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ITASCA.

The Crescent's rival in productiveness, health, beauty, size, and it's superior in quality, ripening and endurance to the end of the season.



The Canadian Horticulturist.

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New Plants.

THE ITASCA STRAWBERRY.

"Run her out o' scar!" we imagine we hear our readers say when they open up the March No. of this magazine, and see still another frontispiece of ripe strawberries. We hope however they may appreciate a sight of the imitations all the more, considering that the real article is three or four months distant.

The past season has brought into public notice several new strawberries for which great things are claimed by the originators, but which have as yet been wholly untested in Canada. Among these the more prominent seem to be the Itasca and the Jessie, the latter of which was described last month in these pages.

The *Itasca* was originated by Mr. J. H. Haynes of Delphi, Indiana, and will be introduced into Canada by our

professor Mr. J. Little of Granton, Ont., who says of it: "I saw the plants on Mr. Crawford's grounds after the meeting of the American Horticultural Society at Cleveland, and he spoke so highly in praise of it, that I thought if the expense would not be too much, I would bring it before the strawberry growers of Canada."

Mr. Haynes in his circular claims for the *Itasca* the following points of excellence, in which we hope he may not be disappointed. We quote his own words:—

"In offering the *Itasca* to the public I feel confident that it will fill a place now vacant on the list of strawberries. I claim for it that it is a rival of the *Crescent* in productiveness, health, vigor, size and beauty, and that it is very superior to the *Crescent* in quality, manner of ripening, and for endurance to the end of the season in ripening its entire crop. It is a seedling of the



Manchester, fertilized with Seneca Queen under glass, excelling both of these varieties in every respect. It is pistillate like all our productive kinds."

Mr. M. Crawford, a member of our own Association, living in Ohio, in a report of new strawberries, writes as follows:—"Itasca; no better berry as far as quality is concerned, has yet appeared, I have seen twenty-five ripe and two hundred green berries on a single plant. It is quite regular in form, obtusely conical, bright red, and averages about an inch in diameter."

As soon as we have tested the Itasca we shall be very glad to give farther information concerning it; but at present we can only say that any berry which, upon thorough trial, may be ranked along with the Crescent, Jewell or Manchester, is certainly well worthy of propagation. In the coming berry we want excellence of quality, more than we want productiveness. For the

latter quality probably no berry surpasses the *James Vick* of which the accompanying cut is no exaggerated representation: but this characteristic instead of commending it has proved to be its fault, in these days when fruit of small size, and ordinary quality is glutting the markets, and scarcely pays the expense of gathering and shipping.

OTHER NEW STRAWBERRIES.

BY M. CRAWFORD, CUYAHOGA FALLS, OHIO.

THE JESSIE.—I have fruited it twice, and I have watched it with great interest on account of the wonderful reports that reached me concerning it. I am unable so far to find one weak place in it. The plant is all one could ask for size, vigorous growth, health, hardiness, and productiveness. Blossom perfect. With me it is wonderfully productive, very large, of good form and color, and one of the best in quality. It ripens all over at once, and is firm enough for distant transportation.

ANNA FOREST.—From D. Brandt, of Bremin, O. Sent out as the largest berry in the world. Not yet fruited here.



JOHNSTON'S SWEET BLACK CAP RASPBERRY.

OHIO.—Originated in southern Ohio, by Geo. L. Miller. It is a seedling of the Kentucky. The plant is wonderfully vigorous, and about twice as prolific as its parent. This is its record at the Ohio Agricultural Experiment

Station, where it has fruited several years. Blossom pistillate. The originator writes that it is much more productive than Kentucky, bright red, and less inclined to show bruises. It yields one or two pickings after Ken-

tucky, and will give more quarts and more money than any other late variety. In growth it equals the Créscent.

CRAWFORD.—All things considered, this is the best berry ever originated by me. I have fruited it five years, and intended to say nothing about it for some time, but an account of it got into the *American Garden*. I always thought that if I raised a seedling that was ahead of all others, I would call it Crawford. This is the only one considered worthy.

JOHNSTON'S SWEET RASPBERRY.

This is a new black cap raspberry which is being sent out from Central New York by Mr. R. Johnston. He claims for it, after four years' trial, that in quality it is particularly sweet and delicious, and that it surpasses all others for evaporating purposes. In season it is about the same as the Tyler, and in size it is little less than the Gregg.

We are not personally acquainted with any one else who has fruited this berry, but we find that Mr. T. T. Lyon, Pres. of the Michigan Horticultural Society speaks highly of it, especially with regard to its quality as an evaporated fruit.

THE GOLDEN QUEEN RASPBERRY.

BY T. C. ROBINSON, OWEN SOUND.

In May, '86, I set out a few rows of this variety with plants which had been grown from root-cuttings in the greenhouse during winter.

Some of the growing canes were nearly a foot high, and it was reasonable to expect that the check of transplanting would induce a formation of fruit-buds on the green wood, which the after-growth of June and July would develop into berries. In this hope I was abundantly justified by a fine show of blossoms in midsummer, which ripe-

ened up finely in August and September. Of course, such abnormal fruition cannot be regarded as a decisive test of the variety—nor can any single test—but a very good idea of the size, beauty and quality of the berries was fairly obtainable, and also of the tendency of the variety to productiveness.

I found the berries to be very large, as nearly as possible of the size, shape and firmness of well-grown Cuthberts. while the color closely assimilates that of Brinckle's Orange. The plant proved on this test to be a fine vigorous grower, fully up to, if not excelling, the Cuthbert. The leaf so closely resembles the Cuthbert that an expert might mistake one for the other; but one glance at the whitish-green cane shows the variation.

In quality it has been pronounced equal to Brinckle's Orange. Fall-grown berries are often inferior in quality to the crop of the regular season, so that my test proves nothing conclusively on this point; but it is only just to remark that with me they were not so good as Brinckle's, but fairly up to the Cuthbert's standard.

Upon the whole I am exceedingly pleased with my experience of this variety. A raspberry that looks just like Brinckle's Orange, that is productive as Cuthbert, and remarkably firm, needs only proof of hardiness to simply place it at the very head of the list, and beyond the competition of any other known variety of its color. Unusual hardiness is claimed for it, and seems fairly promised by its Cuthbert parentage, so that fruit lovers may smack their lips in anticipation of a large, reliable, white raspberry, equally good for home use or market.

Of course further tests in this and in other parts of the country may develop faults that do not now appear; but at present I must regard its indications of success as unusually promising.

Prunus Simoni.—Mr. L. H. Bailey writes in the *American Garden* concerning this fruit, that he thinks hardiness its chief merit. He had it on an exposed location and, yet it came through the winter of 1885-6 unimpaired. It fruited last summer, but its size was against it not measuring over one and a-half inches in diameter; and the flavor, though at first sweet, left an unpleasant bitterness in the month. In appearance it was very handsome. It is not a hybrid between a peach and a plum, but a true, natural species. It derives its name from M. Eugene Simon, who introduced it into France from China.

Fruits.

RAMBLES AMONG FRUIT GROWERS.

THE WESTERN NEW YORK HORTICULTURAL SOCIETY.

ON the 26th and 27th of January last we had the pleasure of attending



J. J. THOMAS.

this, one of the most prominent horticultural societies in the world.

