red raspberries and one cent for thimble berries."

"It is going to be a serious problem," said Mr. E. D. Smith, of Winona, "to get pickers this season. It is now some years since we had a heavy crop of raspberries. I suppose the best plan will be to make contracts for the berry season with a number of Indians from the reserve."

STRAWBERRIES FOR THE WEST

ONTARIO strawberry growers, it is the conviction of Mr. Alex. McNeill, chief of the Dominion fruit division, who has recently returned from a trip to the Pacific coast, will have to use more care in the growing and shipment of their fruit if they ever expect to build up a profitable trade with Winnipeg and western points. "When I was in Winnipeg in July," said Mr. McNeill to The Horticulturist, "strawberries from points in British Columbia were meeting with a ready sale. I asked one of the commission dealers how it was he did not sell Ontario fruit, and found he was a man with a grievance as far as Ontario fruit was concerned.

"This merchant informed me that he had ordered a car of Ontario berries to be delivered on Thursday, July 29. He showed

me a telegram he had received stating that the fruit would not be delivered to him until Friday, and another telegram stating it would not reach him until Saturday, and finally a third telegram stating that the Ontario shipper would not be able to let him have the fruit at all. This promise to ship the fruit and the breaking of it had caused the merchant great loss, as he had relied upon receiving this car of fruit to fill his local demand and had been putting off his customers in expectation of the arrival of the fruit.

"I presume that the trouble with the Ontario shipper," continued Mr. McNeill, "was that he was unable to make proper arrangements for securing the fruit. The trouble in Ontario is that very little fruit is grown for export, as all that is shipped to

the west is what little surplus is left over after the Ontario and Manitoba demand is supplied. In Nelson, B. C., one grower is able to supply the local demand, with the result that all the other growers in that section bend their energies to filling the demand for the Winnipeg market and other cities in Manitoba and the Territories.

"Ontario growers might be growing three times as many berries as they do, but as long as they oscillate between the local and distant markets, without bending their energies to developing a profitable trade exclusively with one or the other it will be impossible for them to work up a first-class trade with the west. If they are going to work up such a trade it means that they must keep their business engagements, even

if it sometimes means a loss to them to do so, as otherwise the buyers in the west will not have confidence in them and will be slow to give them orders.

"Ontario growers will have, also, to raise the varieties that will prove the best sellers, and pick and pack these berries especially for shipment. Only by definite work of this kind will they be able to compete with the British Columbia growers. One failure to fill an order has a worse effect with a buyer than even a shipment of poor fruit, as a small amount of poor fruit can be sold, if necessary, at a lower price, while if no berries are shipped at all the buyer is left in a bad position. When I was in Winnipeg British Columbia fruit growers were receiving \$2 net per case for their berries."

LONDON PARKS

FOR a city of 40,000 inhabitants London is fairly well supplied with parks. The greatest need in the future will be small play grounds for the children. There is a movement on foot, inaugurated by Ex-Mayor Beck, to acquire small areas

in different parts of the city to be laid out as playgrounds for children, so that we hope to have this need filled also.

VICTORIA PARK.

Within three blocks of the center of the city Victoria park is located. It has an



Flower Bed in Victoria Park, London, Ont.

abundance of trees, in fact almost too many. Its area is about 16 acres. Being easy of access, it is a favorite resort in the evenings and on Sunday afternoons and evenings. Very slight improvements had been made for many years till the season of 1904. In October, 1903, the city appointed J. S. Pearce parks superintendent, giving him full control and supervision of all the city parks, together with the trees on the streets and boulevards throughout the whole city. He was also given full authority to prune, cut down, or trim out any trees that were unsightly or out of place. Under his direction a vast improvement has been made. Some 1,600 trees were marked by him a year ago last winter. Nearly all these have since been cut down. The work was done by people out of employment and cost the city but little.

The new superintendent laid plans for a number of alterations in this park. The band stand was moved to a more suitable place. A larger flower bed was made near the center of the park. Some trees were cut out. Much of the old shrubbery was cleaned up or cut out and many of the

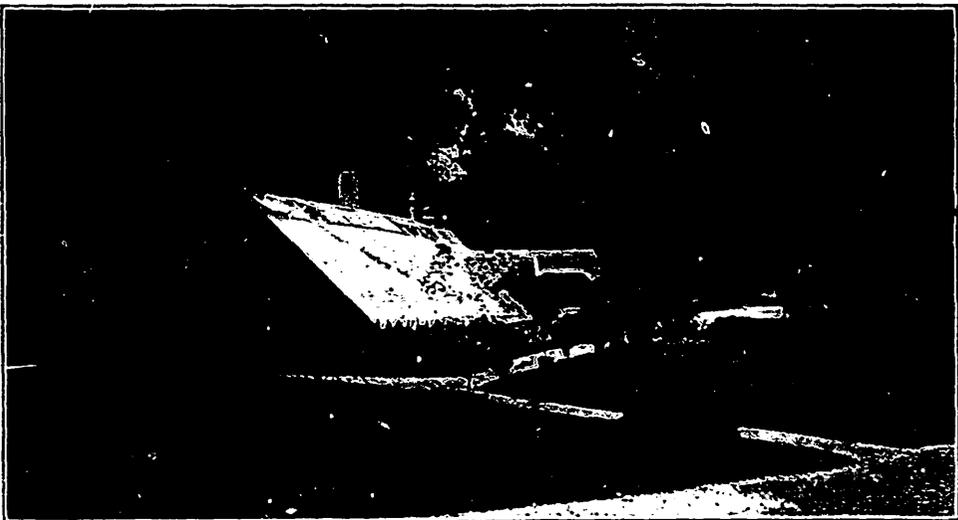
flower beds were rearranged. These changes have so improved the appearance of the park as to cause the most favorable comment. The next step was to plant a lot of new shrubs, trees and perennials. The general appearance of the park can be judged from the cuts reproduced from photos taken during the summer of 1904.

QUEEN'S PARK.

This park has been cleaned up and put in good order. Beds of flowers and shrubs have been planted. Further improvements have been made this year. A number of small plots have been cleaned up and trees and flowers have been planted.

SPRINGBANK PARK.

This park is situated four miles down the river at the city waterworks, and contains some 300 acres. It is beautifully situated, with hill and valley, stream and forest. It is a favorite resort in the afternoons and evenings during the summer months. It is under the control and management of the Water Commissioners, who are gradually improving it. The street railway have a double track into the grounds. Nature has done so much toward making this a



Greenhouse and Surroundings, Victoria Park, London, Ont.

park that man has only to clear the way, make roads and plant flowers.

The number of flowers and shrubs that can be used for park purposes is almost unlimited. Much depends on the locality, the size of the park, and other conditions. This should be left to the taste and judgment of the superintendent. For solid, bold ef-

fect nothing equals geraniums and cannas. A great deal depends on the location of the beds, their size, the arrangement of colors of bloom, foliage, etc. The success and appearance of beds, shrubbery, etc., depends altogether on the good taste and judgment of the superintendent or city gardener.

TROPICAL PLANTS WITHOUT A GREENHOUSE

HORTICULTURAL enthusiasts in different lines take great pride in producing something extraordinary. The orchardist frequently prides himself in having one tree bear many different kinds of fruit. The market gardener, by use of hot beds or greenhouses, thinks he has done well if he catches the early market and big prices with his cucumbers or tomatoes. Florists with their huge greenhouses filled with the latest heating appliances, rejoice if they mature some of the tropical fruits. But for genuine enthusiasm in plant growing the work of Mr. Walter T. Ross, secretary of the Picton Horticultural Society, shows something positively beyond the hopes of an ordinary horticulturist.

Without the aid of any extra heat except what he has in his house and cellar, Mr. Ross has grown with success numerous tropical plants. It would take too much space to enumerate them all. A representative of *The Canadian Horticulturist*, who called on Mr. Ross recently, saw a typewritten list of plants, which filled three or four pages.

"The last two or three seasons," said Mr. Ross to *The Horticulturist*, "have been poor ones for work with tropical plants. It needs a very warm summer to ensure success. It is no more difficult to grow tropical plants than any other kind. The only extra care that is required is to protect them from frost. Conditions as near as possible to their natural conditions in the south

must be maintained. The greatest trouble I have is with the fruit falling off when it is quite small. Too much moisture or too much drought causes that.

"Those are my fig trees," said Mr. Ross, as he pointed to four fine healthy specimens in a row in his garden. "I always kept them in my cellar in tubs until last winter, but I thought I would try covering them outside. They were buried three or four feet deep and then brush was piled on top to hold the snow. When I took them out early in May they were quite healthy. The experiment was a success. I have four varieties which produce fruit of different sizes. There is no apparent flower but one fig comes in the axil of a leaf. I have promise of a fair fig crop this season," remarked Mr. Ross, as he pointed to numerous miniature fruits just forming.

"I handle the pomegranate in the same way," continued Mr. Ross. "The wood is soft like basswood and can be bent down readily when covering for winter protection.

"Sweet potatoes are also grown, as you will see by these vines. The young plants are secured from the south and set out in my garden when about five inches high. The potatoes are larger and whiter than the ones we buy in the stores and the flesh is firm and very white.

"Peanuts are easily grown. I plant the nuts in sandy soil. As the plants grow yellow blossoms appear low down on the stem. I pull the earth up around them

gradually covering the blossoms and thus developing the peanuts underground. They need a warm sheltered place."



A Fig Tree Grown in Canada

One of the fig trees, seven or eight years old, grown by Mr. Walter T. Ross, of Picton Ont., is here shown. There are about five dozen figs on the tree. The variety is the Celestial or Sugar Fig.

Besides these Mr. Ross matures lemons and oranges and has some large specimens in preservatives which are better than most

of the specimens of those fruits which appear in the shop windows of our towns and cities. A fine coffee plant stands in his office window and is as nice an ornamental plant as could be desired. Several curiosities in the form of carnivorous plants, known as Venus Fly Trap, which catch flies, are also very interesting. The Papaw Tree, which has the property of rendering flesh tender, is also grown with success.

Among the many specimens not yet mentioned are pineapple, persimmon, ginger, cinnamon, vanilla plant and tapioca.

"I have never had a greenhouse," concluded Mr. Ross, "but there is an old saying that 'Nothing succeeds like success,' and perhaps my success on the start was the cause of my attempting so much. I always study the plant and find what conditions suit best. If I had a greenhouse I believe I could mature almost any of the tropical fruits."

