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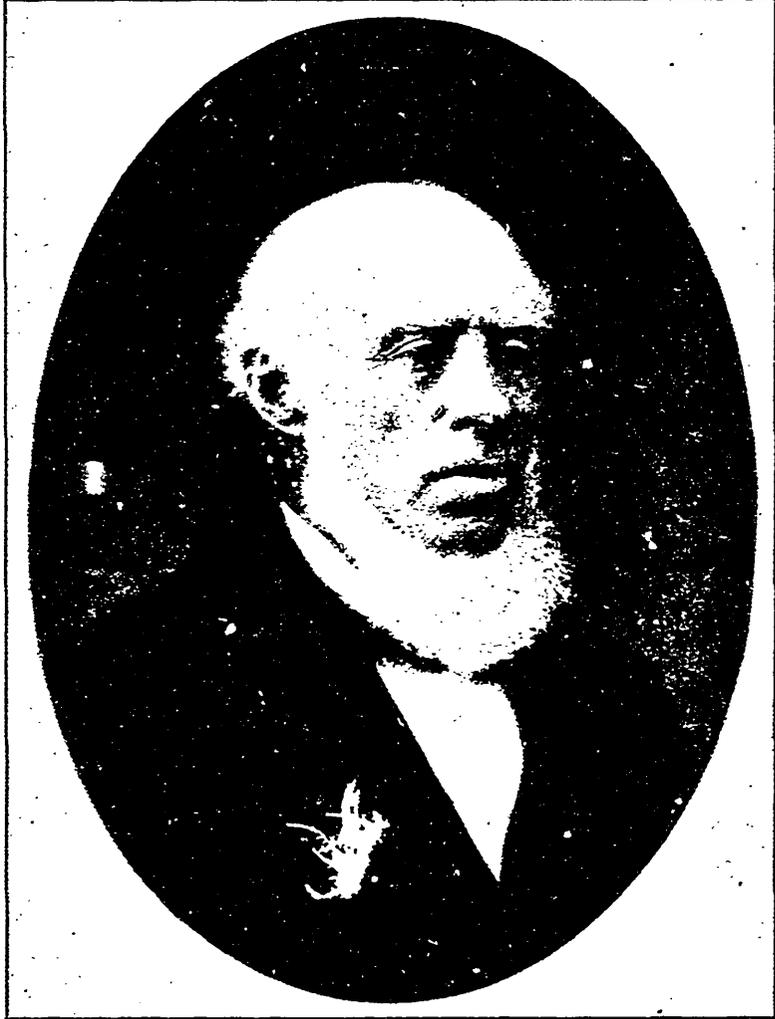
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MR. CHARLES ARNOLD, PARIS, ONT.

THE
Canadian Horticulturist.

VOL. XIII.

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No. 10.



AUTUMN.

(FOR THE CANADIAN HORTICULTURIST).

MATERNAL Flora sinks to rest,
Nature puts on its sombre best,
And Time, with his relentless power,
Is changing every tree and flower.

Each flower, each creature hath its day
In which to flourish and decay ;
So 'tis decreed, that all below
Is only made to come and go.

We sadly mourn sweet human flowers,
Transplanted in Eternal bowers ;
But, tho' by grief our hearts are riven,
Lost friends are stepping stones to Heaven.

Although no joy their voices give,
We know they in their vigor live
And watch us with unslumbering eyes,
And wait to bear us to the skies,

Where changing seasons never come
 To wither the eternal bloom,
 Nor Autumn's ruddy footsteps stray
 To the land of Immortality!

GRANDMA GOWAN.

SOME PROMINENT CANADIAN HORTICULTURISTS—XII.

MR. CHARLES ARNOLD, PARIS, ONT.

SOME of our readers may be disappointed with another photogravure as a frontispiece instead of a colored plate, but those members of our Association who were with us between the years of 1859 and 1883, will, we feel assured, highly appreciate a photogravure of so prominent a Canadian Horticulturist as the late Charles Arnold. Our aim in these sketches is not to write obituaries of the dead, or eulogies of the living, but simply to give due honor to those who have served their fellow countrymen by advancing the interests of that department of industry which it is our object to foster.

A native of Bedfordshire, England, where he was born in the year 1818, Mr. Arnold removed to Paris, Ontario, in 1833, and twenty years after established the Paris Nurseries. Always busy in the interests of scientific horticulture, he was chosen a director of the Ontario Fruit Growers' Association at its very commencement, a position he held to the day of his death. He was an enthusiastic Hybridist, as the many varieties of grapes, apples, raspberries, etc., originated by him, bear witness. In 1872 he obtained a gold medal at the Hamilton Fair, for a new and valuable variety of white wheat; but the most fortunate of his productions in this direction was the American Wonder Pea, for which he received from Messrs. Bliss & Sons, of New York, the handsome sum of \$2,000.

The last meeting of our Association, at which Mr. Arnold was present, was in January, 1883, and he was accompanied by Mrs. Arnold. It was on this occasion that he read to us a poem of his own, entitled "A Seat on the Hill-top beneath the old Tree," of which the second stanza runs thus:

How can I but love thee, thou sacred spot?
 And think of the loved ones who were, but are not,
 When I view thine old trunk draped o'er with the vine,
 The Wood-vine and Pipe-vine thy branches entwine;
 And could but those dear ones who planted them there
 Sit again by my side these blessings to share;
 There's nought in this wide world I'd barter for thee,
 My seat on the hill top beneath the old tree.

At the summer meeting following, it was our sad duty to pass a resolution regretting his loss, as that of one who "during his long life labored with great industry to advance the interests of fruit culture in this country, and by his efforts to improve our fruits and grains by cross fertilization, and has, while benefiting his own province, gained a world-wide reputation."

The following valuable notes on Mr. Arnold's labors as a horticulturist, have been contributed by D. W. Beadle, who as Secretary of the Association, had full cognizance of all his work in this direction :

Mr. Charles Arnold was, I believe, the pioneer in experimenting in the line of cross-fertilization, with the view of producing new varieties of fruits in Canada. His first attempts, so far as is known, were made with the grape. In his first experiments he took for the mother plant a wild vine of, if I mistake not, the *Aestivalis* family, and impregnated the flowers with pollen of the *Vinifera* tribe. From the seed thus produced he raised a number of seedlings, some of which seemed to be well worthy of cultivation, which he named Othello, Cornucopia, Autuchon, Brant and Canada. These are fully described in the Bushberg Catalogue of 1883, from which we learn that they were much esteemed in many parts of France. However, they do not seem to have been well adapted to the climate of America, being too subject to mildew and rot. The Raspberry received attention from Mr. Arnold, and he raised quite a number of crosses between the Antwerp tribe and a White Cap. None of these proved to be of permanent value, exhibiting often a great tendency to sport back to the original Antwerp. His crosses of the Apple has been of more value to us, and one of them, the Ontario, is being grown successfully in many parts of this Province.

Mr. Arnold gave also considerable attention to cross-breeding of wheat, and produced several varieties of that Cereal. Whether any of these have proved to be of special value, I am not informed. His greatest success was in the production of cross-bred Peas. By crossing the Champion of England with Tom Thumb, he produced a Pea having the rich flavor of the Champion of England, and the dwarf habit of the Tom Thumb. This Pea has been widely disseminated as the American Wonder, and is yet to be found in some of the seed catalogues.

The above is a brief account of Mr. Arnold's labors in cross-fertilization. He led the way, others have followed; among them Mr. W. H. Mills, of Hamilton, who died the other day, and Wm. Saunders, now Director of the Experiment Station near Ottawa. Mr. Mills confined his labors to the Grape; but Mr. Saunders took in the whole field of fruits in his experiments.

Mr. Arnold thought several of his cross-bred Apples worthy of a name, among them was Arnold's Beauty, Ella, Dora, and already mentioned, Ontario.

THE GRIMSBY FRUIT SECTION.

It was my privilege to spend a few days this season in the Grimsby fruit section. Having received an invitation from Mr. Murray Pettit, of Winona, to spend a day or two at his home—the Mountain Valley Orchard Farm—I accepted his proffered kindness and availed myself of a privilege which I had long desired—to see the orchards and vineyards of this far-famed "Edenic" section of Ontario. To an enthusiast in horticulture,

and one who delights in nature in her mysterious formations and her modest yet charming landscapes, I know of no section that will afford him a greater or more varied pleasure than the one of which I write. Just why nature presents to us her wonderful handiwork in

"Rock-bound wall and mountain height,
In silvery lake and meadow' vale,"

I cannot tell. But in it all we see a design for man's happiness and comfort. If that design has not accomplished its fullest fruition, if the dweller in the Grimsby Valley be not among the happiest of mortals, it must surely be owing to some fault of his own, or to some condition not a tenet or attribute of the great architectural design.

On the morning after returning from the summer meeting at old Niagara—that birth-place of our Canadian nationality, and the cradle of Canadian patriotism—Mr. Pettit hitched his pony to the phaeton and we started for a drive down the old Grimsby Road to the Methodist Park, a distance of about six miles, calling at several farms and picking up one or two friends by the way. The first stopping place was at the farm of Mr. Geo. W. Cline, whose genial owner joined us in our trip. Mr. Cline's farm comprises one hundred acres, all, except the mountain side, and indeed some of that, in fruit. Though his vineyard is extensive, and his apple and peach orchards by no means insignificant, his specialty is plums, having upwards of 2,000 trees, from full bearing down to only one year after planting. He estimates his crop of plums this year at about 1,500 baskets, and he was about selling the lot on the trees to a fruit syndicate at a remunerative figure. Continuing our trip eastward we passed farm after farm, all more or less covered with orchard, vineyard and berry patch. Many of them, I noticed, were kept in excellent order and scrupulously clean. Among the latter, the model, I think, so far as could be judged from a passing view, belonged to a member of the Woolverton family. Just here I might remark that it was a matter of surprise to one like myself, unaccustomed to that class of farming, how the great majority of the farms we visited or passed by were kept in such good order with so little help. Here in my own county of Perth, where only the old method of mixed farming is pursued, no farmer calculates to work a hundred acres with less than two farm hands; yet I found all these farmers along the Grimsby Road working, as a rule, 100 acres in fruit with but two men. Mr. M. Pettit, with his 175 acres—too much for a fruit farm—kept only two hired hands, and I found his thirty acres of vineyard, eight or nine acres of black berries and forty or fifty acres in apple, pear and peach orchard, surprisingly clean and well-worked with plow or horse hoe. The same might be said of all the farms, to a greater or less degree, in the section, unless it be a few in the hands of unprogressive owners, whose names, I would venture to say, are not among the list of subscribers to THE HORTICULTURIST.