Among the gentlemen whom we were

privileged to meet were the following, viz., Mr. P. C. Barry, the venerable President, whose name has long been associated with the progress of fruit culture, both in Canada and in the United States; Mr. J. J. Thomas, Horticultural Editor of the *Country Gentleman*, at Albany, who has been long recognized as a pomological authority; Mr. E. Long, Editor of *Popular Gardening*, Buffalo; Dr. Sturtevant, Director of the New York Experiment Station; Mr. J. S. Woodward, Secretary of the State Agricultural Society; Mr. S. D. Willard, Nurseryman, of Geneva; Mr. Chas. Green, Editor of *Green's Fruit Grower*, and others.

The meeting was held in the City Council Chamber and was attended by some four or five hundred fruit growers. The subject of the

CURRENT

was introduced by Dr. Sturtevant. His paper contained a history of this fruit from its first notice in England in 1597 down to the present time.

Mr. Barry said: "The currant is one of the best, but one of the most abused fruits in the whole catalogue. Give it plenty of manure and good cultivation, and you have splendid fruit, and abundance of it."

Mr. J. J. Thomas said the

APPLE CROP

in Cayuga County had been very short. The fruit fell off soon after it was set, and was small in size. Those trees which bore well had been in every case highly cultivated and top-dressed with manure. The Greening had borne better than the Baldwin.

Mr. Chase reported that in Wayne County

SMALL FRUITS

had been unprofitable. Strawberries had sold largely at 3c per quart. With raspberries there was one advantage, viz., that when they were very cheap

they could be evaporated. Evaporation of fruit was becoming a necessity with the fruit grower. Nearly every farmer in Wayne County had his evaporator, by which he could evaporate from 40 to 300 bushels of fruit per day.

A *berry picking machine* was here exhibited, by which it was claimed that four or five bushels of raspberries per day could easily be gathered by one person. The machine is wheeled up to a tree, and the ripe fruit whipped off into a hopper.

QUINCES AND PEARS

having been reported as sold at a very low price, Mr. Barry said he had sold his quinces at from \$3.00 to \$5.00 per keg or half-barrel. He shipped a few at a time, just when they were most wanted in the market. The same with his pears; by a little management he got \$3.00 to \$4.00 per half-bushel for his extra choice.

Mr. W. C. Barry added, "You must select the very best, and sell it at a high price; the balance you must sell for what it will bring." Mr. Hooker thought it quite possible to put up good fruit in good shape, and yet do badly.

(To be continued.)

PROMISING CHERRIES.

What cherries are the most promising for orchard planting in Western Ontario?

W.

In reply to this question Mr. E. Morris writes the following paper, the value of which we can fully appreciate, having vainly tried for fifteen years past to make money out of an orchard of Duke and Bigarreau cherries of all the finest varieties:—

"I would recommend as a class the Morellos, although there are a few in the Duke and Bigarreau classes that can be grown profitably in some sections.

Of the Bigarreau, we have noticed the variety known as Great Bigarreau

the least affected by rot, the great trouble with this class of cherries. It may be described as follows: Large size; very dark red, or nearly black when fully ripe; half tender, sweet and excellent. Very productive.

The Morellos as a class are quite as hardy, and resemble in appearance and habits of growth the common red cherry of the country, but without their bad habits of throwing up sprouts or suckers, and, as far as my observation goes, are not subject to the black knot that is destroying the common cherry everywhere in Ontario, except in a few most favored localities; and in view of this fact, I am impressed with the belief that any one planting out the improved varieties of Morello cherries in orchard form (15 feet apart each way) will realize a handsome profit from the investment. I would recommend the following varieties, in order of merit:—

EARLY RICHMOND.—Medium size; dark red; melting, juicy, sprightly, acid flavor, and when only half-ripe resembles the common red cherry, but after this time it will continue to increase in size for at least two weeks, at the same time becoming darker in color and sweeter in flavor; is unsurpassed for cooking purposes and exceedingly productive.

LARGE MONTMORENCY.—A little larger than the preceding, and about ten days later; otherwise resembling it very much.

ENGLISH MORELLO.—A very slow grower and usually a very poor tree on account of slowness of growth; medium to large; blackish red, rich, acid, juicy and good, and on account of its richness is one of the best for canning. Very productive, ripening in August, long after all other cherries are gone.

Of the new Russian varieties recently introduced into this country I can not say too much in favor of the

OSTHEIM, its *only* fault being that it is such a slow grower that it will make it expensive for nurserymen to grow. Some small trees that were imported direct from Russia three years ago have borne each year since planting out; last season *very* full. On one tree, in which wasps had built a nest, they acted as a guard to the protection of the fruit, which was allowed to come to full maturity. Upon testing the fruit at this time I was impressed with the flavor being the richest and having more substance than any other variety of the Morello class of cherries; at the same time being one of the most productive and early bearers. In color, dark red, becoming, when very ripe, dark purplish-red; flesh very dark, juicy, with a pleasant, sweet, and sub-acid flavor.

LITHAN, also a Russian. This is in tree a better grower than the preceding; fruit, a trifle larger and of lighter color.

VLADIMIR and PARENT have not as yet borne, though am much pleased with the growth of the trees, and all are evidently very hardy."

SUCCESS WITH SMALL FRUITS.

BY E. MORDEN, NIAGARA FALLS, SOUTH.

To grow and market small fruits profitably, requires several conditions.

1st. *The soil must be suitable.*—As small fruit plants occupy the same spot for several years, and are cultivated and kept clean with considerable difficulty, a mellow, warm soil is essential. While some of them will succeed upon a variety of soils, the profitable plantations will mostly be found upon sandy loams.

2nd. *The situation is of great importance.*—The necessary manure is not always obtainable at points remote from villages, towns or cities. Shipping facilities to reach distant markets, as well as local markets, are prominent considerations. If there are several routes

by which distant markets can be reached, considerable advantage will result. Fruit that is picked one day and teamed for several miles the next morning, is, of course, in bad condition, and is not likely to remunerate the grower, while it certainly injures the general market.

3rd. *The man must be of the right stamp.*—In my own neighborhood, where the soil and situation are exceptionally good, I have seen many failures. The man who is a general farmer may safely leave the small fruit business alone. He will, as a rule, make nothing himself, while he is sure to injure the business for others. The farmer's harvest, and the fruit harvest, come together; one or the other will be neglected. The good, careful, tidy farmer who hates weeds with an enduring hatred, may, of course, drop his ordinary farming and become a successful grower of small fruits. He has already much of the necessary practical knowledge, and if he is studious and thoughtful, he can learn the new business. City men and others, not already good, careful farmers, have very much to learn, and will, in most cases, fail. The man who is willing to study up the business, and who has persistent pluck, sufficient to keep him at work on his plantation for eight months in the year through a series of years, and who has some capital, some business capacity, and a suitable soil, suitably situated, may try the small fruit business. Under any other circumstances it is safer to leave it alone. It undoubtedly possesses attractive features. Human nature will require to be revised before we can look with indifference upon the beautiful fruits. The coming man will continue to eat berries. The coming fool will continue to produce them at a loss to himself. The coming fruit-grower who fulfils reasonable conditions will probably average fair profits.

