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FIG. 2395. THE ST. JOHN PEACH.

THE CANADIAN HORTICULTURIST

OCTOBER, 1902

VOLUME XXV



NUMBER 10

ST. JOHN PEACH

THE earliest really good peach for either home use or market. Its season is the end of August, just before the Early Crawford; and its fair size, yellow flesh, attractive skin, and good quality, make it one of the most satisfactory peaches for all purposes.

Origin.—America.

Tree.—Vigorous, and productive.

Fruit.—Round, large, $2\frac{1}{2} \times 2\frac{1}{2}$ inches; skin yellow, with dark red cheek; suture traceable on one side, sometimes by a red line; apex a tiny point in a rather deep depression; freestone; flesh, yellow, tinted red at stone; juicy, sweet, rich and agreeable.

Season.—August 20th to September 1st.

Quality.—Dessert and cooking, very good.

Market.—1st class, the best of its season.

Notes and Comments

SUCCESSFUL FRUIT GROWING.

THE lesson of successful fruit growing must be learned slowly; and many a purchaser of a fruit farm is sadly disappointed when he learns that the varieties of fruit upon it are a more important consideration than the number of trees. This season, for example, the Astracan apple has been a complete glut in our Canadian market, and being too tender for foreign shipment without great risk, it has sold at such low prices as to leave the grower a loss of money after labor, packages, freight, commission, etc.,

has been paid for; a similar statement may be made of the whole list of early clingstone peaches, such as Alexander, Hale, Rivers and Triumph. Fancy 10 and 15 cents a basket out of which to pay all expenses! What is left we ask for the grower? Nobody wants such rubbish. But as soon as we begin harvesting a fine yellow freestone, such as Yellow St. John we find a demand at 75 to 80 cents a basket, and we feel encouraged at once.

We mention this to show the great importance to the intending fruit grower when

buying a fruit farm, or to the farmer who wishes to plant an orchard, of knowing what varieties are really desirable; for it is evident that there are very many kinds which are only an encumbrance, and should be rooted out and burned.

It is with this end in view, to know desirable varieties and encourage the planting of them, that our fruit stations have been established; and if our readers will be advised by the reports of their work, as published by the Department of Agriculture, it will save many costly mistakes, and they will not be misled by the gaudy colored plates and glib tongue of the peripatetic tree agent.

GREAT MARKETS OPENING.

THERE is no doubt whatever that the world is big enough to eat up all our fruit products, and rich enough to pay us good fair prices for them. Not only is Great Britain a grand distributing market for our products, but we have enquiries more or less direct from Germany, and South Africa for our fancy apples. It is reported that good apples are just now worth 12c. each in Capetown, and that a line of steamers, furnished with cold storage, will soon begin to run between Canada and South Africa. Why then should not we take advantage of such fine opportunities? Even Japan, China and Australia are opening up for us, and, with so many millions of mouths to satisfy, surely the time will never come when our good apples will go begging for buyers.

FANCY PRICES FOR FRUIT.

WHAT is a fruit tree worth any way? This question puzzles our great corporations when they come to buy land planted with an orchard, for there are as many different values set as there are men to make them. Some say an apple orchard is only an encumbrance, for it does not pay, and

must need be pulled out to make way for something more valuable. Others want fancy prices for each tree. "How many baskets of Flemish Beauty pears do you think I took off that tree this year?" said Mr. W. M. Orr, of Fruitland. Well, it was a stout stocky tree, not so very large, and we guessed about ten. "No," he said, "Twenty, and last year it gave me more than that." What then is that pear tree worth, would you take \$40 for it? "Perhaps I would, but I should hesitate." Well that would count up pretty fast per acre; for you would have perhaps 100 trees on it, and that would make the trees alone worth \$4000, aside from the land value!

"How many barrels of apples would you estimate in this apple orchard which I have recently purchased," said Mr. Orr. We walked through it; the ground was a stiff clay, the trees, though thirty years planted, were low headed, and very stocky, and every tree loaded with clean beautiful apples. We guessed an average of about two barrels per tree, or about 200 barrels from the 100 trees, as a very modest estimate. Now apples this year are valued at \$1.00 per barrel as they hang upon the tree, and the apple crop on this farm we estimated as being worth this year at least \$100 per acre. What then is such an orchard itself worth? Surely \$500 per acre is a very moderate estimate. But why should a man like Mr. Orr, who already has a large fruit farm, wish to add another ninety acres? "It was too good an offer to pass by," said Mr. Orr, "ninety acres, with fine buildings, for less than \$4000! How could I resist the temptation, if only for speculation?"

THE VALUE OF OLD TREES.

THE above purchase was as signally low as another, along the same electric road, was high. Twelve acres about seven miles distant was sold in August last for \$10,000! The value was not in the

orchard alone, though a fine peach orchard just of bearing age; nor in the location altogether, although that is one of the pleasantest, but largely in the grand old trees which were left from the primeval forest to shade the borders of the lawn and hide unsightly views. "It would take a life time," said the buyer, "to put such grand old trees about a home, and I would not buy a place bare of trees at any price." Why is it that the grand old oaks, maples and elms, monarchs of the forest, are so thoughtlessly destroyed by the farmers of Ontario? Is there no way of convincing them that in time these will add thousands of dollars to the selling value of their farms?

THE APPLE SITUATION TO-DAY

IS the heading of several columns in "The Sun," in which the editor says, "Taking the situation as a whole it looks as if good apples, not necessarily grade No. 1, should go between \$1.00 and \$1.50 in the orchard. They may go more, they are not likely to go less, and the probabilities are on the side of the growers." It is really a comfort to us growers to find one journal taking up our interests. The Official Crop Reporter, issued by the United States Department of Agriculture, in speaking of the conditions of the apple crop in the United States, says that of the States having four million trees and upwards in apples eleven report an improvement in condition during August, and all but six of the apple-growing States report conditions ranging from 7 to 32 points above their ten-year averages. The State Weather Bureau reports that the outlook in New York is for considerably less than an average yield of apples. Buyers are snapping up desirable apples throughout the western part of York State. A Kenyon man has sold 2,000 barrels of bulk apples at \$2 a barrel; Albert Wood, Carlton, his orchard of 700 trees for \$7,000; the Pratt estate, Carlton, gets \$2.50 per

barrel for firsts and seconds; an East Albion man, \$2 for everything barreleable; I. Cooper of Carlton, \$2,500 for a 9-acre orchard; several other orchards sold at from \$2,000 to \$3,000. The Illinois Orchard Co., of Kankakee, Ill., has sold the apples in two orchards for \$11,500. These orchards total 125 acres, and are situated in Clay and Richland counties. The apples were of the Ben Davis and Jonathan varieties. On the other hand we read in the New York Fruit Journal such statements as the following:—"The talk that buyers are offering \$2.50 per barrel is rot. The apple men, with few exceptions are not anxious to part with their money. We were talking with one grower to-day who expects 500 barrels, and he remarked that he 'hoped to get \$1.00 for the fruit clear of the barrel.' This is not an exceptional case. The rank and file of our growers are beginning to wonder if they will be able to realize the above figure. Of course, the growers are talking short crop, hoping thereby to get the price started high.

We believe that the situation is one that calls for careful investigation before prices are made."

APPLES A BIG FAILURE IN ENGLAND.

ALL our foreign reports agree that the apple crop in Great Britain is an unusual failure, especially of colored or fancy fruit, so that the prices in England will be high. Already (September 2nd) sales are reported in Liverpool for fall apples at about \$6.00 a barrel, and in Glasgow at \$2.50 per bushel box! We have word of a syndicate in England, which is being formed for the purchase in Canada of high grade apples, packed in boxes, under high class brands. This is pointing in the right direction. We are tired of shipping fruit to commission men, who so often sacrifice it, and seem to care little for the interests of the consignor, so long as they get their percentage.

If we could once establish such a reputation for our brands that we could bring the world's buyers to Ontario for their high class stock, we would be masters of the situation. No apples are finer than Ontario apples, either in color or flavor, and the whole world wants such fruit. Why then should we not supply that want?

ASTRACHANS EXPORTED SUCCESSFULLY.

IT seemed a considerable risk, our sending forward to Glasgow a car load of such tender apples as the Red Astrachan; the carrier cases cost us 22c. each delivered, and the freight and commission on a bushel of apples amounts to about 50c., so that in case of failure we might be in debt nearly \$500, besides losing the fruit. It was therefore with some pleasure that we received the cable from the consignee saying that the fruit had arrived in perfect condition, and had netted us £90 at Grimsby! Pretty good for an apple that is wasting under the trees in Ontario! And still, even at home, there are ways of succeeding with them. Here, for example, is the way a writer in Green's Fruit Grower managed with them:

"So many early apples in sight, with help scarce and poor at that, how to handle them successfully was a problem. We used "fifth" baskets, discarding all inferior fruit. My wife and I attended to the grading and putting up, while the hired man did the gathering. The baskets were new and clean, cost 30 to 35 cents per dozen. The apples were handled one by one, and polished with a cotton cloth until they shone. When carefully graded and attractively put up fruit will seldom go begging for a market. I went only to private houses, and the best at that, and could readily find sale at good prices for fancy eating or cooking apples. I made the business honorable by fair dealing, and at each visit found ready customers. Knowing that I had the best to be found, I was not afraid or ashamed to step

up like a man and ring the door bell of the finest residences. Why should I be ashamed? Husbandry was the labor that God first instituted and blessed, and its devotees are and ought to be the kings and queens of the realm. Well, it was slow work to put up fruit in that way, but I could sell at 15 to 25 cents per basket, and it paid. Others were offering apples by the bushel at the same prices that I was getting for "fifths" baskets, but it was the way of putting them up, I think, that gave me the advantage.

"The best grade of culls was either dried or made into cider. The dried apples would keep over and wait for a shorter supply, and the cider would make vinegar to be sold later on at good prices. The apples not fit for drying or cider were carefully gathered up and fed out, none being allowed to decay on the ground. Why? Well, I have been through orchards and seen the apples lying on the ground and decaying by the bushel. The worms were crawling out by hundreds and seeking a home somewhere else, and, rest assured, they are always heard from the following year."

THE APPLE SHORTAGE IN EUROPE.

MESSRS. WOODALL & CO., of Liverpool, always send us reliable reports of foreign markets, and we have pleasure in quoting from their circular of August 1st, which encourages us to hope for good prices for our No. 1 stock, but very properly discourages the shipping of inferior stock.

"The crop in Great Britain is about the same as the season of 1901, which was a small one. The comparisons are shown in the following figures, but this year there are twenty-six more reports than in previous one.

	Over Average.	Average.	Under Average.
This year.....	12	98	184
Last year.....	15	90	163
Year 1900.....	148	138	16
Year 1899.....	20	137	194

"The total imports from the United States and Canada in the United Kingdom during the past season, 1901-1902, are 781,000 barrels, as against 1,300,000 in the preceding one, and as shewn below are the smallest for the last five years. The receipts from New York were insignificant, Canada being the chief source of supply. It is to be feared that results cannot have been satisfactory to shippers, as, consequent on the scarcity, a high range of prices were paid not warranted in the quality of the fruit, which often landed here in doubtful and poor condition, which is so often the experience in seasons of small crops, and has again demonstrated that the atmospheric conditions which caused the failure, generally prejudicially affects the condition and keeping quality of the fruit, to which the late shipments this year have been no exception. California has again, through the high range of prices, been able to place greatly increased shipments on to this market, the receipts being 117,843 as against 70,303 boxes in 1901-1902, which for purposes of statistics are estimated as at three to a barrel. The quality was not very satisfactory, but buyers had confidence in them, as the condition was generally reliable and also being the nearest approach to the Hudson Newtown Pippin, which were almost an entire failure.

"The prospect of a small English crop gives promise of an early demand for foreign imports, and it is to be hoped that the reports of good crops in the United States and Canada will be realized, as there is every prospect of a large demand in this country. This, of course, it must be repeated, is for good sound quality and condition, as no amount of scarcity will produce high prices for inferior stock, and it is no use paying the heavy freights and expenses with this expectation.

"Reports from the chief Continental growing districts are generally unfavorable."

APPLE CROP NOT EXTRAORDINARY IN ONTARIO.

FROM all parts of the Province comes the same report, viz., that the apples are badly spotted and blemished, so that the yield of No. 1 apples will be comparatively small. Our Ribston Pippins, for example, looked well on the trees, but when we gathered them probably not three per cent. were No. 1, so many were blemished and misshapen; our Fall Pippins, which looked fine on the trees, when picked showed numerous minute scabs which made them nearly all third class; Kings and Gravensteins were much better, and grade largely No. 1, but Spys look very disappointing, and more than one-half will be third class. Besides this, many trees are quite barren, and the orchards will not yield so much above the average as has been supposed. Mr. Race, of Mitchell, evidently agrees with us, he says: "Just made a tour of some of the best apple orchards in this district, and find the prospects much less promising than they were three weeks ago. The average yield of fruit fit for export will be far below that of 1900. There are very few Colverts fit for shipment, though this variety promised well in the early summer. Snow apples are gnarled, spotted and useless; so are St. Lawrence and other fall varieties. Ben Davis and Russett, though numerous, are very small and irregular in shape. Duchess is very fine and will grade well in the picking; so also will the Blenheim and Ribston Pippins. Baldwins promise fairly well, but are as yet much under size. Spys are light and only a small proportion of them will grade up No. 1. One buyer was through the section a few days ago and expressed himself as much disappointed. He said the quantity of saleable fruit would be considerably below an average crop, and did not think that grade one would take many of the Ben Davis, Spys or Baldwins."

Mr. A. E. Sherrington, of Walkerton, says: "The prospects in our section are

very poor for No. 1 stuff. The yield of apples here will not be more than three quarters of the yield of two years ago. There had been a good deal of dropping since the previous report, and it is still on. Ninety per cent. of the apples are more or less spotted, and not more than ten per cent. will grade No. 1. In fact, our intention is to grade all No. 2. No dealers have been here so far as I know, but we have been offered \$1.50, the fruit to be barrelled by the producers, and graded as No. 1."

NO. 1 APPLES SCARCE IN ONTARIO.