When such success has been attained without glass structures what should we expect from some of our up-to-date amateurs and florists with their huge houses and perfect systems of regulating heat and moisture. Even the most sceptical would become an enthusiastic lover of plants after spending a half hour with Mr. Ross.

AN AMATEUR'S EXPERIENCE WITH TREE PEONIES*

THE Tree Peony (*Peonia moutan*) is found wild in China and Japan and attains in its native haunts a height of 40 feet. The appearance of a tree of this size, covered in the early spring with thousands of enormous single flowers of a faint rose lilac color, is surpassed in beauty only by the great magnolia of the Southern States. So remarkable a flowering tree must have attracted the attention of Chinese and Japanese gardeners. In the Flowery King-

dom the Tree Peony is called the King of Flowers. It is said to have been cultivated there for more than 15 centuries, and plants of choice varieties sold for more than their weight in gold. The first Jesuit missionaries who visited China sent plants to Europe, which attracted immediate attention and attained great vogue. Those who planned the stately gardens of France, which are now the delight and despair of new world visitors, contended for the dis-

*A paper read at the July meeting of the Ottawa Horticultural Society by Hon. R. R. Latchford, of Ottawa, who has been very successful in the growing of these beautiful and rare flowers.

inction of possessing a specimen of the tree peony, and plants were sold at 100 louis each. It does not appear to have reached England until the close of the eighteenth century, when it was imported from Canton by Sir Joseph Banks.

The continental gardeners greatly improved the type, and the Chinese varieties and some of the forms produced by Senecouse, Mouchelet and others are not surpassed by the most superb productions of modern nurseries. The opening up of commercial relations between the western world and Japan about 50 years ago, gave a new impetus to the cultivation of the flower. The Japanese gardeners had been quick to take advantage of the tendencies to variation which this flower manifests in cultivation, and had produced hundreds of forms, the best of which they ingeniously propagated. Those brought to England and the continent in the forms most favored were the single and semi-double varieties. They were brought to Europe in great numbers and when crossed with the older importations from China produced seedlings, the best of which have been selected by careful growers and are now available at reasonable prices.

In England a special impetus has been given to the cultivation of the flower by Messrs. Kelway & Sons. By intelligently directed crossing and selection they have produced varieties equalling, if not surpassing, the finest productions of continental growers. They catalogue upwards of 300 varieties, and while among these many eastern forms doubtless masquerade under new names, and others appear that are not any great improvement upon the older varieties, yet it must be conceded that many of Kelway's productions are veritable novelties of the highest merit.

The nurseries at Rochester, New York, many years ago distributed tree peonies of French origin. A plant there obtained



Tree Peony, Yukiarashi (Snow Storm)

From the Tokio Nursery. Enormous blooms nearly a foot in diameter. The most delicate silvery-white petals, tossing in lovely confusion; anthers bright gold. A flower of exquisite beauty and purity.

was long a striking and beautiful object on the lawn of the late H. L. Loucks, in Wellington street, Ottawa, immediately adjoining the VanCourtland property. Its size and period of flowering—weeks in advance of the ordinary peony—attracted my attention, and annually when the plant was blooming I visited the garden to admire it. Mr. Loucks told me that he had no difficulty in bringing it through the winter. He simply inverted over it an empty barrel or packing case. When moving to a new house where he could no longer enjoy the delight of growing a few flowers he gave me the pride of his garden. I cut it back and divided it. One of the plants, now upwards of four feet in height and of equal diameter bore during May more than 150 enormous blooms. Roots purchased in Japan six years ago at trifling cost have bloomed profusely during the last two years, producing flowers of varied colors



Tree Peony, Kimomanotzuki—Moon-Peeping-Out-of-the-Clouds.

Typical of the single Japanese varieties. Rich glowing purple petals; bright yellow anthers.

from the most delicate satiny white through shades of pink, rose and crimson to the deepest purple.

The Japanese names are most fanciful and poetic. When preserved, as they should be, they add much to the charm of the flower. The finest white I have, a semi-double, rejoices in a name which translated is said to mean "Snow-storm." One bloom of this plant was by actual measurement $11\frac{1}{4}$ inches in diameter. Its size and the indescribable sheen and beauty of its petals contrasting admirably with the golden stamens combined to render it the finest flower without exception that I ever saw. A deep purple single flower variety is called "Moon Peeping Out of the Clouds." Other examples of Japanese names are: "White Lion in a Fury," "The Seven Gods of Happiness," "Snow Clad Fuji."

Any soil suits the tree peony, but of course it responds to generous treatment. The roots are very long and the plant is a

gross feeder. The soil should, therefore, be deep and rich, and kept enriched by top dressings dug into the soil from time to time. It loves water, and copious drenchings before and during the flowering season will be amply repaid by increased size and substance in the flowers.

The only pruning necessary is to cut off the dead blooms and give shape to varieties inclined to be straggling. With ample room, however, the tree peony is naturally a symmetrical plant and requires but slight trimming. As the flowers are formed from the buds produced in the preceding year, the little pruning necessary should be done as soon as the blossoms fall. To prune in early spring will prevent any bloom during that season, and to prune late means simply the removal of the flowering buds. Propagation is usually effected by grafting in the spring on the roots of the herbaceous peony. They may also be propagated by division, though this is not advisable, as the plants dislike being disturbed, and by layering, which is comparatively easy. Regard must be had in putting down layers to the brittle nature of the wood, and great care is consequently necessary in bending down the shoot intended to produce a new plant. The season of blooming is coincident with the old-fashioned peony, *P. officinalis*, and precedes by nearly two weeks the not less gorgeous *P. sinensis*, which are the pride of our gardens in early June.

The tree peony may be as easily grown in Canada and Eastern Ontario as the herbaceous varieties. It is equally hardy if given close and dry protection. It may be had cheaply, and in almost infinite variety. It is magnificent in foliage and flower, yet it is unknown except in a few gardens. In the hope that it may be more widely grown and add to the delights that flower lovers alone know, I have ventured to bring it specially to the notice of the Ottawa Horticultural Society.

CHRYSANTHEMUMS IN AUGUST

GEO. HOLLIS, BRACONDALE, ONT.

THE month of August is a busy one for chrysanthemum growers, especially for those who raise the early varieties, such as Fitzwigram, Bergman, Monravia, Kalb and Opah. The buds of these early sorts can be taken after August 12. These early buds are crown buds, and it is a good plan, when putting the growths out, to leave one shoot beside the bud for a day or two to draw the sap up and make the bud plump. Should the bud not swell you will then have another chance.

Wires running the length of the bench, in a line with each row of plants, and a string from top to bottom for each plant, the string being given a twist around the

growths, make a good support for single stemmed plants.

Keep the benches free from weeds and the plants well syringed with tobacco water for insect pests. If fumigation is practiced do not overdo it, as the leaves burn very easily. Give manure water once a week, as recommended last month, but a little stronger for the early varieties. Pot plants outside should be well watched for the chrysanthemum fly, which makes its appearance this month. If the plants are stung by the fly you will have only one sided flowers. Cover the plants with cheese cloth, or take them inside. Tobacco smoke keeps them away.

A TORONTO ROSE GROWER'S METHODS

AN unusual method of growing roses in the greenhouse is followed by Mr. A. J. Frost, of Preston avenue, Toronto, who, instead of renewing his stock every two or three years, as most growers do, has not renewed his stock for over 10 years.

"It is so long since I started any young roses in my greenhouse," said Mr. Frost to a representative of The Canadian Horticulturist, "that I scarcely know how frequently I change my stock. What I have now have not been changed since 1893. They were planted in 1892 and then replanted to where they now stand in July, 1893. The bloom was excellent that season, and during exhibition weeks I cut 400 to 500 per day. They have been just as good ever since, and I intend to leave them as they are just as long as they yield me as great returns as they have done each year.

"I have bloom to cut the whole year round," continued Mr. Frost. "When the other growers are setting out new stock I cut 50 to 100 off two benches each 110 feet long. The profit from the same bench space in 12 months is almost double that ob-

tained from methods of rose culture commonly employed. I cut 25 to 30 per cent. more bloom and have it at all seasons. Of course, naturally, they do not bloom so freely during the winter months.

The chief trouble in growing roses is the regulation of soil and air temperatures. With the solid bed the soil temperature very frequently goes much higher than the temperature of the atmosphere. This causes rapid growth of the roots, but the stem growth is checked. I now aim to have the temperature of the soil practically the same as that of the air in the house. A temperature of 58 to 60 degrees in winter gives the best results. To have the air temperature slightly higher is not objectionable. Instead of that, however, many growers have the soil temperature much higher. Low temperature gives high quality of bloom but short stems and low quantity.

"Before I started into business for myself I decided that florists did not use the most economical methods in growing roses. I thought that since out-door roses did not need to be renewed each season, those



Greenhouse in Which Mr. Frost Grows Some of His Roses

grown in the greenhouse should do well when treated in the same way. I have tested this method for 13 years and shall not go back to the old way."

"What do you do with the old wood?" was asked. "Every third year," replied

Mr. Frost, "I go through and cut out all but the strong young shoots. This leaves a healthy bed of young plants which keep on blooming. I usually do the pruning in July, but last year I pruned one bench in January when the crop was off, and it did as well as others pruned in the summer.

"The work connected with rose growing in this way is very light. Each year in July I add about one inch of cow manure and a moderate dressing of bone meal. Then there is the usual work which is need-

ed in caring for benches. My experience," concluded Mr. Frost, "has taught me that it is wise to leave a crop as long as it is paying well. These roses will stay as they are until I see they have ceased to bring handsome returns."

CANNING SITUATION IN PRINCE EDWARD COUNTY

IN Prince Edward County, Ontario, a great number of the tillers of the soil depend on truck farming for a livelihood. Perhaps more canned goods are put up in this county than in any other county in the province. Prince Edward growers supply the raw material for nine factories, all located within the borders of that county. They also furnish the greater portion of what is canned in two factories just outside the limits of the county. The fact that four new factories have been built within the last two years gives some idea of the increasing importance of the canning industry to the growers.

"In Prince Edward county," said Mr. Wellington Boulter, of Boulter & Sons, Picton, to *The Horticulturist*, "the total value

of goods canned each year amounts to somewhere in the neighborhood of \$1,000,000. Of course it depends on what Nature gives the grower."

