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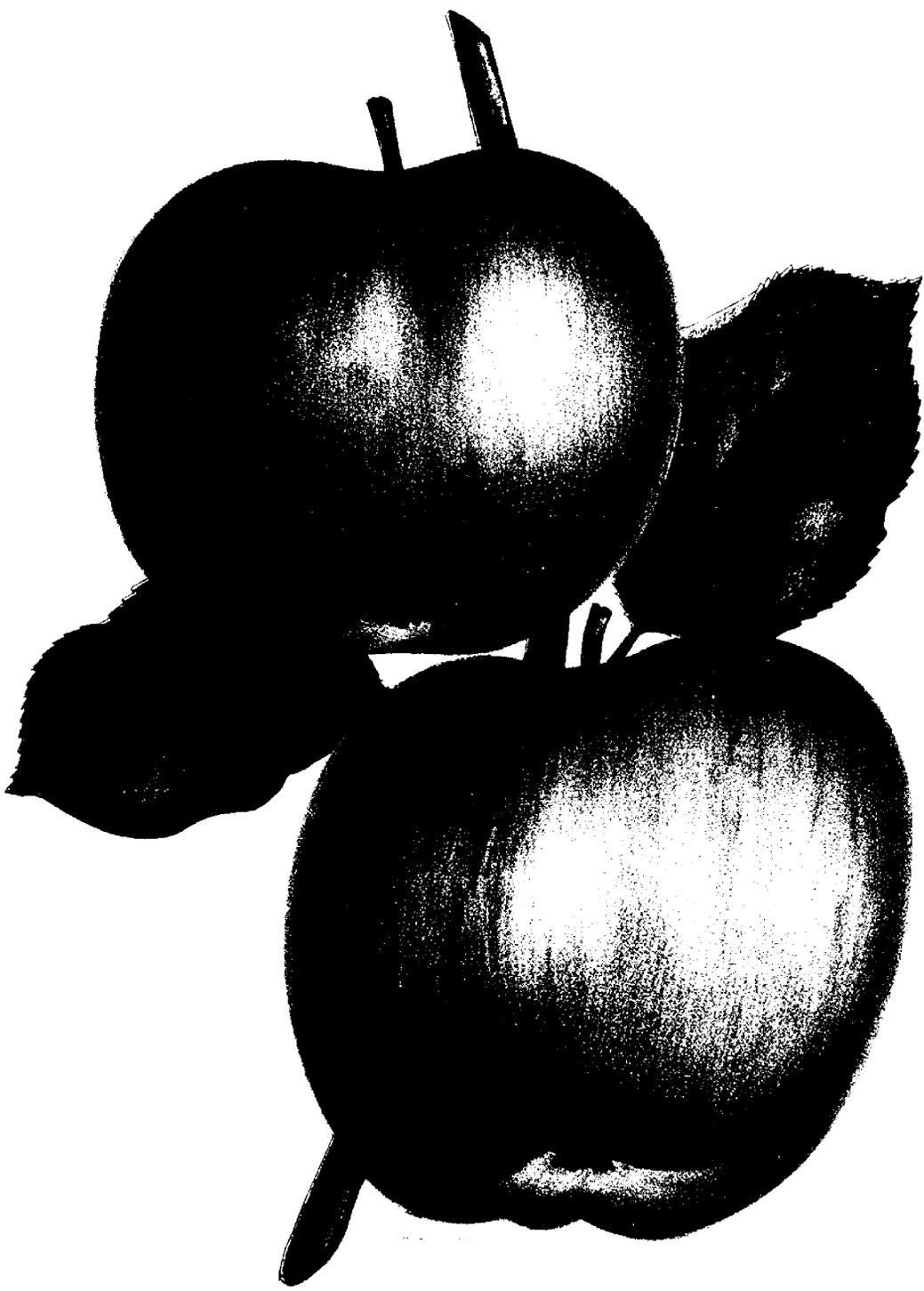
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YORK IMPERIAL.

THE
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THE YORK IMPERIAL.



HIS is an apple that has been grown with great success in Pennsylvania, where it originated. For a winter export apple it stands at the head of the list in that State, but of course it may not be adapted to the Province of Ontario. Mr. Van Deman commended it at the last meeting of the New York Fruit Growers, and said he believed it would succeed in New York State. The apple is

being tested by the Ontario Fruit Experiment Stations, and in due time a report of it will be given.

The following paragraph concerning this apple, appeared in Mr. Van Deman's report as U. S. Pomologist for 1891 :—

“ This notable winter apple, though not new in some sections, is deemed of so much value for both market and family use, and adapted to so large a territory as to deserve special attention. The variety originated at York, Pennsylvania, and was brought to public notice in 1855, but only before small Local Associations. In 1871 it received from the American Pomological Society very high commendations for cultivation in Pennsylvania, Virginia and Maryland. Since then it has been grown in nearly all the apple sections of the country, with remarkable success. It is one of the most popular kinds grown for market in the States above mentioned, and is often called in Virginia by the synonym of Johnson's Fine Winter. For several years I have noticed its good behaviour in the orchards of Kansas and Missouri. In Illinois and Indiana it does well, and also in California, where a few trees have been planted. There is not a market apple now known which is more worthy of being planted.

The tree is vigorous and well-shaped, forming a round head and being an abundant bearer, although not too productive. One objection to it is the peculiar oblique form of the fruit, which makes it difficult to pare on a machine. It may be described as follows:—Fruit in size medium to large; form, round or oblong, diameters nearly equal, angular, oblique; surface smooth, sometimes having russet patches; color, yellow, with indistinct red stripes over a lighter shaded red; basin, deep, wide, abrupt, regular or slightly plaited; eye, nearly closed; cavity, deep, narrow, russeted; stem, short; core, small, closed; seeds, numerous, small, plump; flesh, yellow, firm, juicy, a little coarse, flavor pleasant, sub-acid; quality, good to very good; season, December to spring in the central States."

THE FRUIT EXHIBIT AT THE INDUSTRIAL.



FIG. 998.—LORD ABERDEEN.

PERHAPS never before in the history of the Industrial Fair, was a finer collection of apples and pears shown than was placed upon the tables this year by Ontario Fruit Growers.

The Fruit Experiment Stations of Ontario also contributed largely to the interest of the fruit exhibit, by showing about six hundred and sixty varieties of fruit, some of them chemically preserved, and others fresh from the orchard.

In accordance with the instructions of the Board the Secretary, with the co-operation of the experimenters had put up 150 bottles of such fruits as could

not otherwise be kept, as cherries, berries, early peaches, and plums, gooseberries and currants. This exhibit was shown on shelves at the ends of the fruit tables and attracted a great deal of attention. The Secretary and Prof. Hutt, were on hand most of the time to answer enquiries and give information concerning experimental fruit growing. These two gentlemen are making a study of varieties, and are constituted by the Board a Committee of Nomenclature on fruits. The importance of such a committee is evident from the fact that even this year some varieties which were not true to name, had prizes awarded them by the judges.

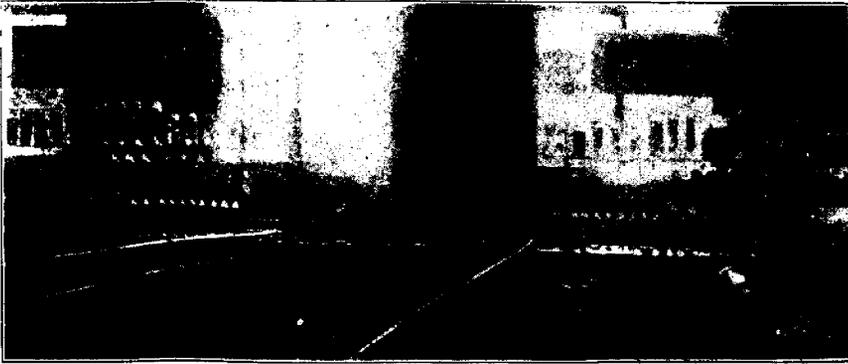


FIG. 999.—BOTTLED FRUIT AT THE INDUSTRIAL.

If the awards are any indication of the advantages of the various sections for fruit growing it would appear that the region of Hamilton and of the Bay of Quinte are foremost in merit. In the collection of forty varieties for example the 1st prize went to Hamilton, the 2nd to Burlington and the 3rd to Trenton; for the twenty varieties, the 1st prize went to Hamilton, the 2nd to Burlington and the 3rd to Trenton. Of the five varieties for export, the prizes were, 1st Burlington, 2nd Belleville, 3rd Hamilton, 4th Hamilton. Of the five for cooking the 1st prize went to Belleville, and of the five for dessert the 1st went to Burlington. Are these then the two rival sections, and are no others equal to them? No doubt many of our readers will dispute such an inference.

The five 1st prize varieties for cooking were King, Duchess, Spy, Ontario, and Greening; for Dessert, Spy, Spitzenberg, Ribston, Swazie Pomme Grise, and Fameuse; for export, Blenheim, Baldwin, Spy, King, Golden Russet.