THE wet summer has caused the growth of so much fungus on the fruit in the northern portions of the Province, and indeed in many orchards of the southern parts, that a large part of the apples will pack under grade No. 2, or, perhaps No. 3. This will cause a glut in all markets of low grade stuff, and a great scarcity of No. 1. No doubt the evaporating factories will have a rich harvest of this grade, and if they pay 40 cents a hundred pounds, we counsel our fruit growers to sell the lowest grades to them, and not to crowd it upon the market. R. J. Graham, writing our excellent contemporary the Sun on this point, says :

"If strictly No. 1 apples were to be picked only, there would be a fair market for our good fruit, but unfortunately we hear of buyers undertaking to pack seconds, and we, therefore, look to see this quality of fruit ruin the market for better goods. We think it will be a disastrous year for speculators who pay any fancy prices for fruit, and we advise everyone to go cautiously, and if possible pack only good goods. We do not think more than 10 per cent. of the crop in Canada would pass No. 1, according to Government standard. The apples in Essex and Kent are much better than in any portion of Ontario, and have mostly been bought at prices ranging from 50c. to \$1 per barrel on the trees. We hear of some sales as high

as \$1.50 for No. 1 fruit east of Toronto and some orchards, bought by the lump. One dollar per barrel for No. 1 fruit is being freely offered in this section (Belleville), and 40c. per 100 pounds for canning purposes.

"This is certainly an off year in the Georgian Bay apple district. The trees are not loaded, and the proportion of small, scabby fruit is abnormally large. 'Not over half a crop,' said Director Mitchell, of Clarksburg Experiment Station, in answer to my question as to crop prospects. 'The western part of the district,' he continued, 'in which most of our apples have been grown, makes the poorest showing this year. The fruit is thin on the trees, and what there is appears to be very scabby.' And Mr. Mitchell did not overstate the case. Some good orchards will not give \$1 where \$10 has been given."

HOW TO GET BIG PRICES FOR APPLES.

THE way to get big prices is to show a good article. Astracans are selling at 15 to 20 cents a twelve quart basket in August, and Mr. Delos Woolverton gathered the finest windfalls, polished them with a cloth, consigned them to the same buyers in six quart baskets and got 33 cents each for these half baskets!

Prof. Whitten read a paper before the Rochester Convention of Apple Shippers on "European methods of securing enormous prices for first-class fruit." Among other things he said :

"The possibilities of a European market for a larger quantity of American apples should justly claim more attention. Such a market cannot be developed by any one class of men alone. The responsibility rests with the American apple grower as well as with the American apple buyer and shipper. A better understanding of European conditions and strenuous effort and co-operation on the part of all concerned ought to secure in Europe a lucrative sale of increased quantities of apples. In order to arrive at a better understanding of European conditions it is perhaps worth while to mention the fact that the Europeans are well aware that they can never hope to compete with America in the wholesale production of cheap fruit. This fact does not worry them, however, half so much as

might be supposed, in fact, they are not trying very hard to compete with us in that way. They are simply laughing at the 'inferior quality' of American apples, and are turning their attention to the production of apples of the highest quality, so they can have the cream of the market, and they get a price for their product such as we have never dreamed of in America. A half dozen apples of first quality attractively put up in a small basket sell for as much in London or Berlin as a whole barrelful of fine apples in America.

"It should be borne in mind that in America we have a great middle class of comparatively well to do people, including millions of the more intelligent laborers, who consume the greater part of our apple product. It is a source of gratification that we have such a middle class and that we can supply enough apples to bring them easily within their reach. In Europe they have practically no such middle class; generally speaking, the people are rich, aristocratic and luxurious or very poor. The former class do not want to eat cheap apples; the latter cannot afford to. There is far greater demand for moderate priced apples in America than there is in Europe.

"It seems to me the future of our European apple market depends upon our supplying only a first-class article. Let us keep all our moderate priced stuff at home. The European grower is turning his attention to varieties of the highest quality, regardless of productivity. It is more profitable here to grow a smaller quantity of apples of high price than a larger quantity of low price."

FRAUDS OF SPECULATORS.

IT is not at all fair that the blame for bad packing of Ontario fruit should be laid at the door of the fruit grower, when the fraud is the work of the speculator who buys his orchard in a lump for so much and packs to make as much as possible. Nearly all the fraudulently packed barrels of apples, which have led to the passing of the Fruit Marks Act, were done by shippers, and not by the growers, who unfortunately for themselves have hesitated to undertake the packing of their own fruit. Here for example is a note in the Mail and Empire, of Toronto, along this line, headed:

FANCY FRUIT TRADE.

"The Dominion Fruit Inspector at Winnipeg has sent to the Department a box of apples taken from the middle of a consignment shipped to Winnipeg by a firm in Galt, Ont. The apples were described by the shipper as "fancy" Canadian apples. The specimens sent to the department are very

poor quality, indeed. Twenty of them weigh only 28 ounces. Twenty hen's eggs of good average size would weigh 40 ounces. It is considered too bad that Ontario fruit is being shipped to the excellent markets of Manitoba and the North-west Territories in this dishonest manner. It is killing the trade out, and playing directly into the hands of the fruit growers and shippers from California. The inspector has been instructed to prosecute the shipper in this instance and every similar instance which comes under his notice."

Now this kind of thing would never occur if we could educate the grower to pack his own fruit, and encourage a few of these men at every shipping point to combine in shipping car lots to proper consignees, for sale.

HOW TO PACK.

FOR a fancy trade in No. 1 apples, the box is the best package. We take out this grade, and the No. 2 goes in the barrel, and is marked accordingly. X, our lowest grade, is No. 1 apples, $2\frac{1}{4}$ inches in diameter, XX is $2\frac{3}{4}$ inches, XXX is $2\frac{3}{4}$, fruit larger than that we call EXTRA, as indicated last month.

We place a thin layer of excelsior first against the bottom, then row in the apples, four wide, four deep and eight long, with padding of excelsior between every layer, in boxes $10\frac{1}{2} \times 11\frac{1}{2} \times 22$ inches. These boxes are most convenient for consumers, who seldom want a whole barrel because it is too clumsy for the kitchen or the pantry, while a box of apples is just in place, especially if it be a high grade article. Another note, in the above mentioned Journal, fits in just here about; and we quote it because it is exactly in line with our views.

HIGH GRADE PRODUCTS.

"A profitable lesson can be learned from a visit to one of the large fruit markets of the city, or even by a casual inspection of



FIG. 2396. GARDEN OF THE REV. J. T. PITCHER, SMITH'S FALLS, ONT.

the different grades offered for sale at the retail shops. There will be seen peaches the size of an ordinary apple, without spot or blemish, while alongside of them may be a basket of immature bruised specimens that apparently have been handled with the same care that is accorded to anthracite coal. The prices of the one is perhaps a dollar and a quarter, the others are labeled three for a dollar. The amount received by the growers of these two grades would be still more convincing evidence of the necessity for growing only the best or at least of marketing only the best. The top prices cannot always be secured, but the fruit of a high standard of quality never waits a buyer."

CLERGYMEN AS GARDENERS.

WE have often been impressed that clergymen should be the most active supporters of our Horticultural So-

cieties. These organizations afford an open meeting ground for all religious parties, and the study of flowers and fruits is a branch of nature study that leads ones thoughts upward toward the creator of this world of beauty.

As recreation for the body, nothing is better for the minister than an hour or two a day spent in his garden, while at the same time he gets many a suggestion for his sermons, gathered from his garden favorites.

The Rev. A. B. Cohoe, of Grimsby, planted a quarter acre garden last April with rows of all kinds of vegetables to keep a succession, and, while the care of it was a pleasure and a source of increased health, the proceeds for the table were more valuable, we fancy, than any other quarter acre in the neighborhood.

The Rev. Canon Hole, Dean of Rochester,

England, is famous for his horticultural books, and all the result of his delight in gardening. And here is another Canadian minister, the Rev. J. Pullman Pilcher, of Smith's Falls, Ont., whose success is evident, who kindly sends us a photograph of his garden with the accompanying letter.

SIR.—By this mail I forward a photograph of my flower garden. I am the pastor of a very large congregation, yet for my pleasure and health I find time to cultivate a large garden. The work is all done by myself before breakfast. One hour a day will keep a garden in good order, will supply fresh crisp vegetables for the table, flowers for the church, neighbors and friends and appetite for the gardener.

OUR EXHIBIT AT THE INDUSTRIAL.

THE display of fruit from our fruit stations was exceedingly good this year. Each of our experimenters arranged his fruit in alphabetical order, for convenience of singling out any variety under consideration; and the labels, being written out boldly with a shading pen by our assistant, were a most important feature. The number of varieties of grapes shown by Mr. M. Pettit was limited, owing to the lateness of the season, but the apple collection from Mr. Dempsey, the pears from Mr. Huggard, and the plums from Mr. Mitchell, were unusually interesting.

THE CHABOT.

THIS plum (pronounced "shabbot") is coming to the front rank among the Japan varieties. It fruited this year for the first time at Maplehurst, and we first noted that the tree was fairly productive, and the fruit large and most attractive in color. Next we tested its flavor and were surprised at its excellence; it was tender, juicy and of a delicious flavor, and were almost convinced that it was the best Japan plum we had yet tasted. Surely this belongs to the first rank of Japans.

It was a little disappointing, however, to see this plum as grown in the Beaver Valley in the Georgian Bay District, and shown by

Mr. John Mitchell, our experimenter there, for in his exhibit it was much smaller and apparently quite inferior. Conditions of moisture, richness and cultivation of soil must have much to do with these differences, and should be further investigated. "In my opinion," said Mr. Orr, of Fruitland, "the best three Japan plants are Red June, Burbank and Satsuma.

"I do not know the Chabot, and of course it may displace one of these. Satsuma is blood red in flesh, and very desirable for canning purposes."

"In my opinion," said Mr. John Mitchell, our Clarksburg experimenter in plums. "the three best Japans are Red June, Chabot and Burbank. I also think very highly of the Satsuma, and would place it fourth on my list, for it is productive, quite hardy, and a splendid preserving plum.

FINE FRENCH PEARS FOR ONTARIO.

WE have noticed in our experimental plot several varieties of pears worthy of the attention of our fruit growers. One is *Triomphe de Vienne*, which is of about the same season as Bartlett, but larger in size, and another is the *Hoosic*, which is a trifle later, but is not only larger than the Bartlett but has a fine red cheek and is of excellent quality. Dr. Charles Saunders, of Ottawa, was particularly taken with a beautiful dwarf tree of this variety at Maplehurst, which was bending down with its tremendous load, and took a photograph of it for the exposition at St. Louis. Surely it would be a splendid export variety.

"I have an excellent French pear here at the Industrial," said Mr. W. M. Robson, of Lindsay, "which is worthy of notice. I procured the cions from the late J. K. Gordon, of Whitby, who was so well known for the large collection of foreign pears and plums in his garden. It is *Beurre de Mortillet*." It was truly a magnificent pear, averaging $2\frac{3}{4}$ inches in

diameter, well colored, and having a peculiarity in the habit of the stem growing out at right angles to the axis of the fruit. "Another fine French variety, that succeeds well in Canada," said Mr. Robson, "is the Duchess Precoce. The tree is an early bearer, and the fruit very fine." We have often noticed this pear as being valuable, especially since Mr. E. C. Beman has grown it with such success at Newcastle. We would suppose that it would be also a good shipper for export.

DISCARDED VARIETIES.

ONE of the most important features of our fruit station work is the warning of our fruit growers against planting inferior varieties. Almost every nurseryman's catalogue is loaded up with a whole list of inferior kinds which he carries simply because they are still asked for; and he will be greatly obliged to us if we can educate the grower to discard them. In our future exhibits we intend making a special table of such varieties, so that growers can see at a glance why we have discarded them. Another feature will be the showing up of varieties which are too much boomed. There are always unscrupulous dealers who want to trade upon varieties before their value is known, and we want to test all such fruits, and where they are not superior to varieties in cultivation we want to warn the growers against them.

COLD STORAGE OF FRUIT.

THE advantages of this means of retarding the ripening of fruit are only beginning to be appreciated. By it we can reach distant markets in all parts of the world, hitherto quite inaccessible, and what is still more important we can reach our own markets at almost all seasons, with fruits which otherwise must be sold immediately after harvesting. Professors Hutt and Reynolds, of the O. A. C., Guelph, have been making some interesting experiments along

this line, and have reached the following conclusions:

1. Apples and pears keep best when wrapped singly in paper, and packed in a shallow box not larger than a bushel. They ship best when, in addition, they are packed in layers and excelsior between.

2. Apples keep better at a temperature of 31° than at a higher temperature. Our experiments do not show what is the best temperature for pears.

3. Cold storage cannot make bad fruit good; neither can it keep bad fruit from becoming worse. Only good specimens will keep for any length of time in cold storage, will pay for storage.

4. For long storage, it pays to select the best fruit and to pack it in the best manner known. The extra labor and the cost of material are more than repaid in the greater quantity and better quality of fruit left at the end of the storage period.

5. With apples and pears at least, and, it seems likely, for most kinds of fruit, the fruit should be picked and stored in advance of dead ripeness. The maturing process goes on more slowly in cold storage than on the tree or bush.

6. With the two kinds of fruit tried, apples and pears, the medium sizes of fruit keep longer than the largest, all being perfect specimens and picked at the same time. It would, therefore, be an advantage, especially with pears and peaches, to pick the larger specimens first, and leave the smaller to mature later.

7. Fruit, on being removed from cold storage, should be allowed to warm gradually, and moisture should not be allowed to deposit upon it. But if the wetting cannot be prevented, then the fruit should be spread out and dried as quickly as possible.

8. With all kinds of fruit, there is a time limit beyond which it is unprofitable to hold the fruit in cold storage, or anywhere else. That limit, for sound fruit, is dead ripeness.

Duchess pears can be kept profitably until late in December; Fameuse, or Snow apples, until March or April. The time limit has to be determined for each kind of fruit.

9. In addition to proper conditions in the storage room, the most important points in the storage of fruit are the *selection* of sound fruit, *grading* into uniform sizes, one variety only in a case; and careful *packing*. Therefore, the results of these experiments can be made use of by the family, in preserving fresh fruit for their own use; by the fruit-grower, in securing better prices for good fruit later in the season, in the local markets; and by the shipper, in enabling him to take advantage of the higher prices offered in foreign markets.

THE VARYING QUALITY OF NIAGARA GRAPES AND OTHER FRUITS.

AMONG other fruits there is very little appreciable difference in natural quality. To some persons an apple is simply an apple, a peach is only a peach,—the variety makes but little difference if the general quality be above a fair average. With grapes it is very different. Every one is familiar with the old Concord and the newer Niagara; with the Catawba and Delaware; the imported white grapes, the California Tokays, the wild Fox, and the fine "hothouse" varieties are all recognized by sight and taste, if not all by name. Each, too, has its coterie of admirers, and justly so.