Our next stopping place was at Mr. A. H. Pettit's, whose proprietor also joined our party to the Camp. Mr. A. H. Pettit is among the most energetic farmers of the Grimsby section, and is worthy the prominent position he holds at the head of the Central Farmers' Institute. His farm, more devoted to apples and peaches and general crop than to vineyards, shows that he does not do all his farming—as some prominent figures in the farmers' institutes do—away from his farm. Mr. Pettit having joined us, we soon arrived at Maplehurst Farm, the home of the Secretary of the Ontario Fruit Growers' Association, and editor of THE HORTICULTURIST. Here the road strikes the base of the mountain ridge, which is thickly wooded to the brow, and underneath its shadow nestles Maplehurst, with its old-fashioned frame homestead, overhung with venerable locusts, ever recalling historic memories of U. E. Loyalist early settlement, of courageous enterprise and subsequent thrift. The farm stretches, in apple, peach and pear orchard and vineyard, with intervening raspberry and strawberry patches, away to the lake. From the mountain here, at an elevation of 250 or 300 feet, overlooking the valley toward Lake Ontario, is what Mr. Rice, of Port Huron, described in such graphic terms at the Hamilton meeting as the grandest natural panorama and most inspiring landscape that ever fell beneath the eye of a horticulturist. His enthusiasm was well warranted and his animated description was no exaggeration. As far as the eye can reach to the east and to the west, bounded only on the north by the beautiful waters of the lake, is one continuous and delightful picture of orchard, garden and vineyard, ever varying, yet ever the same, and appearing before and beneath you more like an enchanting miniature checkerboard of nature than what it really is—a rural scene of vast extent. The inspiration of Bryant could do the scene no more than justice in his vivid description of the mountain ridges, rock-ribbed and ancient as the sun; the venerable wood; the vales, stretching in pensive quietness away; the complaining brooks that make the meadows green; and poured beyond all, old ocean's grey and ever changing margin of waters. And this enchanting and fruitful spot is the abode of man. What a happy lot!

Mitchell, Ont.

T. H. RACE.

(To be continued.)

FRUITS IN MANITOBA.

SIR,—I receive your paper regularly every month, and, to any one having a taste for fruit growing, it is indispensable. The report of the Fruit Growers' Association alone is worth the money. In the spring of 1889 I made choice of the Woolverton * Apple from your list; it arrived all

* The Apple called Woolverton is now known as the Princess Louise. It was given the latter name out of compliment to Her Royal Highness, because of its remarkable beauty.—EDITOR.

right, and last summer it made a fine healthy growth of about twelve inches. I made no report to you then, as I was afraid the winter would be too much for it. I did not protect it in any way, only hilled up the earth about six inches around it, but I was agreeably surprised this spring to find that it had wintered well, and started to grow almost from the terminal bud. Alongside of the Woolverton I had the Duchess and Wealthy, but they proved to be more tender than the Woolverton, dying back to the old wood. The growth of the Woolverton this year is two feet three inches, the Wealthy and Duchess eight and eleven inches. I have great hopes of the Woolverton Apple for Manitoba.

I have successfully fruited the Mammoth Cluster, Hilborn and Gregg black raspberries. I find the latter the most prolific, although the canes are very tender. Of red varieties, I find the Cuthbert the best and hardiest of five different varieties that I have tried. In Blackberries, the Snyder is the best I have found for this Province, all the above varieties have to receive winter protection. I have tried different varieties of red and white currants; the Cherry I have found the best in red, and the Grape in white. In gooseberries, Houghton is the most prolific, although the Downing is a good second, and the fruit is the better of the two. I have the Industry and Whitesmith, but the bushes are too young to judge of their productiveness yet. I have entirely failed with grapes, even with a liberal winter protection; what grows this summer will die next winter; the varieties I have tried are Wyoming and Moore's Early.

Would you kindly recommend as worthy of trial in this Province some varieties of grapes, cherries and plums? I have tried strawberries of the Wilson and Crescent varieties, but they utterly failed after two crops.

Nelson, Man.

A. P. STEVENSON.

NOTE.—With winter protection, no doubt, you can grow most varieties of grapes; your chief difficulty will be in the ripening. Such early varieties as Moore's Early, Worden, Jessica, and possibly Lindley and Brighton, should ripen before the fall frosts. We shall be glad to hear the results of your experiments. In cherries, unless the Common Kentish, or the Montmorency Ordinaire, will stand your climate, we would advise you trying the Vladimir, Ostheim and the Koslov-Morello, which are the new hardy Russian varieties. In pears, the Idaho, now being introduced by the Idaho Pear Co., Lewiston, Idaho, is worthy of your trial.

PROTECTION FOR THE ORIGINATORS OF NEW PLANTS.

THIS subject has often been discussed in a cursory manner at meeting of our Association, but no definite plan has been adopted which seemed worthy of recommendation for legislative action. It does seem an unfortunate state of affairs that when a new fruit is originated

the man, who perhaps spent years in its production by means of hybridization, or by careful selection of seedlings, and thus has conferred a lasting benefit upon the public, should himself go unrewarded. Sometimes, it is true, as in the case of the Niagara Grape Co., a corporation who has plenty of money under its control is able to control the stock as to make a fortune out of it, but more often it occurs that the person, who is the originator of a new and valuable variety of fruit, goes almost entirely unrewarded for his labors, while others reap unmerited good fortune. For instance, the originator of the Worden grape, a grape which is valued as one of the best for the commercial vineyardist to plant, is said to be now a poor man, having received nothing to speak of from the sale of the grape which bears his name. Of course, if the originator is also a nurseryman, he will find means to make the most of his introduction. But suppose an ordinary fruit grower or farmer throughout our country should succeed in this direction, what reward has he? He will attempt the sale of it to some nurseryman who, naturally enough, will disparage its merits and make the purchase at the very lowest price.

Now, there has lately been a scheme introduced by a joint committee of the California State Horticultural Society and the California State Floral Society, which contemplates the submission of a bill to Congress embodying a system for the National Registration, also a second bill providing for the exclusive propagation and sale rights for a limited time to originators.

The National Plant Register would be a very elaborate, but at the same time a very interesting affair. It would contain: 1st, the number; 2nd, the official name; 3rd, the popular and local names or synonyms; 4th, description; 5th, short history and a statement of the peculiarities and habits of the plant; and 6th, in many cases, if not always, a photograph, drawing, or series of photographs or drawings, of the plant, fruit or flower.

Originators of new varieties of plants who do not wish to secure exclusive sale rights would have the right to offer them for registration with the proposed name, and if they are accepted, the originator would be entitled to a certificate, securing to him the honor or prestige to which he is entitled.

If, on the other hand, he desires to have sale rights for a certain term of years, these would be granted him upon the payment of a certain sum.

Of course, this proposed scheme would involve a great number of difficulties, such as, for instance, the difficulty of carefully distinguishing new from old varieties, owing to the varying characteristics of any particular variety, according to the locality in which it is grown. Many of the obstacles, however, can be overcome in a greater or less degree, and it seems to us very desirable that an attempt should be made to carry out this scheme in Canada, or some modification of it. The subject is worthy of discussion at our meetings, and, if feasible, should be presented by a committee, appointed by the Dominion Horticultural Society, for the consideration of the Dominion Parliament.

APPLICATION OF SULPHATE OF COPPER.

WILL IT PREVENT BOTH LEAF BLIGHT AND CODLING MOTH?

SIR,—I am just in receipt of reply from Prof. Taft upon the above subject. He thinks that the ammonia, if added to the Paris green just before using, would dissolve the arsenic to only a slight extent. He adds, however, that he feels like recommending the following formula for the first two applications, viz.: Dissolve in hot water two pounds of sulphate of copper. In another vessel dissolve two pounds of carbonate of soda. Mix in a tub. After all action has ceased dilute to thirty-two gallons. There would be no danger of dissolving the arsenic by adding this to the Paris green. He believes, however, that the copper solution alone will have sufficient poisoning effect to destroy the codling worm. If that be the case, the Paris green can be omitted altogether. In the last two or three applications he would add the ammonia to the copper and soda as prescribed in the formula given in my paper. (See report, 1890.) He further says that if this copper mixture is applied early enough, and occasionally repeated, it will prevent both mildews of the grape. With reference to the curculio, he says: "From what I have seen of the use of hellebore I consider it fully as effectual" as the arsenic.

St. Catharines, August 30, 1890.

D. W. BEADLE.

PACKING AND SELLING FRUIT.

THE first consideration in growing fruit for profit is naturally how to make the most money out of it, so at the commencement I will mention a few things applicable to marketing and selling fruit in general, and then give some information on planting different kinds of fruit trees, the preparation of the soil, packing, etc., in order to prevent needless repetition.

Selling.—In order to effect a ready sale for fruit of any kind in these days of keen competition, it is necessary to grow larger and more highly colored samples than any one else if possible; to strive after quality—as this is understood in the market—more than quantity, although the latter must not by any means be overlooked. And here let it be noted, if the fruit is to be sold privately, good flavor and a proper degree of ripeness will be great recommendations to your customers to come again; but if you intend selling through an agent in the market, flavor will count for nothing, but size, color and soundness of condition are everything towards securing the highest price. All fruit for sale, therefore, should be grown as large and as highly colored as possible, gathered and packed before it be-

comes soft and over-ripe, and should always be honestly graded, that is not putting all the small and deformed fruit at the bottom of the package and a very few fine specimens on the top, but keep each size separate. Next strive to have your fruit in the market when there is not a glut of the same kind there. Very early and late samples always sell the most readily.

Packing.—This requires great care, for no matter how good the sample is, if it is badly packed it may only obtain the lowest price in the market, and months of labor and anxiety will be lost in a few hours. A few general principles will only be mentioned now, further particulars will be found under each kind of fruit. Always pack as carefully for a short journey as for a long one, and always pack firmly—that is, none of the fruit should be able to move in position when fastened down. All movement means damage. On the other hand, no pressure must be applied to soft fruits. All fruits should be gathered only when perfectly dry, not starting to gather them when there is a heavy dew, or immediately after showers. Pack in small parcels to prevent crushing and fermentation. When gathered send to the destination as soon as possible; delay means depreciation of sample. Be very careful that no damaged fruits are sent, as very few of these will soon spoil the good ones if any delay occurs in the transit or sale, and always keep everything perfectly clean and dry.—*Journal of Horticulture.*

THE COUNTRY NORTH OF LAKE NIPISSING.