Chief among the distinguished visitors to our fruit exhibit was His Excellency, Lord Aberdeen, who is himself a fruit grower, and evidently takes the deepest interest in this branch of industry.

The Minister of Agriculture for the Dominion, the Hon. Sidney Fisher, together with the Hon. John Dryden, Minister of Agriculture for Ontario, also visited and examined our fruit exhibit.

CO-OPERATION IN CANNING AND EVAPORATING.



WHETHER or not the canning industry in a community can be made to pay depends in large part upon the manner in which it is instituted and conducted. There is certainly room here for co-operation on the part of those who make a specialty of growing fruit and vegetables, but the wisest kind of judgment must be followed, and the best business management employed. Never has there been a time when the use of canned goods was more general than to-day. This mode of successfully preserving surplus fruits and vegetables at a time when there would otherwise be no adequate market for them, carries profit to an army of agriculturists. At the same time it benefits the consuming masses, providing desirable food products throughout the entire year at moderate cost.

That farmers may here successfully co-operate has been proved many times. For example, in one Connecticut town last season, two score farmers in this manner found a ready market for their product, which in turn was preserved in such unusually fine shape that the management readily sold all at figures decidedly above the market for ordinary canned goods. This factory, employs 80 to 100 people several months in the year, mostly members of farmers' families, and in September its weekly payroll was \$600. It puts up tomatoes, pickles, squash, onions, peppers, cauliflowers, apples and small fruits, the product last year including 20,000 cases of tomatoes (of 24 cans, each weighing three pounds), 1,200 bbls. catsup, 28,000 gals. of bottled preparations, and other stuff in proportion. The object is to make the best product possible, and farmers are encouraged to bring only choice vegetables and fruits to the factory. One man raised 1,213 bushels of first quality tomatoes on one acre, which, at 30c. per bushel, brought \$363.90, also 12 tons of squash from half an acre, at \$10 per ton.

We have consistently maintained, however, in former seasons, and again repeat it, that any community may well go slow about believing literally all the claims made by promoters, whose only purpose is to sell machinery and apparatus at high prices, perhaps loading down the local association with a burdensome debt sufficient to more than offset all profits for five years. There are plenty of reliable concerns with requisite machinery for a model canning plant, who will quote same, or erect and equip factories ready for use. Only use your judgment and avoid the impositions of those whose claims are not worthy of confidence. Evaporating of fruits and vegetables may also be done co-operatively, but usually it is better not to try to combine a cannary with an evaporating plant.

While considering the advisability of establishing a canning factory, do not lose sight of the market conditions in a broad sense. The fact must be recog-

nized that this industry, like many others, has during the past few years gone through a period of depression. Up to a couple of years ago production in some directions was greatly in excess of requirements, prices during the past season have been forced to phenomenally low levels, and the output of many factories finally marketed at less than cost. Last year, however, the total pack—especially of tomatoes—was much smaller, and now there is a prospect of consumption, speedily overtaking production. In this case, with prices to consumers low, and with a prospect of a speedy return of industrial activities, there ought to be an outlet for canned goods of every description, at prices remunerative to both growers and packers.—American Agriculturist.

NEWS FROM OUR AFFILIATED HORTICULTURAL SOCIETIES.

Napanee.



THE first annual show of the Horticultural Society was held Friday evening in the Town Hall. The Exhibition was in every way a marked success. The one drawback being the too brief period in which the show was open to the public. The display of plants and flowers was large and varied reflecting the highest credit on the exhibitors as to variety and beauty. The grouping was very effective showing great taste by the management. The floral decoration on some of the tables called for special praise. Besides the three main pyramids, were table-mantle, fire-place and piano decorations, all works of art. The table decoration and the sweet pea table were the work of Mrs. Herrington, Miss Leneau and Miss Christie Mill, the mantle decoration being the result of the taste of Mrs. Wright. During the evening the visitors to the show were treated to a choice programme of vocal and instrumental music. Miss L. Daly, the well known soprano, sang in her accustomed beautiful style. Mr. Willie Rockwell gave a solo with fine effect. Mr. J. F. Tilley our popular basso, contributed two numbers. The three Messrs. Rockwell were heartily encored after the rendering of "The Sea." Miss Laura Ward acted as accompanist and also played an instrumental piece. The minute dance by four young ladies beautifully dressed to represent the seasons was simply bewitching; Miss Murdock, represented spring; Miss Pollard, summer; Miss Bristol, autumn and Miss Ward, winter. The show was a pleasant surprise to all and its great success has induced the Society to consider the proposal for the holding next year of a two days' exhibition in a larger building if obtainable. Almost double the exhibit could have been made if space had been obtainable, and it is to be noted that it was members of the Society only who had contributed. The whole undertaking was the result of the work of the directors, assisted by

various members of the Horticultural Society. The present directors are Mrs. Wilkinson, President ; Mr. T. M. Henry, Vice-President ; Mr. J. E. Herring, Sec-Treas., and Mesdames Wright, Mill, Richardson, McNeill and Messrs. Bowerman, Herrington, Lloyd, Harmer and Ward.—Star.

Waterloo.

The Annual Exhibition of the Waterloo Horticultural Society, which was held on the 20th and 21st ult., was successful beyond the expectation of those most interested in its success. All the available room in the Town Hall was covered with flowers, fruit and vegetables. About four-fifths of the bench room was occupied by flowers—some 300 exhibits—consisting of cut flowers shown singly and in bunches of from two or three to a dozen or twenty specimens in each receptacle, and also of plants in pots. These great masses of bloom were so arranged in connection with the large number of plants in pots, so mingled with the gorgeous foliage plants, as to produce the most pleasing effects, the beauty of which was thoroughly appreciated by the large concourse of visitors who thronged the Hall on both evenings.

This exhibition differs from most horticultural shows, in having a more abundant floral display and in the absence of that formality of arrangement of the different classes and varieties essential to a well-ordered competitive exhibition. Here, no prizes are offered for competition, and no fee is charged for admission. The public at large are invited to be present and every one is admitted free.

In the Hall there are no constables to cry "Hands off," when a visitor gets a little too near the benches, and whose only other duty, generally, is to *prevent visitors from examining the exhibits*. Here, instead of these gentry, may be found James Lockie, Esq., the energetic and indefatigable President of the Society ; Mrs. Hohmeier, the Vice-President ; Mr. Raymo, the Secretary ; Mrs. Dr. Webb, Mr. Bolduc, Mrs. Bruce, and others of the Directors, together with Miss Maggie Bruce, to whom had been wisely given the entire superintendence of the floral decoration ; all in their places, giving every information required respecting the exhibits. And, I scarcely need add, the visitors gladly availed themselves of this opportunity to acquire a great deal of valuable knowledge respecting the cultivation and peculiarities of growth of many, to them, new flowers.

All the exhibits are contributed by the members of the Society and other residents of the town. The expense incurred in placing the exhibits on the benches, and returning them (when necessary) to the owners, is borne by the Society, and the free admission of the public is regarded by the Board of Directors as in some sense an equivalent for the large grant from the public funds given by the Provincial Government.

The Waterloo Society this year consists of 125 members, who each pay one dollar only. For this small fee every member has received the CANADIAN HORTICULTURIST and all other the privileges of membership in the Fruit Growers' Association of Ontario, as well as the additional privilege of a free lecture on practical Horticulture by Dr. Beadle, of Toronto. Also their choice of either of the following premiums:—1st. One tree each Wilder Early pear, McLaughlin plum and Montgomery cherry. 2nd. One each spirea van Houtti, Gen. Jacqueminot rose, and clematis paniculata. 3rd. Six cannas, twenty gladioli, and two dahlias. 4th. Twelve house plants, assorted. And each member is yet to receive twelve of the best hyacinth bulbs that can be obtained.

The improvements that have taken place in the cottage homes of Waterloo during the past summer, through the influence of this Society, is very marked, and gives ample proof that the plan of conducting the affairs of Horticultural Societies, where every member receives an equal share of the advantages of such associations, commends itself as being infinitely superior to the old system of using all its money in holding a competitive exhibition, whereby about one-tenth of its members generally share between them ninety-nine per cent. of its funds, while the remaining nine-tenths receive no advantages whatever.

Lindsay, August, 1896.

THOS. BEALL.

A HAND APPLE PICKER.

As the season for picking winter apples is now on, orchardists will find the illustrated picker of great service in reaching the fruit on extended limbs. One man can stand under a tree and pick nearly all the fruit from the tree, including the hardest to get at—that on the ends of the branches. The frame is made of heavy wire, or light round iron, and a sack of heavy cloth sewn to the frame, leaving the slots at each end so that an apple will be free to enter the sack. Then all you have to do is to push or pull, and the apple drops into the sack. I have one with a fourteen-foot and another with a six-foot handle. The wire from A to B is eight inches wide, from C to D ten inches. The slots at C and D are three inches long and an inch wide. The handle or pole may be of any desired length.—American Agriculturist.