"There has been a marked increase in the number of acres devoted to truck gardening this season," said Mr. Earl Spencer, of Picton. "This increase is to supply the new factories which are going up. The acreage of canned stuff has doubled in the last few years."

"The old factories are holding their own growers," said Mr. J. E. Terrill, of Picton, "and the four new factories which have started within two years back are being supplied by new growers."

"It is hard to estimate the total number of farmers who supply the raw material for

these factories," said Mr. A. H. Baker, manager of The Old Homestead Canning Co., of Picton. "We have made contracts with 118 pea growers alone. Each of the nine factories would easily average over 100 growers. The number of acres grown is increasing rapidly each year. The producers are more numerous and the old growers are supplying more than they did."

With such a large percentage of the rural population engaged in this work it is not surprising that the situation between growers and the canners combine, as elsewhere in Ontario, should be somewhat acute. Information gathered by a representative of The Canadian Horticulturist who visited that county recently shows clearly the conditions existing. The majority of the factories are in the Canners' Combine, which syndicate has huge factories in different parts of Ontario. Some of the factories are independent concerns, who have been having an up-hill fight against the combine. The agitation for 30 cents per bushel for tomatoes and the refusal of the combine to pay that price augmented the already strained conditions.

"In districts where the combine has opposition," said Mr. Baker, "they raise the price so as to out-do the independent factories, but in sections where there is no independent factory they pull the price down to make up for the extra price paid in the other sections. Where the independent factories pay five cents per box for berries the combine go around and offer six cents, while in another section, without opposition, they refuse to pay more than three and three-quarter cents. In this way they try to whip the independent factories into their camp. Last year there was a surplus of peas and the combine lowered the price until it scarcely paid for production. While we may lose a little they lose a whole lot. They will have to repeat these practices many times, however, before they will be

able to put the independent factories out of business."

FACTORY OF THEIR OWN.

In the Bloomfield district the refusal of the combine to pay 30 cents per bushel for tomatoes caused a number of the leading growers to take decided action.

"During the past five years," said Mr. J. W. Hyatt, of West Lake, "the canners' combine have practically controlled the canning industry. They control the production of raw material and the manufactured product. Of late they have been controlling the price as well.

"Farmers should be only farmers. They should not be millers nor canners. But the cost of labor has increased 25 to 50 per cent. and growers should receive more for the raw material than they have been getting. The canners refuse to give more. What will be done if we surrender? Next year they may lower the price. The longer we wait the worse off we will be.

"After considering this important question carefully," continued Mr. Hyatt, "the growers around Bloomfield decided that their interests would be served best by forming a cooperative company. As a result The Farmers' Canning Company, Limited, of Bloomfield, has been organized. A number one factory with first-class equipment and a capacity of 20,000 cans per day is being built. This year we will can our own tomatoes and corn.

"Tomatoes grown in Prince Edward county are unequalled for quality and flavor. We were dissatisfied because many tomatoes of poorer quality and flavor grown in other sections of the province were being branded with the Prince Edward county brand. The same is true of peas. Prince Edward peas are unexcelled. The syndicates in many instances put up inferior goods which hurt Canada in regard to the canned goods trade. Many growers saw that truck farming was about to be ruined.

This was another reason for our determination to have a factory of our own.

"It has been reported that the syndicates will sell below cost and so put us out of business. But The Farmers' Canning Company is composed of about 40 shareholders who are growing the raw material, and we can hold back our goods for five years, if necessary, until a paying price can be obtained. We are going to put up only the best and work back to the old standard," concluded Mr. Hyatt.

"The farmers were late in starting the agitation for 30 cents per bushel for tomatoes this season," said Mr. Spencer. "Next year they will be able to get the 30 cents all right, but they will have to supply a better quality of goods. Cannery now contract for the crop at 250 bushels per acre if they want them. In case they don't want them

the farmer is left to do whatever he likes with the crop. When the crop is light everything is all right."

"We can not afford to pay more than 25 cents per bushel," said Mr. Baker, "unless all the factories do the same. But there is no crop on the farm pays so well as a crop of tomatoes at 25 cents. An average crop is 250 bushels per acre, and very frequently they run two or three times that much. Last year one man had 800 bushels and that was in an unfavorable season.

"The natural feeling among the growers is that a higher price should be obtained, but an average season gives them returns far above mixed farming or dairying. If the price is raised for the raw material the next move will be a higher price to the consumer and smaller sales as a consequence."

GROWING EARLY VEGETABLES IN ESSEX COUNTY

THE forcing of vegetables for the early markets and their growth for canning purposes is rapidly becoming a very important industry in Essex county, Ontario, especially in the Leamington district. Thousands of dollars are being invested in greenhouses and in the other equipment required. Most of the people growing vegetables were extensive fruit growers until the last few years. The severe winter of 1903-4 which destroyed many orchards in this section forced many of the growers to turn to vegetable growing. In this they have been so successful the acreage has been steadily increased, although some of the growers are again turning their attention to fruit growing.

A grower who has invested a large amount of money in the growing of vegetables is Mr. J. D. Fraser, of Leamington, with whom The Horticulturist recently had an interesting interview.

"Owing to the freeze out in my peach

orchard twice within four years," said Mr. Fraser, "I have been compelled to enter rather more largely than I should otherwise have done into the growing of tomatoes, musk melons, cucumbers, and other vegetables. I still hope, however, to make a success of peach growing, as I firmly believe, apart from the above danger, that this section is second to none for producing this particular fruit. The tops of the trees do not get frozen, only the roots. This has been due to an insufficient covering of snow, as is shown by the fact that after the damage had been done by the frost the trees came out in leaf and bloom and then wilted away.

"For many years previous to the winter of 1899-1900 peaches were grown here very successfully with clean cultivation. After the loss caused by the cold weather of that winter we practised clean cultivation together with a cover crop sown in July or early August, but could not get anything

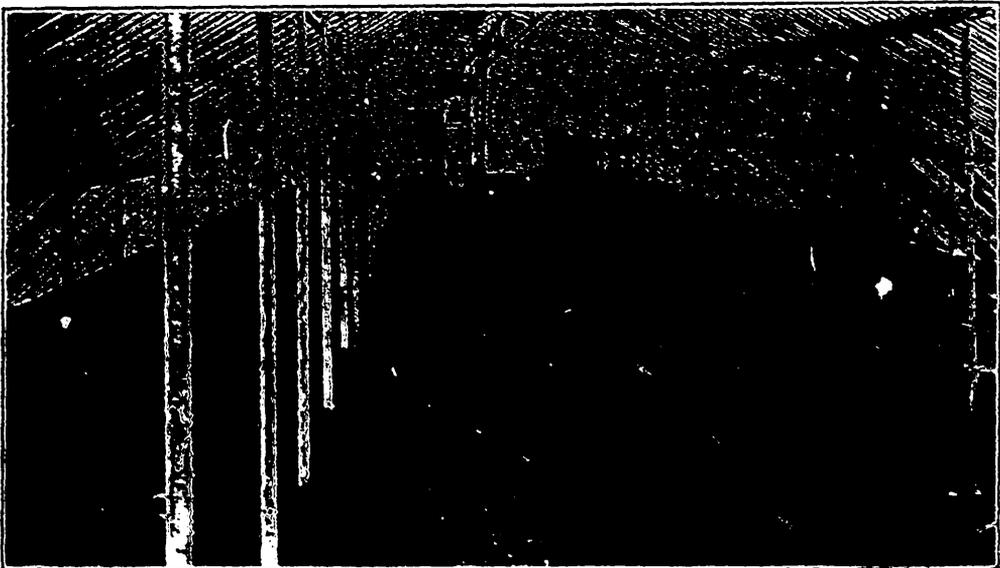
to form a sufficient protection to take the place of the snow.

"In the winter of 1903-1904 many of the orchards that had been replanted were again frozen. In sections of the United States where they have had the same difficulty to contend with, they are using a coarse mulch applied directly to each tree. We are now planting our new orchards 16 by 24 feet apart, and with this plan hope to work a strip in the centre of 10 or 12 feet in width, keeping a sufficiently heavy mulch on the balance to hold the moisture. This, in connection with the heavy cover crop on the cultivated strip, that nearly always grows rankly at a distance from the trees, ought to afford ample protection. I hope in the future to work vegetables in with my fruit growing rather more than I have hitherto done, and under the foregoing conditions expect to make fruit as profitable as vegetables.

"We grow tomatoes chiefly, also cucumbers and musk melons. This year, aside from growing the supply for our own

needs, our growers had over 250,000 tomato plants under contract for canning factory purposes. These were transplanted but once. My own planting included 3,000 cucumber plants, 14,000 Earliana and 20,000 Stone and B. B. tomato plants, and 10,000 melon plants. We ship to commission men in the cities, many of whom we find reliable, although on the start I had dealings with some who were quite the reverse. We also ship more or less to about 80 towns in Ontario, including a few in Quebec, Manitoba and Nova Scotia, where we deal direct with the retailers at a quoted price. The cities we ship to include Winnipeg and the cities of Ontario and Quebec.

"The greatest competition from southern growers is at the winding up of their season, when they send their fruit into the Dominion, under, as I am given to understand, some arrangement with the railway companies whereby no charge for freight is made if the price realized does not make it up. We fruit and vegetable growers of Canada should follow the example of the



An Interior View in One of Mr. J. D. Fraser's Greenhouses, at Leamington, Ont.

This greenhouse is 168 feet long by 32 feet wide. In it a large number of tomato plants and other vegetables were started this spring for the early markets.

Manufacturers' Association and see that our interests are protected along these lines. Owing to our geographical position our neighbors to the south have the advantage, as their early stuff always brings a price sufficient to enable them to pay the present manipulated low tariff, and by the time we can compete in their markets the price is such that we cannot afford to pay the duty. consequently we are not working on an equitable basis.

AN IMPROVED GREENHOUSE.

"With the old system of greenhouses, ordinarily in use, I found that the getting in and out of the soil, which has to be changed so often owing to the different crops being moved out either to hardening houses or the fields, took too much labor, as the stuff had to be carried or wheeled in and out through the ends. This led me to experiment, with the result that I have so changed my greenhouse that I can now drive a team along the side and shovel the soil right into the beds. When removing the plants the same saving of labor is effected. This kind of greenhouse cuts the labor to about one fourth. The side sashes create a current of air in con-

nection with the top ventilators and make it possible to work inside on a hot day nearly as comfortably as in the open. I also find that the more thorough ventilation thus secured produces far better plants than under ordinary conditions.