I HAVE just returned from a trip to the north of Lake Nipissing, and spent a little time in looking over the flora of that section. Down the Sturgeon River the basswood grows to a large size; at Sturgeon Falls are a few apples planted which are doing fairly well, especially the crabs where they are planted on drained soil. I have no doubt most of the hardy apples grown in this section will do well there, that is sorts that do not start to grow too freely in the spring. All sorts of wild fruits are abundant there. Sand plums, sand cherries and the amelanchier, with the Saskatoon, make up the principal of those grown on the rocks or dry plains. The raspberries are very fine, but very few blackberries are to be seen.

The wild plum and frost grape are very plentiful on the islands in Lake Nipissing, some of the grapes are said to be of good quality, but I had not time to go to see them.

The wild rose, in several colours and very fragrant, grows here in great profusion and take kindly to garden culture and soon show improvements,

the fruit on them now is very beautiful, taking all shapes from that of our apple to the longest pear. I brought home a dozen or more to test. I put in a good word for the HORTICULTURIST when I could, and have no doubt if I had had a copy I could have got half a dozen subscribers. However, Mr. Michaud, a gentleman coming from the Gulf of the St. Lawrence and an enthusiastic amateur, at once stated that he just wanted such a paper and immediately handed me his dollar, and asked to have the back numbers and report sent at once. I have no doubt he will make a useful member, and give some valuable information regarding the possibility of that section for fruit growing. Sturgeon Falls must be about 100 miles north of Renfrew. Mr. Michaud talks French fluently, and will be able to explain to the settlers there, (most of whom are French,) the possibility of growing fruit in their new homes.

Gravenhurst.

J. P. COCKBURN.

MONEY IN THE GARDEN.

I WISH I were able to convince every farmer in this glorious country of the great truth that an acre of vegetable or fruit garden, properly taken care of, will be the most profitable acre on the farm, a fact as undeniable as it is important, and one that will bear the most rigid investigation.

The amount of "green stuff" that can be produced on a single acre, well tilled, in a single summer, is simply incredible, wagon loads upon wagon loads; and there need not be a single meal from early spring until winter that is not made more cheerful, more palatable, more wholesome and altogether more enjoyable by the presence of some good dishes from the garden, not to say anything about the canned tomatoes, peas, berries and the crisp stalks of celery, etc., during the winter months. I and my family live almost exclusively on the product of garden and poultry yard during the entire summer, and we enjoy pretty good health generally. No meat bills to pay, no nausea caused by greasy food, no dyspepsia! Think of sixty meals with big plates of strawberries and sixty more with raspberries and blackberries! Think of the wholesome dishes of asparagus, of the young onions, radishes, the various salads, the green peas and beans, the pickles and cucumbers, the tomatoes, squashes, melons, etc.! And all this practically without expense, at least, without cash outlay. There is plenty of good manure in the barnyard; horses stand in the stable more or less unused during the gardening season and the needed labor can also be had in an emergency. At the same time few farmers will have difficulty to sell, or trade off, the surplus to advantage. The village blacksmith may take part, if not all, of his pay in vegetables. The wagon maker, the carpenter, the storekeeper, the physician, the banker, all of them need vegetables, and often are glad to take what good things you have to offer in exchange for money, goods or services. If the working forces on the farm are insuf-

ficient, it will often be advisable to reduce the area of wheat or oats, and grow an acre of garden stuff instead; for the same work devoted to the garden will pay you 500 per cent. profit above that realized from grain culture.—*From How to Make the Garden Pay.*

RIPENING TOMATOES FOR EARLY MARKET.

IN growing tomatoes for market, the premium is and always has been on earliness more than any other one thing. Whoever succeeds in getting his crop before the customers a week in advance of his competitors is sure of a good price and of good profits, and this even when the fruit is not up to the standard as to size and quality.

This observation is not new, nor confined to this country. The market gardeners about Paris, France, have also found it out some time ago, and, as told in the *Revue Horticole*, often employ artificial means for hastening the maturity of the crop. To do this, the fruit is picked when yet green, but approaching maturity, and spread out upon a layer of straw under the hot-bed sashes. Here they are lightly sprinkled from time to time, to keep the atmosphere moist, and prevent them from shrivelling. During the greatest heat, on bright days, partial shade must be provided, else the tomatoes will be liable to get burned or scalded.

It takes but a few days of such treatment to bring out the bright color of maturity in the fruit, but the latter usually fails to attain to the full rich flavor of the tomato when naturally ripened. The quality of specimens picked in the more advanced stages of ripeness, however, as indicated by even the slightest beginning of coloring, is not perceptibly impaired or altered. Melons may be treated in a similar way for the purpose of hastening their maturity.

Our progressive market gardeners usually rely for their early fruit mostly on the selection of such early varieties as King of the Earlies, Earliest Advance, perhaps Dwarf Champion, etc., and on starting the plants very early under glass. It may pay them to try the method here described.—*Popular Gardening.*

PICKING AND MARKETING GRAPES

“VINTAGE time,” as it is still called, is the grape grower’s harvest, and is a very important and busy time of the season. It is one thing to grow a good crop of grapes and another to gather and market them properly and to the best advantage.

Some vineyardists, who have not had the kind of experience that begets wisdom, and being actuated by short-sighted cupidity, are tempted, and sometimes do pick and ship fruit to the city markets when it is scarcely

colored, because the first grapes on sale usually bring larger prices. "But," says the best authority, "if you value your reputation and wish to create a lasting and profitable demand for your fruit, you should not market it before it is fully colored, and so ripe as to be sweet and palatable."

The first grapes to color in our region—the Talman, the Hartford Prolific, etc., which are poor even when fully ripe—if placed in the market only half colored, sour and unripe, generally spoil the demand for weeks thereafter. People buy them because they look passably well, try them, pronounce them unfit to eat, which is the truth, and cannot be induced to buy again for some time. Wait, therefore, as a matter of policy, as well as principle, until after your early fruit is fully colored and really ripe and good to eat, and follow this rule implicitly with the later varieties also. Then whoever buys of your shipments will buy again, and the whole family will desire more and more as the season advances, and the consumption will be greatly increased and prices maintained. This is a substantial gain; and this is not all, as a ripe crop of grapes will weigh much more than those but half ripened, and there is less shrivel and shrink to them, as they will not (like some other kinds of fruit) ripen after they are picked, and only a day or two after they are gathered they begin to present a sickly appearance.

It may be truthfully asserted that, as a general rule, sour and unripe grapes are the principal causes of gluts in the city markets; and, while the shipping of such fruits may in some unfavorable seasons (like those of 1888 and 1889) be, to some extent, unavoidable, in good seasons, when crops ripen up well and early, there is no excuse for shipping sour grapes at the opening or any time thereafter. With a proper distribution of shipments, and shipping in reasonable amounts, no market glut can long continue if the fruit is of good quality, and none need be feared this year.

Gathering, or picking grapes should always be done when the vines and fruit are dry; and the picking trays containing fruit should not be allowed to remain outside of the packing house, or other shelter after the evening dew begins to perceptibly fall. If the grapes are being picked for table uses too much care cannot be exercised in clipping the clusters and handling them so as not to mar their bloom, and in trimming them for packing (taking out all imperfect berries, etc.) the same constant care is requisite in order that they may go into the boxes or baskets as near perfect as possible and reach the market in the very best condition and order. If they are being gathered for wine, less care may be required, but even then they should not be handled so roughly as to be bruised, for they may have to stand in the trays several days, sometimes, before they can be pressed and are always damaged by rough and careless picking and handling. Usually most of the varieties ripen unevenly, and two pickings are necessary, especially when the picking is for market purposes.

In regard to pickers it may be observed that there is a great difference in the manner of doing the work shown by different persons, men, women,

boys and girls; and girls, as a rule, do better, quicker, and more perfect work than boys; and this is emphatically true also in culling, trimming and packing the fruit. Hence it is that vintage time, on the shores of our grape growing lakes, furnish so much work for young women and girls to do in the open vineyards and packing houses—the same as in France, Spain, Portugal, portions of the German Empire, and other grape producing countries of Europe. Deft, quick, delicate-fingered, and faithful working girls are the extensive grape grower's main reliance in "vintage time," and their timely aid at this busy part of the season is highly appreciated by their employers.

This year, as heretofore, the great bulk of the maturing crop of 1890 will probably be packed in five and ten pound baskets and shipped without crating; but there will be a large amount packed in boxes, ranging from five to ten pounds, and next year the proportion will, no doubt, be much greater still, as the railway rates, which favor crating, will probably be adhered to—having been waived this season, because of insufficient time for the factories to change from baskets to boxes and crates.

In regard to packing grapes in baskets, or boxes, for shipment to the city markets much might be said as to how it should be done; but if anyone wishes to learn more about this very important branch of the grape growing business in thirty minutes than we can teach him in thirty chapters, let him go to the packing house of a well established and successful vineyard, where the process has been studied and improved for years, and see how it is done by experts who have brought the art to a high degree of perfection.

In seasons when grapes are plenty, but inferior, and therefore cheap, (as in 1888) good packing excluded nearly everything except full and fair bunches—the rest all going to the wine press—but we apprehend that, as this year grapes will be a less crop and likely to command much higher prices, packing will include smaller and less perfect clusters, providing their berries are ripe and of good average quality.

It is a well known fact that the great wine cellars of Europe—and the same thing is true of those in Pleasant Valley and on the shores of Keuka—will not buy grapes to be delivered until they are perfectly matured, and if they have vineyards of their own the fruit is not allowed to be gathered until it is dead ripe, as shown by the stems turning brown, and from such grapes they obtain the highest and most perfect wine-making results. Therefore, those small growers who have no wine making facilities of their own, but wish to sell their refuse grapes to wine cellars, should let them stay on the vines until they are fully ripe.

Hoping that, with proper picking and packing, the sending of none but ripe and good fruit to market, and not being in a hurry to rush all to the front as soon as it is fit to ship, the grape growers will gather a rich harvest from the vines this year, we bid them good cheer, and wish them the fulfillment of their highest anticipations.—*Vineyardist*.