There is one fact relating to the Niagara that it is desired to bring out particularly, which is that there are two distinct qualities according to the stage of ripening. Those bunches of fruit that have remained long on the vines and become well developed have a peculiar distinguishing flavor and a strong, agreeable odor; fruit picked early, though

ripe, are not well developed, and the quality is really often poor, while the true Niagara flavor is lost. As a rule, the well ripened grapes have a yellowish cast. The new Campbell's Early is said to be the better for remaining long on the vines.

Some apples are noticeably different in quality. The R. I. Greening is very often poor and almost astringent; Baldwin is the same, but perhaps less frequently. Fine specimens of either are of high quality. To a certain extent, the trouble with the apples is similar to that of the Niagara grape—they are not well developed. But the non-development may not be the result of their being harvested too soon; there are other factors in the case. Overbearing or a weakening from the attacks of insects will cause an earlier ripening or an imperfect development. When will every fruit-grower learn that the best fruit is most profitable, and that it is only to be had by thorough care and cultivation.?

The Seckel pear is another instance, though there may be additional trouble of another nature—namely, that the true qualities have been lost somewhere in course of propagation. But the chief complaint is against the miserably grown fruit that gets into the market—ill-shapen, undeveloped stuff that by no means satisfies the lover of this delicious variety.

The Keiffer Pear is exceedingly variable, and here again depends upon the care and judgment exercised in picking and ripening. This pear may be a delicious, juicy, soft-grained fruit, or it may be coarse, dry and almost worthless.

It would be disastrous to allow a Clapp's Favorite Pear to ripen on the tree, as it will rot inside unawares. Picked early and ripened in the dark, it ripens uniformly and is delicious.—*Mechans' Monthly*.

ORCHARDING IN THE ANNAPOLIS VALLEY N. S.

OBSERVATIONS BY THE CHEMIST OF THE EXPERIMENTAL FARMS ON SOILS, CROPS, ETC.

AT the request of the Boards of Trade of Annapolis, Kentville and Windsor, and by the authority of the Minister of Agriculture, Mr. Frank T. Shutt, Chemist of the Experimental Farms, recently made a tour through the famous apple growing section of Nova Scotia, partly to give addresses and partly to gain further information regarding the nature of the soils in that district and the methods of orchard culture in vogue.

To a horticulturist representative, Mr. Shutt said: "My trip has been most profitable and pleasant. While the attendances at some of the places where I spoke was not large, owing to pressure of work at this time of the year upon the farm, we always had most interesting and instructive meetings. The discussions and questions asked showed a keen appreciation of the value of scientific knowledge as applied to practical orcharding. I found a large number of men who are carrying on their work on rational lines—not only reading men, but men who are putting to the practical test the methods suggested by the results of experiments carried on here and at other research institutions. We have already a number of careful enthusiastic co-workers there, and I feel convinced that every year will see an addition to that number. Several have promised me, or rather have volunteered to carry out, and take observations upon, certain experiments or systems of soil fertilization and culture, and such must result in increased knowledge as to the most profitable ways to manage orchards. Certainly, the

orchardists of Nova Scotia are amongst the most intelligent and progressive that I have met in Canada."

What are the chief products? "Hay, apples, potatoes and oats. The hay is grown on the fertile, dyked lands. Such are seldom fertilized (though some farmers are now using a certain quantity of bone meal on them), and only occasionally re-seeded, when oats are used as the nurse crop. It is not at all unusual to take two tons and over of hay per acre for a number of years without breaking the sod or applying any manure.

"The orchards are planted for the most part on what we should call the upland soils—upon the gentle, rising slopes of the mountains, and there they flourish, for the trees get good natural drainage. The orchards are mainly apples, but plums, pears, cherries, peaches and small fruits are also in some parts extensively grown. The soil and climatic influences seem particularly well adapted to fruit growing of all kinds. No doubt the future of that country—I refer to the valleys and adjacent lands of that part of Nova Scotia—lies in fruit growing, and it will be successful. All the progressive, up-to-date men are now practicing clean culture, and the turning under of clover or some other green crop to enrich the soil, and the results are excellent. A considerable and ever-increasing amount of commercial fertilizers (principally bone meal and muriate of potash), is being used."

What do you think of the soil generally? "Leaving out of consideration the dyked

lands, which, as a rule, are heavy loams containing a fairly large amount of clay, the soils are, for the most part, light and gravelly. As we ascend the slopes of the hills or mountains, the soils become poorer in quality, gravels or sandy loams containing a good deal of stone. Of course, as in other parts of Canada, there are great differences in quality to be observed, but one may say there is a predominating type on the slopes and higher lands of a sandy or gravelly loam. Such are warm and responsive to good treatment. Supplied with humus and plant foods, they are well adapted to orcharding. Perhaps the system of maintaining or increasing fertility of the soil by growing and turning under clover, will be of more value to the Maritime orchardist than to the Ontario farmer."

Why do you think so? "Because the fruit growers as a class keep very few cattle; they produce very little manure on their farms, hence their lands become impoverished in humus, which, you must remember, is a most valuable soil constituent, but one not furnished by commercial fertilizers. Clover adds a large amount of humus, as well as nitrogen to the soil. By its decomposition in the soil it also sets free considerable

amounts of phosphoric acid, potash and lime in forms available to succeeding crops. I feel sure there is no way in which the Nova Scotian can so cheaply, and we may say permanently, improve his upland soils as by growing clover. They have a quick, responsive soil which only needs feeding and cultivation (to conserve moisture) to obtain excellent results."

I hear that their apple crop is poor this year? "That is true. Not only is it small in quantity, but there is a large percentage of inferior quality fruit. Nevertheless, there are many orchards, as I can personally testify, bearing a good average crop. On the whole I should say it would be below, rather than above, 50 per cent. Some varieties are poorer than others. Thus, the Golden Russet is practically a failure this year; but the Blenheims are yielding fairly—very fairly—well. Those who have fed their soils and sprayed their trees will have a good crop to market."

Is there any special reason for this failure? "I think it principally due to cold, wet winds prevailing when the trees were in bloom. The frost did not do so much harm as the rain and wind."

REFRIGERATOR CARS

THE Canada Atlantic Railway Company has recently constructed a number of Hanrahan refrigerator cars for the carriage of tender fruits. The cars have been running between Grimsby and Ottawa, at a cost of about one-third that charged for expressage. The Ottawa Fruit and Produce Exchange, for whom the C. A. R. cars were built, report as follows, under date Sept. 20:

"Hanrahan car 40191, loaded at Grimsby on Saturday 13th, arrived here on Monday night and was sold on Tuesday morning in perfect condition, and realized prices equal to Express goods sold at the same time.

"Hanrahan car 1517, loaded part on Monday, balance on Tuesday, arrived here on Thursday, the 18th, in perfect order, and sold Thursday evening at 6.30, realizing prices equal to Express. No sign of decay or any of the goods being affected with age or with time of standing whatever.

"Hanrahan car 1522, loaded on Wednesday the 17th, arrived here Friday the 19th, at 8.30 p. m., and was sold on the morning of the 20th, when every package in the car was in perfect order and realized excellent prices."

Car No. 40191 is the car that was remodelled by the Grand Trunk Railway at the instance of the Ontario Government.

IMPROVING AN OLD ORCHARD

SCRAPING AND PRUNING—FEEDING AND
PASTURING—POOR VARIETIES SHOULD
BE TOP GRAFTED—HOW TO GRAFT—GOOD
GRAFTING WAX—SPLENDID RESULTS

BY

W. H. COARD, LL. D.

DEPARTMENT OF AGRICULTURE, OTTAWA.

MANY an old orchard which is now an eyesore to everybody can, at little cost, beyond slight labor, be converted into an up-to-date tidy, prolific, and profitable branch of the farm. There are many orchards in Canada which bear more worms than fruit, because the generality of farmers cannot be brought to learn that fruit raising pays even if it be grown merely for home consumption. It will only occupy three years to evolve a plentiful harvest as well as a symmetrical well kept orchard out of lichen and moss-covered trunks, if the advice given in this article be followed with fair faithfulness.

The first thing to be done is to scrape off the rough, loose bark from the trunks and branches, and to prune the trees. While it is true that this rough bark may appear to do but little harm, it affords comfortable free board and lodgings for noxious insects which thoroughly appreciate and avail themselves of this hospitable shelter.

Pruning may be as simple as A B C. At first only dead branches and crowding suckers need be removed; unless the trees be old and decrepit with dying branches and waning strength, and in that case the pruning should be vigorous. As a grape vine can be renewed so can an apple tree, and in extreme cases a tree may be cut to the ground and another one built upon a short shoot which will spring up. Cut out old branches, leave young suckers to take their

place, then a new top will quickly form, and good fruit will follow. Always take care to thin out useless branches, because sunshine and air are inseparable from the steady, healthy growth of orchards as of individuals.

An apple tree must be fed if it is to produce fruit, and no diet is more suitable or inexpensive than a leguminous cover crop. Trees require moisture and food; therefore grass and weeds must be removed. To succeed, the farmer must plough his orchard and till the ground, tillage being continued frequently during early summer. By mid-summer wood growth generally ceases and tillage should stop. A cover crop sown then will not only protect the soil from washing but will add humus to it, while a clover crop will gather all the nitrogen necessary for the next year's growth.

A good alternative to ploughing the orchard is to pasture it with hogs and sheep, preferably the former, and always to keep more animals there than the grass will support, because this will insure supplementing the grass diet by grain, which naturally will bring fertility to the orchard and insure that the grass will not grow tall. Where animals are not grazing in an orchard the grass should be mown early and left on the ground to add humus to the soil; but this is not nearly so beneficial as grazing the land.

Insects and fungi have to be considered with, and it will be necessary to spray with

Bordeaux mixture and Paris green at least twice after the blossoms have fallen. The former will clean the limbs of hanging lichens or moss, and the latter will settle most of the noxious insects, though it cannot reach the apple maggot, which calls for special treatment, because it is the larva of a small fly which punctures the skin of the apple and lays its eggs underneath. No matter how thorough the spraying may be it cannot reach this pest; but if the windfalls can be destroyed as soon as they drop, and all refuse from places where winter fruit has been stored be burned, the next season's numbers will be appreciably reduced. It is in this respect that pasturing the orchard has a marked advantage, because if well stocked with hogs or sheep the apples are eaten before the insect is likely to escape.

There are some instances in which the orchard may be in such a condition from long neglect that the land cannot be properly tilled, and the trees cannot be adequately fed. One of the best methods of feeding the tree is to keep it well pruned, because then the food which would otherwise be diffused in numbers of worthless limbs is concentrated in a small number. It is only the well pruned trees that are capable of successful treatment with sprays. Apple and pear trees should be pruned to keep the heads open. Plum trees should be pruned to keep out the black-knot, and some Japanese varieties require frequent cutting back. All pruning can best be done very early in spring, before the sap starts.

There are so many apple trees of little value growing in Canada, which could be successfully top-grafted with better varieties, that it would well repay anyone possessing an orchard to go carefully over his trees and top-graft those which do not produce paying crops. The chief points to take into consideration in top-grafting may be summarised as follows:—

Old trees, if healthy, may be grafted with success.

The top should not be all cut away the first year, but should be removed gradually, the time required to change the top successfully being from three to five years.

Early spring, before growth begins, is the best time to graft. The branches to be grafted should not be more than from two to three inches in diameter where the grafts are to be inserted.

After the branch is carefully sawn in two, the stub is split with a mallet, held open with a wedge, and the scions inserted; two being used, one on each side, if the branch is more than an inch in diameter.

The scion is made from a twig of the previous year's growth, about four or five inches long, and having three or four buds. It is prepared by making a wedge of the lower end, beginning near the base of a bud. The scion is inserted in the stock as far as the upper edge of the wedge.

In inserting the scion great care should be taken that the inner bark of both scion and stock should come in contact with each other. This is very important, as the healing begins from this point, and if the scion be inserted carelessly there is almost certain to be a failure.

After the scion has been set, the cut surface is covered over with grafting wax to exclude the air, and strips of cotton may be wrapped over this.

A good grafting wax for out door use is made by melting together rosin and bees-wax in the proportion of five parts rosin and two parts bees-wax; to this is added one and one-half to two parts linseed oil.

In top-grafting a tree always have in view the production of a symmetrical top after the old one has been removed.

With this cultivation codling moth will disappear, and in three seasons an old ugly and comparatively worthless orchard can be converted into a pretty uniform one, with abundant crops of marketable and profitable varieties. An orchard is "never too old to mend," or beyond renewal.

THE POTATO BLIGHT

BY

PROF. W. LOCHHEAD

ONTARIO AGRICULTURAL COLLEGE, GUELPH, ONT.

THE blight which attacked the leaves and stalks of potatoes during the latter half of August was felt over the larger part of the Province. It is rather early to give an estimate of the damage done, for in many cases the tubers are still healthy and moderately large, while in other cases many have begun to rot.

For some years the blight has not been severe. This year, however, was an abnormal one as far as the weather is concerned, and the moisture conditions were favorable for the development of the fungus which caused the blight. During July and August there was much rain, with intervening spells of warm, not to say hot, weather. As the fungus grows most rapidly in a temperature of about 70° F. when the air is humid, it will be readily seen that it was possible for the disease to make a very rapid headway this season.

There is scarcely a year when there is not a little blight present, but with its remarkable powers of reproduction the fungus may spread with amazing rapidity when the conditions are favorable.

The fungus blight is an internal parasite, hence spraying with Bordeaux is of little avail in preventing injury after the plant becomes infected. Spraying is valuable, however, in preventing the spread of the disease to unaffected plants and should not be neglected. Observations show that fully 99 per cent. of our potato-growers take no precaution whatever to ward off fungus diseases from their crops. Paris green is used everywhere to kill the beetle, but Bordeaux mixture is seldom or never applied to pre-

vent blight. A spray composed of a mixture of Paris green and Bordeaux would ward off both the beetle and the blight. The fruit grower has learned by experience the value of this mixture in combating the codling moth and the scab. Some years the scab is not serious, but the fruit-grower always takes the precaution to spray his trees thoroughly, for he cannot forecast the season with any degree of accuracy. "Fore-sprayed is fore-armed" is his motto, and it ought also to be the motto of the potato-grower.