"In the earlier stages we have tomatoes and cucumber seedlings in the house together, and as they advance in growth gradually work them out into the smaller and cooler houses under cotton and glass. The smaller houses are mostly covered with glass that can be opened easily on suitable days for hardening off the plants previous to setting them out in the field. Glass being rather expensive we aim to keep the benches in the house steadily in use. As soon as the plants are large enough and are removed from the large house we plant out cucumber or other plants in the greenhouse to produce a crop for the market.

"I had a visit recently from Mr. Robt. H. King, engineer for the King Construction Co., of Toronto, who was much interested in my plant and buildings. Mr. King was especially pleased with the ventilating sash as used on the sides of the larger greenhouse, which he considered is a new idea."

SPINACH BEFORE TOMATOES

"I GENERALLY run spinach on the ground intended for tomatoes," said Mr. Wm. Waller, of Bartonville, to *The Canadian Horticulturist* recently. "For an early spring crop I sow the seed in the latter part of August or early in September. This gives a crop of spinach ready for market by the last of April. In this way I get two crops off the same ground in one season.

"The spinach seed is sown in drills about 14 inches apart. By the time frost comes the plants are about in the fourth leaf. They should be protected during winter by a covering of straw, old tomato vines or a

similar covering that is not too heavy but still holds the snow well. It should be planted on high dry soil, because wherever water lies it would be winter killed. A heavy sand loam suits best. When the covering is removed in the spring it comes on rapidly with the first warm weather.

"There is also a spring spinach," said Mr. Waller, "which can be sown in the spring as soon as the frost is out of the ground. If kept well cultivated this crop is ready by May 24. Most of this vegetable grown here finds ready sale on our local market, but sometimes it is profitable to ship it to Montreal or some other city."

The Canadian Horticulturist

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LESSONS IN PACKING.

The Department of Agriculture, Ottawa, is to be congratulated on having secured the services of Mr. B. T. Boies, of the Coldstream Ranch, Vernon, B. C., for the purpose of giving instruction in fruit packing in eastern Canada. Mr. Boies was selected by the Coldstream Ranch in British Columbia as head packed, as he had had several years experience in California, Washington and Oregon. He is therefore, properly fitted to give pointers in the very latest and best methods in fruit packing before even the best fruit growers in Ontario, Nova Scotia and other provinces.

It is the intention of the Department to have Mr. Boies visit various parts of the Maritime Provinces, Quebec and Ontario, giving demonstrations in the packing houses in the large centres, and probably overseeing what may be termed classes for beginners in box packing in the various fruit districts. The exact itinerary has not yet been planned definitely, but will probably be announced in our next issue. It is to be hoped that this will lead to much more extensive work another year.

In no department of fruit growing is the east-

ern grower at greater disadvantage than in the matter of packing and grading. For want of proper attention to these points eastern Canada is losing a most profitable trade in the north-west, and is obliged to take an inferior price for her best fruit in the foreign markets.

THE MARKET GARDENERS' CHANCE.

During August leading members of the Ontario Vegetable Growers' Association will visit the principal cities and towns of the province in an effort to form branches of the association. The leading market gardeners in the sections visited should give these delegates a cordial reception and should do all in their power to assist in completing organization in their districts. There will be many growers who will hold back and refuse their assistance for fear the stranger is after their money. These men will require patient handling.

The idea of a strong provincial association is so new to market gardeners it may prove difficult at first to convince them of the need for such an organization and of the benefit it will be to them. One of the best methods of reaching these men will be by explaining that instead of wanting their money the desire of the association is that they shall share in the grant the Ontario government has made for this work. No industry is in greater need of better organization than that of the vegetable growers. May success crown the efforts of those who will this month endeavor to secure this organization.

THE SAN JOSE SCALE.

The announcement by the provincial inspector, Mr. J. Fred. Smith, that the San Jose scale continues to spread in Ontario and that new districts are being infested calls for action of some sort. A serious feature of the situation is that now the panic the scale caused a few years ago has subsided it is difficult to arouse growers to the seriousness of the situation.

The proper enforcement of the laws already in effect would do much to prevent the further spread of this destructive pest. Growers who refuse to destroy trees that have been ruined beyond hope of redemption should be forced to do so. A few actions in court, such as those tried at St. Catharines last year, would have a beneficial effect. It is not likely that the scale will ever be completely driven out of Ontario, but this should not prevent the taking of steps which will help to make it impossible for the carelessness of some growers to result in serious injury to their neighbors.

The truth of the adage that big results from little causes slow is borne out by the case of the Oakville Basket Company, of Oakville, Ont., which last January signed for eighteen dollars' worth of advertising space in *The Horticulturist*. This month *The Horticulturist* has received an application from Smart Bros. of Chillingwood, Ont., for one of the handsome prizes we offer to readers who buy goods from our ad-

vertisers, this firm having purchased \$442.82 worth of baskets from the Oakville Basket Company through seeing their advertisement in *The Horticulturist*. The Oakville Basket Company, writing about their advertisement, say: "We have received several orders from having the advertisement in your paper, and have two or three customers who intend to submit their names for some of your premiums, including Smart Bros., of Collingwood, Ont., and Auguste Dupuis, Village des Aulnais, Co. L'Islet, Que." How is that for an example of a small advertisement and large returns. A check for five dollars has been sent to Smart Bros., and a prize will also be given to Mr. Dupuis if he applies for it.

We regret to have to warn our readers against doing any business with the Indianapolis Nursery Co., Indianapolis, Ind., which had a full page advertisement in the April and May issues of *The Horticulturist*. This advertisement was accepted by us in good faith and we, therefore, regret to learn from some of our readers that they have sent orders and money to the company without receiving any response. In some cases their communications have not even been acknowledged. Another suspicious circumstance in regard to the good standing of this company is that it has not paid for its advertisement. *The Horticulturist*, however, expects to have a few bad accounts each year. Its greatest regret is that its readers should have suffered loss. We know all the advertisers we are now dealing with to be thoroughly reliable.

In spite of the fact that a large number of extra copies of the June *Horticulturist* were printed our supply has become exhausted. The relatives of the late R. W. Lloyd, of Deseronto, whose portrait was published in that issue, would like some extra copies of that number. Our readers who can spare their June numbers will confer a favor either by mailing them to this office or to Mr. D. McClew, the president of the Deseronto Horticultural society.

The members of the Canadian Horticultural Association always manage to work a great deal of fun and profit into their annual conventions. Here's hoping that their annual convention in Montreal this month will be the most enjoyable and profitable in their history. Professional florists should not miss these meetings.

Items of Interest

The members of the Toronto and Hamilton branches of the Ontario Vegetable Growers' Association will hold a joint picnic at Burlington Beach, August 16. Several hundred will go from Toronto, and it is expected the attendance from the Hamilton district will be about equally as large. There will be a program of sports and a fine time is assured for all.

A movement is under way whereby a number of cars of mixed fruit, carefully picked and

packed, may be forwarded to Winnipeg during this coming fruit season, with a view to testing the various types of refrigerator and ventilated cars, as to their respective advantages in carrying fruit a considerable distance, and these cars will be under careful supervision from first to last and every condition and circumstance noted that might be likely to affect the fruit in any way. It is expected to commence shipping the latter part of August and continue the shipments from St. Catharines and points west as far as Hamilton during the season as may be found expedient.

Toronto's Sad Loss



EDWARD TYRRELL.

The members of Toronto Horticultural Society were greatly shocked to learn on the morning of July 18th of the death of their well-known ex-president, Mr. Edward Tyrrell, of Toronto. Mr. Tyrrell was apparently in perfect health and about an hour before his death had been in his lovely garden with his flowers, of which he was a great lover and out of which he took much pleasure and pride. Mr. Tyrrell was 68 years of age, and was for three years president of the Toronto society, for which he did much. Many readers of *The Horticulturist* became acquainted with Mr. Tyrrell through the series of interesting articles written

by him, entitled "Flower and Plant Lore," which appeared in this magazine. Early in June *The Horticulturist* had a visit with Mr. Tyrrell, who was very enthusiastic at that time regarding a larkspur in his garden, which he had planted and which had attained a height of considerably over 6 feet, with a flower spike over 12 inches long. Mr. Tyrrell's presence will be greatly missed at the meetings of the society. Among those present at the funeral was Hon. G. W. Ross.

Fruit Crop Notes

A report from Mr. W. H. Dempsey, Trenton, on July 25, states that the apples are dropping badly. Also the leaves have been attacked by a fungous disease which causes them to turn yellow and fall. The fruit, however, is clean.

Mr. C. W. Neville, of Newburgh, says that the quality of fruit in Addington county promises to be good. Pears are a failure except the variety, Louise Bonne, which is well loaded.

From Nantyr, Simcoe county, Mr. Stanley Spillet reports that Pewaukee apples are falling off.

Rev. Father Burke, of Alberton, Prince Edward Island, reports that this is an off year for apples. They are not more than half crop. Pears are medium and plums light. Spraying has been pretty general and insects and fungous diseases not in evidence.

TRADE NOTES FOR PROFESSIONAL FLORISTS

The Montreal Convention

The Canadian Horticultural Association Convention, at Montreal, August 8, 9, 10 and 11, promises to be "vaster than has been," and it goes without saying that it will be enjoyable. Montreal is an ideal place for an "ornamental horticulturist" to visit on account of the many beautiful gardens, as well as the grand natural scenery, the view from the top of the mountain being a sight that no Canadian should miss.

But in looking forward to the entertainment part of the convention florists must not forget that there is important business to be transacted during the four sessions devoted to the interests of the profession, and every one who has these interests at heart should make a special effort to attend. In these days "the butcher, the baker, the candlestick maker," etc., etc., all have "conventions and things" and reap no small benefit thereby; surely our profession should not lag in the rear of the grand procession. The country is prospering and making money, M. P.'s and Senators have got a raise, and there should be a little more going to the florist, seedsman and gardener in consequence, if they are not too backward in putting themselves forward. Then Ho! for Montreal. For programs and information apply to A. H. Ewing, Woodstock, Ont.

Woodstock's Gardens

Mr. H. G. Doyle, who lately sold his greenhouse plant to Mr. J. Dickenson, has started to put up two houses near his old stand. The King Construction Co. are supplying the material with all their latest improvements.