PATRICK BARRY.

PATRICK BARRY, one of the most widely known and highly respected citizens of Rochester, expired June 23rd, at eight o'clock a.m., at his residence on Mt. Hope Avenue. He had been ailing for over a year, and the final collapse was due to a complication of causes. His death was painless, and he was surrounded by his family in his last moments.



Patrick Barry

Mr. Barry was the son of a farmer, and was born in Belfast, Ireland, May 24, 1816. He received a liberal education, and at the age of eighteen became a teacher in one of the Irish National schools. He taught for two years and then resolved to make the new world his home. He came to New York in 1836, and in his twentieth year became a clerk in the Linnæan

nurseries of the Princes at Flushing, Long Island. He remained there four years, during which time he devoted his energies to acquiring a complete knowledge of the nursery business. In 1840 he came to this city, and in July of that year founded a partnership with George Ellwanger, which has continued unbroken until to-day. Seven acres of ground was the extent of territory on which the firm of Ellwanger & Barry started the Mount Hope nurseries, now of world-wide fame.

Thomas Meehan, state pomologist of Pennsylvania, in a biographical sketch of his life-long friend, said: "In fruit culture especially, Mr. Barry's services stand pre-eminent. He had long been known as an effective writer through papers in different periodicals, when in 1852 his first great work "*The Fruit Garden*" appeared. This was so popular that another edition was issued in 1855. The greatest work of Mr. Barry, however, is probably the "Catalogue of the American Pomological Society," the preparation of which, as chairman of the committee, has been chiefly his work. This is the great guide for American fruit culturists, and has long been the admiration of the world."

For more than thirty years Mr. Barry had been president of the Western New York Horticultural Society, one of the most useful and flourishing organizations of its kind in the United States. He has been president of the Western New York Agricultural Society, and was a member of the board of control of the New York State Agricultural Experiment Station. Among the positions he has held in the business world were the office of president of the Flour City National Bank, president of the Rochester City and Brighton Railroad Company, president of the Mechanics' Savings Bank, president of the Rochester Gas Company, president of the Powers' Hotel Company.

Mr. Barry was a man who at once commanded respect by reason of his frank, manly countenance and an address in keeping therewith. He was deliberate in speech and yet at no loss for words to express his ideas with clearness and force. Sound sense and correct judgment were the leading characteristics of his mind, and these qualities backed by decision of character gave his opinions weight.—*Florists' Exchange*.

FALL PLANTING.

TREES.

SIR,—There is a good deal of truth in T. H. Race's remarks about fall planting of trees, but it is a hard matter to remedy. There are many reasons why nurserymen work off stock in the fall, and a man can always find plausible arguments to prove his own course to be right. I set very few fruit trees in the fall. When I find it necessary I always shade

the south side. A very good way is to set a good strong stake in the hole before planting the trees, I then set the tree on the north side and close against the stake. This not only protects from the sun but is a support in its future growth. •

Prof. Smith, of the Botanic Gardens, at Washington, D.C., says that it is important that all trees should be shaded for a few years after planting, and, to this end, he has a peculiar form of frame that he puts around them. He has the care of all the street and park trees in the City of Washington. No citizen is permitted to plant or trim trees on the street in front of his property in that city.

Port Huron, Mich.

S. B. RICE.

BERRY PLANTS.

I SHALL try planting red raspberries and blackberries in October, protecting each hill with a forkful of manure as soon as the ground is frozen enough to drive upon. The raspberries I will plant in check rows, and put three plants in a hill to insure a perfect stand. The matter of having a full row with no vacancies I have twice before alluded to, and now do so again, as no large or extra large yield can be obtained if there are missing hills. An acquaintance, who is a large berry producer, is realizing this to his cost this year. The wet weather delayed him in the spring, and also delayed parties of whom he bought plants, and finally when he did plant in poorly prepared ground, many plants failed to grow. His strawberries have twenty-five per cent. of vacancies, and his blackberries have come to the extent of only thirty per cent., leaving seventy per cent. of the ground unoccupied, to hoe and cultivate not only a year, but for several years to come unless he ploughs it up or fills the vacancies next season. The blackberry failure is not entirely his fault, but the result of a swindle. He sent to a widely advertised firm for Erie plants. Late in the season he received a box containing pieces of roots about five inches long, with a letter stating inability to furnish plants, but taking the liberty to "substitute root cuttings, which would do just as well." Such a swindle should be punished by recourse to law and wide exposure, but in this case the amount is not large and the swindled party not given to litigation, so he will quietly submit, and I suppose the firm will repeat their methods another year.—*Vick's Magazine.*



* Flowers *

THE WATER LILY.

SIR,—I have been experimenting a little with pond lilies this summer and have found that the little “*Nymphaea odorata minor*” is very easily domesticated and has given quite satisfactory results. Its little blooms are very fragrant and are perfect in form, about two to two and one-half inches in diameter. The roots are small and well adapted to pail and tub culture.

I fitted up sixty tobacco pails and several tubs or half barrels. The plants have done remarkably well in all, but have bloomed best in the pails, perhaps because I had stronger plants in them, as I arranged them first. Later I have made a small pond in my lawn. The red, blue and yellow lilies have not as yet given any flowering buds. For winter I shall set the pails in the cellar. Tubs set in the lawn will be simply covered where they are.



FIG. 65.—THE WATER LILY.

Port Huron, Mich.

S. B. RICE.

NOTE.—My plan is to cut an oil cask into two and set the parts in the lawn, three or four inches below the surface of the ground, so that the sod can slope down to it and cover the top edge of the tub. Fill four or five inches of rich earth (I use a mixture of clay soil, more mud top of the clay) and set the plants firmly into it.

I was quite surprised; I made a tank last of July 6x12 feet, 3 feet deep, filled one-third full with earth, set in plants, they continued to grow luxuriantly and are now in bloom, with more buds. They are certainly an easy flower to raise.

THE IRIS.

OF stately growth, rich perfume and an endless variety of color, this kingly flower, half orchid, half lily, has won for itself favoritism wherever grown. In England it is extensively cultivated, and is perhaps one of the most popular of hardy plants, while in our own country every lover of flowers has at least some varieties of this charming plant among his collection.

As a garden plant, it is especially desirable, and years ago we began with the low old-fashioned Iris, or Flowering Flag, with which we bordered our beds, and have it still, its low fragrant blossoms always at hand in the early spring. An older species of Iris, and much more rare at this day, is a peculiar variety called by the older people "Quaker Lady," of silvery hue, richly dappled and veined with bright yellow and deep maroon, its foliage delicate, of a bulbous nature, and blooming exceedingly early in March and April. But it is to the large-flowering and free-blooming varieties we would call attention. Most of them are quite hardy and very easily grown, and can be planted in spring or fall. Planted singly they soon form clumps of their own, with flowers, whose quaint form, richness of color and delicate perfume, defy description.

A pure white variety is equal to the rarest lily, and much more easy of cultivation. Each clump of the Iris will send up many flower stems, and each stem bear several large beautiful flowers, whose delicate texture will be a marvel to the beholder. Dappled, striped, bordered and mottled, with crimped edges and plain; with the richest violets, gray and rose; with some of the newer varieties more veined still, until almost every color shown in flower is to be found among this family.

The German Irises are very fine. Among them Bacchus, a tall-growing variety, white, with the margin veined with purple, and Cherau, of smaller growth, color bronze yellow, with maroon on white ground. Iris Susiana is another variety of great beauty, flowers very large, mottled chocolate and black, veined with the silvery gray.

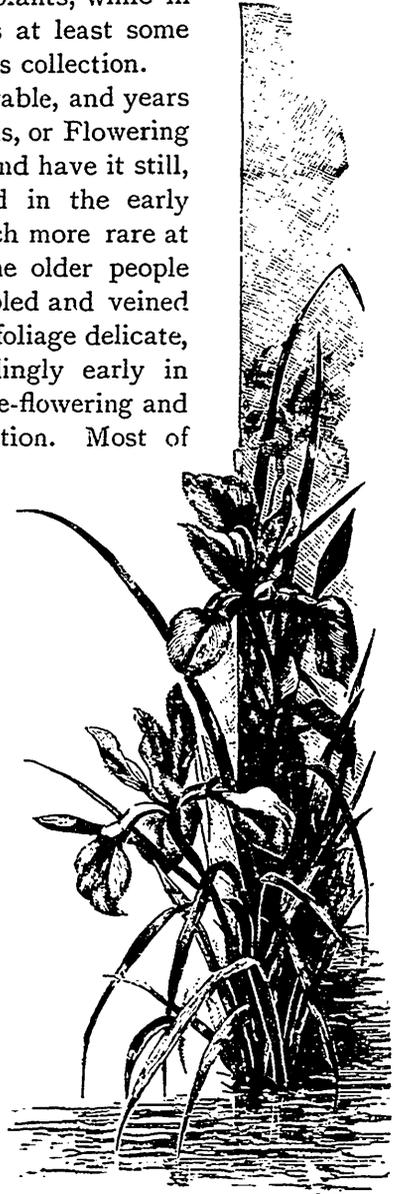


FIG 66.—THE IRIS.

When once planted the Iris will increase in size and beauty every year. The taller varieties can be placed in the background and the low-growing sorts and medium sized in front—a charming picture when in full bloom. They bloom from May until the last of June, and some of the old-fashioned dwarf varieties much earlier. The flowers when cut are fine for house decoration.—*Vick's Magazine*.

 New ◦ ◦ ◦ Little ◦ Known ◦ Fruits 

A LATE STRAWBERRY.—On the 3rd of September, Mr. J. T. Couch, of Davisville, North Toronto, sent us a runner of a strawberry plant which was fruiting, having on it seven berries, which he assures us would ripen, had they not been picked. He says that he has more like it, and that some of the runners bloomed even before they had rooted. This is surely somewhat unusual.

A NECTARINE.—Mr. A. Alexander, of Hamilton, sends a sample of a nectarine, with the following remarks:—

“By this post I send you three fruits from a tree growing in a back yard in Hamilton. It is to all appearances a seedling peach, but as you will observe they have the aroma and the flavor (to some extent) of the English nectarine. It fruited last year for the first time, bearing a large crop, which ripened before the 1st of September. Last year they had not the high color which these had, but looked more like some varieties of green gage plums. I think it an acquisition, if a seedling; if not, do you know it?”