For the best method of preparing and applying the combination, Bordeaux and Paris green, consult Spray Calendar, Bulletin 122, published by the Department of Agriculture, Toronto. For potatoes, however, use 8 oz. Paris green instead of 4 oz. to the barrel. Spraying should be done all through July and August.

The potato blight first shows itself as small, brownish blotches on the leaves. These rapidly enlarge so that in a few days the entire field becomes blackened. During the early stages a delicate, white, felt-like covering may be seen at the margin of the brown areas on the under side of the leaf. This is composed of an immense number of branching threads bearing spores. These spores are readily dislodged from the threads and are carried away by the wind to the surfaces of other leaves where they germinate at once and send germ tubes into the leaf. Once within the leaf they grow rapidly by feeding on the juices, and soon set up the diseased condition known as blight. If, however, the leaves are covered with the

Bordeaux the spores which alight on them are killed and infection prevented.

The way the tubers become affected is not so clear, but it is probable that the spores, on falling to the ground, are often washed by rains through the soil to the tubers, into which they force an entrance and set up conditions which give rise to the rot. In some plantations this year only the uppermost tubers are rotten. This would seem to favor the idea that the rot was produced by spores washed down by rains.

As the winter spore of this fungus is not known it is supposed by many authorities that the fungus winters over as thread in diseased tubers, and that after planting the tubers the following season the threads grow into the new shoots and into the new leaves. If this is the case, it becomes important to plant "seed" potatoes from the localities where the blight was absent the previous season.

Some authorities are of the opinion that the fungus winters over as a thick-walled spore in the tissues of the dead leaves and stalks. This supposition is a quite probable one, for many closely related blights winter over in this way, and their winter spores are not difficult to find. But the potato blight winter spore has, as yet, not been found, hence the various suppositions as to the method the fungus adopts to survive the winter. If the blight has a winter spore, then all the dead stalks and rotten tubers should be *burned*. They should never be thrown on the manure heap, for with the application of this manure to potato ground the following year many spores will be distributed, and ready to infect the new plants. At this juncture it would be advisable to remove the dead stalks from the ground before digging up the tubers, for it may prevent further infection of the tuber and subsequent rotting.

NEW FRUITS

THE BARTLETT PLUM

ONE of the most delicious plums that is now on the market is Burbank's Bartlett. A small dish of them will soon fill a room with a delicate aroma, which strongly suggests bananas. In fact, the children insisted that bananas were on the sideboard until they were told to go and take a look and a smell. Now, when they smell bananas, they want Bartlett plums. This plum is about the size of a Tragedy prune, yellowish green when at the right stage to pick and in a day or two will turn a dark, shiny red. The flesh is soft and juicy, deep yellow, and has a decided Bartlett pear flavor. The skin is very thin and tender, has no sour or astringent taste common to most plums, and cracks if heavy dews fall on it when allowed to ripen fully

on the trees. It is decidedly a plum for the home orchard, and should be in every one. The tree is not particularly prolific, although it has all it can carry this year. The two previous years the crop may have been light.

Climax is considered a choice plum from some accounts, but on the sandy soil of the Pomona valley it has proved a failure. It is a fine looking plum, but does not bear with us. We have failed to secure a good specimen, for what few set have always fallen off before they thoroughly ripened. Shiro is a most wonderful bearer, is a fine looking plum, but lacks flavor with us. It makes a good shipper, for it is firm and a beautiful lemon yellow. In shape almost perfectly round. - *Cal. Cultivator*.

APPLE GROWERS' AND EXPORTERS' ASSOCIATION

NOTES OF MEETING HELD IN ROCHESTER, AUGUST 6TH AND 7TH, 1902

CANADA was represented at this meeting in the persons of Peterson Bros., Toronto; W. McWilliams, Toronto; H. Dempsey, Rednersville; James Depew, Southend; J. M. Shuttleworth, Brantford, and W. N. Hutt, of the Ontario Department of Agriculture and others.

This association differs somewhat from the Ontario Fruit Growers' Association in that its efforts are devoted almost entirely to the commercial aspect of apple dealing. The membership fee is \$5.00 per annum, and being somewhat exclusive the membership is limited and made up only of those who have gained the confidence of the association. It aims at estimating the extent and value of the apple crop throughout North America, and the collaborating of all information which would assist in establishing a fair price to offer for apples during the season.

Monthly reports are issued by the association giving the number of barrels of apples in storage in all parts of the country, and the clearance from these houses during the month.

The practical, orchard side of the apple question was treated by Prof. Craig, of Cornell University, who gave a very interesting and instructive paper on the management of orchards in relation to trimming and pruning, fertilizing, the use of cover crops, the conservation of moisture, thinning and marketing of fruit. This paper was much appreciated by all at the convention

and gave a great deal of information in a very interesting way.

Prof. W. A. Taylor, Pomologist, in charge of Field Investigation in the United States Department of Agriculture, Washington, gave an illustrated address on "The Commercial Areas of the United States." A map marked out with the areas under orchard throughout the different States showed a very wide extent and showed also that Missouri particularly was a large grower of apples.

Prof. A. S. Beach, of the Agricultural Experiment Station at Geneva, gave a valuable report on "The Keeping Quality of Apples," and brought out many points that were rather a surprise to the audience. One of these was that the Northern Spy was not a valuable keeper in New York State. This was rather a striking contrast to the splendid Spys raised in the Province of Ontario which keep well until the following summer. Prof. Beach remarked that apples from orchards in sod were higher colored and better keepers than apples raised under cultivated conditions, though of course the apples are not so large nor the crop so heavy.

W. N. Hutt, of the Department of Agriculture, Toronto, gave an address on "Pruning of the Orchard" illustrating his remarks by means of sections of limbs of trees showing the proper formation of the tree, and also injury that might be done to the tree through careless or injudicious pruning.



FIFTH CONVENTION OF THE CANADIAN HORTICULTURAL ASSOCIATION

HELD AT HAMILTON, SEP-
TEMBER 3RD AND 4TH, 1902

THE C. H. A. Convention just passed will do more to set Canadian floriculture on a permanent and proper basis than all of its predecessors; this is a statement that we think will pass unchallenged.

The untiring work of the Hamilton Gardeners and Florist's Club and the officers of the C. H. A. to bring about a Convention and Trade Exhibit that would adequately represent the Horticultural standing of the Dominion cannot be allowed to pass without suitable mention, also the hearty co-operation of the Hamilton Horticultural Society. We would say that it is a vigorous young body, only 5 years of age, being organized in St. George's Hall, Toronto, in 1898; Mr. William Gammage, the well known London florist, being its first president. Since that time the association has convened in the cities of Ottawa, Montreal, London and lastly at Hamilton. The object

of the association is to organize and carry forward the interests of the florists, nurserymen, seedsmen and gardeners of the whole Dominion, and anyone interested in horticultural pursuits, whether amateur or professional, is eligible to membership. That its aims are strongly of a national character was evidenced by the discussion which followed the recommendation of Prof. Hutt of the Ontario Agricultural College that the name of the organization be changed to the "Ontario Florists Association," and so receive a provincial grant in the same way as the other provincial organizations.

We quote the following paragraph from the Florists' Exchange, a weekly New York publication, which will show the impression that the late Convention of the C. H. A. created abroad:—

"The Convention of the Canadian Horticultural Association just closed at Hamilton has proved to the world that a new power



FIG. 2397. THOMAS MANTON, EGLINTON.
President Canadian Horticultural Association.

has risen in the north—a power for good and the promulgation of floricultural weal. In debate it has shown that it was intended to be and now is a Canadian National Society, with the intention of uniting in one common accord and working effectiveness all portions of the great Dominion interested in floriculture. That it may accomplish its aim, achieve success in the highest, and work hand in hand with our own Society of American Florists for the promotion of the welfare of our ancient and honorable calling is the sincere prayer of its well-wisher, The Florists Exchange.”

THE CONVENTION

The Convention was held in the City Hall. On Wednesday, September 3rd, at 2.30 p. m., the first session was opened by Mr. C. M. Webster introducing Alderman J. G. Y. Burkholder, who in the absence of Mayor

Hendrie welcomed the delegates to the city. He closed his interesting address by remarking, “You have the freedom of the city and can take away anything you wish excepting our mountain.” The address of welcome was responded to by Thos. Manton of Eglinton.

President Joseph Bennet, of Montreal, then addressed the meeting in a few well chosen words. He reviewed the progress the Association had made during the past year, and also spoke eloquently of the widening of the aims and objects of the C. H. A. He pointed out that there are over 1200 persons engaged in the interests of floriculture in the more populous districts of Canada. The urgent need of a Canadian Trade paper was also dealt with; the large growers had yearly more and more stock to dispose of, and they felt the need of an advertising medium to reach other members of the craft throughout Canada.

REPORTS OF TREASURER AND SECRETARY

The report of Treasurer Hermann Simmers, of Toronto, was then read. It showed the finances of the Association to be in a flourishing condition. The report was adopted without discussion.

The report of the Secretary, A. H. Ewing, Woodstock, was then read. He spoke most hopefully of the work of the Association and its future. The death of Mr. C. G. Knott, of St. John's, N. B., had removed one of the most active workers among the members of the Association. He regretted that lack of time had necessitated his giving the preparation of the Convention program into other hands.

A request was read from the Superintendent of the Flower Show that judges be appointed from among the florists.

The following were selected by the President: Thos. Manton, Eglinton; E. Mepsted, Ottawa; A. C. Wilshire and Jas. McKenna, Montreal.

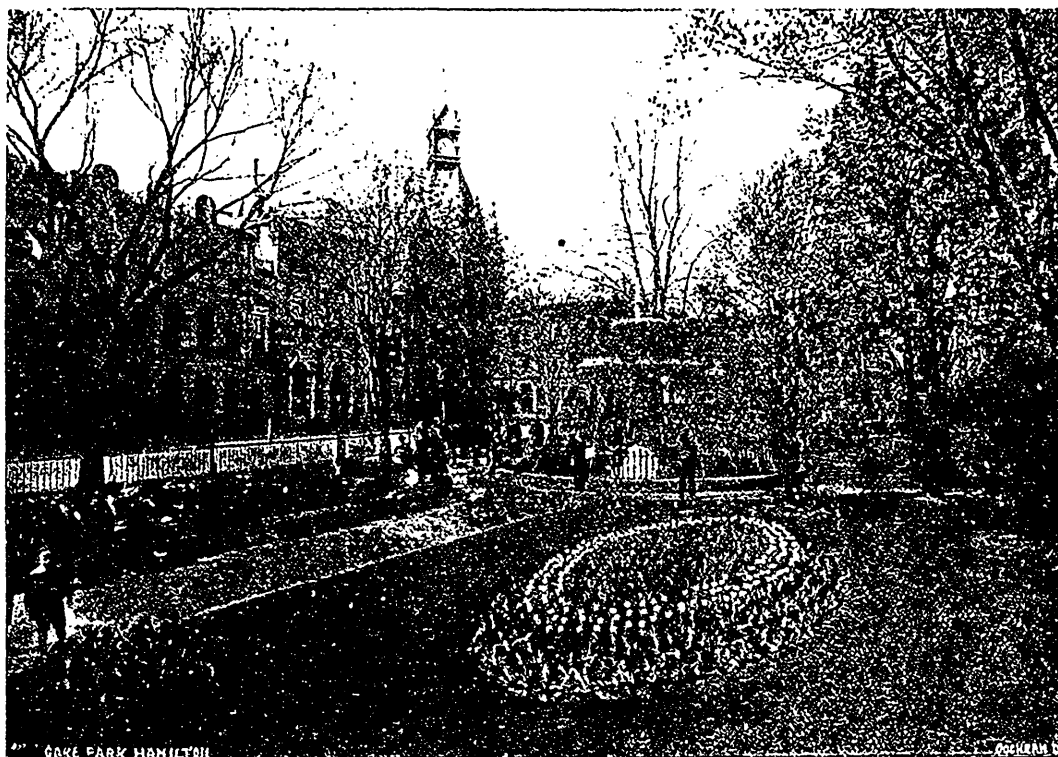


FIG. 2398. GORE PARK, HAMILTON.

After an interesting discussion on the President's paper, the following were appointed to bring in a report on the advisability of establishing a trade paper: Wm. Gammage, London; J. H. Dunlop, Toronto; Joseph Bennett, Montreal; Jno. A. Campbell, Simcoe, and C. M. Webster, Hamilton.

Some very practical advice on the matter was given by Mr. F. R. Pierson, Tarrytown, N. Y., and Mr. A. T. De La Mare, of the Florists' Exchange, New York.

The first session adjourned at 4.30 p. m., and the delegates were taken to the Floral Fete and Trade Exhibit in the Thistle Curling Rink. All agreed that it was the best Trade Exhibit ever held in Canada, and the amateur exhibits were pronounced very high class.

EVENING SESSION

The hall was completely filled at this session, and the close attention of the delegates was favorably commented on by the American visitors.

A paper on "Winter Flowering Plants," prepared by C. A. Smith, Montreal, was read by Fred. Bennett, of the same city.

A most interesting and up-to-date paper, "The Latest Facts About Roses," by Edward Dale, of Brampton, brought out a most useful discussion on grafting.

Mr. W. N. Hutt, of the Department of Agriculture, Toronto, explained that he was present to find out for himself what the C. H. A. really was, not having any definite information about the organization. He deprecated the fact that so little had appeared in Canadian publications about the

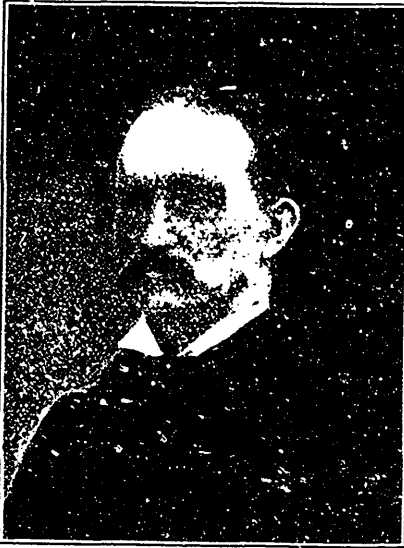


FIG. 2399. A. H. EWING, WOODSTOCK.
 Secretary Canadian Horticultural Association.

organization, and advised that one sure way to forward their interests was to use the columns of those papers who would gladly print any information that was given them. He suggested that the Association approach the Canadian Horticulturist about the publication of a trade paper.