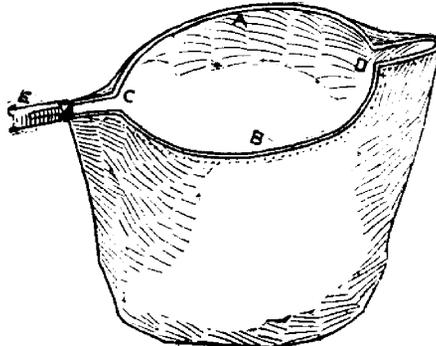


FIG. 1000.—FOR PICKING FRUIT WITHOUT BRUISING.

DUTCH BULBS.



HE frost having put the finishing touch to the work of the summer season, now is the time to commence for next spring. Get your beds in readiness for everything you intend to plant; then put in your bulbs without delay. If your plants are not already laid, lay them; then carry out your designs.

Tulips, which are the most showy of spring flowers, may be planted now; it is better they should; however they can be safely put out next month. Make the soil good and rich, work it deep, then put in your bulbs, six inches apart each way, and cover them with four inches of good soil. Be sure to have a bed of Parrot Tulips, which are, botanically, monstrosities; from the florist's standpoint, sports; but from the amateur's standpoint, simply gorgeous. While Tulips are the most hardy of all bulbs, in this climate, where freezing and thawing alternate so rapidly, and in such a marked degree, it will pay well to mulch the bed sufficiently to prevent this.

Hyacinths can and should be planted now. Every day's delay detracts from their usefulness and from the pleasure you receive from growing them. Plant in good soil, and cover with four inches of the same. Then mulch so thoroughly that frost cannot reach them. This you *must do* if you hope to be successful. In selecting, exercise your own taste so far as color is concerned, and also as regards the double and single forms. Buy good bulbs, cheaply if you can, but under no circumstances buy *cheap* bulbs. For bedding purposes, the second or third size is the best, as they will last longer without breaking up; but for pots or glasses get the best only.

Crocuses *must* be planted at once, if at all. It is no use to plant them after they commence growing; they will be sure to disappoint you if you do. Lift up the sod in places on the lawn and put them in promiscuously; they will make it cheerful in spring. Plant them in every sunny nook; they will bring plenty of sunshine with them. If their room is wanted for other things, throw them away after flowering; their one season of beauty will more than repay their cost.

Crown Imperials should have a place in every garden, and it should be a sunny place, as they are about the first to appear in spring. They are heroic resolutions in leaf and stem as they push themselves out of the ground after the first few days of encouraging growth; and no amount of frost will check their energies after once starting. But mulch them; they do not like to sleep through winter in a frozen bed.—American Gardening.



FIG. 1001.—PARROT TULIP.

THE APPLE TREE BORER (*SAPERDA CANDIDA*) IN MUSKOKA.



INTNER, in his first New York report, gives a list of one hundred and seventy-six insects more or less injurious to the apple tree. Many of these are only accidental feeders, and several are not Canadian. However, two of the most destructive species, *Ædemasia concinna* (the red-humped apple tree caterpillar), and *Saperda candida* (the striped apple tree borer), are very common throughout northern Ontario, and one of these, the borer (beetle) is the principal cause of the failure of apple culture in Muskoka. Although often catalogued as a Canadian apple tree pest, it was not reported as being very injurious in the front counties of Ontario; in fact, it was rare, and entomologists found some difficulty in procuring a good series of cabinet specimens. But so abundant is this insect in Muskoka, that in the ovipositing season (June) fifty specimens may be taken from the trunk of one small apple tree. The natural habitat of this borer is our native cherry trees, *Prunus serotina* and *Prunus pennsylvanica*, and as these abound along roadsides and over burnt-over lands throughout Muskoka, of course this accounts for the beetle being so numerous.

The settlers have made laudable and persistent efforts in the way of purchasing trees and planting orchards, with very little result, and the consequent loss to the country is probably one million of dollars.

These native cherry trees are of no value, not even as shade trees, and as they are infested with the borer larvæ, the first suggestion is to cut them down and burn them, either in the fall or before the beetles emerge in the spring. One or two days' work from every settler would perhaps be quite sufficient. Fifty pairs of beetles to each wild cherry tree is no doubt a moderate estimate, and as they take very readily to apple trees, in fact, seem to prefer them, the great danger to orchards is readily seen.

The whole question of fruit raising in Muskoka is one of very great importance, and deserving of a special, full and careful investigation by the agricultural authorities.

Toronto, August, 1896.

W. BRODIE.

Unfermented Wine.—Weigh the grapes picked from the stems. Mash to break skins. Put in a porcelain kettle, add a very little water, cook till stones and pulp separates; press and strain through a thick cloth, return juice to kettle, and add 3 lbs. sugar to every 10 lbs. grapes; heat to simmering, bottle hot, and seal. This makes one gallon and is good.—Practical Housekeeping.

THE STARLING.

SIR,—Referring to the correspondence published on page 134 of your journal for May, 1891, on the subject of the Starling as a desirable bird to have introduced into this country, I have again satisfaction in sending you herewith a cutting from a recent issue of a London, Eng., paper, which contains an extract from the Report of the Highland Agricultural Society of Scotland on the same subject.

Mr. Gilmour observes :—“The result of the investigation confirms me in the opinion I have long held—that rooks in the enormous quantities in which we have them in counties such as Fife do an immense amount of damage, and I would urge those who have the control of rookeries to see that the numbers of their inmates are kept within reasonable limits.” The starling comes out of the ordeal with a creditable record. The inquiry shows that about three-fourths of this bird’s food is insect—largely of the injurious class—and one-fifth grain, while there was no trace of any other crop being touched. Summarising the results of the whole inquiry, Professor McAlpine says :—“If this estimate is correct, as it certainly appears to be, there can be little hesitation regarding the starling. He is a bird rather to be fostered than destroyed ; he is a benefactor rather than a foe to the farmer. Of the pigeon it may be said that he is an unmitigated scoundrel ; of the rook that he is a cunning rogue ; but of the starling we can say with truth that he is our natural friend, by habit and by instinct.”

I have not observed that the matter has been discussed at all at any of your meetings. In view of what Mr. Gilmour says in his report concerning this bird, I would suppose it to be well worthy of the attention of our Association.

Annapolis, N. S.

E. D. ARNAUD.

IRRIGATION.

SIR,—I might say, in answer to Mr. H. Picket’s inquiry, *re* irrigation, that I have irrigated an eight-acre apple orchard for years, and have found it of great advantage almost every year, and especially a summer like the one a year ago. The fruit is much larger, and the trees will make a good growth of wood, even when they are heavily loaded with fruit. A glance at the foliage would convince any person, during a dry summer, of its benefits. My mode of applying is quite simple. The orchard is on a mountain side ; three springs rise at the top, and by ditches I convey the water to wherever wanted. I watered twice during the dry spell in the early part of this season, and my young trees have kept growing right along. Trees planted one year ago have made over two feet of wood this season.

One other subject I would like to mention, which I have been watching carefully since I noticed Mr. Caston mentioned it, and that is crutch rot of the

Spy apple tree. I feel satisfied it is caused by the old bark lodging in the crutch of the trees. The Spy is a very upright grower, and only in that kind of a crutch have I found the least sign of the bark showing signs of rot wherever the branches are at an angle of forty-five degrees, or nearer a right angle. Spys are all right; the old bark should be carefully scraped out, if not at the age he mentioned (about sixteen years), it will be found that the green bark has rotted away and the wood begins to decay.

Vandeleur.

J. I. GRAHAM.

APPLE PICKING AND PACKING.



OW that the vexed question of the size of apple barrels is finally settled (the larger being universally adopted), the manner of harvesting these immense crops the most expeditiously, and with least expense during the shorter days of uncertain autumn weather, should be considered. As now generally practised—picking each apple separately—it is necessarily slow, laborious and expensive. But thanks to the Yankee ingenuity the needs of this emergency, like many others seems to be successfully met. A prominent and extensive fruit grower of Genesee county has invented and quite satisfactorily used for two seasons an apparatus constructed of canvas, resembling somewhat that of an inverted umbrella, into which the fruit is shaken from the tree. And from an aperture in the smaller and lower part, it is deposited in a basket, to be carried away and assorted. While many are prejudiced against shaking winter fruit from trees under any consideration, the sales of fruits at different periods during the season gathered in this manner, the condition, relative to its keeping qualities, and the prices obtained, prove that in the harvesting the fruit of the extensive apple orchards of western New York, and other parts of our country, hand picking as generally practised, is now hopefully being superseded.

The ease and convenience in assorting apples can be greatly enhanced by using a table constructed for the purpose as follows: Length 7 feet, width $3\frac{1}{2}$ feet, height 3 feet. The top should consist of canvas or oilcloth securely nailed to the frame, strips three inches wide of inch stuff, and, for convenience, openings should be left in each corner large enough to admit a half bushel basket. These rest on supports fastened to the legs of the table, the latter being made three inches wide and two inches thick, all well braced. The writer can vouch for the ease, comfort and facility of the work performed by its aid, and could not be induced to return to the tiresome, back-aching method of sorting on the ground. Not being patented they are free to all, and are truly a great acquisition, not only in the apple orchard, but are desirable for handling pears and quinces as well.—Farm and Vineyard.