The nectarines certainly have a delicious flavor, and a pretty color, but the size is against them as a market variety. The nectarine is simply a smooth skinned peach, and sports of this kind often occur where a large number of peach seedlings are raised. They can be propagated by budding, and in England some twenty or thirty varieties of nectarines are cultivated.

This one is probably a seedling from a peach pit, planted perhaps accidentally in the place where it is growing.

THE WILLIAM'S STRAWBERRY.—Mr. Alfred Ledger, of Burford, writes to give the true history of this berry. He says that the originator of that berry is Mr. Jonah Williams, of Burford. He found the first plant under a grape vine, and planting them in an open field, he was so pleased with the fruit, that he named them “William's Improved.” He has grown them six years, and has taken great care not to mix the plant with others. To show its productiveness, Mr. Ledger states that after the frost of 1889, Mr. Williams picked off one acre and three-quarters, 3,700 quarts.

Mr. Ledger claims, therefore, that Burford and not Cainsville, is the true home of this valuable strawberry.

A SEPTEMBER CHERRY.—A subscriber in Annapolis, N.S., writes:—

SIR,—“ I send you to-day a small box containing a sample of fruit which I think may prove of interest to you. It has been named Clarke's September Cherry, and is found growing on one tree at a place called Lower Granville, a few miles from this town. It is said to be the only known late cherry, and when fully ripe the color is a dark purple or red. The tree producing this fruit has been purchased by a firm of nurserymen doing business here, who intend propagating it, I understand. I shall be glad to know what you think of it.—E. D. ARNAUD.

The samples came to hand in good condition, notwithstanding the long distance. The cherry is about the size and shape of the Kentish, and the skin somewhat similar in color. But the flesh is firm, and of a sweet and most agreeable flavor. It would be a capital shipping cherry, for at the time of writing the samples have been kept ten days, and are still in good condition.

TRIOMPHE DE VIENNE PEAR.—This magnificent French pear took the first prize at the Industrial under the section “ Any other variety.” On p. 261, Vol. XI, of this journal, some of the points of excellence of this pear were mentioned. To-day, September, 20th, we are again in receipt of two samples just in eating condition. In general appearance, it somewhat resembles the Bartlett, but it is far larger, more regular in form, and the skin yellow with numerous dots. Would our readers like it placed on the list for distribution?

A SEEDLING APPLE from Malcolm Cameron, Bass Lake, Oro., said to ripen about the end of September, is very good quality. It is below medium size, skin a rich red, and altogether quite an attractive dessert apple for its season. Its chief fault is that in about ten days after ripening it goes to “ mush,” losing flavor and consistency.

SUTHERLAND'S SEEDLING GOOSEBERRY.—Mr. Sutherland writes, referring to Mr. Bealls' criticism on p. 273, that the sample was too green to judge of quality, and that when fully ripe the quality compares favorably with that of any variety he has seen.



The Canadian Horticulturist.

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 of plants and trees.

REMITTANCES by Registered Letter are at our risk. Receipts will be acknowledged upon the address label.

THE WILDER EARLY PEAR, Mr. Green, of Rochester, writes us, ripens August 1st, and is nearly equal to that of the Seckel. It will keep two or three weeks after picking.

SOME LARGE PLUMS.—Major Allan, of Grimsby, showed us some very fine samples of Pond's Seedling plum which measured seven and three-quarter inches in circumference one way, and six the other. Major Allan's fruit farm is situated in a choice spot just under the mountain, near Winona, and seems particularly adapted for growing fine plums. Indeed this section of country has lately become noted for its plums, Mr. Cline having an orchard of over two thousand trees, and other growers devoting a greater or less acreage to the same fruit.

TESTED RUSSIAN APPLES.

ACCORDING to an article by Dr. Hoskins in the *American Garden*, there are very many varieties of Russian apples that have been proved to possess positive merit, notwithstanding it is now some thirteen years since the large importation of Russian fruits was made by the National Department of Agriculture of the United States. He mentions first the Oldenburg and Tetofsky, the former of which is everywhere valuable, and the latter only where extreme hardiness is required; and both of these introduced previously to the importation referred to; the Yellow Transparent, an apple of great commercial value, is the only one of this importation which he has thought valuable enough to plant extensively; and of more recent introductions, he names the following

as large, handsome and productive kinds, viz.: Titus, Zolotoreff and Switzer.

He adds, "But I am not decided yet to select one of these, rather than the Red Beitigheimer, an apple introduced by Ellwanger & Barry as German, but which proves as iron-clad as the Russians. Antonovka and Longfield promise to be profitable for planting for early winter varieties. The Red and Yellow Anises are both too small for market. The same must be said of Borsdorf, a longer keeper, of good quality. Getting beyond these we need time to arrive at satisfactory conclusions."

FRUIT GROWING IN IRELAND.

A CORRESPONDENT of the English *Journal of Horticulture* has been making a tour of Ireland. He reports that a very small portion of the arable land is brought under cultivation, and much that is cultivated is done in the worst possible manner. In the north of Ireland, flax is one of the great staple crops, one hundred thousand acres in the province of Ulster alone being devoted to it. The great staple crop in the south, and one that is there considered more important than bread among the family supplies, is the potato. He confirms the reports of the newspapers about the general failure of this crop in that country owing to blight, as a result of which thousands of acres look as if they had been burnt, and a dreadful famine stares the inhabitants in the face.

It would appear that the country is well adapted for market gardens and for some lines of fruit growing; and, if any such enterprise as is seen on this side of the water

characterized the people of that country, fortunes might be made in these lines. Apple trees flourish and bear good crops from the extreme north down to Cork and small fruits may also be grown with success; but whatever is done in the culture and marketing of fruits is done in the most haphazard and careless manner. Nevertheless the occupiers of some orchard land are able to pay as much as \$15 an acre rent, and earn a good living; while at the same time land on the same estate, not planted, rents as low as \$2 or \$3 per acre.

COMPOSITION OF APPLES.

PROF. CLARK, of the Missouri Experiment Station, has been making analyses of apples of various stages of growth, to determine if chemical compositions can afford any reason for the thinning of fruits. A sample of the Ben Davis apple was taken on July 9th, and on October 23rd a large and perfect sample of the same variety, and others at the same date which were small and imperfect. The results show that a large proportion of the mineral matter contained in the fruit is stored up during the early part of its growth, evidencing the importance of thinning fruit as soon as it is of sufficient size to show the wormy and imperfect specimens. A surprising result of the investigation is the fact that the late sample of small and imperfect fruit shows a richer content of plant food than the large and perfect specimens; and from this apparent anomaly, the author concludes that "it costs less to grow a barrel of large and perfect apples than it does to grow a barrel of small and inferior fruits."

FRUIT EXHIBITS AT THE WORLD'S FAIR.

In pursuance of a call of the Illinois Horticultural Society, a convention of delegates from various American Horticultural Societies met in Chicago on August 27th, to outline some plans regarding the horticultural exhibits at the approaching World's Fair in that city. In accordance with the suggestion of Mr. VanDeman, of Washington, it was thought best to separate the hor-

tical exhibit into four departments, viz.: 1, Floriculture; 2, Pomology; 3, Nursery and Forest; 4, Seed and Vegetables. Mr. Parker Earle, of Ocean Springs, Miss., was made General Commissioner of Horticulture; and the four departments were placed under Superintendents as follows: 1, Jas. D. Reynolds, River Side, Ill.; 2, G. B. Brackett, Denmark, O.; 3, Geo. B. Thomas, West Chester, Pa., and 4, J. C. Vaughan, of Chicago.

It was further resolved that any other societies existing in America were entitled to representation on payment of \$25 each.

It is worthy of consideration whether the Ontario Fruit Growers' Association should not be represented, and more especially whether we should not make a creditable display of Ontario's horticultural products at so important an Exposition.

THE CULTIVATION OF THE CHESTNUT.

At the late meeting of the American Association of Nurserymen held in New York city, a paper was read by Mr. S. C. Moon on this subject. After referring to chestnut culture in orchards as being profitable, he says: "No trees, which are equally well adapted for avenues, will yield any return like our native nut-bearing trees, and none are more appropriate for shade and ornament about buildings, or along farm lanes, or in pasture fields. In planting the Chestnut, whether in orchards or avenues, the trees should be set at least forty feet apart, and some varieties will need forty-five or fifty feet. Like fruit trees they should be mulched, or the land should be kept mellow about them while they are small, and they will come into bearing as soon as apple trees or pear trees. Wild trees usually commence bearing when from twelve to twenty years old, and grafted ones, of the most productive varieties, from two to seven years after grafting. A Chestnut orchard of the Numbo or Paragon varieties will come into bearing condition as soon as an orchard of Baldwin apples. Both of these varieties possess the qualities which make any orchard fruit profitable, that is, hardness of the tree and early fruitfulness, with large size and fine appearance of fruit."

Question • Drawer

RASPBERRIES FOR MARKET.

80. SIR,—What are the best kinds of raspberries and black caps for market?—
GEO. SAVAGE *Burnhamthorpe, Ont.*

With us at Grimsby, the Cuthbert is the most profitable red raspberry in suitable soil, but possibly in the county of Peel it might not be sufficiently hardy. The Turner

is an excellent berry and very productive; it has the advantage of being hardier than the Cuthbert, but it is too soft to be a good shipper. The Brandywine is one of the best in this latter particular, being a very firm berry, good color and very productive. In quality, however, it is inferior.

The Shaffer is on the border land between the red and the black varieties. It is well worthy of your testing. We find it very productive and unsurpassed for canning purposes.

In the black raspberries, you can plant no better than the Hilborn and the Gregg.

STRAWBERRIES IN MATTED ROWS.

81. SIR,—If strawberries form a matted row, should the runners be cut off?—G. S., *Burnhamthorpe*.

There is no doubt that a judicious thinning out of the runners will well reward the cultivator for his trouble, but practically a large number of our growers are neglectful in this respect. The runners should be allowed to grow the first season until the row has reached a width of eight or ten inches. After this, unless new plants are needed, the runners should be kept cut off. By this means the plants can be much better cultivated with both the hoe and the cultivator than if they were allowed to cover a greater width of ground.

GRAPE BASKETS AND MARKETING.