The gardens surrounding the residence of John White, Esq., on Vansittart avenue, have been much enlarged and improved and have quite a metropolitan appearance. Mr. Greig, the gardener (a late arrival from Scotland, and thoroughly experienced), deserves great credit for the good work done in so short a time.

"Altadore," the former residence of the late Hon. James Sutherland (now of H. A. Little, Esq.), is looking its best. The large quantity of trees and shrubs planted two years ago are beginning to show up, and the late rains have made the large expanses of lawn look their greenest. This is really a beautiful old place, and no visitor to this city should miss seeing it. Four men are employed in the gardens most of the summer. A horse-mower and two hand mowers cut the lawns, etc., in a day and a half. This spring and early summer the grass has all been cut twice a week, some of it three times. There are, also, about two acres of kitchen garden and an acre of orchard, besides shrubbery, pasture, etc., 22 acres in all. There are many very pretty and well kept smaller gardens in the city, and as the horticultural society is in active operation, the people are well supplied with information, novelties, etc. Mr. James Hoare goes in for roses and grows them nearly as fine as they do in the old country. Mr. R. Woodroffe goes in for gladiolus in large quantities

and grows nothing but the best. Some of these days the Canadian Horticultural Association will have to pay a visit to Woodstock.—(A. H. Ewing.

Montreal Notes and the Convention

The usual summer dullness in trade is on us now in earnest, with the thermometer hanging around 90 degrees every day and a great amount of humidity in the atmosphere. It is impossible for trade to be any other way; everybody who possibly can is out of the city trying to get a cool breeze and not thinking of buying flowers. But whilst the store men are taking a rest the growers are as busy as possible building, mending, etc.

Roses are growing fine, this weather just suiting them. Chrysanthemums are all planted and doing splendidly; fewer varieties than usual are being grown, but in larger quantities. Carnations have done well in the field this year, and housing will start in earnest next week. A few asters are to be seen in the stores, but outdoor asters are late. Up to the present they are not showing signs of the yellow, and the bug is not as plentiful as usual.

But, if trade is quiet, the convention committee is very lively. They have everything well under way, and a pleasant and instructive time is assured for all the delegates. Reports from the different cities promise a large attendance, which is the only thing required to make the convention the success anticipated. We would like to impress on the delegates the advisability of staying over the four days. The fourth day will be given up entirely to visiting the private places for which Montreal is renowned. The owners have signified their willingness to allow their places to be thrown open to the members. The Montreal Gardeners' and Florists' Club will pay all expenses for that day. The banquet has been arranged and the tickets will be \$1.00 each.

The railway rates are the same as last year, viz., fare and one-third if more than 50 delegates attend. I would like to impress on all attending the necessity of travelling by rail and taking a certificate. It will be far more to their advantage to spend the extra day in Montreal rather than spend the time on the boat, at the same time helping their brother delegates to get a reduced rate.—(G. A. Robinson, Montreal, Que., July 24.

The Trade in London

Routine work is progressing favorably. Chrysanthemums are all planted and the crown buds on "opah" are swelling fast. Present indications are that the flowers will be ready for cutting by the first week in September. Others of early kinds are growing fast, such kinds as Bergmann, Geo. A. Kall, The Pacific Tribe, Omega, Amorita (the very best early pink), are climbing fast. Carnations in the field are anxiously looking for a drink, but the

very favorable weather all through the early part of the season gave them such a splendid start that a moderate drouth will do them little harm. Sweet peas are remarkably dwarf in this vicinity, but the flowers are good and moderately plentiful. I hope later to be able to give comparisons of some of the best varieties. Asters are fairly plentiful. Queen of the Market is about the only one for which we have any demand. Perennial phlox is appearing in quantity all over the city. This class of plants is getting very popular.

DISTRICT NOTES.

Mr. H. L. Jansen, of Berlin, has his place in excellent condition; probably the features are two houses of tomatoes and two houses of cucumbers in full bearing. Mr. Jansen reports an excellent market for these products. Chrysanthemums are looking fine, the early ones especially being well advanced. Carnations are grown partly in the field and partly inside. Both lots of plants are looking well. The Boston ferns in 5 and 6-inch pots are the best seen for some time.

Mr. Wilson Her, the spairy specialist, has a most extensive and lively stock in this line. His greenhouses are filled with a miscellaneous stock in good condition.

Mr. G. L. Peltz, of Preston, is also looking well and reports the late bedding trade as excellent. It is worthy of note that red and crimson geraniums were invariably scarce in this district the past season.

Mr. John Wells, of Galt, has a collection of Rex begonias that is most complete. A limited number of big specimens grown especially for the local exhibition are magnificent.

THE CANADIAN HORTICULTURAL SOCIETY.

I had the pleasure of receiving a letter from my old friend Mr. Geo. A. Robinson, president of the Canadian Horticultural Association, on convention matters. He tells me the meeting will be a banner one, and I can quite believe him. I also had a letter from another old friend on Lake St. Louis. He says they are contracting for a supply of ice to keep the boys cool, and amongst other things that they have a newly imported Scotch plant down there called "The Epicure," that the committee is to report on. We shall all be glad to see it. I also got the information that the Montreal growers were going to try and lift the Toronto chrysanthemum cup this year. Wonder what they want to butt in for.

In reference to transportation, the London delegation will go by boat from Toronto. I have to go that way. My wife won't let me go by train this time, and it's all Willie Hall's fault. We shall leave Toronto on Saturday and arrive at Montreal—later.

Of course our friend Tom Manton will be along. Recollect the Montreal "bounce." Tom, and take a spare pair of trousers along this time.—(Fred. Bennett.

Some Perennials of Note

Charles Webster, of the Webster Floral Company, Hamilton, says: "I consider *Campylopus Persicaefolia Moerheimii* the most meritorious perennial of recent introduction. In comparison with the variety *Alba Grandiflora Plena* it is a great improvement. The flower stems are clothed with flowers from top to bottom. Each flower is large and as well formed as a camellia. It is the strongest growing variety grown in this section.

"The little Thrift (*Armeria*) is beautiful at this time of year for borders, or, in fact, in any position where the surrounding plants are not too tall. Having noticed that some of the plants raised from seed come a washy pink color, I am now propagating by divisions from bright colored plants only. *Sedum Maximum* (*Atra purpureum*) reminds one in general growth of the *Sedum Spectabile* (Live-for-Ever), but it is stronger and larger growing and the foliage is brilliantly colored, sometimes crimson and sometimes dark maroon. It seems to be hardy anywhere.

"The *Gaillardia Grandiflora* has in recent years undergone development not unlike that seen in the Cactus Dahlias. Some of the flowers are oddly quilled, but none of the varieties seem to take as well as the large, broad-petalled flower, showing plenty of crimson coloring. Two shrubs which are worthy of note are *Acacia Hispidia*, commonly known as the Rose Acacia. It is perfectly hardy here and its large clusters of pink sweetpea-like flowers make it one of the very prettiest shrubs. A little pruning is necessary to keep it in symmetrical shape, but it well deserves a lot of attention. *Weigela Eva Rathke* is a beautiful red variety and fully merits every word of praise which has been given it. It is hardy, as dark in color as the variety *Lavall*, but it is a clear crimson with well opened flowers, which show the color well. It is too bad that the beautiful *Weigelas* are not hardy in northern Ontario and the west. They are certainly among the very showiest shrubs that can be planted."

Toronto Florists

"The season has just opened for asters and gladioli," said Mr. H. G. Dillemoth to The Horticulturist. "They are coming in fine. Weather conditions have been favorable and these flowers should be good all season. Roses are scarce, and what do come in are a small grade of inferior flowers. Carnations are fairly good but are being replaced by asters. Lilies are plentiful. They are being grown more extensively than ever before in this section at this season. *Lilium speciosum*, *Lilium album* and *Lilium roseum* are all good sellers.

"There has been a great run on *centaurea* this season. These beautiful flowers appear in white, mauve and yellow shades and are very saleable. Sweet peas are excellent and in good demand. Local growers are busy getting carnation plants in from the field. The young

stock has made good growth and the plants are in fine condition."

TRADE DULL.

"Trade has been somewhat dull," said Mr. J. S. Simmons, the Yonge street florist. "Funeral orders form the bulk of the trade now. Asters, lilies and sweet peas are the main stock. Gladioli are coming in. The specimens are excellent but not abundant. The centaurea is a lovely flower and well liked by some, but there is not a heavy run on it as it does not last long. It is a one-day flower, maintaining its freshness about the same length of time as the summer carnation."

NOTES.

D. J. Sinclair reports business better than is usual at this season, owing to the demand for funeral flowers and from the hospitals, etc. Gladioli are coming in in quantity and the demand is brisk. Asters are in fair supply, mostly white. Carnations are off owing to many of the growers having replanted. Roses are out of season. What are coming in are very inferior, with the exception of some very fine Kaiserine. Peas in good supply.

D. J. Sinclair intends making an exhibit of supplies at the Montreal convention.

E. Crowhurst, of Mimico, is sending in the finest asters seen in Toronto.

Geo. Gard is cutting some very fine *Lilium Aratum*.

Grobba & Wandry, of Mimico, are supplying some excellent *Album* and *Rubrum* lillies.

Without exception the best sweet peas supplied to the Toronto florists are those grown by Miss F. F. Young, of Bradford, Ont., who, although an amateur, has the cultivation of sweet peas down to a science.

Campbell Bros., of Simcoe, are supplying a choice lot of gladioli to the Toronto florists. This firm has 15 acres from which to cut, and judging from those coming in will have some fine ones as the season advances.

A rather unusual sight was seen recently when Mr. Thos. Manton, swinging gaily in his hammock among a carload of palms, dracenas, orchids, crotons, auracarias, orange trees, etc., left Toronto for Winnipeg, to decorate the new store of The T. Eaton Co. Mr. A. Jennings, manager of the floral department in the Toronto store, in speaking of the trip to *The Horticulturist*, said it was a record trip in many ways. The car left Toronto July 5, arriving in Winnipeg July 8. Mr. Manton accompanies the car. On arriving at Winnipeg some of the boys evidently thought the fruit on the orange trees was brought for their special benefit, as they helped themselves during Mr. Manton's absence. Such a display was never before witnessed in Winnipeg, and the palms, some of which were 20 feet in height, caused a sensation.