ABOUT CIDER AND VINEGAR.

The best cider vinegar is made without the addition of water. It takes this more than a year to make, and then it is too strong for ordinary use, and should be mixed with one third, more or less, of water. Nothing else should be added. If the cider is left in barrels, covered with a cloth, until vinous fermentation ceases it will shorten the time somewhat. But a good vinegar cannot be made in a day.

A good way is to fill a barrel up to the bung with cider and rainwater in the proportion of one gallon of rainwater to two of cider, and store in a warm place. Acetic fermentation will be hastened by scalding the barrel with boiling vinegar before filling. So also will a few strips of folded brown paper saturated with molasses. The vinegar, after being fully fermented should be drawn off from the mother and put into another cask.

Another good way to make cider vinegar is to take ten gallons of apple juice fresh from the press and let it ferment fully, which will be in about two weeks, or sooner if kept warm; then add eight gallons new cider, for producing a second fermentation, and in two weeks add a like quantity for a third fermentation. This last is sufficient. Then stop the bung-hole, which should have been covered with gauze to keep out insects, with an empty bottle with the neck downward, and expose it to the sun for some time. When the vinegar is come, draw off one half into a vinegar cask and set it in a cool place above ground for use when clear. With the other half in the first cask proceed to make more vinegar in the same way. Thus one cask is to make in, the other to use from. When making the vinegar, let there be a moderate degree of heat and free access of external air. The process may be hastened by adding to the cider, when you have it, a quantity of the "mother" of vinegar, as it is called—a whitish, ropy coagulum, of a mucilaginous appearance, which is formed in the vinegar and acts as a ferment. The strength of vinegar depends on the amount of sugar or starchy matter to be ultimately converted into acetic acid.—Fruit Growers' Journal.

Pruning should not be commenced until the vine has become thoroughly dormant, say about the middle of November. Our object during the summer has been not to grow any superfluous wood, so in pruning we should leave only such canes as are needed to renew the parent vine. Trim all laterals not required back to two buds, and see that the vine is securely fastened to its support when not layered for the winter. It is a good practice to rake up all grape foliage and trimmings, and burn them. Whatever disease there may be present will be most likely to be found on the foliage and tender shoots. Throw a light covering of evergreen boughs, corn stalks or coarse, strawy manure around the roots for winter and let them rest.—The American Cultivator.

OUR APPLE MARKETS.

Messrs. Jas. Adam, Son & Co., of Liverpool, write:—

SIR,—As customary, we once more take pleasure in reporting on the prospects for American and Canadian apples, as viewed from present aspects.

From what we can gather, it would appear as if home supplies were going to be on a moderate scale, as although reports from some of the growing districts indicate an average yield, those from others, and these the principal from which marketable supplies are available, speak of a light crop.

On the Continent, also, some sections are very short of apples, but in others there are plenty of good quality, whence quantities will inevitably find their way to this country. These, of course, may to some extent affect the sale of transatlantic growths, but, as a rule, home and Continental supplies do not count for so much as is generally supposed, when the fruit from your side is of *good quality*, and, if reports prove true, that such is the case this year, we look for a good and active demand throughout the season.

In view, however, of the large crops reported from the States and Canada, it cannot be expected that prices will rule high, and we hope at the outset that shippers will not be induced to pay too much in the orchard. Great care, moreover, should be given to the grading and packing of the fruit, as the cost of shipping and handling is identically the same on a poor as on a good barrel, while the larger operators will do well to see that the best keeping varieties only are held over for shipment in the spring.

Messrs. M. H. Peterson, Liverpool, write:—

SIR,—We beg to submit for your perusal and guidance our ideas regarding the indications of this year's apple crop and prospects, formed both from observation and from reports by us received from reliable correspondents from various apple producing sections wherever apples are grown.

Great Britain.—Appreciably less than last year, as from 392 reports received, only 75 are above average, while 152 are average, and 165 under average; while last year, from 371 reports received, 160 were over average, 161 average, and 50 under average.

It is true Ireland has quite a crop of apples, but these do not seriously compete with apples from this side.

Continent.—Germany and Holland.—About one-third of an average crop, with late varieties preponderating.

France and Belgium.—Late kinds short, and early sorts in fair supply, except along the Franco-Belgian frontier, where there is quite a crop.

Portugal.—A promising crop, of good quality.

Italy.—A fair crop, which, however, is usually not sent to Great Britain until January or February.

United States.—New England States, New York and Michigan the largest

crop in years, mostly of good quality. Ohio, Pennsylvania, Indiana, Illinois, Iowa and Wisconsin a fair crop. Missouri and Kansas considerably less than last year.

Canada.—*Nova Scotia* a large crop of good quality—many young orchards just commencing to bear are well loaded. *Ontario* will also have a large crop, of generally good quality. In one county alone, all estimates received state the yield will not be less than 500,000 barrels.

One can readily understand that this season, so far as this side is concerned, the large yield is in the portions which naturally and usually export to Great Britain. The United States are supplied much beyond their requirements, and from many quarters comes the enquiry, what is to become of this year's enormous apple crop?

The only accessible market which has not a sufficient home supply is again, this season, Great Britain; but different sections from this side could, if shipments were freely sent, swamp this market, and the great question therefore is, how are we to market this enormous crop with the least sacrifice to growers and buyers?

Great Britain can take a large quantity of choice apples, properly graded and carefully packed, at a low first price; and should anyone not rigorously observe this rule this season, it seems almost inevitable that results must be unfortunate. In estimating this season's prospects, bear in mind that there is a large amount of freight to be moved out of the country, and as the cost of transportation is a most important element, in reckoning on the cost of the package before the fruit is marketed, advise yourself before concluding the price the market will stand, what the through freight probably will be.

As a matter of fact, the through rate at present quoted is considerably higher than for a few years back, and as these rates are variable and quite liable to advance, the purchasing question is not an easy one. We would remind buyers that it is dangerous this season to be misled by glowing accounts of the probable market price to be realized for apples, so apt to be sent out by would-be receivers, who cannot possibly appreciate the immense crop on this side.

Remember large losses quickly swallow many small profits with sad experience the only residue.

We, of course, base our remarks upon the indications as they are to-day barring wind and hailstorms, and dropping through heat or other unforeseen causes which might, and sometimes do occur. At present this season has all the *earmarks* of a *cautious year*.

We would, therefore, again this season, urge *buyers* and *shippers* to be *most conservative* in their operations, only *handling hand-picked fruit, carefully graded and properly packed*, by *experienced packers*, at *reasonably low first cost*. There is an abundance of choice fruit for all, and anyone basing his operations on excitement, rivalry or unfounded rumours, cannot hope for a satisfactory season. Remember the freight and carrying charges are as much on a poor as a good barrel of apples.

Guard against handling a quantity of apples greater than you yourself or some one of experience, in whom you have confidence, can personally oversee. There cannot be an outlet without consumption, and consumption to be at all commensurate with our enormous yield, must be at a low price. We have the supply, and the demand depends entirely upon the quantity, quality and cost.

Messrs. Simons, Jacobs & Co., of Glasgow, write :

SIR,—We cannot too strongly urge upon shippers the necessity of only shipping the very best fruit and having it properly graded and packed for export. Packing that ordinarily does for home trade will not do for export

Selling as we have done for a number of years past one-third of the total exports of apples from America, we thoroughly appreciate the importance of proper handling and packing for export. While there are many shippers who understand how to pack, yet there are many who do not, and, with a probability of a large number of new shippers engaging in the export trade this season, we beg to offer a few suggestions that may be profitably followed :

Only use the full-sized standard apple barrel. Do not pack apples that have been picked with a club, because prices are low. If possible, do not pack apples that have been piled on the ground for the sun, dews, rains, and extreme changes in temperature to unduly ripen. Any person who will take the trouble to compare apples that have been exposed to these influences with those of the same kind that have not been will readily understand why we strongly condemn the very common practice of leaving apples on the ground a day or two before packing. Select and carefully grade the fruit, putting in nothing bruised or defective. When packing, face the barrel (stems down) with a fair sample of the fruit which it is to contain. Upon this facing or layer place by hand, about a half bushel of apples in the shape of a cone or pyramid, then commence filling. After each basketful, jar the barrel to make the fruit settle well together. When the barrel is about half full put in the racking head (a padded piece of wood a little less in diameter than the barrel head) and thoroughly rack the barrel. Continue filling as before till the barrel is full, then tail up, that is, turn each apple stem end up, again putting on the racking head, holding it in position with the hands, and thoroughly rack the barrel again. After the racking has been done the fruit should be just about level with the top of the chime, and with a little straightening up the pressed ends should look almost the same as the faced. Thorough racking obviates the need of heavy pressing and prevents the barrels from becoming slack through the decay of the crushed fruit.