82. SIR,—I understood, when at a meeting of the Association, that some arrangements were made with manufacturers so that baskets could be got at a less price. Would you kindly inform me name of manufacturer and where you think the best baskets can be had? They are for grapes. Also any information about marketing. This is the first year my vines have borne, and I have had no experience. My Niagaras are loaded, and other kinds not quite up to them. Have 2,200 vines; 1,000 Niagara, others Brighton, Worden, Moore's Early, Vergennes, Rogers 43 and 44, and Delaware. I have no idea how many I may have, but others who have seen them say I should have 2,000 baskets or more. If you know the names of reliable men in the trade that I might correspond with as to selling, and size of baskets, any information you can give me will be thankfully received. R. T. WILSON, *Braeside Vineyards, Dundas*.

The Ontario Fruit Growers' Association has made no such bargain as the one referred to, but the best makers often exhibit their work at our meetings, and advertise in the columns of our journal. We feel confident, therefore, that our correspondent will get baskets both good and cheap from these firms, as, indeed, the writer, who uses a large quantity every year, can testify. We can speak much in the same way regarding the firms who advertise with us as fruit merchants, and would advise writing to them with regard to the size of basket best suited to the market chosen. The best way to sell is, no doubt, by dealing directly with retail merchants; but when one has much fruit to gather and pack for market it becomes next to impossible to pay proper attention to the selling; and, therefore, we usually place that part of the business in the hands of commission men, even if we must take a little less price.

FRUIT EVAPORATORS.

83. SIR,—Could you inform me, through the next issue of the HORTICULTURIST, if fruit evaporators are manufactured in Canada? What firm would you recommend, and what evaporator is considered the best?—THOS. MOYSE, *Central Bedeque, P.E.I.*

We have at hand only two catalogues of fruit evaporators, and these are both American, one of them being issued by the Zimmerman Machine Co., Cincinnati, Ohio, and the other by the American Manufacturing Co., Waynesboro', Pa.; and these will, no doubt, both send you catalogues on application. We shall be glad to hear of any good Canadian evaporator, and introduce it to our readers, many of whom are inquiring about this method of saving fruit that would otherwise be waste.

THE BROWN ROT OF THE GRAPE.

85. SIR,—I send you enclosed bunch of grapes which appear to suffer from a blight from some cause. What is it, and can you suggest a remedy? If so, please refer to it in your next month's paper.—R. KIRK, *Toronto*.

The grapes which you send are affected with the brown rot, a disease which, in

some places, is exceedingly troublesome to grape-growers. It is really a form of the downy mildew of the grape-vine, which first appears on the leaves, and is called by the former name when it attacks the fruit itself. You should gather and burn all specimens affected, so as to prevent the spread of this fungus, and next season begin early to spray with the Bordeaux mixture, or with the ammoniacal sulphate of copper, both of which are elsewhere formulated.

For a more particular description of the brown rot, see Vol. 12 of this journal, page 297.

GRAPES IN MUSKOKA.

84. SIR,—Can grapes be successfully grown in Muskoka, and, if so, what varieties?—T. B.

Will some Muskoka correspondent please answer?

THE WALNUT TUSSOCK MOTH.

86. SIR,—I enclose you a specimen of a worm that is infesting the walnut trees in this vicinity, and, if not checked, will completely defoliate them. The trees are so high that it is difficult to reach them with a spraying pump.—W., *Grimsby*.

Reply by Mr. Jas. Fletcher, *Experimental Farm, Ottawa*:

The caterpillar on the black walnut is *Halisidota caryæ*, the Walnut Tussock Moth, sometimes very common on walnuts, butternuts, hickories, elms and many other trees. Of course Paris green will kill them if you can apply it; but this seems to be your difficulty. By fastening your nozzle to the end of a light rubber tube, and then attaching this to a long bamboo, you can raise it a considerable height. You probably know of this method as figured by Dr. Riley. In this way a spray can be thrown over almost any apple tree I have required to treat.

WOOD ASHES ON CLAY SOIL.

87. SIR,—Would you recommend unleached ashes for small fruits or clay soil, or would leached ashes be better?—A SUBSCRIBER, *Newton*.

As a rule, it is not wise to apply unleached wood ashes to stiff clay soils. The chief

objection is the mechanical effect produced by the potash, for it renders such soil more tenacious and lumpy than before; farther than this, it is less needed upon such soil as manure, because there is usually present a larger amount of potash in composition than there is in lighter soil.

Leached ashes, on the other hand, constitute a very valuable fertilizer on clay land, for they consist largely on carbonate of lime, which is itself valuable as a fertilizer, and has a beneficial effect upon heavy soil, in the first place promoting nitrification, and in the second place, rendering the soil looser and less liable to puddle.

BLACK KNOT.

88. SIR,—Is black knot hereditary or is it spread only by contact, and would it be safe to plant a young plum orchard on the ground of an old one which died a few years ago of that disease?—A SUBSCRIBER.

No, the black knot is not hereditary, neither is it spread by contact, therefore we see no reason, under this head, why a new orchard should not be planted on the same ground as the old one. The black knot is a fungus which is propagated by very tiny spores. These, though they correspond to seeds in higher plants, are organized upon a lower scale, and grow by cell divisions. Fungi do not have leaves, stems and roots, with all their separate functions the same as plants of a higher order; they have, however, a portion which corresponds to the root, called Mycelium, which enters in between the cells of the plum wood and draws its subsistence therefrom. The plum knot fungus has also a portion which corresponds with the branches of plants, little thread-like portions called Conidia, and upon these are borne the tiny spores above referred to. It is by these that the disease is propagated. They are so tiny that they float about from place to place in the air, and, lodging upon the wood of the plum or cherry trees, immediately proceed to grow. By this will be seen the great importance of carefully destroying all trees in the neighborhood that are badly affected with the knot, and of always carefully cutting out every knot upon its first

appearance. The wild plum and cherry trees, black with fungus, which often line the road sides in Ontario, are a public disgrace.

PRUNING CURRANTS.

89. SIR,—What rules should be observed in the pruning of black, red and white currants, and young apple trees, respectively?—A SUBSCRIBER.

P^r referring to page 124, some information concerning the pruning of your trees will be found. With regard to currants, the work of pruning may be done at any time between now and spring. If done later than the 1st of April, the bushes will bleed freely, which, if no very great injury, is certainly no benefit. The method is simple, consisting, chiefly, in the removal of about half the new growth each season, and in the removal of all old and sickly canes. By this means there will always be an abundance of bearing wood, and very little opportunity will be offered for the work of the borer. Where, however, the old canes are seldom cut out, the borer will soon become very abundant and destructive, and the whole plantation sickly and barren. It is therefore evidently wise not to grow the currant in tree form in this country, but rather to follow the renewal system, and to encourage new shoots from the ground year after year.

BOOK ON FRUIT GARDENING.

90. SIR,—Would you please recommend me a good work on small fruits and gardening in general?—H. A. ARDAGH, *Toronto, Ont.*

You can find no better work on general fruit culture than the "American Fruit Culturist," by J. J. Thomas.

TIME TO APPLY ASHES.

91. SIR,—Which is the best time to put ashes on land—spring or fall?—JOHN GIBBARD, *Napanee, Ont.*

In the case of leached ashes there is little to choose between fall and spring for its application, but unleached ashes are better applied about the growing season in the spring; because, if applied in the fall, the heavy rains might carry the potash beyond the reach of the roots of the plants.

EXTERMINATING PURSLANE.

92. SIR,—Could you, or any of your readers, tell me if there is any known way to exterminate purslane, and if it does much injury to the soil and crops? I think it is the worst weed a gardener or fruit grower has to contend with. The first two or three years it was on my place, I tried to fight it by gathering all I could find, roots and all, and carrying it off the land. I have also poured boiling salt and water on it, but it gets worse in spite of everything.—G. J. R., *Penetanguishene, Ont.*

We know of no better method of exterminating this weed than that adopted by our correspondent of carrying it off the ground entirely, for if pulled out and left lying, it is sure to grow again. Will some of our gardening friends please give their experience?

CLOUD'S SEEDLING AND MRS. CLEVELAND.

93. SIR,—I would like to know if the Cloud's Seedling and the Mrs. Cleveland are very productive?—GEO. SAVAGE, *Burnhamthorpe, Ont.*

Reply by John Little, Granton.

There are few varieties as productive as those you mention. Cloud is similar to the Crescent, a few days earlier, as large, and of a better color. It is the leading variety in the south. Michel's Early is ahead of anything yet introduced for earliness, productiveness and vigor of plant. Mrs. Cleveland is mid-season, one of the largest in plant and fruit, and productive. On the fruit stand you would pass many varieties by and choose it. If people were acquainted with Mrs. Cleveland it would be in every garden. It is pistillate, and so is the Cloud.

PLANTING YOUNG FOREST TREES.

94. SIR,—I wish to plant a quantity of young pine, balsam, maple, birch and oak around this place. There are plenty of them growing in the bush around here. Will you please say in your next issue if you think that, with care in transplanting, I might have a chance of success; also, whether fall or spring would be best for the work, with a few hints how to proceed.—W. B. McLEAN, *Stanley House, Musk.*

There is no doubt that, with care, you may succeed in removing young forest trees for

ornamental planting. Indeed, where these are procurable, we can see no reason for applying to the nurseries for exotics, which may or may not be adapted to the locality in which you live. It is, however, difficult to remove trees from shady places and to make them grow well in sunny exposures, without first accustoming them to the change by degrees. Large trees, too, are less apt to succeed than smaller ones, on account of the greater loss of roots in proportion to the top. It would be better, no doubt, to set aside a small piece of the garden for a year or two, as a nursery plot; and then to select a good collection of our native trees of small size, and grow them with care until they have developed a quantity of fibrous roots, and have acquired vigor to insure their growth in the places where they are required. On the whole, we advocate spring in preference to fall planting, especially in the colder sections of our country.

THE PEAR BLIGHT.

95. SIR,—I have an orchard of fifty trees, and something has caused their leaves to blacken and a great many of the limbs to die. Can you tell me the cause of this, and say if I can prevent its spread?—JOHN McLEAN, *Mount Pleasant.*

Our correspondent does not say whether his orchard consists of pear or apple trees, but we presume the former. The blight has been so often referred to in these pages that it seems unnecessary to make any further explanation of it here. It is thought by scientists that the pear blight is due to bacteria, the presence of which, in plants and in animals, account for so many hitherto unexplained diseases. The little microbes, which are the germs of the disease, escape from blighted limbs of one tree and float imperceptibly to others; they find entrance through little stomata, or breathing pores of the leaves or young wood; they multiply with exceeding great rapidity in the wood cells, from one to another of which they have a peculiar faculty of making their way by making holes through the thin partitions. Thus, unless checked in some way, the sap of a large portion, if not of a whole tree, becomes corrupted through their action, and

suddenly turns black and dies. The only cure, therefore, with which we are acquainted, is to cut off every vestige of the blight as soon as it is discovered. A sharp look-out for it should be made during blossoming time, in the spring.