A TRIP TO GRIMSBY

On Thursday at 8-15 a. m. the delegates left on a special car on the Hamilton, Grimsby and Beamsville Electric road. A stop was made at Winona at E. D. Smith's shipping house; everyone was interested in the process of handling and packing fruit for long distance shipping and also the cold storage plant in which fruit is cooled for shipping to Great Britain. The trip was then continued as far as Grimsby Park. When the car returned another stop was made at E. D. Smith's and he personally conducted the party through his extensive nurseries and made no objections to the raids which the delegates made on the various fruit plantations, allowance being made for the delegates from Montreal and other

northern points, to whom the fruit belt appeared like the Garden of Eden. The car pulled into Hamilton about 12 o'clock at noon and the whole party proceeded up James street to the foot of the mountain, up which they were taken on the Incline Railway. Quite a contingent of newly arrived delegates were found on top and about one hundred did justice to the dinner provided by the Hamilton Gardeners and Florists' Club. Mr. T. Lawson, Secretary of the Club acted as toast master and the following toasts were proposed and responded to:

Our King and Country, responded to by Prof. Hutt, and C. M. Webster

The Canadian Horticultural Association, responded to by Joseph Bennett, Jas. McKenna and J. H. Dunlop.

The Society of American Florists, responded to by F. R. Pierson, Tarrytown, and Mr. Clucas, New York.

The Gardeners and Florists' Club was responded to by Messrs. Manton, Mepsted and Gammage.

The members were then grouped on the steps of the Mountain View pavilion and photographed.

THURSDAY, 3.30 P. M.

The meeting was called to order by President Bennett at 2.30 p. m. There was an overflow meeting which should be taken into account in the selection of a meeting hall for next year.

Prof. Hutt spoke on the relation of the professional florist to the local Horticultural Societies. His remarks about changing the name of the Association called forth a good deal of argument. But the pith of his remarks addressed to professional florists were listened to with rapt attention.

A paper on the Hardy Perennial Border was read by Andrew Alexander, President of the Hamilton Horticultural Society. It was a masterly tribute to the new popular hardy perennials.

HELD
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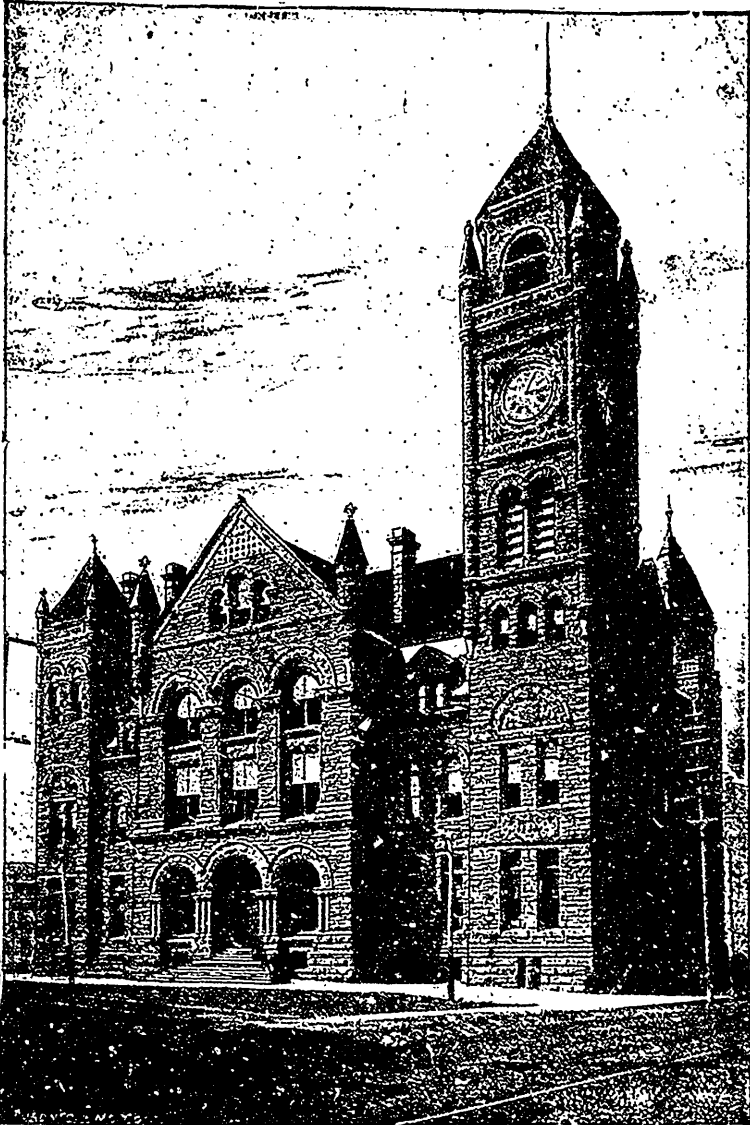


FIG. 2400. CITY HALL, HAMILTON, WHERE THE C. H. A. CONVENTION WAS HELD.

Roderick Cameron, of the Queen Victoria Park at Niagara, gave an address on the Advantages of Cold Storage of Plants to Florists and Gardeners.

The last paper of the afternoon was that prepared by Geo. Hollis, Bracondale, on Hybridizing. It was read by Mr. J. H. Dunlop, Toronto. It was of absorbing in-

terest and showed that the gentleman, to whom we owe the production of Chrysanthemums Timothy Eaton and Lady Roberts, and several other plants of merit, understands his business and carries out his work on scientific principles.

The next order of business being the selection of next place of meeting, Mr. Thos



FIG. 2401. HERMANN SIMMERS, TORONTO.
Treasurer Canadian Horticultural Association.

Manton said that the Association had a standing invitation from Toronto, but he would not urge it as Torontonians had the reputation of grasping for everything in sight.

Mr. W. Gammage and Robert Brooks, Fergus, extended an invitation to meet at Guelph next year.

John H. Dunlop spoke for Toronto, saying that owing to Mr. Manton's bashfulness and his retiring disposition he would have to undertake to tender the invitation to Toronto.

It was moved by E. Mepsted, seconded by J. McKenna that Toronto be the next place of meeting. The motion was carried.

THURSDAY-EVENING SESSION

Wm. Hunt, of the O. A. C., Guelph, read a paper on Summer Flowers for Florists. He called attention to some very useful plants which are not at present much used. He also reviewed some of the standard kinds.

A paper on Heating Greenhouses, prepared by Mr. Edward Gurney, of the Gurney Foundry Co., of Toronto, was read by one of their enterprising young men, Mr. E. J.

Brewer. The paper was most carefully prepared and was read by the young man in a masterly manner, which called forth rounds of applause.

OFFICERS FOR 1903

The following officers were elected: President, Thos. Manton, Eglinton; 1st Vice-President, Geo. A. Robinson, Montreal; 2nd Vice-President, E. J. Mepsted, Ottawa; Treasurer, Hermann Simmers, Toronto; Secretary, Arthur H. Ewing, Woodstock.

The following were elected on the Executive Committee to take the place of retiring members: Mr. Wm. Algie, Brampton; Mr. Jno. A. Campbell, Simcoe; Mr. A. C. Wilshire, Montreal; and C. M. Webster, Hamilton, to take the place of C. G. Knott, deceased.

The other members of the Executive are W. J. Lawrence, Mimico; Walter Muston, North Toronto; O. G. Johnston, Kingston; T. Manton, Toronto; and Wm. Gammage, London.

The Trade Paper Committee reported that the time at their disposal was insufficient to propose anything definite and the matter was left in the hands of the Executive Committee to deal with at their next meeting.

FINAL RESOLUTIONS

Votes of thanks being tendered to the President, Joseph Bennett, to the Mayor and Council of the City of Hamilton for the use of the City Hall for holding the meetings in, the Hamilton Gardeners' and Florists' Club, the Hamilton Horticultural Society and the Hamilton daily papers, for their full reports of the convention.

The meeting adjourned at 9.45 p. m. to meet in Toronto, 1903, at the call of the President.

THE TRADE EXHIBIT

Great credit is due to the Gardeners' and Florists' Club for the remarkable energy they displayed in getting together the large

G. N. Sones, Hamilton, plants for retail trade.

E. G. Brown, Hamilton, plants for retail trade.

F. G. Foster & Son, Hamilton, plants for retail trade.

Joseph Bennett, Montreal, beautiful Adiantums in pans, also florists' plants.

Certificates of Merit were awarded to the T. R. Pierson Co., the King Construction Co. and the Foster Pottery Co.

NOTES

It would seem that in this flower show the matter of closer relations between the amateur and the professional Horticultural Societies has been solved. For the members of the trade and the Horticultural Society worked hard in hand with the utmost harmony and it was freely said that the show would be made an annual affair if at all possible.

Several genial members of the Horticultural Society added materially to the sociability of the Convention.

The majority of the delegates came from the following centres, Montreal, Toronto, Ottawa, Guelph, Brampton, Niagara Falls, Brantford, Simcoe, Woodstock, and Chatham.

It is the avowed intention of the association to meet in the future in Winnipeg, Halifax, Vancouver, and other distant points. The true national spirit is present.

Such a Horticultural Association was considered and looked forward to by some of Canada's leading florists for many years before the organization. All of this little body are now active members of the C. H. A. with the exception of F. G. Foster, Hamilton, whose poor health has not permitted him to take an active part; also Harry Dale Brampton, and Jas. F. Webster, Hamilton, who did not live to see the successful launching of the organization.

Those desiring information about membership, fees, etc., should write to Arthur E. Ewing, Secretary of the Association, Woodstock, Ont.

SOME SPECIAL FEATURES OF THE FLORAL EXHIBITION

A very beautiful and artistic feature of the exhibit was the competition in table decoration. This showed tables arranged for dinner with flowers arranged in as pleasing and artistic forms as possible. The exhibit attracted considerable attention, particularly from the ladies visiting the exhibition.

Another novel feature was the exhibit in plant photography by James Gadsby, of Hamilton. This contained many wonderful specimens of photographic art. There were campanulas, lilies and groups of flowers, fruits and lawns, all of which looked very natural. This work would be very valuable to any magazine wishing to illustrate flowers and fruits from half tones.

Probably the best educational exhibit in the whole show was that of the Hamilton school children. In the early spring aster seeds were given to the children to grow in their gardens and there were 186 entries in the flower show. These were grouped as to schools and labelled as to individual exhibitors. The results shown from those few packages of seeds was simply marvelous and would have done credit to the skill of any professional florist. Work of this kind is certainly very valuable as an educator to children and should be encouraged and fostered by our city officials.

W. N. HURT.

Toronto.

SUMMER FLOWERS FOR FLORISTS

PAPER READ BY

MR. WM. HUNT

ONTARIO AGRICULTURAL COLLEGE, GUELPH.

THE commendable and increasing demand on the part of the flower-loving public during the last few years, for a greater display of taste in the more natural arrangement of flowers, necessitating their more lavish use in the make up of designs and floral decorative work in general, makes it imperative on the part of florists, to consider well as to how they can best supply the wants of their customers in this respect.

The grouping of palms and foliage plants, as well as the very general use of large quantities of fern fronds, asparagus, etc., for room decorative purposes, often requires the use of large quantities of flowering plants and cut flowers, to brighten up the density of these masses of green. Bright colored foliage plants, such as crotons, pandanus veitchii, etc., are admirable for this work, but they are not always available, and cannot be used in many positions, even where they are to be had.

Roses and carnations can of course usually be obtained, but these cannot always be had at prices that will warrant their use except for the finer points of florists' work. Out of door flowers can usually be had in summer, but with the failure or partial failure of the sweet pea and aster crop, even these during the hottest weather in summer are often very limited both in quantity and quality, and many kinds of out-door flowers are too common almost to allow of their being used satisfactorily.

It seems to me that the empty benches so commonly seen in many florists' establishments, could be more profitably used than

they are, to supply this demand for a better class of flowers than is often obtainable out of doors during the summer months.

Japan lilies, more especially *lilium speciosa alba*, *lilium rubrum* and *lilium auratum*, as well as other varieties of this class can be, and are grown in large quantities, but these sometimes, like our at one time reliable and beautiful Easter lilies, have of recent years become more fickle and uncertain in their character, and are at the best too costly, except for the very best class of work.

Although it is impossible to attempt even to fill the place of the gorgeous beauty of roses and carnations, as grown at the present day by our florists, or the more chaste and delicate beauty of the lily, there are some plants that I have found most useful as accessories and auxiliaries to these indispensable florists' flowers mentioned. I have reference more particularly to begonias.

For many years past I have grown *Begonia Weltoniensis* and *Begonia MacBethii* and *Begonia Weltoniensis alba* in as large quantities as desired, and although these varieties have been known to most of us for over a quarter of a century, or at least two of them, - they cannot in my opinion be surpassed by any of our newly introduced varieties, taking ease of culture, handling and keeping qualities, as well as profuseness in flowering habit into consideration. By wintering over a few old plants and starting them in April or May, and propagating as soon as the cuttings are ready, a fine batch of plants can be had early in August, that will furnish a good supply of bloom or pot



FIG. 24-3. BEGONIA WELTONIENSIS.
(Pink Flowering.)

plants, at a time when flowers and flowering pot plants are scarce. By drying the plants off gradually when they are through flowering, and putting them on a front shelf under the greenhouse benches where the drip does not bother them, or on a back shelf in the greenhouse, or even in a warm potting shed, these begonias will keep splendidly, and occupy no valuable winter space. I have found two year old plants profitable, as they can be grown on into 6 inch or 7 inch pots, but after the second season I have not found the keeping qualities of the plants as reliable as younger stock. The *Begonia Weltoniensis* is a splendid bedder, and succeeds well in almost any position in light soil. Fairly light soil should be used for pot plants of this begonia. Other newer varieties, such as *Begonia Vernon*, *Bruantii*, *Erfordii*, *Ingramii* and other summer flowering types of

Begonia semperflorens, will not compare favorably in my opinion with the two varieties first mentioned, excepting perhaps that these latter can be easier raised from seed than the *Weltoniensis* begonias. The seed, however, should be sown early in the spring, about February, to secure early flowering plants the same season.