Teddy brought a green caterpillar in from the garden the other day, and showing it to his mother, he exclaimed, "I've got a big worm, mamma, but he ain't ripe yet."—Harper's Round table.

THE ELBERTA PEACH.



AMONG the whole list of peaches, both old and new, there is no variety that has attained a higher place in public estimation than the Elberta. It is liked equally well by the grower and consumer. About 25 years ago Dr. Samuel H. Rumph, of Georgia, raised about 12,000 seedling peach trees from seeds saved from the very choicest named varieties, and in the whole lot there was but one that he deemed worthy enough to be preserved. This was the product of a cross between the Chinese Cling and Crawford Early. He bestowed upon it the name Elberta, in honor of his wife, and it has in turn been an honor to its namesake. Knowing something and hoping more of its good qualities, he planted extensive orchards of it, from which he shipped large quantities of choice fruit, and realized profitable returns. It was not long before other peach growers learned of the good qualities of the Elberta, and began to plant it; first in the Southern States, where it had already proved its value beyond question, and then in the northern peach-growing sections. It has proved to be one of the standards in all regions from Georgia to Michigan, and from Connecticut to California. The tree is vigorous enough to make a good orchard tree, spreading in habit, and has large leaves, somewhat like its parent, and is as hardy in tree and bud as the average of varieties. It ripens its fruit a little before mid-season, or about with Old Mixon Free. The fruit is above the average in size and oval in shape, with a suture on one side. The color is lemon yellow, a blush on the sunny side. The flesh is rather pale yellow, tender and juicy, yet firm enough to ship well. In flavor there is nothing lacking. Altogether, there is, perhaps, at the present time no peach, for all sections and all purposes, quite so valuable as the Elberta.—H. E. Van Deman in Horticulture.

THE TETOFSKY APPLE.

Judging from an article in the Home Farm, this apple is singularly little known in Maine, though it has been in New England all of forty years. The Home Farm says it is one of the best Russians in quality, and a correspondent thinks it quite an acquisition as an early apple. In comparison with the Yellow Transparent, the Tetofsky is "nowhere" among the Russian sorts, either in quality, size, beauty or earliness. It is not a bad apple to eat raw or cooked, and is productive, but it has the very serious fault of dropping nearly its whole crop prematurely, owing to the fact that it grows in clusters on short spurs, something like those of the pear. It is, however, a most excellent variety to use as a stock for better sorts, especially those late in coming to bearing, or a little tender against severe cold. The Wealthy, like the Baldwin, is proving not to have a sound trunk when grafted or budded low, and the Tetofsky is an excellent stock to graft that, the Fameuse, or any other better apple on. In this respect it is far superior to the crabs.

H.

USES OF PLASTER.

There seems to be an opinion prevalent with many that as plaster or sulphate of lime does not enter largely into the composition of plants, it can be of but little use as a fertilizer. They do not consider that there are substances which, while they do not contribute directly to the growth of plants, have chemical or mechanical properties that play a very important part in vegetation. Plaster has both of these properties. As a disinfectant and deodorizer it is one of the best, as well as cheapest, substances at our command. Any one who has kept stock of any kind stabled during the warm summer months, knows what a hard task it is to keep their apartments clean and odorless. Now, if they will keep a barrel of fresh-ground plaster in a convenient corner, and every day, on sweeping the floor clean, sprinkle it freely with the plaster, it will absorb all disagreeable, noxious odors, rendering the air sweet and pure, while the value of the manure will be greatly enhanced by the retention of the ammonia. Poultry-houses should also be swept clean at least twice a week in summer, and once a week in winter, and the floors sprinkled with plaster; it will add greatly to the value of the manure, and the satisfaction of having clean, sweet, odorless coops and healthy flocks, will abundantly pay expenses. Try it and be convinced.—American Agriculturist.

GRAPE JUICE.

When the grapes are at the best for eating, they are just right for juice. They should be fully ripe. Wash in a colander, and then strip from the stems, throwing out all faulty ones. Put them into a fruit kettle with nearly enough water to cover; a good rule, is two quarts of water to six quarts of stripped grapes; if barely ripe take a little less water; no sugar is needed. Skim when they begin to boil, heating slowly, and when the whole mass is boiling hot, strain through a flannel or cheese cloth; a thin muslin like that used for flour sacks will do. This gives the clear juice, with very little pulp. When no more juice will run through, put the seeds and skins into a coarse linen bag, or one of ordinary cheese-cloth, and express the remainder; a jelly squeezer would answer, but it is sure to discolor, more or less. Add no sugar. The less the fruit (or juice) is cooked, the brighter the color and the better the flavor; like all the small or tender fruits, it is injured by long or rapid boiling; the color becomes dark, and the fine, fresh flavor is gone. After straining and squeezing, put all the liquid back into the kettle, let it come slowly to a boil, and then remove from the fire or seal in cans. This juice put into glass cans or bottles.

✻ Flower Garden and Lawn. ✻

CLEMATIS VIRGINIANA (VIRGIN'S BOWER.)

FEW of our readers, even among those who belong to our affiliated Horticultural Societies, are aware that we have in Ontario a native variety of Clematis which is sufficiently hardy to be grown even in our Northern sections. Some years ago we received some plants of it from Mr. J. P. Cockburn, of Gravenhurst, and these have thrived wonderfully well, covering a portion of the front porch as seen in our engraving. (Fig. 1002.)



FIG. 1002.—PORCH COVERED WITH VIRGIN'S BOWER.

The flowers are white and small, compared with many foreign varieties, but are so numerous as almost to cover the vine, and grows in panicles as shown in Fig. 1003. These come on the new wood in June and July, and in August the

flowers are succeeded by numerous carpels, with long tails, as shown in Fig. 1004, and which are also ornamented. The leaves of the Virgin's Bower are alternate, and each leaflet is acute heart-shaped, and coarsely toothed, and often cut in deep lobes. The vine grows stronger each year, and will reach up fifteen or twenty feet.



FIG. 1003.—BUNCH OF FLOWERS.

The pronunciation of the word clematis is not uniform. People in the United States incorrectly say clemat'is, while many in Canada as incorrectly say clemat'is. Mr. Nicholson, of Kew Gardens, one of the best authorities on gardening, gives cle'matis as being most correct, following the derivation from



FIG. 1001.—A BUNCH OF CARPELS.

the Greek *κλημα*, a vine branch. The best usage, however, and the authority of Webster, and of the Standard, is *clem'atis*, which therefore we will follow.

A BELT OF YUCCAS.

This yucca is a capital plant for amateurs to grow because it "lasts for ever," and it is always neat in appearance, except for a few dead leaves that can be pulled off, and does not spread out of bounds; and its flowers are bold, conspicuous and showy, and it blooms at mid-summer, a time of year when we want something striking in our gardens.

There are several varieties of it differing from one another in the stiffness or threadiness of their leaves, the size, fullness and whiteness of their flowers and their taller spikes. One can see the difference between them in that, while the majority of the flower spikes run from four to six feet high, there are some clumps whose flower spikes are eight to ten feet high, and this character is permanent. And one of our prettiest hardy plants is the variegated-leaved form of this yucca. Its leaves are green, belted or streaked lengthwise with white.

Yucca angustifolia is hardy from New York south and makes handsome clumps three to four feet high. But the grand yucca *gloriosa*, which is the tree-like yucca so common in southern gardens is not hardy in the north.—
Gardening.

VIOLETS.



VIOLETS are known in Europe as the imperial flower. They belong to the pansy family (*Viola*). They express faithfulness, and this is perhaps why Bonaparte first adopted the violet as the imperial flower. The Paris Temps relates that before departing for the Island of Elba, Bonaparte was walking in the gardens of the Fontainebleau, accompanied by the Duc de Bessano and General Bertrand. The emperor was still uncertain whether he should offer resistance or betake himself into exile in peace. The Duc de Bessano was endeavoring to show him that it was now no time for drawing back. Greatly impressed by the objections of his secretary, Napoleon continued to walk up and down in silence. He had no reply to make, and he was seeking something to distract his attention from the embarrassment of his position. Suddenly he saw near him a pretty child of three or four years of age, who was picking violets, of which he had already made a little bunch. "My dear," said the emperor, "will you give me your nosegay?" "Certainly, sir," replied the lad, handing it to him with infinite grace. Bonaparte took the flowers, and kissed the child (whom he recognized as the son of a man employed about the chateau), and continued his walk. "Well, gentlemen," he said to his courtiers after a few minutes' silence, "what do you think of that child? This chance meeting seems to me like a piece of advice warning me for the future to imitate this modest flower. Yes, gentlemen, henceforward violets shall be the emblem of my desires." The emperor's adherents afterwards carried a bunch of violets in their hand, or wore them in their buttonhole when in season: this is how they recognized one another.



FIG. 1005.—BASKET OF FLOWERS.