FRUIT AT OUR LOCAL EXHIBITIONS.

BY J. H. WISMER, PORT ELGIN, ONT.

Any one interested in the fruit department of our Township Fall Shows cannot but notice the errors so common in naming the different varieties of apples, pears, etc. Especially prevalent is this fault among our fruit-growing farmers—some of whom are rather extensively engaged in this branch of their occupation—and I believe I am but giving the opinion of all who are in the habit of judging at our local exhibitions, when I say that not one farmer in twenty is able to name correctly all the fruit he grows. I have often heard bitter and loud complaints from exhibitors against judges, charging them with partiality and incompetence because their "extra fine" specimens were awarded no premium, while in the same class entries of inferior fruit took all the prizes, simply because the exhibitor in the latter case complied with the prize list in naming his fruit correctly, while the former did not.

At an exhibition last fall, where I was requested to act as judge, I could not, according to the prize list, award a single prize in "collections," although there were seven entries. This state of affairs is very annoying and unsatisfactory to judges as well as exhibitors, and has been a fruitful source of strife and contention, causing a rapid falling off of the number of fruit exhibits from year to year in many of our local shows.

To remedy this, all fruit growers, and exhibitors especially, should see that they know by name what they grow, and in cases of doubt should refer to their nearest authority in this line, or, do as I have done, send a sample peck or half bushel (express charges prepaid) to our obliging President, who is said to be the *best authority in the Province*. I submit this, believing that all who know him will confirm the statements herein contained.

Seedling Peach Trees.—Mr. J. B. Pierce maintains before the Horticultural Association of Pennsylvania that it pays best in cold sections to plant seedling peach trees, because they are hardier than budded kinds.

Our experience does not bear this out. We have over 2,000 budded and several hundred seedling peach trees in our orchard, and we get crops as often from such budded kinds as Early Purple, Hale's Early, Alexander and Louise, as from the seedlings; and when there does occur a full crop seedlings are unsalable. Other kinds are more tender, as, for instance, Early and Late Crawford, Old Mixon, Smock, &c. If we had any peach trees native to our climate it would be well to endeavour to improve them by extended experiment, and perhaps our Experiment Station may further acclimatize some of the hardier varieties; but to advise any fruit grower to plant an orchard of natural fruit, in these days of improved varieties, is absurd.

CONDENSED REPORTS OF FRUIT.

BRIGHTON, MOORE'S EARLY AND WORDEN GRAPES.—Mr. J. B. Burk, Brougham, writes:—My Brighton and Moore's Early fruited last year. The fruit of the former is delicious, much superior to Moore's Early, and about one week later. No grape pleases me so well as the Worden. It is a heavy cropper, and it ripens soon after Moore's Early, about the first or second week in September. The quality is superior to the Concord. True, its fruit drops if allowed to hang too long, but if picked as soon as it is ripe it will cling to the stem as well as the Concord.

THE DUCHESS OF OLDENBURGH.—Mr. S. Roy, Berlin, sends a photograph of one of his trees of this variety, borne down with an enormous crop of ripening fruit; but which he thinks has now borne to its last crop. He says:—

"This variety of apple has paid me better than any other in my collection, which embraces some fifty varieties.

The Duchess is apparently not destined to be a long liver in our climate; it is too precocious for that. My experience with it would limit it to about thirty years. The trees are rather on the small side, and can be grown without crowding about twenty feet apart.

I notice further that when budded on the common stock it is very apt to sucker, but when root-grafted it is free from this fault.

This apple, the Yellow Transparent and the Tetofsky belong to an entirely distinct type of the *Malus* from any other in general cultivation, and are botanically assimilated to the Siberian Crab (*Malus Baccata*), of which those indigenous to Southern Europe are only sub-varieties.

The Alexander is called a Russian apple, but has no botanical affinity to those previously mentioned. It is evidently of west of Europe origin."

SMALL FRUITS IN BRANT AND OXFORD.

Mr. S. Cornwell, Sec. of the Small Fruit Growers Association, of Brant and Oxford, sends us an extended report of their January meeting, clipped from the *Norwich Gazette*.

Mr. Barnes maintained that the business was profitable and referred to Mr. S. Cornwell's sales of \$900 worth of small fruits in a single season. In order to get the same amount of profit that there would be in these operations, in other lines such as grain and other produce, a pile of hard labor would have to be invested.

Mr. Charlton—Will Mr. Cornwell tell us how he made \$900 out of small fruit that year?

Mr. S. Cornwell—The figure stated is the total price received; the cost of picking has to be taken out of that. My berries sold at 8 cents; I paid 1c.

per quart for picking; and I had three acres bearing. I never had as good crops or prices as that year.

Mr. Chas. Grantham, of Cainsville—I think it is a great mistake to raise on the price of picking to a cent and a quarter.

The Chairman—Yes, those who sell for five cents and give two cents for picking can't be very anxious to make a profit. I had no difficulty in getting pickers at one cent. I had to turn off about half of those who applied for work at that price. All my adult pickers averaged from \$1.50 to \$1.75 per day, and fourteen year old boys and girls earned from 80c. to \$1 per day, with two or three hours rest each day at noon.

Mr. Charlton—I think it is well enough when, like Mr. Cornwell, one can get \$900 for the crop and 8 cents per quart for berries; but many last year sold for three cents. I think that strawberry growing, as generally practised, does not pay. To sell at 3 cents and pay 2 cents for picking was hardly encouraging.

Mr. W. H. Lee, of Cainsville—That sort of thing comes from raising poor fruit, and poor fruit is going to come behind every time, and the further behind it gets the better for the careful grower. It pays to raise good fruit.

The Chairman—There are two men losing to every one who makes, taking large and small together.

Under the head of *Culture of Strawberries*, Mr. D. M. Lee said: In the preparation of land the following precautions might be used to advantage: Choose land that is not too light; strawberries thrive best on heavier soil; his crop was the best in Ontario last year and was grown on clayey ground, almost sticky. Prepare the ground thoroughly; seeds and roots will bother the plant-growth; corn or

roots grown on the ground the year before planting berries will help the ground; the ground should be worked late in the fall, as late as possible; that is one of the secrets of success.

With regard to *varieties* Mr. Grantham said he could do better with the Crescent than with any other kind. The Manchesters were larger, and when the others were small and dying out they extended the season considerably.

The Chairman—If we grow the Crescents as extensively as the Wilson it will kill the market, being a poorer berry and of a light color. The buyers are asking for a darker berry even now.

Mr. W. H. Lee—Had a seedling to introduce shortly, coming between the Sharpless and Crescent Seedling.

Mr. Cornwell—Had found that the James Vick on good rich soil was as large and firm as the Wilson.

Another gentleman spoke in favor of the James Vick for fertilizing.

The next subject was the "*Culture of Raspberries*"—*best modes of cultivating, and best varieties.*

Mr. W. Lee spoke for half-an-hour or so on the subject, giving some excellent practical advice based upon his own experiences as a successful grower. The soil must, he remarked, be good strong dry loam, flat land fairly dry, or well drained. The soil must be prepared as carefully as for the strawberry. The raspberry could be grown successfully for ten-years in certain varieties, and could sometimes be cultivated successfully in hills. As to the varieties, the Marlboro' was undoubtedly the best early berry, though it laps too close on the end of the strawberry season. For a fine late berry he would recommend the Cuthbert. The color was against the Philadelphia, and that variety had stood the wear and tear as long as it would. Of course he was getting a little shy of raspberry-growing as compared with strawberries. He recom-

mended planting them at distances of eight feet one way and four feet the other.