HAMILTON'S FRUIT AND FLOWER SHOW

The Hamilton Fruit and Flower Show, advertised in this issue, will be held in the Thistle Rinks, Hamilton, September 12, 13 and 14. The prize list is one which should assure the exhibit of the best fruit and flower products from the finest fruit and flower sections of Canada. The Hamilton Horticultural society is straining every effort to make the exhibition a success. They are in no way competing with the Fruit, Flower and Honey Show at Toronto, but believe that their dates are so arranged that they will be able to have many of the early fruits on exhibition which will not be in condition in November.

The fruit list is a very extensive one, embracing 50 sections of apples, and offering large prizes for export fruit in boxes 10 x 11 x 20 inches, confined to the following varieties: Alexander, Blenheim, McIntosh, King, Wealthy, Baldwin, Spy, Ontario, Gravenstein, Louise.

In grapes there are 37 sections, including the most profitable varieties.

In peaches prizes are offered for 22 sections, giving special prizes to seedlings worthy of introduction, thus encouraging the art of the hybridist. The majority of peaches will be at their best during this exhibition.

Fifty-three prizes are offered for pears, including premiums for the best commercial and dessert varieties.

The plums are a fruit which will be in splendid condition for this exhibition, and the directors have realized this fact by offering prizes for 25 different varieties and special prizes for collections of Japanese and English plums, also for general collections of merit. The quince, a fruit which is not used as extensively as it should be, has not been overlooked.

PRIZES FOR FLOWERS.

It would be a mistake to conclude that while the society has done everything to encourage the production of fruit that it has in any way neglected flowers. Good prizes are offered covering 100 sections, embracing foliage, flowering and specimen plants, hardy herbaceous perennials, annuals, and almost all cut flowers which will be in bloom about September 12.

The professional florists have been liberally dealt with. While their prize list is not as large yet good prizes have been offered, and the Hamilton Horticultural society well knows from past experience that they have not only have the support of local florists but from all professionals who can possibly attend.

Mr. J. M. Dickson, of 22 Bruce street, Hamilton, Canada, would be pleased to receive applications for prize lists and entry forms from all interested. No entry fee will be charged. Entries close September 4.

OUR SPECIAL FRUIT CROP REPORTS

Judging from reports received from correspondents in the different parts of Ontario up to July 26, the fruit crop will be almost an average one. Apples and pears had promising bloom, but wet weather and lack of sunlight at the proper time prevented the fruit from setting. In many sections the fruit set, but, fell off later on.

Cherries were a full crop in many districts, but some growers lost a great portion of the crop by rot which came with destructive force in a day or two just when the fruit was ready to be harvested. Sweet cherries suffered more in this respect than did the sour varieties. Strawberries varied from a half to full crop, but the sample was good. Other small fruits promise greater yield than last year.

An abundant crop of plums set, but many fell off during the wet weather, and some sections report rot setting in. Despite these facts, however, the crop will be much ahead of last year.

Peaches and grapes have excellent promise. Some correspondents state that the yield will be three times last year's, but on the whole 25 per cent. increase seems to be the average estimate. The decrease owing to the destruction of trees during the severe winter of 1903-4 will scarcely be made up by the higher yield where trees escaped the frost. Grapes are ahead of last season's supply, but already the destructive rot is showing, and unless weather unfavorable to its development sets in a considerable percentage of the crop will be destroyed in a number of sections.

PROSPECTS IN LAKE ERIE SECTION.

The outlook for apples in the counties along Lake Erie is not very bright. Most reports state that the crop will be light and only 40 to 50 per cent. of last year's yield. Pears are also very light, and in many cases reported as a failure. Reports give plums medium to heavy crop, or about double that of last season. Cherries did not yield as well as was anticipated, but peaches and grapes are much ahead of last year. Strawberries have been scarce, but other small fruits have excellent promise.

NIAGARA PENINSULA OUTLOOK.

Apples in the Niagara district have a poor promise. One grower places the yield at 10 per cent. that of last year. The prospects,

however, are for 30 to 50 per cent. The deficiency in apples is made up by a fine promise of other fruits, even pears in some cases being a fair crop. Cherries were abundant, but rot destroyed some orchards. Plums promise 40 to 75 per cent. increase over last year's yield. A report from Ridgeway says the plums are falling off, while one from Glanford states that rot is developing.

HEAVY CROP OF PEACHES.

Were it not for the fact that so many peach trees were destroyed by frost, this season would give a bumper crop. Almost every orchard in the Grimsby and St. Catharines districts promises an increase of 20 to 40 per cent. over last year's yield. Several growers are shaking or picking off the fruit so that they may have better quality. The grape crop promises to be about the same or slightly better than 1904.

IN BURLINGTON DISTRICT.

Apple growers in the Burlington district promise only a medium crop, some reports placing it at one-third that of last year. Pears are a light crop. Plums, peaches and grapes are very much above the yields of last season. Small fruits are a medium to full crop.

COUNTIES ALONG LAKE ONTARIO.

Early apples are a medium crop in the counties bordering on Lake Ontario, but the fall and winter varieties are not up to last year except in a few cases. The fruit, though lacking in quantity promises to be above the average in quality. Pears are scarce and scab has been reported bad in Ontario county. The outlook for plums is for a full crop, double that of 1904.

POOR PROMISE ALONG LAKE HURON.

As anticipated in last month's report, the apple crop in the Lake Huron district will be light. The best the growers can promise is 30 to 50 per cent. of last year's yield. Pears promise a light crop to a failure, although one report quotes 25 per cent. ahead of 1904.

GEORGIAN BAY COUNTIES.

Reports from growers in the Georgian Bay district place the apple crop equal to last year's. Ben Davis trees are well loaded. Prospects early in the season were bright for the Pewaukee, but the fruit is falling off. Plums promise a heavy yield, while small fruits are better than last year.

Florists



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Also Palms and Araucarias of very select quality.

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PROSPECTS IN INLAND COUNTIES.

From inland counties come the best reports for apples. Dufferin, Peterborough and the south part of Simcoe promise as good or better yield than last year. Pear trees are very scarce and the yield poor. Plums are reported as being a medium to full crop. Small fruits, too, are plentiful.

OTHER SECTIONS.

Apples promise to be a heavier crop in the Ottawa valley than they were a year ago. McIntosh, Wealthy and Fameuse are quoted as being a good crop. A noticeable feature is the absence of fungous diseases. In Muskoka apples are reported up to last season's crop and coming in earlier. In Algoma district the promise is slightly better than 1904. Pears and plums have not recovered from the winter of 1903 and 1904. All small fruits are a heavy crop.

Fruit Crop Notes

Writing from Essex county, J. O. Duke, of Olinda, says that present appearances point to the apples of that section being quite wormy.

Jas. Symington, of Port Dover, reports that strawberries were light, but other fruits will be a good crop.

A report from Robt. Thompson, of St. Catharines, says that the hot weather is having a good effect in preventing rot on the grapes.

From Hamilton R. H. Lewis reports that black rot has already started.

On July 19 John Rice, of Whitby, writes that appearances earlier in the season favored a large crop, but continued wet weather caused much of the fruit to drop.

From Bond Head, H. B. Jeffs reports that plums have been infested with a host of "little black bugs" and that black knot is very prevalent.

D. M. Lee reports from Paris that raspberries are a short crop and that plums have nearly all rotted.

In the Okanagan Valley, British Columbia, the fruit is expected to ripen a week or 10 days earlier than usual owing to warm dry weather.

J. E. McNeill, of Wanstead, Lambton county, has a fine quince tree which has borne a good crop each season for five years.

The Davis Clothes Line Reel

We make this reel. It is for the yard. It has 130 feet of clothesline, twisted wire, and occupies only a 16 foot circle. You tilt it to one side to pin the clothes on, then straighten it up with a push. It then holds the washing high off the ground. The wheel turns round with the wind, and dries the clothes evenly and quickly. No more yard tangled up with clothes line to run against—no more washing falling into the mud. It is cheap too, and durable. Sent all ready to set up, needing only a post hole. Circular free. See our address on last cover page of this issue.

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is never past.

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See Notice in Advertising Columns.

FRUIT, FLOWER AND VEGETABLE PRIZE LIST

The prize lists for the floral and vegetable sections of the Provincial, Fruit, Flower, Vegetable and Honey Show, or The Ontario Horticultural Exhibition, as it is proposed to call it, have been completed and a portion of the fruit prize list. The prizes in the floral section will be worth about \$1,900, in the fruit division \$800, and for vegetables \$200. Here are the prize lists as completed to date:

FLORAL EXHIBITS.

The rules governing the floral exhibits will be published in the prize list. They require that all exhibits, except made-up work, must be grown by the exhibitor and in his possession three months before the date of the show.

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Upwards of \$4,000.00 in prizes for

Horticulture and Floriculture

Entries close Monday, August 14th.

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CLASS A—CHRYSANTHEMUMS, PLANTS AND MISCELLANEOUS.

Best 1 specimen, any variety or sized pot, 1st \$6, 2nd \$5, 3rd \$4.

Best 1 standard, any variety or sized stem, not more than 3 feet, 1st \$6, 2nd \$5, 3rd \$4.

Best 3 specimens, white, pots not to exceed 10 inches, 1st \$12, 2nd \$10, 3rd \$8.

Best 3 specimens, pink, pots not to exceed 10 inches, 1st \$12, 2nd \$10, 3rd \$8.

Best 3 specimens, yellow, pots not to exceed 10 inches, 1st \$12, 2nd \$10, 3rd \$8.

Best 12 single stems, and flowered, not less than 4 varieties, in 6-inch pots, 1st \$6, 2nd \$5, 3rd \$4.

Best 5 single stems and flowered, not less than 8 varieties, in 6-inch pots, 1st \$12, 2nd \$10, 3rd \$8.

Best 12 specimens palms, not less than four varieties, pot not to exceed 10 inches, 1st, \$10, 2nd \$8, 3rd \$6.

Best 50 ferns, not less than 8 varieties, pots not to exceed 3 inches, 1st \$5, 2nd \$4, 3rd \$3.

Best 25 ferns, not less than 6 varieties, pots not to exceed 3 inches, 1st \$4, 2nd \$3, 3rd \$2.

Best 6 specimens ferns, 1st \$10, 2nd \$8, 3rd \$6.

Best 1 orchid in flower, 1st \$3, 2nd \$2, 3rd \$1.

Classified Advertisements

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

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.

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thousand feet of glass: one of the best equipped greenhouses in Toronto, located in the best residential sections of Parkdale, large plant trade; residence, stable and everything in good condition. Apply to F. C., care of The Canadian Horticulturist.