The new hybrid type of *Gloire de Lorraine* Begonia, although beautiful and floriferous at almost all seasons, can scarcely be considered as a summer begonia. Although several new types and varieties of *Begonia semperflorens* have recently been introduced, at present there is still room for an ideal summer flowering begonia for florists; a want that may possibly be filled, as begonias are very susceptible to cross fertilization, a fact that many of our principal florists are taking advantage of, as is shown by the introduction of so many types and varieties of this beautiful and useful class of plants. But the ideal florists' begonia has yet to be raised, and like all other classes of beautiful plants to be found in the floral world, we shall never know when the highest possible point has been reached, so great and mysterious are the workings of nature, when assisted by art, as well as by the assistance of bees and other insects in hybridizing and crossing different varieties of flowers.

I have been pleased to learn during the last few days that the three varieties of begonias mentioned, viz.: *Begonia Weltoniensis*, *Begonia Weltoniensis alba*, and *Begonia McBethii* are again coming into popular favor, and, in my opinion, no florist should be without them on his greenhouse benches in summer, as their many good qualities for decorative purposes in general, still entitle them to a place in the front ranks of this numerous and useful class of plants. Many florists, who have dropped them from their lists, are again taking them up, ample evidence that they are still of

service, and that there is nothing yet to surpass them for general usefulness amongst summer flowering begonias.

And now a word on outdoor flowering plants in summer. 1st—Annuals, the prettiest, most varied and unfortunately, I must add, in many cases the most fickle and uncertain class of plants grown.

It is gratifying to know, however, that there has been, during the last few years, more especially on the part of seedsmen and seed growers, a greater effort made, not only to introduce new species, but to improve generally the various strains and types of these useful adjuncts to a florists' establishment.

Time will not permit me to but barely touch on the subject of annuals, as it is unnecessary for me to even mention the staple varieties of many of them, such as Asters, Sweet Peas, Mignonette, Nasturtiums, Stocks, Phlox Drummondii, Cosmos, as well as Anthirrinums, Petunias and Verbenas—the last three being now generally acknowledged for all practical purposes as annuals—as all of these are well known to all classes of flower lovers, as evidenced by the beautiful display now on exhibition in connection with this convention.

But there are a comparatively few new varieties and types that may, perhaps, not be as generally known and cultivated as



FIG. 244. ANNUAL CHRYSANTHEMUM.



FIG. 245. MALOPE GRANDIFLORA ROSEA.

those I have mentioned. Take first of all the annual chrysanthemum. The beautiful colors and markings, as well as ease of culture, good keeping qualities, etc., well entitle these to the notice of all florists. For table and room decorative work, more especially, these annual chrysanthemums will be found to be invaluable. By sowing the seed early in the season, their decided and pretty flowers can be had early in August and September in abundance.

Another species of plants that will furnish material for florists' use, are the Malopes and Lavaterus. These improved types of the Mallow class of plants will be found of great service for decorative purposes and for loose cut flowers. *Malope grandiflora alba* and *Malope grandiflora rosea* being the two varieties most useful to florists. *Lavatera rosea splendens*, *Lavatera alba splendens* and *Lavatera trimestrie* are good varieties, their large, showy, mallow-like flowers being often several inches in diameter; and for a convolvulus shaped flower their keeping qualities are very good, as I have, by experimenting with them in this respect, kept their flowers and foliage quite



FIG. 2406. ARGEMONE GRANDIFLORA ALBA.
(Mexican Poppy.)

fresh for three days under treatment similar to what they would receive as cut flowers for decorative work.

Another class of annuals coming into favor are the annual rudbeckias, the beautiful brown and dark crimson markings of the base of the petals of these flowers makes them more acceptable than they otherwise would be, taking into consideration the almost objectionable and overdone appearance of many flower gardens, by the too general use of masses and rows of yellow flowers, such as *Rudbeckia laciniata* (Golden Glow) and the deep colored heavy looking sun flowers. Several very much lighter shades of these annual *Helianthus* or Sunflower have recently been introduced, their soft lemon yellow and almost white flowers making them less oppressive and objectionable as florists' flowers than the deeper orange shades of the older varieties of sunflowers.

There is one more annual I would like to mention, viz., *Argemone grandiflora alba*, or Mexican Poppy. Although the growth is coarse (3 ft.) the abundance of its pure white petalled flowers will especially commend it to florists, as it gives an abundance of blos-

som during August if sown in the open border in April. This plant has a habit of closing its flowers when on the plant at night and during dull weather, but when cut it remains open constantly. Although the stamens in the centre of the flower are yellow, it is of such a soft shade and texture that this feature is not as objectionable as it is for florists' flowers. For short time work it ought to be of value to florists, as large white flowers are so scarce oftentimes before the Asters make their appearance.

PERENNIALS.

I should like to have said a few words on perennials, but the time is so short and space will not permit except to say that the improvement in the class of plants are equally as noticeable as in that of annuals, and no general florist's establishment is complete without a collection of these useful and inexpensive class of plants. I have a few specimens of several of the varieties of plants that I have mentioned, amongst which will be found several varieties, such as *Helianthus cummerifolia*, *Helianthus decapulatus nanus*, that from their form and soft lemon yellow colors well recommend them to the notice of florists as useful summer flowering varieties.

In conclusion I would mention another class of plants that could be made of more service to florists in summer than they are at the present time, I have reference to Hardy Climbers, more particularly the *Clematis*. The beautiful colors and shades of those that are now offered, from the pure white of the *Duchess of Edinburgh* variety, *C. paniculata* and *C. Henryi* to the deep lavender color of *Standishii* or to the intense purple of the more common *Jackmanii*, will allow of no excuse for florists planting around and about their establishments—as we often see done—the common varieties of *Ampelopsis* and *Clematis*, when other kinds such as those I have mentioned might oc-

copy to advantage and profit the places of the commoner kinds, and give results that would benefit their owners as well beautify their surroundings where planted.

I cannot close this rather lengthy, but I trust not altogether uninteresting, paper without again saying that although it is impossible and undesirable to supplant the queenly Rose, and I can almost say the

kingly Carnation, in the estimation of the flower loving public, still there are demands on florists that will sometimes not permit of the very general use of these as florists' flowers, especially at this season of the year, which I trust will be an acceptable apology and excuse for these remarks from me on "Summer Flowers for Florists."

A NIGHT-BLOOMING CEREUS



FIG. 2107. CEREUS NYCTICALUS

PERHAPS the cactus that is most heard of is the night blooming Cereus. But there are many plants which are wrongly credited with being such, The Queen Cactus or Phyllocactus Latifrons, is one which is very generally supposed to be, and is called a night blooming Cereus, when it

does not belong to the Cereus family at all. It grows long, round stems, with thin, flat branches, from the edge of which springs the fine flowers. These are very large and beautiful, and as they open at night, the mistake of calling the plant the night blooming Cereus is quite natural.

All the Echinopsii are night bloomers also, and some think when the fine, large, trumpet-shaped flowers open, that they have a Cereus, but they are again wrong.

The Cereus grandiflorus, the true night-blooming Cereus, is a slender climber, and has no leaves at all, the stems being five and six angled, with short spines along the ridges. A fine wool comes along with the spines on new growth, and makes the plant distinct from many of the other slender climbing Cereus. Nearly all Cereii bloom at night, hence are night blooming Cereus, but the C. grandiflorus is queen of them all.

C. Nycticalus is a free bloomer, and its flowers are very large. A flash light photo of a fine bloom a foot across is shown in the engraving. It was taken about ten o'clock at night in the greenhouse where the plant stood. The stems of the plant can be seen close alongside the flower. A great many people visited the cactus greenhouse to see the flower when open.

Woodstock, Ont. J. H. CALLANDER.

WOLVERHAMPTON FLOWER SHOW

SIX TENTS FULL—WONDERFUL ROSES AND
BEGONIAS—A FRUIT EXHIBIT INCLUDED

REPORTED BY

A. McD. ALLAN, F. R. H. S.

THE second finest flower show in England is held here annually, and was the chief attraction to the Exhibition grounds the past week, as it was held in part of the beautiful park in which the great exhibition is. The prize money this year comes to the magnificent amount of nearly \$5000, besides a handsome silver challenge trophy and gold, silver and bronze medals.

The exhibits were staged in enormous tents most artistically, and competition is so keen that no trouble or expense is spared to make the most of everything. There were six tents, and exhibits were divided into classes, including groups of plants, the All-England section, gentlemen gardeners and amateurs, amateurs and cottagers, and table decorations. The prize collection in groups consisted chiefly of palms, crotons, ericas, ixoria, anthuriums, fuchsias, ferns, bamboos, *rumera elegans*, *pandanus veitchii* and others. The taste displayed in blending bloom and foliage and setting the plants so that the eye could take in all their elegance, and the entire absence of stiffness in the collection, even to the construction of a beautiful arch which formed part of this display, was remarkable.

Stepping into the rose compartment, England's flower greets the visitor with all the elegance of form and richness of color imaginable. It was hard to pick out the richest bloom in such a collection, but if any might be specially referred to I would call up Mrs. John Lang, A. K. Williams, Bessie

Brown, Comtesse Nadaillai, Mildred Grant, The Bride, Duke of Teck, Her Majesty, Gustave Piganeau, Mrs. Cocker, Marechal Niel. But space in your journal will be disallowed me if I continue through many collections of seventy-two distinctive varieties in each.

In the "All-England plant" section the visitor felt inclined to walk up and down to dwell upon the magnificent bedding and veritable stacking of foliage so rich, and bloom most gorgeous, and still nothing out of place or appearing as if packed unduly. But here was the competition for the challenge trophy valued at \$175, besides cash with it of \$25. We find *ixoria*, *phœnocomo prolifera*, *stephanotis*, *alamandas*, *anthurium skerziana*, raising themselves in beauty among other plants as if claiming special attention from the passer-by. But we dare not leave this paradise without referring to that charming flower that even the poorest peasant in the land may be enriched by, the sweet pea. These cut flowers formed a background that rose from near the ground to the edge of the tent as a mass of sweetness and beauty that almost tempted the visitor to cast himself into the delicious bed of all colors so blended as to stagger any but an expert judge. Jeannie Gordon, Grace Greenwood, and Lord Rosebery were present everywhere in that mass of glory, and the whole was enriched from that fact, for they seemed to appeal for a look from the visitor.

Begonias were beyond anything I had



FIG. 2468. FLORAL EXHIBIT AT WOLVERHAMPTON

ever seen in the deep satin-like richness and delicacy of bloom and foliage, and the plants in the first prize collection were faultlessly arranged so as to blend in every respect. This blending of foliage and flower is a study that the English gardener is justly proud of, for he excels.

In the "gentlemen gardeners and amateur" class a bank in the shape of a half-moon consisting of a large variety of choice ferns, begonias in all shades of color, lilies, petunias, gloxinias, caladiums and many other remarkable specimens interspersed with graceful grasses, was one of the finest collections of the kind I have seen. Several magnificent groups in this competition must have given the judges thought in coming to

a decision, for all were large and grandly designed in form of a bank.

Table decorations were specially fine, and quite different from anything of the kind we see in Canada. The competition was keen and arrangement most artistic throughout. The flowers used were mostly sweet peas, orchids, and carnations, none of them bunched, but blended with an easy grace and entwined with one or other of the finest foliaged slender climbing vines, asparagus, plumosa and sprengerii, some of which had the appearance of rich lace, gracefully worked as if the bloom was part of the vine, while here and there weeping grasses made up the picture.

Although this annual event is called a



FIG. 2409. FLORAL EXHIBIT AT WOLVERHAMPTON.

flower show, there is also a fruit and vegetable department, and here we find grapes, peaches, melons, figs and nectarines, all from hot-houses and all large and delicious if we may be allowed to judge by appearance. Passing to vegetables, the collections are all worthy, though they bear the impress of having been forced for the purpose of this

competition. Specimens are small but clean, well formed, and as usual, skill displayed in setting before the judges in the most attractive form. Tomatoes were specially fine in appearance, large, smooth and in good color. But grown in hot-houses they do not possess the richness of flavor and the juice of ours.

Ordinary whitewash, as frequently used, has very little effect except to disfigure the trees. To destroy the insects and eggs hidden in the crevices of the trees very much stronger applications have to be used. Soft soap, reduced to the consistency of a thick

paint, with the addition of a strong solution of washing soda, makes one of the most lasting washes. A solution of one pound of commercial potash in from two to four gallons of water is also very good.



The Canadian Horticulturist

COPY for journal should reach the editor as early in the month as possible, never later than the 12th. It should be addressed to L. Woolverton, Grimsby, Ontario.

SUBSCRIPTION PRICE, \$1.00 per year, entitling the subscriber to membership of the Fruit Growers' Association of Ontario and all its privileges, including a copy of its valuable Annual Report, and a share in its annual distribution plants and trees.

REMITTANCES by Registered Letter or Post-Office Order addressed The Secretary of the Fruit Growers' Association, Parliament Buildings, Toronto, are at our risk. Receipts will be acknowledged upon the Address Label.

ADVERTISING RATES quoted on application. Circulation, 5,500 copies per month. Copy received up to 20th.

LOCAL NEWS.—Correspondents will greatly oblige by sending to the Editor early intelligence of local events or doings of Horticultural Societies likely to be of interest to our readers, or of any matters which it is desirable to bring under the notice of Horticulturists.

ILLUSTRATIONS.—The Editor will thankfully receive and select photographs or drawings, suitable for reproduction in these pages, of gardens, or of remarkable plants, flowers, trees, etc.; but he cannot be responsible for loss or injury.

NEWSPAPERS.—Correspondents sending newspapers should be careful to mark the paragraphs they wish the Editor to see.

DISCONTINUANCES.—Remember that the publisher must be notified by letter or post-card when a subscriber wishes his paper stopped. All arrearages must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post-Office address is given. Societies should send in their revised lists in January, if possible, otherwise we take it for granted that all will continue members.

ADDRESS money letters, subscriptions and business letters of every kind to the Secretary of the Ontario Fruit Growers Association, Department of Agriculture, Toronto.

POST OFFICE ORDERS, cheques, postal notes, etc., should be made payable to G. C. Creelman, Toronto.

THE WINTER MEETING

THE Executive Committee of our Association met last Wednesday morning and decided upon, Tuesday, Wednesday and Thursday, the 2nd, 3rd and 4th of December, as the best dates for the annual meeting, to be held at Walkerton, Ont.

Some of our readers seem confused over the change of management, and do not seem to understand that the business management is now in the hands of Mr. G. C. Creelman, Parliament Buildings, Toronto, to whom all business letters or money orders should be addressed; and that the editorship of the Journal still remains, as usual, in the hands of Mr. Linus Woolverton, Grimsby, Ont., to whom all articles for publication should be sent.