Before adjourning it was resolved that the price for picking strawberries should be one cent per quart and no more.

OPEN LETTERS.

The Alexander Apple.—Mr. R. Brodie, St. Henry, P.Q., writes:—We generally sell our Alexanders as soon as they are well colored in the fall, as we get a good price, averaging \$3 per barrel, for them, and no risk in keeping them. This has been a remarkable season for keeping fall apples. I have Plumb's Cider and a few Alexanders in my cellar at the present time (Jan. 29).

Paris Green.—Mr. Dickson, Parkhill, writes that by using too strong a solution the leaves were wilted off his apple trees. In our experience three ounces to 40 gallons of water is quite sufficient.

The Yellow Transparent.—Dr. Hoskins, a famous fruit grower of Vermont, writes: "I note your *beautiful* picture and *correct* description of the Yellow Transparent apple, but wish to correct the *great error* (in the quotation from the proceedings of the Michigan Pomological Society) that it is the same as the White Astrachan, a later, much inferior apple, and very unproductive."

The Wilson Strawberry.—Mr. J. P. Cockburn, Gravenhurst, writes as follows:—"With reference to Mr. Morden's remark about the Wilson Strawberry, I think it wise of the Wilson "to give up the idea of running" when there are so many better candidates in the field. For a general crop on medium to light soil, vote for Crescent, Manchester, Miner, and Glendale; for fancy crop, Early Canada and Sharpless. These will furnish a continuous crop of first-class berries all through the season, with the advantage of the plants with-

standing more rough usage than any other sort."

Temporary Wind-Break.—SIR: In sending in my subscription to your valuable publication, which I notice is improving in many ways, I enclose a description of a temporary wind-break, which I put through my Niagara grape vines this fall to ward off strong northern and western winds. We cut and drew several loads of young pines, which we got from a neighbor who was about to clear a pinery. These bushes, ranging from 6 to 10, or more, feet in height, were placed up against the trellis and wound fast with one strand of stove pipe wire, placing them close enough to form a hedge. Several rows were run through, one about every third trellis, where the vines were too large to lay down. The posts in the trellis are about 30 feet apart. About every other space we put a brace, by using two light posts fastened across one another near their upper end, the fastening being just under the top wires of the trellis. This mode is the best and cheapest wind-break I could think of for this season, but for a permanency I have other methods in view.

R. POSTANS, Oakville, Ont.

Important Questions.—SIR: I like the January Number very much. Mr. Simmers article on the culture of flowers is especially interesting. What to plant, how to plant, and how to prune, are questions that many are asking in rural districts. It must be confessed, the farmers wives and daughters are really the only ones that are interested in the garden, (the farmer and his sons giving all their interest and attention to the farm and stock,) and it is wonderful how well many of them succeed in raising fine vegetables and small fruits, and in surrounding their homes with flowers.

F. FOXSTON, Minesing, Ont.

Elliot's Early Pear.—SIR: I am glad to find a good word in your last issue in favor of the Elliot's Early pear. Some six years ago, I ripened it at Sault St. Marie, Algoma, in the fore part of August, although afterwards the tree blistered and died.

Is the Jessie strawberry now in the market? P. D. LAURENT, Lindsay.

[NOTE.—The Jessie is advertised in our columns.—ED.]

TIMELY HINTS FOR THE ORCHARD.

PRUNING.

The first mild weather is the favorite time with most farmers for pruning. This work is frequently overdone, and we often see permanent injury inflicted, by lopping off the large limbs and leaving great ugly wounds which never can heal over. By such cruel treatment many orchards are hastened into premature old age. We have an old veteran apple tree, a hundred years of age, and still in good bearing condition. It was a sweet kind, and therefore pruning was neglected, while many others, of better varieties, were pruned to death. We advise, then, to prune the *apple and pear* as little as possible, consistent with the necessity of removing all superfluous limbs which cross, and always to choose the smaller when one of two must be removed. Cut close to the main branch, so that the bark may close over the wound.

Dwarf Pears need to have the new growth thinned out, and judiciously cut back, in order to produce fine-sized fruit. The pyramidal form is best for a dwarf pear tree.

The *Cherry Trees* will need very little, if any, pruning. Broken boughs and dead limbs, however, should be carefully removed.

The *Peach Tree* will require considerable attention. It is our custom at this season to go over them with a pair of tree-pruning shears, removing all dead



A GROUP OF FLOWERING BULBS.

wood, and cutting back a considerable portion of the new growth. For the higher limbs a Water's tree-pruner is most serviceable.

Pruning the *Grape* is necessary to fruitfulness, and the pruning shears must be used freely. The work is better done after the fall of the leaf in the autumn; but, if left until now, must be done as early as possible before the active circulation of sap begins.

The *Currant Bushes* need shortening in and thinning out both, if fine-sized fruit is desired. Under the common system of neglect it is strange that currants are so abundant. They stand more abuse than any other fruit.

The *Gooseberry Bushes* must be thinned out but not shortened in. One-half the old branches may be removed.

All this work should be done in March or early in April, lest in the push of spring planting and summer harvesting it be neglected altogether.

Flowers.

WINTER FLOWERING BULBS.

BY HERMANN SIMMERS, TORONTO.

At this season of the year when the various Dutch and Cape bulbs have completed their growth, it would be well to give a few practical hints as to their after care. The best possible example that we can take is the Hyacinth, as all other bulbs need similar treatment. As soon as the bulbs have finished their bloom, cut the faded flower stalk off, about two inches above the top of the bulb; then allow them to remain in this condition for about two weeks, after which take the bulb out of the pot or glass, or whatever receptacle they may have been grown in, and cut the green leaves off the same height from the bulb as the flower-stalk has been cut off. The bulbs should then be put in a warm, dry place, with



the roots still adhering, which, when dry, may easily be rubbed off, leaving the bulbs in the same sound condition as when first planted. There are several modes of keeping the bulbs until the fall, and either of the following ways are thoroughly practicable, and

are recommended to the amateur. The first plan and probably the best is to plant the bulbs that have been dried about seven inches below the surface of the ground as soon as the weather will permit in the spring, in any out-of-the-way place; as when so planted

they do not make one particle of growth, and are only being prepared for planting at their proper season, for winter blooming. The next mode, a

very simple one, is to tie them up in a bag, and hang them in a dry place in the cellar, avoiding dampness, which causes decay.



CHINESE CHRYSANTHEMUM.

THE CHRYSANTHEMUM CRAZE is not on the wane. At least Peter Henderson, a noted florist, declares in *Popular Gardening* that the opposite is the case. He thinks it has come to stay for many years. He says further: "No plant is so easy of culture; in no family of plants have we such variety of contrasting colours, or such symmetry and yet eccentricity of form. It comes in a season when nearly all other flowers are gone; it is hardy, so that it can be grown by the most humble owner of a cottage, yet gorgeous enough to make splendid the conservatory or the drawing room."