There is no flower unless it is the rose, more prized by our ladies than English violets. The species known by this name is found all over Europe, in some parts of China and Japan. Marie Louise, dark blue, and Neapolitan, light blue, are the most in cultivation, Swanley White, has lately come to us from Europe, and is so much in demand in the cities that it is not very plenty yet. The single dark blue, Cæsar, is prized by many, but I cannot see that it has any special quality, unless it be profusion of bloom.

Violets have been recommended for house-blooming, but my experience is that they do not do well in the house on account of the dry atmosphere. If placed in a conservatory in the cool part, near the glass, they will give an abundance of bloom. The essential points for violets are a soil that is porous and at the same time has enough clay to retain nourishment, and low temperature, not over 40° by night, and 60° by day, with plenty of air in bright weather. --Farm and Home.

WALKS AND DRIVES IN PRIVATE GROUNDS.



In all places of sufficient extent or pretension to invite artistic design in the laying out of the grounds, the plan of the necessary walks and drives calls for careful study, in order to combine the greatest convenience in use with harmonious relation to the grounds as a whole. Even on places of only a few acres it is well to consider and sketch in advance of construction the elements of a satisfactory working plan of the roads and walks. Position and alignment depend chiefly on local conditions, but some general rules are more or less applicable to all cases, such as utility, convenience, proportion and construction.

For walks in nearly constant use, flagstones are preferable to gravel, especially in the immediate vicinity of buildings. Where flagging or concrete is too expensive, gravel is the material most usually available. Such a walk should have a foundation of 6 to 9 inches in depth, of stone chips or coarse gravel, to give it proper drainage in wet weather. The surface material should compact readily by rolling or by travel. The gravel must be fine enough not to be harsh or gritty under foot, yet not so fine as to be slimy after a shower. A slight crown on the middle is an advantage, and paved gutters should be provided if there be any stretch with a steep gradient. The width should be determined by convenience in use, 4 feet being required for two persons going abreast or passing each other but greater width may be demanded by other conditions.

Winding walks for pleasure only across open lawns, or along their borders, are unnecessary if the travel on such lines can be sustained by the greensward without damage. Walks made for show only are in bad taste because worse than useless. Such walks are sometimes surfaced with small pebbles of nearly uniform size, round, smooth and clean, but so loose that nobody can walk on them, until by neglect they become encased and cushioned with weedy grasses. All gravel walks in places where frequent hoeing and stirring are necessary to check such weeds are evidently of little use, and are of no value for ornament.

In private grounds walk and drive are often happily combined in one. The smooth wheel track makes an excellent path, and there is always room to give a vehicle the right of way without any risk of collision. Where no special advantage can be gained by using a separate path there is no incongruity in walking on the drive.

The proper width of the drive is determined by the conditions of its use. On short stretches where vehicles have no occasion to pass each other, eight feet may suffice, but otherwise fourteen to eighteen feet may be necessary, according to the general proportions of the adjacent grounds. Where a drive is so narrow as to confine the travel to one line, a gutter like groove will be worn along its center, if "one hoss shays" are in general use on it.

Such drives are usually constructed with a foundation of stone spalls on coarse gravel and surfaced with finer gravel or finely crushed stone. The cases are rare where a substantial macadam structure is built, but the principles governing the macadam process should be followed as closely as circumstances will permit. These may be briefly stated as a guide to the inexperienced.

The depth of structure should be sufficient when firmly compacted to support without yielding the heaviest loads likely to pass over it and to withstand displacements by frost. This will depend largely upon the nature of the subsoil and the drainage conditions in wet weather. The common depth for local drives varies from six to twelve inches, but there may be conditions where a depth of 18 inches is necessary. It may be naturally supposed that a depth of 18 inches is only three times as strong as a depth of 6 inches, but in reality it is nine times as strong. The pressure of a load spreads through the roadway in the form of a cone with its apex at the wheel. The area of the base of this cone increases as "the square of the depth." Thus if the depth of "macadam" be 6 inches, the weight at the bottom will be spread over 36 square inches. A depth of 12 inches will be four times as strong, and the bearing surface as the bottom will then be 144 square inches and so on.

When the structure is given a depth of 12 to 18 inches, the bottom half is usually built up with rough stones and spalls compactly placed, and the interstices filled with small stones. Over this to the surface grade is placed one or more layers of stone broken into angular cubes of one to two inches across. This is thoroughly rammed or rolled into place, and then covered with a thin layer of fine gravel, or fine screenings from a steam stone crusher. Where work of this kind is now done on a large scale, the macadam stone is all broken by machinery, and the material is thoroughly compressed by a steam road roller of 18 to 20 tons weight. Sprinkling carts are also used in further compacting the surface layer, and thus a smooth and hard driveway is at once secured.—Wm. McMillan, in *Gardening*.

The Myrtle.—Another "classic" is the Myrtle, *Myrtus communis*. It grows to be a large, compact, shrubby plant, thickly set with shapely branches, and, when well grown, these branches are covered with small, white flowers, having a rich fragrance. The leaves are evergreen and shining, and, when brushed or bruised, they also are fragrant. It must have plenty of pot room, delights in being bedded out in summer, and a rich soil, such as you would give Roses and Carnations. Three things must be closely guarded against in growing the Myrtle, hot sunshine, sour soil from imperfect drainage, and the red spider. Sprinkle the leaves daily, shift into larger pots occasionally, and do not give too high a temperature. For bouquet work it is very valuable, and grown into a large, handsome shrub it is ornamental in a high degree. Cuttings of the young wood root easily. There is a double variety, also, which is said to be very beautiful, but I have never seen it.—Vick's Magazine.



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.

» Notes and Comments. «

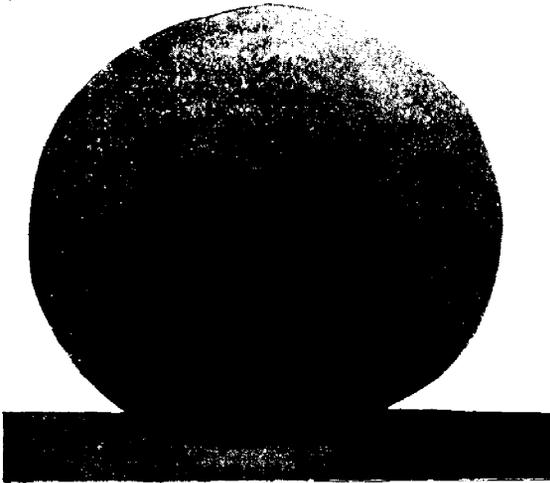


FIG. 1006.—YELLOW ST. JOHN.

the trees are very compact and easily picked. Under such treatment it is not surprising that his trees yield an average of five baskets per tree.

Mr. Carpenter does hand work in his peach orchard, but has a disc harrow, with an extension which will reach well under the projecting limbs and cultivate close to the very trunk. His orchard is situated on the lake shore near Winona, and the house is a substantial stone building, the approach to which is by a long avenue lined with Norway Spruce trees.

THE YELLOW ST. JOHN promises to be the most popular peach of its season. To-day (Aug. 25) we visited the peach orchard belonging to Mr. Jonathan Carpenter, of Winona. He has several thousand trees, and a good many varieties for a commercial orchard, and counts the Yellow St. John as one of his best. His trees are five years planted, and receive the very best of cultivation and manure. He prunes them low and shortens them in, so that

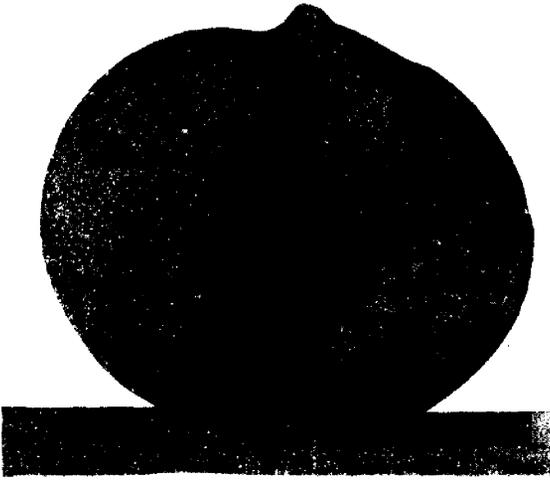


FIG. 1007.—YELLOW ST. JOHN (SECTION).

We brought home a sample of this peach for photographing, as is evidenced by the accompanying Fig. 1006. The peach is medium to large in size, yellow with dark rich red on sunny side; apex, small pointed; flesh, yellow, red at stone, juicy, melting, rich delicious flavor; stone large, free; season, 20th to 25th August.

PEACH YELLOWS AND BLACK KNOT have been made the subject of a special bulletin (No. 72), by the Experiment Station, Wooster, O., at the request of the state. This bulletin gives fruit growers full information concerning these diseases, and is sent free to applicants interested in the subject.