THE USE OF X'S IN GRADING

The use by so many apple shippers of X to denote No. 3 apples, and XX to denote No. 2, has made it necessary to discard these for No. 1 apples as proposed on page 401.

It is unfortunate that the Fruit Marks Act should have countenanced the use of X's on second and third grade fruit, which could as well have been indicated by No. 2 and No. 3; but until this is rectified we find it necessary to save confusion to fall in line and begin our grades of No. 1 apples with XXX instead of with X.

Our grades in future for No. 1 apples will stand as follows:

XXX	apples 2 $\frac{1}{2}$ inches in diameter.
XX XX	" 2 $\frac{1}{4}$ " "
XXX XX	" 2 $\frac{3}{4}$ " "
XXX XXX	" 3 " "
XXX XXX X	" over 3 " "

Question Drawer

A Pruning Book.

1306. SIR,—Would you please recommend a book on trimming trees? I am starting a small orchard of trees of various kinds, and would like to consult the best authority.

MRS. H. C. CORSON.

Middlehead, Cape Breton.

Thomas' American Fruit Culturist gives much general information on the care of the fruit garden, including much about pruning; but on the subject of pruning alone, probably the best work is Bailey's Pruning Book.

Robson's Crab.

1307. SIR,—I send you a seedling crab possessing some good points, viz., earliness, size and beauty. The tree is symmetrical and very productive. The season is the middle of August.

W. M. ROBSON.

The crab seems to be all that is claimed for it, but in these days crabs are not wanted in sections where the apples succeed. The sample is $1\frac{3}{4}$ inches in diameter, too small for an apple and too large for a crab. At any rate crabs are only in demand in cold sections where the apples are not so hardy. Possibly, if the tree is very hardy, this might be valuable for the extreme north.

Plans for Improving Home Grounds.

1308. SIR,—I am desirous of some information about fitting up a lawn. I have purchased a piece of ground 33×30 feet, adjoining my present premises. How would you lay it out, and what are the most handsome trees and shrubs to plant?

Hagersville.

JAS. SHELDRIK.

REPLY BY C. E. WOOLVERTON, LANDSCAPE ARCHITECT, GRIMSBY, ONT.

So much depends upon the surroundings that it is impossible to give any reliable advice without a personal visit. Trees and shrubs are planted about a place to hide objectionable views, to screen the occupants in part from public view, and to lend picturesque beauty to the whole. The size of

the lawn described is a little too narrow for a tennis court, which requires 36×78 feet; but it would afford an excellent croquet lawn, besides giving room for a bowling green, and still leave plenty of room for grouping of trees and shrubs. A few elms, and maples would be excellent trees for shade, shrubs and creepers should be grouped in such a way as to hide the fences and boundary lines, and choice exotic trees and shrubs used to lend attractiveness and color to the borders.

For the best results one should have a plan carefully drawn to a scale before beginning any work of this kind.

Introducing a New Fruit.

1309. SIR,—On the advice of Mr. G. C. Caston, of Craighurst, I write you about introducing a new peach, known about here as the Blood Peach. Ought I to send it to the Horticultural Farm, and would they avoid propagation from it. To whom should I send samples?

Port Colborne. ELIZABETH F. AUGUSTINE.

First, you should send samples to the members of the Committee on New Fruits of the Ont. F. G. A. The names of the Committee are: L. Woolverton, Editor Canadian Horticulturist; H. L. Hutt, O. A. C., Guelph, Professor of Horticulture; and W. T. Macoun, Horticulturist, Central Experimental Farm, Ottawa. It would then be noticed in their annual report. Secondly, samples should be sent to prominent nurserymen, who would soon set a price on the control of the variety if they saw value in it.

Varieties For Home Garden.

1310. SIR,—I want to plant sixteen cherry trees, and shall be obliged if you will advise me what to plant. I already have Montmorency, Richmond, Dyehouse, English Morello, Windsor, one of each. I also wish to plant five or six plums, and already have Reine Claude, Red June Niagara, Yellow Egg, Burbank, one of each. I want to add

Abundance because it is early, or some other very early kind, the balance I want for about last half of September or early October. I also want fifty peaches, I already have Fitzgerald, Hill's Chili, Triumph, Crosby, Stewart, two of each. I intend to take chances on a few of early and late Crawford. The balance of the fifty, say forty I do not know what to do with, I want hardy trees but I also want large good fruit. I planted the trees I now have in May 1901, and allowed two peaches on the Triumph to mature this year, and they were very nice in color and quality though not large. My field is pretty well protected from south and west and by the time the trees are three or four years old will be better protected. I may add I am somewhat inclined towards the Diamond, Grand Duke, Monarch and Yellow Gage plums, figuring from nursery catalogues. My intention is to plant all these trees this autumn, of trees in size four to five feet.

T. A. SNIDER, Cayuga.

Locality and personal taste enter so largely into such a question as the one proposed by Mr. Snider, that it is scarcely prudent for us to name varieties in reply. It would be far easier to name varieties for a commercial orchard, because usually there is just one feature to consider, viz., which is the most profitable? The following are suggestions only of varieties which might be added to Mr. Snider's list.

Cherries—Cleveland, Black Tartarian, Knight's Early, Napoleon, Reine Hortense, May Duke, Royal Duke.

Plums—Bradshaw, Washington, Quack-enbos, Diamond, Grand Duke, Geuui.

Peaches—Sneed, Greensboro, Yellow St. John, Crawford, Elberta, Smock and Salway.

What to Grow in a Small Greenhouse.

1311. SIR.—I have made a small greenhouse, about 30 x 15. What would be the best paying crop I could put in to bring a quick return? Would lettuce and onions pay? What are the best kinds and management? Would cucumbers pay, trained against the bars of the roof on the north side? If so what heat and treatment would they require, and would there be any sale for them by Christmas?
C. POULLOY.

REPLY BY WM. HUNT, O. A. C., GUELPH.

Lettuce and radishes would be the best paying crops as there is a good demand for them in winter. A few onions might pay, but the demand for them would be more limited.

The best kinds of lettuce for forcing are the Grand Rapids Forcing and the Nonpariel varieties. There are several good varieties of radish for forcing, New Rapid Forcing, Triumph and Scarlet White Tipped, being three good kinds.

Cucumbers pay well in winter if properly grown and near a good market like Toronto. Use rich soil, composed of rotten sod from loamy soil. Two parts of this mixed with cow manure will make a good compost for them. A depth of four to six inches of soil is plenty, but give each plant at least three square feet of soil as the roots spread over a large surface. Cucumbers like plenty of water at roots and syringing once or twice a day. Use tepid water or lukewarm. Liquid cow manure and a thin mulch of rich soil should be given when the roots show on the surface of soil. Temperature 65 to 70 at night, 70 to 80 in day time.

How to Ship to Foreign Markets.

1312. SIR.—I wish to make a trial this year of shipping apples to England, beginning with the Gravensteins. The Department of Agriculture, Ottawa, has advised me to consult you in reference to the matter of shipping and especially in the securing of cold storage facilities. Any information that you may venture to furnish will be gladly received by me, as I am entirely without experience in shipping to England and do not know anyone in this immediate vicinity whom I could consult to advantage.

Port Dalhousie.

J. T. WHITE.

This is an easy thing if there is a little co-operation. The first thing to do is to make up a car lot, and if several shippers combine, and constitute one of their number the Secretary, it will be an easy matter to make a shipment every week or ten days. Then a reliable consignee in Great Britain must be decided upon, and the line of steamers most desirable for reaching him. Correspondence with the consignee should be had long in advance, in order to secure an interest in the class of goods to be forwarded; and with the steamship agent to secure the required space. Then the agent at the railway sta-

tion should be consulted, and he will secure a through bill of lading to the foreign port, a copy of which must be at once forwarded to the consignee, so that no delay shall occur in his getting possession of the goods. A full list of the goods, with grade marks, should also be forwarded to the consignee. If cold storage space is needed it must be calculated for in advance, and in estimating the amount required it will be convenient to know that a bushel equals about two cubic feet of space.

Our Fruit in British Columbia.

1313. SIR.—I see no reason why this trade could not be developed and possibly several shipments made every season. The grapes shipped in previous years have arrived in good condition, packed properly in suitable cars; a two weeks journey they ought to carry all right. Will you kindly think the matter over and advise me at the earliest possible date if you could supply the fruit. You know the contents of a car, and freight rate, and could then quote a price delivered. Small packages always preferred.

Vancouver B. C.

C. A. SHOOLEY.

At present the distance, and the expense of transportation, prevent our shipping grapes to British Columbia. We shall not however give up the hope that in a few years, we will have such reasonable rates both at home and abroad, that we can reach almost any of the best markets of the world.

Fawcett's Seedling Apple.

1314. SIR.—I herewith send you a sample apple which I think worthy of your attention. You know that every parent thinks his crow the whitest, and perhaps that may be the way with me and my apple. However, this apple is a seedling. The enclosure is a sample of the first fruit, which speaks for itself; but I am sorry I have to send it before it is ripe, as a wind storm last night brought down all but three. I fear it may be found a little too acid. It will clearly be a winter variety. The tree is perfectly hardy and a good grower. I am sure the form and color will commend themselves.

Ottawa.

G. H. FAWCETT.

A magnificent looking apple, very large, bright red in color, over a green ground,

and of excellent quality for dessert. It seems to be in season in October, and we know of no equal to it as a table apple of the same season.

Triomphe de Vienne.

1315. SIR.—I am sending two pears by to-day's mail. One of them is Triomphe de Vienne. The tree bore fruit for the first time this year, and it was sent to me by Ontario Grower's Fruit Association in the year 1891. There are about more than one dozen on it. Tree is very vigorous, and its branches are very thick and strong, and leaves are very dark green.

The other pear is Idaho; it also bore fruit this year for the first time and the tree was sent by the Association in 1892. It seems not doing well, branches poor and short. The sample is rather inferior to what I expected. Its shape is much like Sheldon, but color is different. Catalogue says it is very large, and I rather think it is not correctly named. There is just six pears on the tree.

I intend to enter Triomphe de Vienne at our fair on the 30th Sept. and 1st October, for "Any other variety".

I would like to know if any other subscriber got that same pear in 1891 in Stratford or vicinity. Please give a reply by next mail and oblige.

Stratford.

ROBERT McLAGHAN.

P. S.—I may inform you that Triomphe de Vienne tree is 15 feet high, 9 inches circumference six inches above the surface.

Idaho tree is only 8 feet high, 5 inches circumference. The Canadian climate and my land being clay soil may both affect the growth of the latter tree.

The Triomphe is a fair sample of this excellent pear, as we have grown it at Maplehurst, and we consider it a valuable variety for Canadian orchards. So far we do not hear that it has been grown except by those who have received it from our association.

The Idaho is probably true to name; the shape is correct, except that it is usually corrugated at the basin, and usually quite large in size.

In our opinion it was very much over lauded, and is of little use in Ontario. Some samples of it much resemble the Sheldon, but it is not equal to that variety in quality for dessert.

Open Letters

FRUIT GROWING IN QUEBEC

WORK ON JUDGE CARON'S FARM—
BLACK KNOT—WINTER PROTECTION

A LETTER FROM H. P. CARON, L'ISLET, QUE.

SIR,—I always read your journal with the greatest interest. As the following might prove useful to some of your readers I will report on the crop of fruit for the lower part of the Province of Quebec. We have had a great deal of rain, almost every day. Also, in my orchard, where there are about 3000 trees, I have not seen caterpillars more than two or three times. I sprayed this spring with Paris green $\frac{1}{4}$ lb. to about 24 gallons of water mixed with one pound of lime. The strawberries have done very well, they are the James Vick and Sharpless, cultivated in rows 3 feet by 4. They fruited in great quantities, were free from all kind of diseases, but I must say they were very acid. I consider this due to the heavy rains. Our gooseberry bushes were overloaded. We cultivate in single rows, one single row between the apple trees, 6 feet apart. They are the "Smith Improved." We never have mildew. I spray with Paris green once in the beginning of June and once after the crop is removed. At the end of August I have a heavy pruning performed, removing the smaller shoots, only leaving two new shoots and cutting away the two oldest branches, which have been fruiting (this is the renewal system), and shorten the end of all the long branches. This gives great force to the gooseberry bushes, lets the air freely in, prevents the spread of diseases and the hatching of caterpillars. We sold the gooseberries from 20 to 30c. a gallon.

The raspberries were very plentiful—White, "The Golden Queen," red, Cuthbert and Marlboro. They took a first prize at the late Universal Exposition at Paris. We cultivate in rows 6 feet both ways. The fruit was not as firm as usual, due to the rain. The blackberries are covered with fruit. Our cherry trees were a great success, some trees of nine years old giving 10 gallons and more; but I cannot say how much a tree produces really, because we are surrounded by a lot of poor people who eat freely of our fruit, not being invited to do so. In about 500 cherry trees I found this summer not more than 10 or 12 black knots; but I must say that our plum trees are terribly affected by the black knot. The trees are loaded with plums. As soon as the fruit is picked I shall cut off and burn all the knots, and spray with a $\frac{1}{4}$ pound of Paris green to 24 gallons of water, with one pint of petrol oil. All the trunks of our trees have been washed with the same preparation. I think that the very wet weather has much to do with this disease, the knots are different from those of the cherry trees. The plum trees to look at seem in perfect health. Our potatoes this year are very good and yielding immensely, being planted on sandy hills; but our cucumbers and melons are a complete failure. Last year we had some melons of the best quality, the only covering given was a thin cotton sheet at night. Our flowers are sad to look on, and we must

be content with dahlias, sweet peas and sunflowers. In August we have had rain, very high wind, and even frost. Our pear trees are doing very well, and I have succeeded in wintering out doors two peach trees. With proper protection I expect to succeed in having fruit. This part of the Province is particularly adapted to the culture of cherry and plum trees; they require care, attention, washing and heavy manuring. Every autumn we put a few

rough boards to prevent the freezing of the roots. The trees are latted at the beginning of October to prevent the bark being eaten by moles, etc. The laths are removed about the middle of May. The crop of apples is very large, but the apples are stained, due to the extreme rain.

Cats are kept to eat moles, rats, mice, etc., and birds never disturbed, as they eat so many worms. The currants have been neglected, as we cannot find pickers.

GOOD PRICES FOR EARLY APPLES IN WOLVERHAMPTON

PEARS FIFTEEN CENTS A POUND—PEACHES SIX CENTS
EACH --ASTRACHANS EIGHT CENTS A POUND

A LETTER FROM A. M'D. ALLAN, F. R. H. S.