By favor of Mr. Vick we present a cut of Japanese Chrysanthemums. And for contrast we show also a cut of

a Chinese variety. It will be observed that both are large, loose graceful flowers, but that the former is more ragged or fringe like in habit than the latter.

We cannot better introduce this flower to those who are thus far unacquainted with it, than by giving the following condensed report of Dr. T. Sterry Hunt's remarks on this flower, in his address on flowers before the Montreal Horticultural Society, last March:

"And first about Chrysanthemums. To many people, the name is comparatively new, and the flower itself is new. He had been surprised to see how few are cultivated in Canada. That, however, is due in part to the conditions of climate. All present knew the family

of this flower and its character. We speak of this flower something like an Aster, as a Chrysanthemum; it is really a Pyrethrum. It is one of the Composite flowers. The Chrysanthemum we cultivate the most, is one that comes from China. This flower was for a long time cultivated in India and China, and in New England it was known as "the India plant." The story he had heard as a boy, as to the manner of their introduction, was to the effect that they were brought out from India by some sea-captain. And, doubtless, that was their history. They are highly prized in India; they are plants that will flower for a long time on ship-board, and they are easy to transport. These Chrysanthemums have been greatly varied by cultivation. The Chinese and Japanese have from time immemorial vied with each other in the production of new varieties. Nowhere has the florist's art and careful selection been carried to such a pitch of perfection as in China, or, still more, Japan. The Japanese are our masters in that, as in so many elegant arts. The Japanese attach a special importance to the Chrysanthemum. It is to them a sacred flower. It has a peculiar religious symbolism. Its fragrant odor; the freedom with which it flowers; the ease with which it is cultivated, have given it prominence among these people of the East. We have three or four different types. They are of every possible color but pure blue, and are often beautifully shaded with two or three tints; one color at the tip, one at the base, one on the upper side, and another on the lower side; there is infinite variety in this one little flower. Extremely hardy and very easy in cultivation, they do not stand our winters, and cannot be made to blossom here in the open air. In Rhode Island, or in Connecticut, they bloom in November, and even in early December, in the open. Here we

cultivate them in pots and bring them to bloom in the house. The propagation is simple: It is a little, woody, shrubby plant, easily propagated, and running up some four, five or six feet in height, and is laden with flowers in the late autumn and early winter. They are very fragrant, and keep their beauty for a long time on the plant, and after they are gathered. When the plant has done its work of flowering, you cut it down the ground, and put the root in a place where there is not too much moisture all the winter, and in the spring, the root torn asunder, will give you a great many plants. Comparatively few take the trouble to grow them from seed; you may get something that is more beautiful, but the result is uncertain, and you rather trust to friends for cuttings of approved varieties."

FLORICULTURAL.

SOWING SEEDS.—Wm. Falconer, in *Rural New Yorker*, advises early sowing of the following flower seeds, among others, in order to have fine plants for transplanting in May, viz.: lobelia, tuberous rooted begonia, cockscomb, verbena, snapdragon, petunia, stocks, canna, abutilon, pansy and chrysanthemum. Lacking a hot-bed, seed pots may be used, half-filled with drainage, and balance with mellow, light, sandy soil. Scatter fine earth over the seeds, just enough to cover them, giving very little water. The pots should be placed on the window sill, away from bright sunshine, and a bit of stiff paper laid over them, but tilted up about one-fourth of an inch at one side. On germination of the seeds, the paper should be removed. The Chinese and Japanese chrysanthemums are so copious and gay in November, and so easily raised from seeds that we should all try a few.

Vegetables.

CÉLERY.

How to Grow and Keep It in the North.

BY A. A. WRIGHT, RENFREW.

How many readers of the *Horticulturist* have at this season of the year an abundant supply of beautiful, crisp, ivory-like celery? It is so healthful and in the winter season especially, such a desirable relish, that it seems strange it so rarely appears upon our tables.

It is easily grown. Sow your seed in the hot-bed—in this locality—about the 1st of April. It will not come up the same day nor the same week, but if kept warm and damp will come along in good time. Neither will it astonish you with its wonderfully rapid growth, for at first it is a slow grower. When about an inch high the plants, should be removed to another portion of the hot-bed, and there left until they have attained a considerable size, when they are ready for planting in the place they are to occupy in the garden. Having previously enriched and prepared the ground, by deep spading, I dig out a trench about five or six inches deep and as wide as the spade, throwing the earth to both sides of the trench. I may mention also that you need not fear having your ground too rich, or too loose and mellow.

The plants are now taken from the hot-bed and planted in your trench, setting them about six inches apart. This being done, place little pieces of sticks across your trenches say five or six feet apart, and on these cross pieces lay inch boards, say ten or twelve inches wide, and any length. These will make an excellent shade for your plants, and can be easily removed when you are water-

ing them, which should be kept up for some time after planting, unless you have rain, when of course it will not be required. As your plants grow, the earth should be drawn about them with one hand, while with the other the stalks are held together, to prevent the earth from getting in between, and injuring them. This earthing up should be continued from time to time until the plants are fully grown, care being taken that it is done only when the earth and plants are dry to prevent rusting of the stalks. Your plants being fully grown the next step will be storing for winter.

For this purpose I take boxes about four feet long, a foot wide, and, say eighteen inches high. The ordinary boot and shoe boxes are admirable for this purpose.

Having procured one which is tolerably sound, if the top has been replaced you take it off, as you have no use for that. You next turn it on its side. Then take a straight-edged board and with your pencil draw a line lengthwise of your box, and about three inches from the bottom of it. Now take your rip saw, and saw the side of your box through from end to end on this line. If the board that you have just sawn was six inches wide, you will remove the upper three-inch strip. Next take your cross cut saw and saw your end boards in, about three inches, and in a line with your previous cut with the rip saw. This done, make another cut with your saw in your end boards reaching from the bottom of the remaining top side-board of your box to where your last cut ended, and remove the V shaped piece from the end. Now do the same thing with the other end. You next take the three-inch strip you had previously taken from the side, and place it back again. The top of it will now be in line with the side of the box, but the

bottom will extend in, leaving a two-inch space the whole length of your box, which space you will use for pouring in water to supply moisture to your plants. Now, take your box to your celery-bed, and cover the bottom with two inches of earth, and in this earth plant your celery as closely as possible. This should be done on a dry day. The box, with its contents, can now be removed to your cellar, when, for the present, your work is done.



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WHITE PLUME CELERY.

From time to time as your plants need—which is pretty often—you will supply them with water, and always through the open slit in the side of your box, never by the top, as it would rot your plants.

Treated in this way you can always get at your plants, without any trouble, and you can see at any time the exact condition that they are in.

One word as to varieties. I have now discarded the Boston Market and other old standard sorts, and grow only the White Plume, as it blanches so much

earlier, is so crisp and tender, and strange to say, with me it keeps in the way I have described, longer than any of the older sorts. In this last respect my experience seems to differ from nearly every writer whose articles on celery I have chanced to see, as all state that the White Plume is the poorest keeper of any.

It may be that, if kept in some other way, it would prove the poorest keeper, but kept in the manner I have described I have found it to have no equal.