THE MEETING OF THE GRIMSBY HORTICULTURAL SOCIETY on Tuesday evening, September 1st, was, as usual, a great success. There was an elegant display of flowers shown by the members of the Society, and more especially by our amateur florists, A. Terryberry, A. E. Cole and Wm. Gibson. The first part of the evening might be called a *conversazione* during which the people met together and talked of the beauties before them. About nine o'clock the Chairman, Mr. J. G. Grout, called the meeting to order for the following programme: Piano duet, Misses A. McGibbon and F. Woolverton; vocal duet, Mr. and Mrs. Unwin; piano solo, Miss F. Woolverton; Chairman's address, Mr. J. H. Grout; recitation, Miss Metcalfe; address on "Lawn Ornamentation," Prof. John Craig of Ottawa; recitation, Miss Metcalfe; vocal solo, Miss Vahey.

HORTICULTURAL SOCIETIES may be organized now for 1897. The first meeting for organization proposed is fixed by law for the second Wednesday in January of any year; but previous to that time the real work must be done, viz.: Fifty names must be secured, who are willing to become members, and sign the declaration to that effect, paying in \$1 each to the funds of the Society. This declaration, thus duly signed, must be sent to the Minister of Agriculture for the Province, who will authorize a person to call the first meeting as above

and of this meeting at least two weeks public notice must be given. It is therefore time to be collecting names thus accomplishing the preparatory work, and anyone intending to take up the matter should write to the Department of Agriculture, Toronto, for a copy of the Acts relating to horticulture, in which all information can be found. Most of the recently formed Horticultural Societies have affiliated with the Ontario Fruit Growers Association, thus securing for all their members our monthly journal and report. One of our Directors, Mr. Thos. Beall, of Lindsay, has interested himself in such Societies, and will attend any meeting for organization to give information upon the privileges of affiliation with us, upon request from any persons interested in having such information. We have just received a letter from one of our members at Smith's Falls, who thinks a strong Society can be formed at that place, in affiliation with us.

COLD STORAGE.—During the Toronto Fair the writer paid a visit to the Dominion Cold Storage Company's premises at Toronto, and was surprised to find such excellent storage so near at home. There is no doubt that for certain perishable products, it would always pay the cost of storage to hold them until the glut is over. What fruits would pay for storage must be studied out each season for itself by each grower, for no rule seems general. Mr. Jones, the Toronto manager, gave us the following items of information:—We have altogether 15 store-rooms—the ground floor room is the largest, and will contain about eight carloads of butter. We keep it for goods having no odors, such as butter, lard, maple syrup and canned goods. The temperature here ranges from 40° to 42°. Another butter room on first floor is kept below freezing for choice highly salted butter, which is to remain in storage for a long time. Our cheese room will hold about three carloads, and is kept at 35°. This room we use for fruit also. Our fruit rooms are kept at 35° and 40°, according to the ripeness of the fruit when we receive it; we have three fruit rooms, two of which are now filled; the other has just been vacated by oranges and lemons, and is ready for pears, peaches and grapes; it will hold about three carloads. We have stored since June 1st, about eight carloads of oranges and lemons, and about a car of California pears and peaches, as the oranges and lemons go out fresh fruit takes their place; we have some very fine Canadian pears now in, and keeping perfectly. With the exception of two large rooms filled with evaporated fruits, such as peaches, apricots, plums, prunes, apples, raisins, figs, etc., and nuts of various kinds, which retain all their weight and freshness in cold storage; the rest of our space is devoted to eggs. Eggs keep better in cold storage than if pickled, and sell for better prices.

It is no trouble to keep early pears and late peaches fresh till Christmas, and late pears, grapes and apples till the spring, if they reach us in the proper condition. They must not be quite ripe, and must be all of one degree of ripeness; carefully selected, and packed in shallow boxes or trays. Our space is so limited now, that we have room for only a few growers who wish to experiment, and we think all who have choice fruit should, if possible, cold store a little of it.

HYACINTH CULTURE IN POTS.—The Waterloo Horticultural Society has just issued the following circular to its members, in view of the distribution of bulbs now about to be made by the Society.—Three or four bulbs can be planted in an 8 or 10 inch pot, but single bulbs in 5 inch pots are preferable. Many good plants are grown in tin cans with holes punched in the bottom for drainage. Any good potting soil will do ; if stiff, mix with sand to make it porous ; merely cover the bulb with soil, leaving it slightly lower than the rim to permit of watering. Press the soil lightly around the bulb, but NOT BELOW ; if pressed too firmly in the soil when the roots begin to grow they will lift the bulb out of its proper position. After potting, water moderately and set in the coolest part in the cellar, cover so they are perfectly dark, but leave room for tops to grow. They can be placed out of doors, covered with four or six inches of coal ashes, until hard frost, and then removed to a dark cellar. The object in this is to have the pots filled with roots before the top grows. Plant in September or October, for the longer time they have to make roots the better the bloom, but do not bring them out of the cellar until January. If the tops have started, bring gradually to the light to give natural color. Do not hurry them, as the very best bulbs will bloom poorly in December or in January ; poorer bulbs will bloom well in February or March.

In Glasses.—Fill the glass with pure rain water until it barely touches the bulb, place in the dark as described above, and delay bringing up until the glasses are filled with roots, and not then if too early in the season ; change the water occasionally, but be careful not to break the tender roots. The single varieties are best for house culture.

In the open ground.—Plant in good, well enriched soil, four to six inches deep and six inches apart, but do not allow them to touch fresh manure ; after the ground has frozen cover with strawy manure, to keep from freezing and thawing, but remove in spring, before the tops begin to grow. Hyacinths, after blooming in water, are worthless ; those in pots, if kept growing until the tops die off naturally, will do fairly well planted out next fall, but are not worth forcing again. In the open ground they can be left three or four years without removal

Do not fail to join the Waterloo Horticultural Society for 1897. One dollar, if paid by January 1st next, will entitle you to the Canadian Horticulturist Monthly, the bound volume of Reports of the Canadian Fruit Growers' Association and Entomological Society, and a share in the plant distribution of that Association, and your choice of fruit trees, shrubs, plants and bulbs as premiums. These will be larger and better than any previous year. Subscriptions received by the President, Secretary, or any of the Directors.

✠ Question Drawer. ✠

Low Prices for Apples.

872. SIR,—It is reported in this neighborhood that the dealers are combining to offer the apple growers an absurdly small price for apples this season. Why do not the officers of our Fruit Growers' Association take steps to counteract such a combine by making arrangements and giving information with a view to enable the growers to ship their apples for exportation direct without the intervention of the dealers, as many of them would do were this done? This seems an occasion on which the Association might well show its usefulness and justify its existence.

ARTHUR G. HEAVEN, *Glenside, Oakville.*

We would be glad, for our own sake as well as that of our subscribers, to keep the price of apples up to a satisfactory amount this season, for we have ourselves 2,000 or 3,000 bbls. to harvest. But the outlook is discouraging, and we cannot hold out hopes of high prices. If a grower can get from 60c. to \$1 for his fruit this season, as it lies in his orchard, he is safer than the man who exports, not knowing whether he will receive any returns, or there will be a draft upon him for transportation charges. However, we hope that the export trade will take all our apples at paying prices, and we will do our best to give our readers the fullest information concerning the apple market from time to time.

Wintering Climbing Roses.

873. SIR,—Kindly inform me how I may best winter my climbing roses. I have three varieties, viz., Baltimore Belle, Prairie Queen, and Seven Sisters, the latter being about eight feet high.

MRS. VANDERWOORT, *Sidney Crossing, Ont.*

The Seven Sisters, properly called Grevillia, is too tender to succeed well in Ontario; it is of Japan origin, and tree peddlers often push its sale in places where it is ill adapted; the other two are hardy and need no protection, indeed Prairie Queen is a native, and found growing in many of the Western States. If protection is needed, a mulch of coarse manure is useful, and in the case of Grevillia, the stems might be laid down and covered with earth.

Blackberries Failing.

874. SIR,—The Snyder grows vigorously to new wood with me, and sets plenty of fruit; then it dries right out and dies to the ground, the berry shriveling just as it begins ripening.

T. M. G., *Norwood.*

Probably the soil is not adapted for the growth of berry. Correspondence is invited upon the question.

Where to Ship Apples.

875. SIR,—I have a large quantity of winter apples. Would you advise me to ship them on my own account ; and which is the best market ?

J. H. B.

We dare not undertake to answer such questions. For ourselves we intend exporting our whole crop, hoping to do better than the price offered by buyers, viz., 50 cents a barrel for the fruit ; but which is best is still problematic. The European crop is fortunately short, otherwise our apples would very likely not be worth picking this season of abundance ; but whether the immense quantities to be forwarded will not overstock the foreign market, is the question.

The Niagara District Fruit Growers' Stock Co. forwarded a car load of fall apples to England, which netted the shippers 42 cents per barrel, but of course they did not arrive in good condition.

Hardiness of Weigelia.

876. SIR,—I would like to ask a question or two through your valuable paper. Is the Wistaria vine and the Weigelia shrub hardy in this locality, centre Frontenac, and if not, what is the proper way to protect them in the winter ?

A. F. BOND, *Iurery.*

Reply by Mr. John Craig, Ottawa.