BUSINESS MEN AS FRUIT GROWERS.

96. SIR,—I would like your advice as to the most suitable book for me on fruit culture. I am a tailor by trade, in business here some years, and *quite green* at fruit growing. Many years ago I was very nearly attempting the same thing, but circumstances thwarted me; business since has fully occupied me. About six miles from my place of business, between Lambton Mills and Weston, I have some land lying idle. One field of sixteen acres, with a few stumps on, I am told, has yielded good crops, and field of five acres, gravelly. Both fields are level plateaux. These, and a few other fields, are almost wholly surrounded by the Humber river and Black Creek flats. The five acre field is delightfully situated, commanding a good view. I prefer it, but suppose it would hardly pay cultivation. If you could tender me any advice as to fencing, ploughing and generally getting it under weight, whether advisable to put in a few trees and try my hand in a small way, or hire a man and go in larger, I would feel obliged.—THOS. H. TAYLOR, 518 *Queen Street, W., Toronto.*

We hesitate very much to advise any man to engage in fruit growing who is entirely inexperienced in the business. It is hard enough for those of us, who have spent years devoted to the study and practice of this branch of agriculture, to get very rich at the business; and, on the other hand, it would be quite easy for an inexperienced man to lose what property he had. We believe in fruit culture, properly and systematically pursued, as one of the most profitable branches of agriculture, but we cannot advise a man whose life has been spent in a trade, or in mercantile life, to enter into fruit culture for profit. The best plan for our correspondent is to try it first on a small scale, if he intends managing it himself; or, if he can find a gardener who would grow small fruits on shares, finding implements and team, then try it on a large scale. The gardener would no doubt agree to allowing pear, peach, quince trees and grape vines to be planted.

and would care for them, also, by having a liberal portion of the small fruits.

The most economical fence is one of posts and wire. Land intended for fruit trees should be ploughed up this fall and exposed to the winter's frost. If in sod, it would be better to cultivate it to some farm crop the first season, in order to bring it into fit condition to receive the trees and plants. The sample of soil sent appears to be light and sandy, but, if wheat, corn and potatoes have been grown successfully upon it, no doubt fruit trees will also succeed.

SHIPPING APPLES.

97. SIR,—Would you please give the different methods, and proceedings in each method, of shipping apples to the old country, especially with regard to railways and steamships?—A. M. MONRO, *Glanworth, Ont.*

There is no great secret in exporting ones own apples to the old country markets. The first great point is to secure a good and reliable house in Great Britain to buy or to handle your fruit. There are plenty of these, and some of them advertise in our journal. It would of course have been better to have opened up a correspondence with the house, to which you intend shipping, in advance ;

but this is not necessary, for in most cases the best will be done for you. You need not necessarily mark the shippers' address on the packages ; many only use their own particular brand, by which their fruit is to be known in the markets, and the full name of the consignee only on the railway and steamship way bills. At most of the G.T.R. and C.P.R. stations through shipping bills can be made out to the principal cities in England ; but if you want your fruit to have especial attention on the journey, so as to arrive in the best possible condition, you would do well to correspond in advance with one of those steamship companies which are making special provision for carrying apples, and then ship your fruit to their care, timing your shipments to arrive in time for the next steamer to leave. Some people seem to think it necessary to have a great quantity of fruit, in order to place it in the old country, but this is a mistake. The only point is to ship only the very best, and put it up in the best manner. We would warn our correspondent, however, that fortunes are not always made in the export of fruit, but that very often there are heavy losses to those who are green in the business, and sometimes even to the old and crafty shippers.

Open Letters

MAMMOTH CLUSTER, [HILBORN AND GREGG.

SIR,—In reply to Mr. Beall's note in your last issue, p. 275, comparing Mammoth Cluster, Hilborn and Gregg black caps,—as fruited here this season they ripened in the above order, with Gregg fully one week later than Hilborn and a trifle larger. Hilborn is first in quality and yield of the three, while Gregg is firmer and a better market berry. Mammoth Cluster did not compare with the others in yield. In quality was on a par with Gregg.—JOHN CRAIG, *Experimental Farm, Otakwa.*

CONGRATULATIONS FOR MR. P. C. DEMPSEY.

SIR,—I wish to offer my congratulations to our worthy and highly-esteemed ex-president, Mr. P. C. Dempsey, on his recent

escape from the hand of the would-be assassin. How would it do for Mr. Dempsey to present that hat, with the bullet-hole through it, at our next Association meeting as an example of the ravages of the *borer*? Could our esteemed ex-president and fellow-director now say that 'tis better to have been shot at and missed than never to have been shot at at all?—T.H.R.

THE PEAR ON ASH STOCK.

SIR,—In reference to pear stock grafted into mountain ash (see p. 263), would, you just permit me to say that five years ago I grafted four varieties of pear into a few thrifty young ash on my premises. The scions all united and grew the first year from six inches to two feet in length. The first winter thaw that came they all turned black as ink. A second trial and a thorough cut-

ting back in September proved no more successful. Pear on mountain ash evidently grows too tender and sappy to stand the winters of this country, and I think Mr. E. J. Phippin, of Park Hill, will find that to be the case, from his experiment.—T. H. RACE, *Mitchell*.

THE SPARROW NUISANCE.

SIR,—In reading the occasional articles and reports of discussions on the English sparrow nuisance appearing in the *HORTICULTURIST*, the Yearly Report, and in other papers, the idea has occurred to me that the most effective way to deal with this pest would be to attack him in the winter instead of in the summer months. Supposing a farmer or fruit grower who is badly troubled with sparrows were to feed them with grain around the house or barn-yard in the winter for a short time till they came to look regularly for their rations, and then change the diet to poisoned grain, the slaughter would be wholesale. Likewise in towns or cities, if the authorities would encourage them, as in time past, by building houses for them, and feeding them, and then suddenly change to poisoned feed, also in breeding time visit the houses and destroy the eggs or young birds, surely the numbers could be greatly reduced and with much less trouble, expense and danger than by fighting them in the summer. Perhaps some may take this hint and give the method a trial in the coming winter.—G. J. R., *Pentanguishene*.

NOTES FROM WEST MISSOURI.

SIR,—The apple crop in this section is a partial failure, caused by a blight which affected certain varieties, leaving others untouched. The Duchess of Oldenburg and Baldwin will have a full crop; the Northern Spy from 50 to 75 per cent.; the Red Astrachan, 20 oz., Snow Apple, Ribston Pippin, and Golden Russet, from 10 to 25 per cent.

Pears are a good crop, no blight of any kind touching either tree or fruit. The Doyenne D'Ete, Clapp's Favorite, Bartlett, Belle Lucrative, Flemish Beauty, Washington, Vicar of Wakefield, and other varieties being loaded with fruit.

Plums, on account of the curculio and the black knot, are little cultivated; still a few trees which were sprinkled with Paris green are bearing fruit.

Grapes are little cultivated here on account of the late spring frosts, which frequently destroy not only the fruit but also the foliage and young wood. This season has been favorable and the vines are well loaded with fruit, Moore's Early, Delaware, Concord, Worden, Jessica and others yielding a full crop.—JOHN M. MCATNSH, *West Missouri*.

THE FRUIT CROPS—CAUSE OF BLIGHT.

SIR,—THE destruction of the apple crop is no doubt due to the frost which occurred immediately before the blossom buds expanded, but apparently no such destructive effects followed as that which took effect on the pear trees. I only observed a few twigs affected. The Russian varieties are evidently better suited to resist the eccentricities of our fickle climate—even better than our native trees. I have not observed many in fruit; even the wild crab apple shows but a sparsity of fruit, an unusual circumstance. The Duchess of Oldenburg and Tefofsky have borne to excess, and the fruit very fine indeed. The Astrachan and Alexander bear well, so also the recently introduced Yellow Transparent, but unfortunately there are not many of these trees here in general cultivation, but are gradually gaining in favor.

Blight has seriously damaged the pear trees in this locality. Out of twenty varieties in my collection only two escaped, viz., the Beurre D'Anjou and Buffum. The Clapp's Favorite are completely destroyed—this variety being the worst and the Doyenne D'Ete and Elliott's Early nearly as bad, the others only partially affected, the least of which are the Bartlett and Seckel. Should the disease even be checked, it will take several years before the trees will assume a symmetrical appearance. I am now convinced that my theory of the cause of blight, viz., the late frosts, and subsequently fermentation by fungoid action, only a natural result. The trouble first originated in the injury to the nectary glands. Even the insects did not come near the blossoms as usual, simply because fermentation had commenced. It is not true in science that micropic fungus is the direct cause; it is only an effect following a cause, and that being a violation of natural laws, either by climatic influences or otherwise. No natural decomposition can take place without fermentation produced by fungoid action, this being their sphere in the economy of nature.

It is a scriptural truth as well as a scientific fact that "a little leaven leaveneth the whole lump." This is only fungoid action, and what I am afraid of is that the pear trees which have been even partially affected will yet be ruined.

All varieties of the cultivated plum are heavily laden with exceptionally fine fruit. The curculio scarcely made an appearance. In the neighboring gardens there is no fruit on the native or wild plum.

I may also state that little or no injury has been done to the small crop of apples by the codlin moth.—SIMON ROY, *Berlin*.

Our Markets

KINGSTON.

Peaches—\$1.50 to \$2. *Pears*—Bartletts, 75 cts to \$1; Duchess, 65 to 75 cts. *Plums*—\$1. *Grapes*—Concord, 2½ to 3 cts. per lb.; Delaware, 3 to 4 cts. per lb.; Niagara, 3 to 3½ cts. per lb.; Roger Red, 3 to 3½ cts. per lb. *Potatoes*—75 to 85 cts. per bag. *Cabbage*—40 to 60 cts. per dozen. *Cauliflowers*—\$2 per dozen. *Celery*—40 to 50 cts. per dozen.

MONTREAL.