THE ONION.

Draw off his satin waistcoat,
Tear his silk shirt apart,
And, weeping tears of pleasure,
Creep closer to his heart!

Wrapt is this modern mummy
In ceaseless fold on fold;
Yet what a wondrous power
Those endless wrappings hold!

Of all the vegetables
From garden's length to length,
He is the one most mighty—
Epitome of strength.

Whene'er his person enters,
All noses snuff the air,
And epicurean stomachs
For gastric treats prepare.

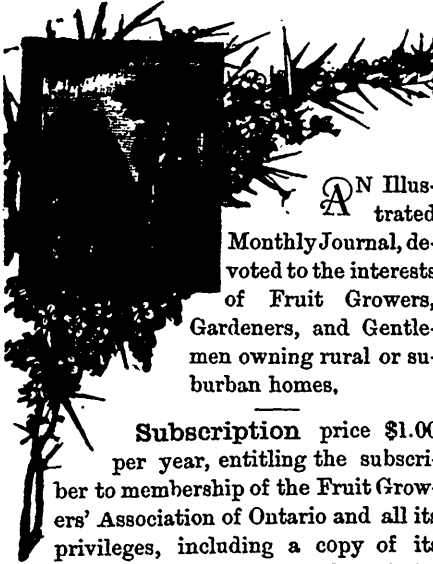
A subtle spirit rises
Of dinner in full bloom,
An appetising odor
Pervading all the room.

When at the well-laid table
How is the palate blest!
He betters other dishes,
Yet is himself the best.

But call upon your lady—
Why is her smile so grim?
Before a word is spoken
She knows you've been with him!
—*Boston Transcript.*

They were at a dinner party, and he remarked that he supposed she was fond of ethnology. She said she was, but she was not very well, and the doctor had told her not to eat anything for dessert but oranges.

THE
Canadian Horticulturist.



AN Illustrated

Monthly Journal, devoted to the interests of Fruit Growers, Gardeners, and Gentlemen owning rural or suburban homes.

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 premium plants and trees.

This Journal is not published in the interests, or for the pecuniary advantage of any one, but its pages are devoted wholly to the progress of Horticultural Science and Art in Canada. We aim at the development of the fruit growing industry in our Province; at the general distribution of knowledge concerning all the newest and best varieties of fruits; and at the education of a refined taste in the art of decorative gardening around the homes of our Canadian people.

With such ends in view we invite the co-operation of the lovers of Horticulture both in extending the membership of the Fruit Growers' Association of Ontario, and in contributing to these pages such items as may be of general interest and profit.

Patience on the part of our subscribers will favour us. Owing to great amount of mail matter coming in just now, it

is impossible to change the address label the first month after it is received in every case. There need be no anxiety, therefore, respecting safety of enclosures until after the second month from time of sending.

Subscribers receiving March Number, and not returning the same, will be counted members for 1887, but no premiums or Report can be sent them until their dues for the year are paid.

Not a Nurseryman.—The Editor of this Journal is not a nurseryman, but a practical fruit grower. He has had some years experience in the nursery business, but during the past ten years has devoted every acre of his ground to fruit culture. He has no interest in or connection with any nursery; but, on the other hand, will endeavour to protect the fruit grower against humbugs, whether introduced by a nurseryman or by any one else. At the same time it will be his object to keep the readers posted concerning all new fruits, and to commend those which are valuable so soon as their reputation is fully established.

Contributors should remember that four or five hundred words are enough for any ordinary article. We have received one that approaches the thousands, and would require a special number of our *Horticulturist*. Lengthy articles, though valuable, sometimes have to wait a long time before we can find space for them.

The Annual Report for the year 1886 will be in the hands of the members of the Association very soon. We regret its unusually small size, the result of the employment of an incompetent substitute in place of our usual reporter. Whole pages had to be erased owing to the wretched work of this man, and what remains was mostly re-written by the Secretary.

Such a mistake will not be repeated, as a thoroughly competent official re-

porter has been engaged for the year 1887.

The Winter Meeting at Chatham was a most interesting one. Valuable papers were contributed by the following gentlemen, viz.:—A. M. Smith, St. Catharines; B. Gott, Arkona; John Croil, Aultsville; S. P. Morse, Milton; F. W. Wilson, Chatham; P. E. Bucke, Ottawa. Also most interesting addresses were delivered on various topics by his Worship the Mayor of Chatham; T. T. Lyon, President of the Michigan Pomological Society; Wm. Saunders, Director of the Experimental Farm Stations of the Dominion; Prof. H. Panton, of Guelph Agricultural College; A. McD. Allan, President of the Association; P. C. Dempsey, of Trenton, and others. But as our readers will receive all this, verbatim, in the Report for 1887, we need not occupy these pages with even a summary of the proceedings.

Such meetings as these, held as they are in various portions of Ontario, serve to disseminate knowledge of fruit culture far and wide, and never fail to very largely increase the local interest in the work of our Association.

The appointment of the place for the *Summer Meeting* has been left in the hands of the Executive Committee.

Thanks.—Again we thank the members of the Association for the many kind letters of congratulation concerning the improvement in the *Canadian Horticulturist*. We again ask that this appreciation manifest itself in helping us to double the circulation, and thus increase the usefulness of the Fruit Growers' Association of Ontario.

An Indiana Correspondent thinks "there is no danger of our communication with the United States being cut off this year." Certainly not, if the horticultural fraternity can prevent it. We recognise neither political parties nor

national boundaries; and since our business is with the land and not the sea, we can afford reciprocity in horticultural information, undisturbed by the quarrels of a few fishermen.

Acknowledgment.—The cuts of Flowering Bulbs and of White Plume Celery in this issue were kindly furnished by Messrs. J. A. Simmers & Co., J. A. Bruce & Co., respectively, by request.

Question Drawer.

This department is intended as an open one to every reader of the "Horticulturist" to send in either questions or answers. Often a reader will be able to answer a question which has been left unanswered, or only partially answered by us. For convenience of reference the questions are numbered, and any one replying or referring to any question will please mention the number of it.

16. Yellow Transparent.—*Where can I buy the trees?* [E. R., Stratford.]

Write to any of the nurserymen who advertise in this journal for information.

17. A Rosary.—*What is the proper distance to plant Hybrid Perpetual Roses in making a Rosary?* [F. F.]

Mr. Wellington, Toronto, writes:—The proper distance to plant Hybrid Perpetual Roses is, for strong growing varieties, three feet apart; for those of weaker habits, one to two feet.

18. The Wealthy Apple.—*Has the Wealthy Apple the defect of dropping off the tree before being ripe, and is it easily shaken off by winds?* [F. F.]

A. A. Wright, of Renfrew, writes:—We have never been troubled with the Wealthy dropping its fruit prematurely, as the Tetofsky does. Neither is it easily shaken off by the wind. We find it, so far, one of the very best apples we have for our cold northern climate. I sent several boxes from here to the Intercolonial.

19. Gooseberry Bushes.—*Will they do well under a wide-spreading tree? Do*

you recommend root pruning in the spring?

[R., Toronto.]

The only reason for planting them under a tree that we know of is for lack of any open ground; for, grown under a tree, the fruit will likely be small and mouldy. The gooseberry likes moist soil and plenty of manure with high cultivation.