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established in good residential part of Toronto: new brick store and dwelling; also greenhouses. These may be purchased separately or combined: owner has excellent reasons for retiring. A bargain if sold immediately. Apply to M. L., care of The Canadian Horticulturist, Toronto.

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Fruit Grader, in perfect working order, for sale at a bargain. Address L. Woolverton, Grimsby, Ont.

CACTI FOR SALE. A COLLECTION OF RARE
and Varied Cacti. Apply Rev. C. E. Whitcombe, Hamilton.

CACTI—FOR SALE, A VARIED AND RARE
collection of Cacti, made by the late William Raynor, of Hamilton. Apply to Mrs. Wm. Raynor, 61 Steven street, Hamilton.

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

Best 6 cyclamen, in bloom, pots not to exceed 8 inches, 1st \$5, 2nd \$4, 3rd \$3.

Best 12 primulas, in bloom, pots not to exceed 8 inches, 1st \$5, 2nd \$4, 3rd \$3.

Best 6 pots of callas, in bloom, pots not to exceed 8 inches, 1st \$5, 2nd \$4, 3rd \$3.

Best 6 begonias, in bloom, pots not to exceed 8 inches, 1st \$5, 2nd \$4, 3rd \$3.

Best group of plants, arranged for effect, consisting of mums, palms, ferns and selaginellas, space not more than 90 square feet, Hallam cup, 1st \$30, 2nd \$25, 3rd \$20, 4th \$15.

Best group of foliage plants, arranged for effect, in which mums may be introduced, space not to exceed 90 square feet, 1st \$20, 2nd \$15, 3rd \$12, 4th \$10.

Best display of orchids, in which nepenthes and any foliage may be used, arranged for effect, 1st \$25, 2nd \$20, 3rd \$15, 4th \$10.

CLASS C—CUT BLOOM (CHRYSANTHEMUMS).

Best 25 distinct varieties, cup, 1st \$8, 2nd \$6, 3rd \$4.

Best 12 distinct varieties. Hallam cup, 1st \$6, 2nd \$4, 3rd \$3, 4th \$2.

Best 25 T. Eaton, cup.

Best 25 Dr. Oronhyatekha, cup.

Best 25 any varieties, 1st \$10, 2nd \$8, 3rd \$6, 4th \$4.

Best 12 one variety, 1st \$6, 2nd \$4, 3rd \$3, 4th \$2.

Best 6 distinct varieties never before exhibited in Ontario, 1st \$5, 2nd \$4, 3rd \$3, 4th \$2.

Best 6 white, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.

Best 6 pink, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.

Best 6 yellow, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.

Best 6 crimson, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.

For largest bloom in the show, prize R. J. Score' guinea pants.

CLASS D—CUT BLOOM, CARNATIONS.

Best 25 white, named, 1st \$4, 2nd \$3, 3rd \$2.

Best 25 red, named, 1st \$4, 2nd \$3, 3rd \$2.

Best 25 light pinks, named, not darker than Scott, 1st \$4, 2nd \$3, 3rd \$2.

Best 25 dark pinks, not lighter than Scott, 1st \$4, 2nd \$3, 3rd \$2.

Best 25 crimson, 1st \$4, 2nd \$3, 3rd \$2.

Best 25 fancy, 1st \$4, 2nd \$3, 3rd \$2.

Best 25 new, introductions of 1905, 1st \$5, 2nd \$4, 3rd \$3, 4th \$2.

Best 25 new, not yet introduced to commerce, cup.

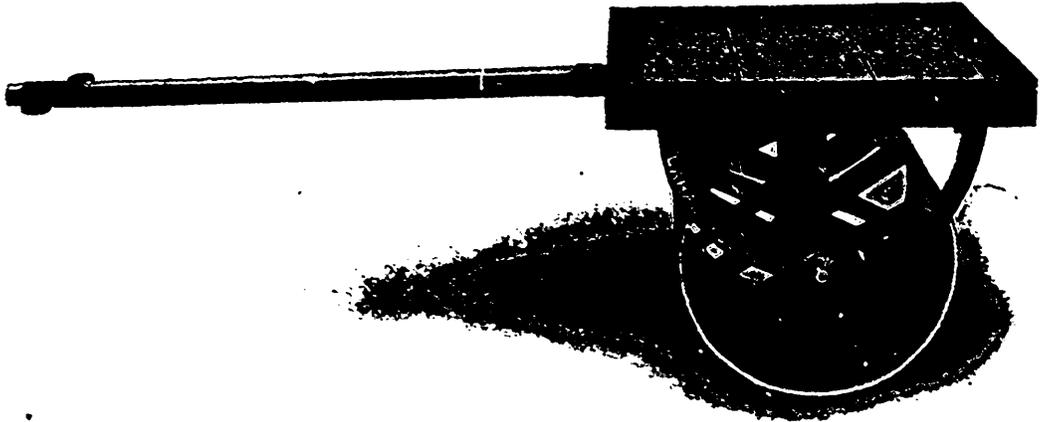
Best 50 blooms, one variety, arranged loosely in vase, 1st \$8, 2nd \$6, 3rd \$4, 4th \$3.

Best 50 blooms, any varieties, with any foliage, arranged loosely in vase, arrangement to count in judging, not necessarily grown by exhibitor, 1st \$8, 2nd \$6, 3rd \$4, 4th \$3.

CLASS E—DECORATIONS.

Best decorated dinner table, to seat eight, laid complete, exhibitor to supply everything, 1st \$60, 2nd \$50, 3rd \$40.

LAWN ROLLERS



Well made, light and serviceable. Can be weighted when desired.

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE: TORONTO

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

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

CLASS F—CUT BLOOM, ROSES.

- Best 10 yellow, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.
- Best 10 white, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.
- Best 10 pink, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.
- Best 10 crimson, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.
- Best 10 light pink, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.
- Best 10, any other color, 1st \$4, 2nd \$3, 3rd \$2, 4th \$1.
- Best 10 American Beauties, 1st \$8, 2nd \$6, 3rd \$4, 4th \$2.
- Best 25 American Beauties, 1st \$15, 2nd \$12, 3rd \$10.
- Best 10 new, introduction of 1905, 1st \$6, 2nd \$4, 3rd \$3, 4th \$2.
- Best vase of 50 roses, arrangement to count in judging, not necessarily grown by exhibitor, American Beauty excluded, 1st cup, 2nd \$12, 3rd \$10, 4th \$8.

CLASS G—CUT BLOOM, VIOLETS.

- Best bunch 50 violets, double, 1st \$3, 2nd \$2, 3rd \$1.
- Best bunch 50 violets, single, 1st \$3, 2nd \$2, 3rd \$1.

CLASS H—FLORAL DESIGNS.

- Best funeral design, standing crescent, wreath (20-inch frame), 1st \$15, 2nd \$12, 3rd \$10, 4th \$8.
- Best presentation basket of mums, 1st \$10, 2nd \$8, 3rd \$6, 4th \$4.
- Best presentation basket, any flowers, 1st \$10, 2nd \$8, 3rd \$6, 4th \$4.
- Best flat basket of mums, for table decorations, not to exceed 30 inches over all, 1st \$12, 2nd \$8, 3rd \$6, 4th \$4.
- Best hand bouquet, any flowers, 1st \$10, 2nd \$8, 3rd \$6, 4th \$4.

VEGETABLE PRIZE LIST.

- Artichoke, red, 12, 1st \$2, 2nd \$1, 3rd 50c.
- Artichoke, white, 12, 1st \$2, 2nd \$1, 3rd 50c.
- Beet, long, 6 roots, 1st \$2, 2nd \$1, 3rd 50c.
- Beet, turnip, 6 roots, 1st \$2, 2nd \$1, 3rd 50c.
- Beans, green, best quart, 1st \$2, 2nd \$1, 3rd 50c.
- Brussels Sprouts, 3 stalks, 1st \$3, 2nd \$2, 3rd \$1.
- Cabbage, red, 3 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Cabbage, Savoy, 3 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Cabbage, pointed, 3 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Cabbage, flats, 3 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Cauliflower, best, 3 heads, 1st \$3, 2nd \$2, 3rd \$1.

Keep the weeds down by using the

“Handy Hand Scuffler”

the best tool in the market for farmers or gardeners. See Canadian Horticulturist of April for particulars. Wm. Welsh, Kinkardine.

GEO. VIPOND & CO.

Fruit Commission Merchants
MONTREAL

Re-liable. Prompt. Safe

- Cardoon Spanish, red, white, yellow, 1 each 1st \$2, 2nd \$1.50, 3rd \$1.
- Celery, Paris Golden, 6 heads, 1st \$3, 2nd \$2, 3rd \$1.
- Celery, red, 6 heads, 1st \$3, 2nd \$2, 3rd \$1.
- Celery, winter, 6 heads, 1st \$3, 2nd \$2, 3rd \$1.
- Carrots, table, best 12 roots, 1st \$2, 2nd \$1.50, 3rd \$1.
- Cucumber, White Spine, 2, 1st \$2, 2nd \$1.50, 3rd \$1.
- Cucumber, greenhouse, 2, 1st \$2, 2nd \$1.50, 3rd \$1.
- Citron, preserving, 2, 1st \$2, 2nd \$1.50, 3rd \$1.
- Egg Plants, 3, 1st \$2, 2nd \$1.50, 3rd \$1.
- Endive, 6 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Kohl Rabbi, green, 3 roots, 1st \$2, 2nd \$1.50, 3rd \$1.
- Kohl Rabbi, purple, 3 roots, 1st \$2, 2nd \$1.50, 3rd \$1.
- Leek, 6, 1st \$2, 2nd \$1.50, 3rd \$1.
- Lettuce, Grand Rapids, 3 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Lettuce, head, 3 heads, 1st \$2, 2nd \$1.50, 3rd \$1.
- Onion, White Globe, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
- Onion, Yellow G. Danvers, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
- Onion, Red Globe, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
- Onion, Prizetaker, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
- Onion, White Pickling, quart, 1st \$2, 2nd \$1.50, 3rd \$1.
- Onion, Yellow Pickling, quart, 1st \$2, 2nd \$1.50, 3rd \$1.

Caught in a Glut

is what happens to the fruit grower who depends on one market to take his crop.

Fortunately there is no need to be thus caught. Canada is wide. There are many centres from Halifax to Calgary anxious to get good fruit from a reliable grower.