Apples—Market decidedly improving. Maiden's Blush and Twenty Ounce \$3 to \$3.50 per barrel; Winter probably \$4 upward per barrel. *Grapes*—Concord, 3 to 4 cts. per lb.; Delaware, 5 cts. per lb.; Rogers and Niagaras, 4½ to 5 cts. per lb. *Pears*—Bartlett, 75 cts. to \$1.25 per 12-quart basket, \$7 to \$10 per barrel.

Market bare, prices rising.

OTTAWA.

Pears—Bartlett, \$1.10 to \$1.40 per 12-quart basket, \$9 to \$10 per barrel. *Apples*—Fall, \$2.75 to \$3 per barrel. *Grapes*—Rogers, 4 to 5 cts. per lb.; Delaware, 8 to 10 cts. per lb.; Concord, 3 cts. per lb.; Niagara, 4 to 5 cts. per lb.

GUELPH.

Grapes—Concords in good demand, 3 cts. per lb., with prospects of 3½ cts. for good No. 1 stock; Rogers, selling rather slow, 3 to 4½ cts. per lb.; Wordens, 3 cts. per lb.; Niagaras, 4 to 6 cts. per lb., as to quality; Delaware, 4 to 5 cts. per lb. *Peaches*—Scarce, selling at \$1.50 to \$2.25 per basket. *Pears*—Bartletts, getting scarce, good stock bringing 90 cts. to \$1 per basket, and selling well; all other varieties plentiful, and range from 40 cts. to \$1 per basket. *Quinces*—Coming in and sell rather slow yet, at 75 to 90 cts. per basket. *Plums*—A few coming, and find ready sale, 90 cts. to \$1.25 per basket. *Potatoes*—Almost over, but anything good sells well at 20 to 30 cts. per basket. *Cauliflower*—50 cts. to \$1 per doz. *Cabbage*—40 to 50 cts. per doz. heads. *Water Melons*—Sale over. *Musk Melons*—From 25 to 75 cts. per doz.

BRITISH MARKETS.

Apples—Fancy Kings, 35s. to 37s. per per barrel; Baldwins, 24s. to 24s. 6d. per barrel.

WINNIPEG WHOLESALE MARKET

September 23rd, 1890.

Grapes—Champion, 4 cts. per lb.; Concords, 5 cts. per lb.; Moore Early, 7 cts. per lb.; Warden, 6 cts. per lb.; Roger and Niagara, 8 cts. per lb. *Potatoes*—75 cts. per basket. *Pears*—90 cts. to \$1 per basket.

NEW YORK CITY.

The week opens with clear cool weather and with an over-stocked grape market. The apple market opens with a firm market with a good demand for all prime fruit, selling to-day as follows:—*Apples*—Kings, \$3.50 to \$4.25 per barrel; Gravenstein, \$4 to \$4.50 per barrel; Duchess of Oldenburg, \$3 to \$4 per barrel; Greenings, \$3 to \$4 per barrel. *Pears*—Bartletts, \$6 to \$8.50 per barrel and \$2 to \$3.50 per keg; Seckle, \$5 to \$7 per barrel and \$2 to \$3.50 per keg. *Peaches*—N. J., \$2 to \$2.25 per basket; Western, \$3 to \$4 per bushel. *Plums*—Green Gage, \$1.75 to \$2.25 per crt. *Cranberries*—Cape Cod, \$8 per barrel; Medin, \$6.50 to \$7.50 per barrel; Light, \$6 per barrel and \$2 to \$2.75 per box. *Grapes*—Delaware, 4 to 7 cts. per lb.; Niagara, 5 to 8 cts. per lb.; Concords, 2½ to 3½ cts. per lb.; Pocklington, 5 to 7 cts. per lb.; Marthas 3 to 4 cts. per lb. *Potatoes*—Rose, \$2 to \$2.25 per barrel; Blush and Queen, \$2 per barrel; Burbank, \$2 per barrel; Sweet, \$1.75 to \$1.87½ per barrel. *Onions*—Yellow, \$2.50 per barrel; Red, \$2.25 to \$2.50 per barrel. *Corn*—White, \$2 to \$3 per barrel; Red, \$2.50 to \$2.75 per barrel; Yellow, \$2.50 to \$2.75. *Pickles*—50 cts. to \$1.50 per 1,000. *Cabbage*—\$2 to \$3 barrel (100). *Corn*—\$1.25 per 100. *Cauliflowers*—75 cts. to \$3.50 per barrel. *Butter*—Creamery, 22 to 23 cts. per lb.; Dairy, 20 to 21 cts. per lb. *Cheese*—Fancy, 9½ cts. per lb. *Eggs*—Fresh, 22½ cts. per dozen. *Poultry*—Spring Chicks, 12½ to 13 cts. per lb.; Fowls, 14½ to 15 cts. per lb.; Turks, 11 to 13 cts. per lb.; Ducks, 60 to 80 cts. per pair. *Dried Fruit*—Apples, 16½ to 17 cts. per lb.; Cherries, 30 to 35 cts. per lb.; Raspberries, 31 to 32 cts. per lb.; Blackberries, 9 cts. per lb. *Beans*—Marrow, \$2.80 to \$2.85 per bushel; Red Kidney, \$3.50 to \$3.60 per bushel. *Hay*—65 to 70 cts. per cwt. *Straw*—80 to 85 cts. per cwt.

Markets reported by agents of N D.F.G. Stock Co. in various places:—Messrs. Vipond & McBride, Montreal; Mr. G. S. Palmer, 166 Reade St., New York; The Imperial Produce Co., Toronto, and H. Walker, Guelph.

LOVING THOUGHTS ON MR. CROIL.

A H, can it be, my friend is gone,
 No more he'll hail the "robin's song;"
 And the glory of the rising sun
 He'll hail no more; his journey's done!
 Sing on "wee birdies," sing his requiem,
 He's gone beyond our earthly ken;
 Great was his soul (his soul's still great)—
 Worthy was he on earth; he's worthy yet.
 Who knew him longest, loved him best;
 Love follows to his blissful rest;
 His life sublime, without a stain,
 And resolute his racy brain.
 No stranger to nature; or nature's end,
 For nature's Ruler was his friend;
 Sweetly may the lilies bloom
 Around his sacred, dreamless tomb.

GRANDMA GOWAN

Fruit Commission Men.

The Imperial Produce Company

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Fruit and Produce Brokers and Commission Agents.

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 Agencies throughout the United Kingdom.

Consignments of all kinds of FRUIT AND PRODUCE solicited for Toronto market.
 Shippers of Apples and Pears to our English Office during the ensuing season can rely upon
 good returns.
 Oct. 31.

1890

1890

TENTH ANNUAL CIRCULAR
OF THE
NIAGARA DISTRICT
Fruit Growers' Stock Co.
(LIMITED).

IN presenting you with the Company's Tenth Annual Circular we take this opportunity of thanking you for the liberal patronage extended to us in the past, and would most respectfully solicit a continuance of your shipments to our Agents this season.

We beg to apologize for the delay in issuing this season's circular, which delay was caused partly by the reorganization of the Company, through which the Company has more than doubled its number of stockholders, thereby largely increasing the stability of an institution which has always been admitted by the Fruit Growers of our province to be one of the most reliable and beneficial institutions yet established. We have already added one additional agency to our list, viz., Kingston, with a prospect of establishing one in Winnipeg if the fruit crops (which have not up to the present time maintained the promise of a few weeks ago) of the present season will warrant the Company in doing so. It is one of the prime objects of our Company, by establishing so many agencies, to cause the distribution of our fruits over as large an area as possible, thereby preventing "gluts" in our principal markets and maintaining prices.

The usual commission of ten per cent. for selling will be charged by the Company, and cheques will be issued every two weeks (or more frequently if desired) on the Imperial Bank, St. Catharines. To avoid errors and unnecessary delays in rendering "Sales Accounts," please write your Name and Post Office Address plainly upon each tag, and mark the number of packages in each shipment to each agency. Any shipper wishing to use a number instead of his name can do so by notifying the Secretary, who will forthwith allot him one.

We learn that some fruit growers and shippers have a wrong idea in reference to our Company, believing that only Members of the Company or Stockholders have a right to consign fruit to our agents, or that permission has to be obtained from the Company to consign to them. Now, we would say, for the information of such, that no such requirements are necessary. We solicit consignments from all shippers, and would be pleased to make every fruit grower and shipper a patron, promising on our part to use every endeavor to handle promptly and carefully all consignments and to render Account Sales with the least possible delay.

The Agencies of the present season are well equipped for doing a large business in a most satisfactory manner. Our agents are all experienced men, capable of filling the positions they occupy, as a glance at the following list of Agents will substantiate.

LIST OF AGENTS, AND AGENCIES NOW OPEN.

S. E. de la Ronde, agent for the city of Ottawa; Jos. Brown, agent for the city of Montreal; J. W. Brownlow, agent for the city of Toronto; J. B. Cairncross, agent for the city of London; Geo. Dudgeon, agent for the city of Guelph; B. Hare (late Ottawa agent), agent for the city of Kingston.

Shipping tags for all or any of the above agencies supplied free of charge upon application to the secretary or to any of the directors. A supply can also be had from any of the following stockholders, viz.: E. D. Smith, G. W. Cline, Winona; A. M. Smith, Roland Gregory, W. H. Bunting, J. H. Broderick, Andrew Haynes, St. Catharines; at express office, Winona; J. M. Clement's store, town of Niagara; INDEPENDENT Office, Grimsby; Express Office, Beamsville,

DIRECTORS.—E. J. WOOLVERTON, Grimsby, President and Manager; C. M. HONSBURGER, Jordan Station, Vice-President; D. VANUZER, Esq., Grimsby; E. A. GORING, Esq., St. Davids; AARON COLE, Esq., St. Catharines.

J. W. G. NELLES,

SEC.-TREAS., GRIMSBY.

July 4t.

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Account Sales with cheque weekly, or as desired. Consignments of Choice Fruit (via Glasgow) solicited.

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Consignments of Fruits and Produce Solicited. Satisfaction guaranteed; advice of sales daily; returns made weekly. Our facilities for handling fruit are unequalled. 6-12t.

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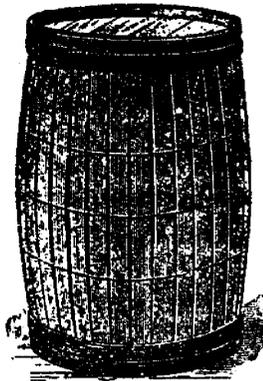
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