As to pruning, it is necessary to thin out the *top* every fall or spring to nearly one-half, especially the old wood, but we see no use of root pruning.

20. Grafting.—*Please state the time for cutting scions, time for grafting, and way to make best grafting wax.*

[A. C. McDONALD, Dunlop.]

Scions graft better if cut a good while before they are wanted, because they should be in a dormant condition when used. They may be cut early in spring, or they may be cut in the autumn, and packed away in fine dry soil or sawdust until needed. It is not good to cut them when frozen.

The grafting may be performed until quite late in the spring. Indeed, a neighbour of ours was top-grafting last spring until the leaves came out, and yet succeeded.

Grafting wax is usually made by melting together equal parts of tallow, beeswax and resin; or a little more of the tallow to make it easier worked.

Another good mixture is: Linseed oil, 1 pint; beeswax, 1 pound, and resin, 6 pounds.

21. Wind-Break.—*How far from an orchard should a wind-break of Spruce or Lombardy Poplar be planted?*

[F. F.]

Mr. Thos. Beall replies:—"If spruce trees are planted at the same time as the orchard, they should be planted as far from the nearest row of trees as the rows are from each other. No injury will result for forty or fifty years. Lombardy Poplar is the worst tree I

know of for that purpose, and therefore should never be used."

[The *Catalpa Speciosa* is highly spoken of for this purpose, and is quite hardy.—ED.]

22. Half-Standard Apples.—*Would trees branching about two feet high be better than Standards for this section?*

[H. E., Napanee.]

Yes, if you can manage the cultivation. A low head is a great protection to the trunk from the scorching rays of the sun. No doubt the best way to obtain them would be by topping off two-year-olds at the desired height.

23. Spot-Free Apples.—*Please give me a list.*

[H. E.]

Yellow Transparent, Red Astracan, Duchess of Oldenburgh, Gravenstein, Wealthy, Ribston, King, Mann, Golden Russet, and others. Of these the Transparent, Duchess, Ribston, Mann and Russet are, we believe, absolutely free.

Scientific.

CANADIAN PHOSPHATES.

P. G. BUCKE, OTTAWA.

The following paper is principally taken from a most exhaustive and admirable essay on the phosphate beds of the world, read by H. B. Small, Department of Agriculture, Ottawa, before the Hamilton Association last summer:—

A short review of the phosphate fields of Canada may not be uninteresting to the readers of the *Horticulturist*, especially when we consider that the above ingredient is essential to all living tissues, whether vegetable or animal. This substance is repeatedly passing through its three great changes; it is found in the soil, from which it enters into the composition of plants, from them it is absorbed into animals, and again deposited in the soil to pass

through the same cycle. This, however, is broken by the dense population of cities, when the phosphates, instead of passing again into the land, are lost by our present defective method of getting rid of city sewerage. A good deal of phosphate is also lost to this country by the shipment of cattle and grain to distant markets by sea and land, and hence the desirability of building up the waste thus made from the natural beds found in various parts of the world. Fortunately for Canada she has the richest and apparently the largest deposits which have yet been discovered on the face of the globe.

The first of these deposits was discovered by the late Mr. Vennor of the Geological Staff, also known to fame as a weather prophet, in 1871, in the County of Hastings. This area was subsequently much enlarged, specimens were found throughout the entire district lying back of the city of Kingston, and mining is still, to some extent, being carried on there.

It is in the Laurentian range of the Province of Quebec, and more especially, as far as has yet been discovered, in that part lying in the townships of Buckingham, Templeton, Wakefield, Hull, Derry, Portland and Bowman, that mining is chiefly being prosecuted, and more especially in the two first named townships. The question of the continuity of these deposits was at one time doubted, but later tests which have been made by means of the best mining appliances, such as steam hoists and drills, have shown that at the depth of three hundred feet the phosphate is of a higher grade, whilst the deposits are more extended. These discoveries go to show that our Quebec beds are practically inexhaustible.

These mines have a great advantage as being situated in contiguity to navigable water, the Lievres River, which is deep and sluggish, where the mineral

is placed on scows which are towed down by steam tugs, or are left to drift till they reach Buckingham village, situated on the Canada Pacific Railway. Hitherto most of our Canadian phosphates have been shipped to Liverpool by steamer from Montreal, where they have been treated with acid, and again distributed as superphosphates throughout Britain and Europe, a large percentage again finding its way across the Atlantic into the United States.

The grades shipped are known as firsts, seconds and thirds. The best is from 80 to 85 per cent., second-class 75 to 85 per cent., third-class below 75 per cent.

Phosphate is found in various forms, sometimes in crystals, at others in masses, varying from compact to coarse granular, in strata of a lamellar texture, and in a friable state called "sugar phosphate." The color varies from greenish to clear sea green, bluish, red, brown of different shades, yellow, white, and cream colored. Phosphate runs from twelve feet square to sixteen feet square to the ton, according to its compactness.

The old style of mining surface deposits has now been superseded by men of capital and powerful companies. These have introduced steam power and improved machinery, and by this means a higher grade of the mineral has been taken out at a less cost. This has placed mining operations on a more permanent basis. The actual cost of a ton of phosphates delivered in Liverpool is about five dollars, after paying all expenses for mining and freight. The price obtained in Liverpool ranges from twenty-six to twenty-eight dollars per ton, so that there is a large margin for profit. It is, however, only by a large outlay of capital that the above results are obtained. The first year's operations seldom leave a margin, owing to the heavy expense for plant

and buildings; but after the first year it is known that in the case of two companies now working a dividend of thirty per cent. was cleared and paid to the shareholders. One of the most successful mines is owned by a company having its headquarters in London, England. The property covers 1,200 acres. The profits for three years, 1882, 3 and 4, after defraying all expenses, paid a dividend of 25 per cent., leaving a balance of \$10,000 as a reserve. Large forces of men are being employed in this industry, which is rapidly assuming considerable proportions. The out-put for the past six years furnishes the following figures:—

1880....	7,500 tons.	1883....	17,160 tons.
1881 ...	10,307 "	1884....	20,461 "
1882....	15,556 "	1885....	24,876 "

Unfortunately pyrites, out of which sulphuric acid is made, is not at hand in sufficient quantities to supply works for treating the phosphates, and as most of the product of the mines is used in Britain, where acid is inexpensive, it pays better to ship the crude material. A wealthy American company has established a mill for grinding and pulverising phosphates, either for acid treatment, or for use in its pure state. These works are situated at the confluence of the Lievres with the Ottawa rivers. This mill has a capacity of fifty tons per day. The powder obtained is so fine that it is passed by means of fans through an 80 mesh bolt, thereby separating every particle of mica, which is the most troublesome material the refiners have to contend with. This flour of phosphate is shipped west to cities situated along Lake Erie. Very little of this material has hitherto been used in Canadian agriculture or horticulture. but as our soils become exhausted by the shipment of grains and cattle, the time cannot be far distant when this powerful fertilizer will be largely sought for, and these deposits

which nature has bestowed with such a bountiful hand, will be thoroughly appreciated by the Canadian farmer and gardener.

Uses of Fruit.