THE CANADIAN GROCER is the medium through which the grower can reach these buyers.

An advertisement in our Fruit Department costs little and goes far.

Drop a card for rates.

The Canadian Grocer
TORONTO, ONT.

Parsnip, 6 roots, 1st \$2, 2nd \$1.50, 3rd \$1.
 Parsley, 6 stalks, 1st \$2, 2nd \$1, 3rd 50c.
 Radish, winter, 6 roots, 1st \$2, 2nd \$1, 3rd 50c.
 Radish, forcing, 6 roots, 1st \$2, 2nd \$1, 3rd 50c.
 Salsify, 12 roots, 1st \$2, 2nd \$1.50, 3rd \$1.
 Spinach, 1 basket, 1st \$2, 2nd \$1.50, 3rd \$1.
 Squash, yellow and green, 1 each, 1st \$3, 2nd \$2, 3rd \$1.
 Vegetable Marrow, 2, 1st \$3, 2nd \$2, 3rd \$1.
 Tomato, red, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
 Tomato, pink, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
 Potato, red, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
 Potato, white, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
 Turnip, table, white, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
 Turnip, table, Swede, 12, 1st \$2, 2nd \$1.50, 3rd \$1.
 Herbs, collection not to exceed 12 varieties, 1st \$3, 2nd \$2, 3rd \$1.

PRESERVED FRUIT.

CLASS 10.

Three prizes of \$3, \$2 and \$1 each will be offered for the best one-quart sealers of canned fruit of each of the following varieties of fruit: Cherries (black), cherries (red), cherries (white), grapes, peaches (white fleshed), peaches (yellow fleshed), pears, plums (red), plums (yellow), raspberries (best, red, black), strawberries.

CLASS 11.

Jams.

In this class the prizes will be \$2.50, \$2 and

\$1.50: Black currant, peach, pear, plum, raspberry, strawberry.

CLASS 12.

Jellies.

Three prizes of \$2.50, \$1.50 and \$1 will be offered in each section for the best exhibits of two half pint jars of the following varieties of fruit: Apple, crab apple, currant (red), quince.

In classes 10, 11 and 12 no gelatine or preservatives other than sugar shall be used.

Regular Sailings

The improvement in the regularity of steamship sailings from Montreal means much to fruit exporters. There was a time when specific sailings from Montreal could not be depended on, but in recent years faster and better vessels have been brought to the port, so that now it is a rare thing for a ship to miss her sailing date.

Some apple exporters are apt to overlook this very important feature of the St. Lawrence route, but a glance over the history of the past two or three years will convince shippers that the regularity of the Montreal sailings is worthy of their attention. The Robert Reford Company very early saw the necessity of regular sailings and worked hard to have such a service. The result now is a regular weekly service to Glasgow and London by ships fitted up with cold storage refrigerators and cool air chambers. See advertisement below.

ATLANTIC REFRIGERATOR SERVICE

THOMSON LINE

Montreal and London Service

Cervona, cold storage and cool air, Aug. 5th
 Iona, - cold storage and cool air, " 12th
 Devona, cold storage and cool air, " 19th
 Kildona, cold storage and cool air, " 26th
 Hurona, cold storage and cool air, Sep. 2nd

Direct service to Newcastle, Leith and Aberdeen. Sailing cards will be furnished on application.

DONALDSON LINE

Montreal and Glasgow Service

Tritonia, fan ventilation..... Aug. 3rd
 Marina, cold storage and fan ven., " 10th
 Athenia, cold storage and fan ven., " 17th
 Lakonia, cold storage and fan ven., " 24th
 Salacia, fan ventilation " 31st

LORD LINE TO CARDIFF, fortnightly sailings.

FOR SPACE APPLY TO

THE ROBERT REFORD CO., LIMITED

STEAMSHIP AGENTS

Montreal, Toronto, Portland, Me., St. John, N. B.

TORONTO OFFICE: Room 110, Union Station

D. O. WOOD, Western Agent

An Interesting Book

Much valuable information for fruit growers and florists is contained in a book, recently published, entitled *The Orchard and Fruit Garden*, by E. P. Powell, the well known United States authority. The book, which contains over 325 pages and numerous illustrations, is divided in three parts. Part first is devoted to the orchard and deals with the varieties and the handling and marketing of apples, pears, plums, cherries, peaches and numerous other varieties of fruit. Part second is entitled *The Fruit Garden*, and treats on currants, strawberries, raspberries, etc., a full chapter being devoted to each.

Part third deals with cultural directions. A few chapters are devoted to windbreaks, drainage, irrigation, pruning, spraying, harvesting, marketing, etc. The William Briggs Company, of Toronto, are Canadian agents for this publication.

The Classik Kids

The Classik Kids are a chirpy little pair who have succeeded in placing Sure Grip Shingles, Steel Siding and Classik Ceilings, made by the Galt Art Metal Co., Limited, in the very front rank of popularity in this Dominion. Little more than six months have elapsed since these goods were first introduced, but the demand for them has been enormous. The goods them-

selves are largely responsible for this. Made only of the highest grade materials, by competent workmen, on modern scientific principles, they have found ready buyers wherever they have been exhibited.

This success is built on a sound basis and is sure to be more than doubled in the remaining half year. In the first place, Galt Steel Sidings and Sure Grip Shingles, applied to any building, make it practically fire proof from without. If it is a farmer's barn, there is no danger from a flying spark from a passing locomotive or a thresher's engine, and lightning has absolutely no effect on a building thus clad in a coat of Galt steel, the latter acting as a perfect conductor. Then they make a barn, or any other building, perfectly wind, rain and storm proof. For interior decoration nothing surpasses Classik Ceilings and Panels in beauty or durability.

New Advertisers in This Issue

Miss Lilly, Toronto, Ont.
Georgian Bay Shook Mills, Midland, Ont.
C. E. Whitcombe, Hamilton, Ont.
Allan Line Steamship Co., Montreal, Que.
W. Briggs, Toronto, Ont.
Clarke & Sinclair, Dundee, Scotland.
J. F. Watson, Ottawa, Ont.
Canada Cold Storage Co., Montreal, Que.
Union Cold Storage Co., Montreal, Que.
Furness, Withey & Co., Montreal, Que.
Art Metal Co., Galt, Ont.

Why? ————— Why?

The question is, Why should the farmers of Ontario send their boys and girls to the

Ontario Agricultural College?

and the answer is, Because the boys will receive a practical and helpful working knowledge of Scientific Agriculture, and because the girls will be given a first-class training in Household Science at the **MACDONALD INSTITUTE**.

Residence Accommodation is provided for both men and women.

Macdonald Hall, the girls' residence, is one of the best equipped buildings of its kind in Canada, and the boys' dormitories are comfortable and commodious.

COURSES

Courses for Boys, varying from two years to four years in length, commence on September 13th.

Courses for Girls, varying from three months to two years in length, commence on September 13th.

For full information regarding courses, terms, etc., write to **G. C. CREELMAN**, President Ontario Agricultural College, Guelph, Ont.

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

Unsurpassed Facilities

Continuing their policy of improvement in facilities and service from year to year, the Allan Line, Royal Mail steamship service, has this season been equipped with fast steamers and superior facilities for handling apples, fruits, dairy products and other perishables with the utmost dispatch. The refrigerators and system of ventilated compartments are thoroughly up to date, assuring discharge of this traffic at destination in perfect marketable condition. The Liverpool service has been augmented by the addition of the new turbine steamers, Victorian and Virginian, which together with Tunisian and Bavarian, constitute the fastest and most up-to-date Canadian line on the Atlantic to-day.

In order to facilitate the handling of apples and other perishables at London the Allan Line steamers now discharge their cargo at the Surrey Commercial Dock Co.'s Greenland Dock, on which has been erected the Canadian Produce warehouses, fitted with refrigerator and cool air chambers, the steamer's perishable cargo being discharged into such chambers by the most improved methods of handling.

Not content with improving the Liverpool and London services only, the Glasgow steamers are also equipped with the most modern systems of refrigeration and sirocco fan ventilation, for the

handling of apples and other green fruits, and dairy products, thus making the vessels on this service unsurpassed in both speed and equipment.

With their usual enterprise the Allan Line has, therefore, the fastest and most efficient steamship service to London, Liverpool and Glasgow, the various vessels sailing weekly from Montreal during the season of St. Lawrence navigation.

As a further indication of the progressive policy of the Allan Line, there has been inaugurated this season a fortnightly service from Montreal to Havre, France, thus placing the Canadian exporters in closer touch with their French customers and enabling them to make prompt and regular deliveries of their product destined for European consumption.

Improves The Sight.—A handy aluminum pocket microscope is being introduced to fruit growers and florists by the firm of Stone & Wellington, of Toronto. These microscopes are made of aluminum and magnify four and a half times. A large number of them have been sold to farmers who find them useful in examining seeds and grains. Florists and growers use them in examining plants and trees for insects, and teachers and scholars use them in studying botany. The ordinary individual will find them useful in many different ways.

Use Corrugated Paper, it's tidy and quick.

The Biggs Fruit Box Press

(Pat. applied for)

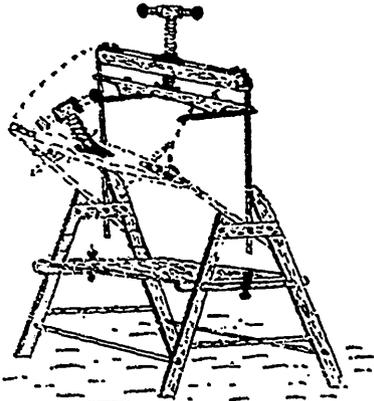
We have all kinds of Pack-er's Supplies.

Last month we directed your attention to our **Utility Fruit Box** with six reasons why it is the best. This month we direct your attention to our **Box Press**, which is **Light, Strong** and **Serviceable**.

We have put this Press on the market to supply the wants of Box Packers.

A Good Press will save time.

WRITE FOR PRICES



This is the only Box Press that is adjustable to press Apple and Pear Boxes of any ordinary size.

It is Complete.

NOTE—Don't forget that success in the fruit trade depends upon a **Series of Goods: Good Fruit, Good Boxes, Good Packing, and Good Tools** will assist you in this. Why not have these **Tools?**

The Biggs Fruit and Produce Co., Limited, - Burlington

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See Notice in Advertising Columns.