THE first apples I noticed in the market of this season was Astrachans from Spain, which sold retail at eight cents per pound. They are fair in size but lack the color of ours, are coarser of texture and not so juicy and sprightly.

The Keswick Codlin is used for stewing when half grown and many even eat it out of hand when no larger than a walnut. The fruiterers all had it for sale at four cents per pound, the first week of this month.

August 8th, I observed quantities of Yellow Egg Plum in the market at four cents per pound, and was curious to know what on earth anyone could use it for when perfectly hard and green and before attaining full growth. It is pickled, and also made into jam for pies; put up in pots it is kept sometimes for winter use. Osband's Summer Pear from Jersey reached market on the 9th, and brings twelve cents per pound, very small, and where soft is mealy and flavorless. Small Green Tyson, also from Jersey, brings twelve cents per pound, and like others lacks that fruity flavor we are used to.

Green Gage Plum is good size and we recognize the quality, but it lacks juice. It comes from France and brings twelve cents.

On the 12th, Barletts, from Jersey, light green, medium in size, dry and flavorless, bring fifteen cents per pound. Jargonelle (English), about size of quarter grown Vicar, slightly russet, green, knotty, twelve cents per pound.

The Jersey Pears are packed in boxes with brown paper between layers, not wrapped, but samples are of even size throughout and all clean. Plums are also packed in a similar manner in small boxes usually about twenty pounds each.

On the 18th, some English Astrachans appeared, but the samples are smaller than the Spanish and insipid in flavor.

Peaches from hothouses are very fine in appearance, but this luxury costs the consumer six cents each. The skin is much thicker than ours, flesh firm, but lacks the juice. Apricots bring eight cents each, and specimens are grand, large and high in color. I thought it a pity to taste these, as the sight of a box containing a single layer,

with each specimen folded in clean white paper was enough to feast the eye upon, and my pen shall not record a word against the beauties. The fruiterer knows how to attract the customer and presents this picture prominently in his window with the spotless paper folded back loosely from each specimen to shew the rich contrast of color. Our hand naturally feels for our purse, but no, let us leave it at that, and look at those grapes at from 12c. to 28c. per lb., according to size, all luscious. Yes, grapes are very fine, but of course all are hothouse varieties, and such is the English taste. I cannot wonder that we cannot find a market here for ours, and we will not until a taste is cultivated among a class of consumers who cannot afford to pay high prices.

Although there is so great a demand for fruits of all kinds here I can see clearly that it pays to make the brands before shipping, and whatever these brands may be let them always be perfectly even. No matter what time and labor it may cost, separate the samples with the utmost care, and do not let a choice brand be spoiled by a single spot or sample under size or lacking the points of its kind to make the brand perfect. If you wish to pack spotted fruit we might be

tempted to say select in accordance with the number and size of spots, having brands for single spot and so downward!! A word may be sufficient to convince some packers, would that all might heed us.

I cannot but feel that fruit growing has become a partial failure in this country because growers neglect their orchards. We generally hear them say, "What is the use in trying, as these Canadians will undersell us in all our markets with our own varieties of much finer size and color." But where will our growers be in a few years with neglected orchards? Of course our bright sunlight will always do its duty, but what of that if the substance is not supplied to the soil, and if the trees are not kept free from filth and relieved from a burden of useless wood?

I walked through the market on farmers' day lately, and was struck specially with the fact that almost every farmer was not only dressed in his best, but had a button-hole bouquet. He looked natty and tidy, and invariably had well blackened boots. I am told this is also the case in every village market, and is worthy of note, and as it should be.

PEARS IN COLD STORAGE AND OTHER FRUIT MATTERS

A LETTER FROM MR. R. BRODIE, OF MONTREAL.

SIR,—With reference to the Flemish Beauty pear in cold storage mentioned in the July number of the Horticulturist, I may state that the pear gathered and packed under the same conditions as those put in chemical cold storage and stored in our own cellar, ripened up nicely and gave good satisfaction to the purchaser and commissioner.

The apple crop is very good in this locality,

Fameuse, Wealthy, Ben Davis, Oldenburgh above the average. When trees are not well sprayed, there are lots of apple spots (fungi); the worst insect enemy is the apple curculio, spraying has no effect. I was surprised to see the effect of the severe frost of the 10th May on the plum trees. The frost did not injure the first buds of most of the European varieties of plums (*Prunus Domestica*) leaving us a very good

crop; while the fruit buds of American varieties (*Prunus Americana*) were very much destroyed with the frost, also the Japanese varieties, Abundance, Burbank and Willard. Would you kindly give the dimensions of the Grimsby apple case. I have been using a case the same as the California case holding about 40 lbs. of apples.

The apple box used by us in exporting apples measures $10\frac{1}{2} \times 11\frac{1}{2} \times 22$ inside

measure and holds about one bushel of apples. If this were taken as the outside measure it would mean a box holding about 40 lbs. of apples, and indeed be practically the same as the California apple box. We have preferred to take these as inside measurements, because in packing we can just fit in the apples $4 \times 4 \times 8$, of No. 1 stock, $2\frac{1}{2}$ inches in diameter; or a total of 128 apples in a bushel box.

CORK INTERNATIONAL EXHIBITION, 1902

A LETTER FROM MR. E. H. WARTMAN, DOMINION FRUIT INSPECTOR, MONTREAL.

SIR,—It may be your pleasure to publish a few lines from my note book. As Superintendent of Fruit at International Exhibition, Cork, Ireland, my time is fully taken up telling the people here how successful the fruit growers of Canada have been in the cultivation of various kinds of fruits. When I tell them we can grow apples at a profit at one dollar per barrel, and grapes, pears, plums and peaches, a ten pound basket at thirty cents, they look astonished. I saw some very nice peaches in a fruiter's window. I went in and priced them; they asked 6d. to 1s., or 12c. to 24c. each. Although my mouth seemed to water, I came away minus any. I have visited a number of "as they call them" orchards in the vicinity of Cork. They all have twelve foot stone walls around them. This wall serves a two-fold purpose, for concentration of heat as well as a good support to tack vines or various kinds of trees to. I tell them of our hundred acre orchards that it would be impossible to put a penitentiary wall around, as we can put our stone to better use; but they say unprotected orchards here have all their fruit stolen. Then I tell them to try Canada, where thieves seldom break through and steal. The fruit

growers of our Province will see the people here have many discouraging things to contend with. The visitors to our pavilion are most unanimous in saying it's the best show on the grounds, which is a pleasure for us Canadians to hear, and gives encouragement still to do better in the future years.

I have about 20 kinds of our apples on table yet in a good state of preservation this 18th day of August, 1902. On the 8th of August I made a thorough examination of a number of boxes of apples with the following results: Baldwins, 56 per cent., sound; Phoenix, 46 per cent.; Golden Russet, 57 per cent.; Canada Red, 55 per cent.; English Russet, 86 per cent.; Rox Russet, 95 per cent.; Nova Scotia, Nonpareil, 86 per cent.; Mann, 80 per cent., sound. I consider this speaks well for keeping quality of our apples, as this lot were repacked out of barrels that had been pressed very hard for export and badly bruised. Had they been carefully selected from trees, cooled, wrapped and boxed, results would have been better. It is very natural for people of this country to ask me how we keep our apples so long. I tell them in the first place it is the climate that makes our apples of so good keeping quality, in fact the best keepers in the world; tha

we pick our apples carefully and keep them in cool air, which prolongs their lives. Now there is one thing I have heard about our apples in England and Ireland which I dislike very much, to the effect that our apples are dry and woody. One gentleman said, "I don't know whether they are American or Canadian, but wish they would keep their apples at home." Now this seemed to warm my Canadian blood and I commenced to cut a few of such apples as Spy, Wagoner, Spitz, reminding them they had been gathered over ten months ago, which would result in a certain amount of good being evaporated, and they unanimously said "marvellous, marvellous." But can we wonder at people saying our apples are dry and woody

when so large a percentage of our apples are Ben Davis? I fancy this is the secret of such remarks; their beautiful color and symmetrical form attracts the buyer.

Their shape, color and keeping quality is unsurpassed, but what good is an apple without lots of well flavored juice? It is said by some one Ben Davis improves while crossing salt water, but I think this statement is a farce. How many apple growers in Canada lay aside carefully Ben Davis for home use? Fruit growers of Canada, it would pay you to consider this subject carefully and come to conclusions very soon on such an important subject. Hoping these lines may be of profit to some one, I remain, yours faithfully,
E. H. WARTMAN.

A SPRUCE GALL LOUSE

DEAR SIR,—I have read Mr. G. E. Fisher's letter in September Horticulturist about the application of fumigation methods to the destruction of the Spruce Gall Louse. So far as I know the life story of this insect the gall louse passes the winter about the base of the bud in a half grown state, and not in the egg state. I was not aware that the louse was viviparous. I was under the impression that the louse, not long after being hatched in May, formed a gall at the base of the leaf, and remained within the gall until the middle of August, when it emerged to lay eggs. I believe, with Mr. Fisher,

that with small shrubs it would be quite practicable to fumigate, but how would he pitch his tent when he had rows of tall spruce trees to deal with? I have found the whale oil and soap and tobacco solution effective if applied when the young gall lice were moving. This movement occurs twice a year, on hatching from the eggs about May 10th and August 20th.

I should think, also, that these dates would be the best for effective fumigation, for the lice are practically living in gas-tight cells from June 1st to August 10th.

"A SPRUCE LOVER."

News from the Societies

Kincardine.—The Horticultural Society of this place held their Sixth Annual Exhibition of Pot Plant and Cut Flowers in the Town Hall on Friday last. The display was first-class which proved that the efforts of the Society in the encouragement of this refining recreation is being appreciated by old and young.

The display consisted of common and rare plants so nicely arranged on the tables that the blending and harmonizing of color and form gave an addi-

tional beauty to the common without detracting from that of the rare. There were rubber plants and palms, ferns, asparagus, sprengeri, geraniums, glaxinias, and begonias, with hosts of other plants no less beautiful. The Otahite orange trees, one with ripe fruit, was to many a great curiosity. Some of the plants and trees exhibited required a great deal of care and skill in handling and the wonder is that only one mishap occurred in the handling of so many hundreds of pots and vases.

On the platform were some gorgeous specimens of vegetation. Wherever a position was to be had that could add dignity to the surroundings a magnificent tropical or greenhouse plant or tree was to be found.

A rubber tree of about seven feet in height with its bright olive green, leathery leaves was a point of admiration. Others as beautiful tho not so large filled positions no less inferior.

A branch of a peach tree laden with ripe fruit (24 peaches in a cluster), caused many to stop and make the enquiry, "Can such peaches as these be grown in Kincardine?" Mr. E. Miller is the grower. A snap shot was taken of the prolific branch.

A very large agapanthus in full bloom was a much admired plant. In the center of the platform was a tall and graceful spike of campanula with its scores of bell shaped mild lilac flowers. A tripod with a beautiful jardiniere just visible through a maze of asparagus sprengeri, and a grand vase with choice asters held prominent positions. These with castor beans, sword ferns, cacti, etc., rendered the platform a "thing of beauty." Some music to enliven and cheer the admiring spectators was given by the Misses Smith and Henry on the piano.

Woodstock.—Another very successful garden meeting of the Horticultural Society was held last night at the residence of Mr. Wm. Grey, Graham street. The attendance was unusually large, proving that the holding of garden monthly meetings brings out more members and their friends than when the meetings are held in the Council chamber. Those present at last night's meeting spent a very pleasant hour between seven and eight o'clock, seeing Mr. Grey's vegetable, fruit and flower garden, and walking about his well-kept lawn. The distinctive characteristic of Mr. Grey's flowers is that a considerable proportion are old-fashioned or those that were common a quarter of a century or more ago. Many of these are now popular in the most modern gardens and they were seen last night with evident pleasure. Several evening primroses attracted general attention as they came into bloom while looking at them. But Mr. Grey's fruit and vegetable gardens are quite equal to his flowers, and he has an abundant crop.

At eight o'clock the regular monthly meeting was held in the spacious parlor. The chief business was the making arrangements for the forthcoming horticultural exhibition. The President reported for the committee in charge that they had selected the market building as the place for holding the

exhibition, and this was approved by the meeting. It was also decided to hold the exhibition on Wednesday and Thursday, the 20th and 21st of August. A large committee to carry out all the arrangements was then appointed, including the following: Mrs. Davidson, Mrs. Hoare, Mrs. H. J. Finkle, Mrs. Dawson and Miss Moyse, together with the President, Secretary and Messrs. Woodroffe, Richmond, Sproat, Calender, Hoare and Dawes. This committee will meet at an early date.

THE FIRST SOCIETY.

The President, on behalf of the Society, thanked Mr. Grey for his kind invitation to hold the meeting on his grounds and for the pleasure which had thereby been afforded the members of the Society and their friends. He also requested Mr. Grey to give a sketch of his horticultural experiences in Woodstock and of the formation of the first horticultural society. The latter, Mr. Grey explained, was formed, according to his recollection, some time in the forties. The late J. T. Cottle was a prominent member, and the first exhibition was held in his house, then a frame one, which subsequently gave place to the brick structure known as Altadore. Two subsequent exhibitions were held, the latter being a failure. After that the Society seems to have collapsed, but it was revived in the fifties, and if we recollect aright, also in the late seventies, prior to the formation of the present organization later on. Mr. Grey mentioned a Mr. Jones, a blacksmith in the east end, as one of the pioneer settlers who indulged in flowers. The gentry, a large number of whom were located in Woodstock and vicinity at that time, had also creditable flower gardens. The Cottle's, the Ladies of the Graham family, George Alexander, Deblaquires, Vansittarts, General Murray and others cultivated flowers and helped to give an impetus to their general cultivation in the then "clearing" and subsequent village, town and city of Woodstock. Mr. Grey also mentioned the formation of the first Agricultural Society, whose exhibition was held for some time on the Bettridge property below Riddell street, later on what is now Victoria Park, then to the grounds west of the present C. P. R. railway, and finally to the present fair grounds on the Alexander property north of the city.

Mr. Grey's story was listened to with interest and pleasure by those who heard him last night, and at the close he was accorded a hearty vote of thanks. The serving of light refreshments by the venerable host, and Miss Sharp brought to a close an unusually interesting meeting of our local Horticultural Society.