Apples for Stock.—C.L. Underwood says in *Farm and Home* that he has been feeding apples for ten years past. He uses a peck of apples to two quarts of bran for his cows and finds it to increase the flow of milk and improve the quality of the butter.

Apple Butter.—Making Apple butter is almost one of the lost arts, but I have gathered the process from old experienced folks, and New York State farmers say that it is apples pared, cored, cut and boiled in sweet cider till the whole is a dark, rich pulp, and the cider is reduced one-half. No sugar is needed, for the fruit furnishes its own sweetness. Half the apples may be sour and half sweet, or all sweet, as one likes. It takes nearly two gallons of cider to make one of Apple butter, and spices are added, or not, to taste. I should spice it, the rule being one tablespoonful of cinnamon and one-third of a teaspoonful of ground cloves to each gallon of Apple butter, added when it is taken up, boiling hot. It may be kept in barrels, stone pots, or butter firkins and boxes. A clean second-hand butter firkin is a very good thing to keep many kinds of preserves or pickles in.—*Vick's Magazine for January.*

Baked Apples.—Are "a dainty dish to set before a king" if you bake them the right way. Take sour, sound apples and core but do not peel them. Fill the cavities with sugar and stick into each a clove, a bit of cinnamon or lemon peel as preferred. Put the apples into the oven with a little water in the bottom of the baking pan, and bake until a straw will pierce them. Eat cold with

cream. Pears served in the same way are even better than apples.

How to Cook Cranberries.—Wash one quart of cranberries and put them in a covered saucepan with one pint of water. Let them simmer until each cranberry bursts open; remove the cover and add one pound of sugar, and let them all boil for twenty minutes without the cover. The cranberries must never be stirred from the time they are placed on the fire. Follow this recipe exactly, and you will have a most delicious preparation of cranberries.—*Toronto Globe.*

Review.

We will gladly give our candid opinion of any books, magazines or catalogues received, especially if they are likely to interest or benefit Canadian fruit growers, but will not insert cut and dried reading notices in favor of any publication whatever.

Queen's College and University, Kingston, Canada, 1886-7. Containing full information concerning the course of this well-established seat of learning, and the series of examination papers of 1885-86.

The American Garden, 46 Dey St., New York City.

This well-known magazine has incorporated in itself the *Floral Cabinet*, and yet notwithstanding its increased excellence, is now reduced from \$2 per annum to \$1.

Massachusetts Horticultural Society. Schedule of Prizes for year 1887. Robert Manning, Boston, Secretary.

An attractive feature of the weekly meetings of this Society. Besides the special exhibitions, as that of spring flowering bulbs, in March, and of autumn fruits, in October, the Chrysanthemum show in November, there is a series of weekly exhibitions of flowers, and fruits in season, every Saturday, from July 2nd to Sept. 3rd.

The Fruit Grower, an eight page monthly containing much valuable information, published by The D. W. Beadle Nursery Co., St. Catharines, in the interests of their business. Edited by D. W. Beadle, so long and so favourably known as the editor of this journal.

The American Agriculturist published at 751 Broadway, New York City, bids fair to be as attractive for 1887 as ever. Its profuse illustrations render it a favorite with every member of the farmers household, from the oldest to the youngest.

The Horticultural Art Journal, published by Mensing & Stecher, Rochester, N. Y. is a gem in its line. It is got up in excellent taste and contains four colored plates in each number. The terms are \$3.00 per year.

CATALOGUES.

J. A. Simmers' Illustrated and Descriptive Seed Catalogue and Cultivator's Guide for 1887. Toronto, 147 King Street East.

This is one of the most attractive of Canadian Seed Catalogues. It contains a colored plate of vegetables, and a complete set of illustrations, both of vegetables and flowers; and altogether is an evidence of the enterprising spirit of the firm. The business is now in the hands of Messrs. Anton & Hermann Simmers, the latter of whom is kindly contributing such valuable articles to these columns.

John A. Bruce & Co.'s Annual Catalogue of Seeds for year 1887. Hamilton, Ont.

This is the Thirty-sixth Annual Edition, and is a familiar visitor to many a Canadian home. Bruce's seeds are well known to be thoroughly reliable.

Gregory's Annual Illustrated Retail Catalogue of Warranted Seeds, Vegetable, Flower, and Grain, grown and sold by Jas. J. N. Gregory, Marblehead, Mass., 1887.

Herein are described and illustrated a remarkably full list of novelties as well as standard varieties of vegetables, of which Mr. Gregory evidently makes a specialty. We commend his catalogue to the special notice of market gardeners and florists who want the newest introductions.

A. G. Hull's Descriptive Catalogue of Grape Vines and Small Fruit Plants, St. Catharines, Ont., 1887.

Certainly a very tidy pamphlet, and contains a list of the most approved and best tested varieties.

A. M. Smith's Catalogue and Price List of Fruit Trees, Grape Vines and Small Fruits, St. Catharines, Ont., 1887.

Mr. Smith is well known as a thoroughly reliable Nurseryman, and any one sending him an order will not be disappointed.

Steele Bros. Seed Annual, Toronto, 1887, Corner Front and Jarvis Streets.

An excellent Catalogue of eighty pages.

A. C. Nelles & Co.'s Descriptive Catalogue of Mohawk Valley Seeds. 1887. 64 Cortlandt St., New York City.

Joseph Harris Seed Co.'s Illustrated Catalogue. 1887. Moreton Farm, Rochester, N. Y.

Joseph Harris is well known everywhere through his "Walks and Talks" in the *American Agriculturist*. His catalogue of vegetable and flower seeds overflows with the most useful and practical information, and is a valuable handbook for that reason alone.

The Folding Sawing Machine Co. send us an illustrated Catalogue and Price List of their useful machine. Their Canadian factory is at Essex Centre, Ont.

The Waters Stock Farm send us Catalogue of thorough bred trotting horses, each with complete pedigree, and careful

description. The address is Genoa Junction, Wis.

CIRCULARS.

John B. Moore & Son, Concord, Mass., sends us a Circular concerning his new seedling black grape, the "Eaton," with a large cut of the same, showing a cluster measuring 4 x 8 inches. They claim that it is larger and earlier than its parent, the Concord.

Alex. Begg sends a Circular concerning a Canadian Exchange in London, Eng., which he is establishing. This will be of great service to Canadians visiting England, who will thus find a common centre to meet business friends and acquaintances, and for obtaining all needed information. Canadian office, Room 19, Corn Exchange, St. Sacramento Street, Montreal.

Humorous.

Two Students ring a hated professor's bell at midnight. He puts his head out of the window and wants to know what's up. "One of your windows is wide open." "Where?" exclaims the startled professor. "The one you are looking out of."—*Fliegende Blätter*.

A Swiss Law compels every newly-married couple to plant trees shortly after the ceremony of marriage. The pine and the weeping willow are prescribed, but the birch is allowed as being prospectively useful.

Mrs. Greene: "Timothy, what have you done with the letter that was lying on the bureau?" Timothy: "I put it into the letter-box, ma'm." Mrs. G.: "Oh! provoking! Didn't you see there was no address on the envelope?" Timothy: "Yes, ma'm; but I thought you didn't want nobody to know who you was writin' to."—*Life*.