Weigelia Rosea is a beautiful, half-hardy shrub at Ottawa, and I presume it would succeed better at Frontenac. It always blooms on the lower, snow-protected branches, and sometimes comes through the winter entirely uninjured. It is probably the hardiest of a great many varieties.

None of the Wisterias have proved hardy, or even half-hardy here but have not been protected. They might be laid down in the autumn and covered in the same manner in which grape vines are treated towards the north.

When to Plant Apple Trees.

877. SIR,—Would you advise planting an orchard in fall or in spring ?

A. M., *St. Catharines.*

We would advise the spring in Canada, because the tree seems less affected by frost if left undisturbed through the winter in the ground where it has grown, and where its rootlets have a tight hold. We have sometimes noticed even a hardy tree like the apple, much set back by fall planting, and starting its spring growth much later in the spring, than trees not moved. As a rule it may be safe to move apple and pear trees in the autumn, as the check may not be very observable, but peaches, plums and cherries succeed best if planted in spring.

Ammonia.

878. SIR,—What strength should ammonia be used for spraying?

J. E. K. HERRICK, *Albottsford.*

Two quarts for twenty-five gallons of water. Ammonia, however, so soon evaporates, that we would commend some other specific washes as more serviceable and less expensive.

Early Potato.

879. SIR,—What is the earliest potato for market?

H., *St. Catharines.*

During the past season we have grown Burbee's Early, with much satisfaction. It is very early, of fine size and quality.

Possibly some reader knows an earlier variety still.

Distance to Plant.

880. SIR,—What is the best distance for planting plums, pears and cherries in this neighborhood?

H., *St. Catharines.*

Twenty feet is not too great a distance for all standard pears, plums, and either Heart or Bigarreau cherries. Dwarf pears, quinces and Morello cherries may be planted half this distance.

THE MINER PLUM.

Some claim that the Miner plum is a profitable variety, while others contend that it did not bear, and they were on the point of digging up the trees. The fruit is large; skin, bright scarlet; flesh, yellow and adheres to the stone. The quality is good, and although the Miner is not invulnerable to the curculio, it does not cause the fruit to drop.

The tree is a strong grower, and will attain a height of six feet the second year from root cuttings. Owing to its rapid growth it will not bear while young. We are assured by those who have old trees that they have an abundance of fruit every year. We expect to see this variety become quite popular in a few years, as the demand is already on the increase.

Tiverton, Ont.

A. H. CAMERON.

* Open Letters. *

Humboldt Blackberries.

SIR,—These are a new and distinct sort of blackberries; they grow in a trailing, prostrate form, and should be trained on trellises; the fruit is very large, good specimens being $1\frac{1}{2}$ inches long, and nearly an inch thick, and of a beautiful, jet black color; their flavor, however, is what charms everybody, being entirely different from that of any other variety of blackberry known, or in fact any other berry; their fascinating, spicy flavor, makes them of unrivalled value, for pies, jams, jellies, etc. They are the earliest blackberries known, ripening about a month before the Early Harvest blackberry. They are very hardy, and will endure almost any climate. They are marvellous yielders, and give heavy crops the next season after being set out. As a money maker, it stands high, as all its crop of fruit is ripened before the Early Harvest and other common blackberries commence to ripen; and it is these early berries that command the highest prices in market.

S. L. WATKINS, *Grisly Flats, Cal.*

Trees Worth Planting.

SIR,—In choosing trees for planting for either timber or shade, the aim should be to have what will make the largest growth of wood in the shortest possible time. In planting for timber, the quality of the wood is the chief consideration. In planting for shade, beauty, symmetrical figure and cleanliness are to be regarded; but when one tree possesses all these qualities, it may be good either for timber or shade.

It is always best to plant for shade reliable free-growing varieties, which are sure to make a growth, and remain healthy, even though they are not as handsome as some of the other kinds, which may do well in other localities.

For timber or for shade, the wild cherry might be put to a good use. It may be trained into almost any desired shape, and its dark green pear-like foliage gives it a very ornamental appearance.

The American mulberry is a very handsome tree, and one or more specimens should be in every collection. Its rapid growth and the beauty of its foliage ought to make it a favorite, aside from the value of its fruit, which is excellent for dessert and canning purposes. Magnolias are very popular, and some will have them if they have to search the swamps, or pay a high price to get them. Unlike the ill-shaped specimens in the swamps, the magnolia properly cultivated may be made to grow symmetrical, and become a 'thing of beauty,' for its large bright leaves are always fresh, and the seed-pods colored red and brown, are an ornament to the tree.

A. H. CAMERON, *Tiverton, Ont.*

Superiority of Canadian Apples.

SIR,—To-day I purchased some *fair, handsome* Early Jose apples at one cent each, from the South. They measured one and three-quarter inches in diameter the longest way. They were *free from defects*, color dull crimson, skin *very* thick, flat sub-acid flavor, flesh soft, but they *were not over-ripe*. In my garden at Oshawa, the Early Jose was thin-skinned; cheek in the sun bright deep crimson, flesh *bitter*, brisk sub-acid flavor, which was appetizing and refreshing. Now this is a fair statement as to all summer apples from the South, as compared with Canadian apples. The clear dry air of Ontario gives the fine brilliant color, which makes apples *attractive*, and when in addition they are refreshing and appetizing, they create their own market when they are known. To make them known, send them to market and advertise them, and from that time they will advertise themselves. God made the conditions which makes Canadian apples (Ontario and Quebec) superior to others. Man cannot make them or change them, therefore you cannot over-stock this market with prime fruit, well and carefully packed in small packages. Long before trees now planted come into bearing, your farmers will have free access to this market.

September 1st, 1896.

FRANCIS WAYLAND GLEN, *New York.*

Mildew-Proof Gooseberries.

SIR,—I find I must alter my list of supposed mildew-proof gooseberries, as this hot, dry summer produced mildew on every variety except Houghton, Downing and Smith. Triumph showed slight mildew on the top of the shoots. This variety is less subject to mildew than the Industry. To me the new American berries, Columbus, Triumph and Chautauqua appear to be simply Whitesmith seedlings. The Chautauqua and Columbus have the best flavor, but it is a very faint flavor indeed, while the Triumph is so poor to eat that I infinitely prefer the Whitesmith. These large American berries show no trace of any native strain. Still they are fine, satisfactory berries, equal to the Whitesmith in size and of much freer growth.

W. L. BROOKS, *Mount Forest, Ont.*

Good Prices for Fancy Fruit.

SIR,—Just as I anticipated, fine summer apples are the rarest fruit in this market. Friday last at 6 a.m., I went fruit hunting, so as to catch the grocers just as they came from the wholesale market. I saw and purchased a small measure (two quarts) of handsome Red Astrachans, price 20 cents; skin thick enough for upper leather. Very mild; sub-acid flavor; there were fifteen apples in the two quarts; price per bushel at that rate, \$3.20. Saturday I purchased from the push carts on Frinting-house Square, twenty *superb Cranford peaches* for 25 cents, and fine yellow egg plums for 10 cents per dozen. From my grocer, same day, *prime* five-pound baskets of Delaware and Niagara grapes for 25 cents; twenty *prime* Bartlett pears for 25 cents. The apples are scarce, but the plums, pears and peaches are abundant. The plums are from California, South Carolina and Georgia. Your September plums will find a good market here, and you cannot even stock this market with fine blue Damson for preserving and pickling this fall. Last year ten-pound baskets of such plums were scarce at 75 cents in Fulton market, and none to be had of grocers at any price. The rarest of all the small fruits this year were Black-caps. They are my favorite fruit, and I only secured them three times of my grocer, and paid 15 cents per quart for them. Give us some good Canadian apples, apples that are appetizing, and when they are known, you cannot supply the demand if you produce a million barrels.

FRANCIS WAYLAND GLEN, *New York.*

August, 1896.

Astrachan Apples.

SIR,—To-day I purchased three handsome smooth *dull red* Astrachan apples, free from spot of blemish, for five cents. I ate one of them and gave the other two away. Why? Because they were so near sweet that they were insipid, and produced a feeling of fullness in the region of the stomach. If they had been grown in Ontario, I should have eaten all three of them, and purchased three more. Ontario apples are appetizing, while those I purchased to-day produced a clogging sensation, and one was enough. Ontario apples create their own market when once known. Only Ontario air and sunshine can produce them. Man cannot make the same combination of air and sunshine, and, therefore, cannot grow Ontario apples south of Lake Ontario.

FRANCIS WAYLAND GLEN.

⇒ Our Book Table. ⇐

THE NURSERY BOOK, a complete guide to the multiplication of plants, by L. H. Bailey, 3rd edition. New York: The MacMillan Co., 66 Fifth Avenue. 1896. Price \$1.

This is a most useful book for all those interested in the propagation of trees and plants. Like all Prof. Bailey's writings, it is lucid and yet very comprehensive. Chap. I. is devoted to Seedage; Chap. III. to Layerage; Chap. IV. to Cuttage; Chap. V. to Graftage. This is the 3rd edition and is well illustrated.