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THE

CANADIAN HORTICULTURIST

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FRUIT GROWERS' ASSOCIATION OF ONTARIO

VOLUME XIV

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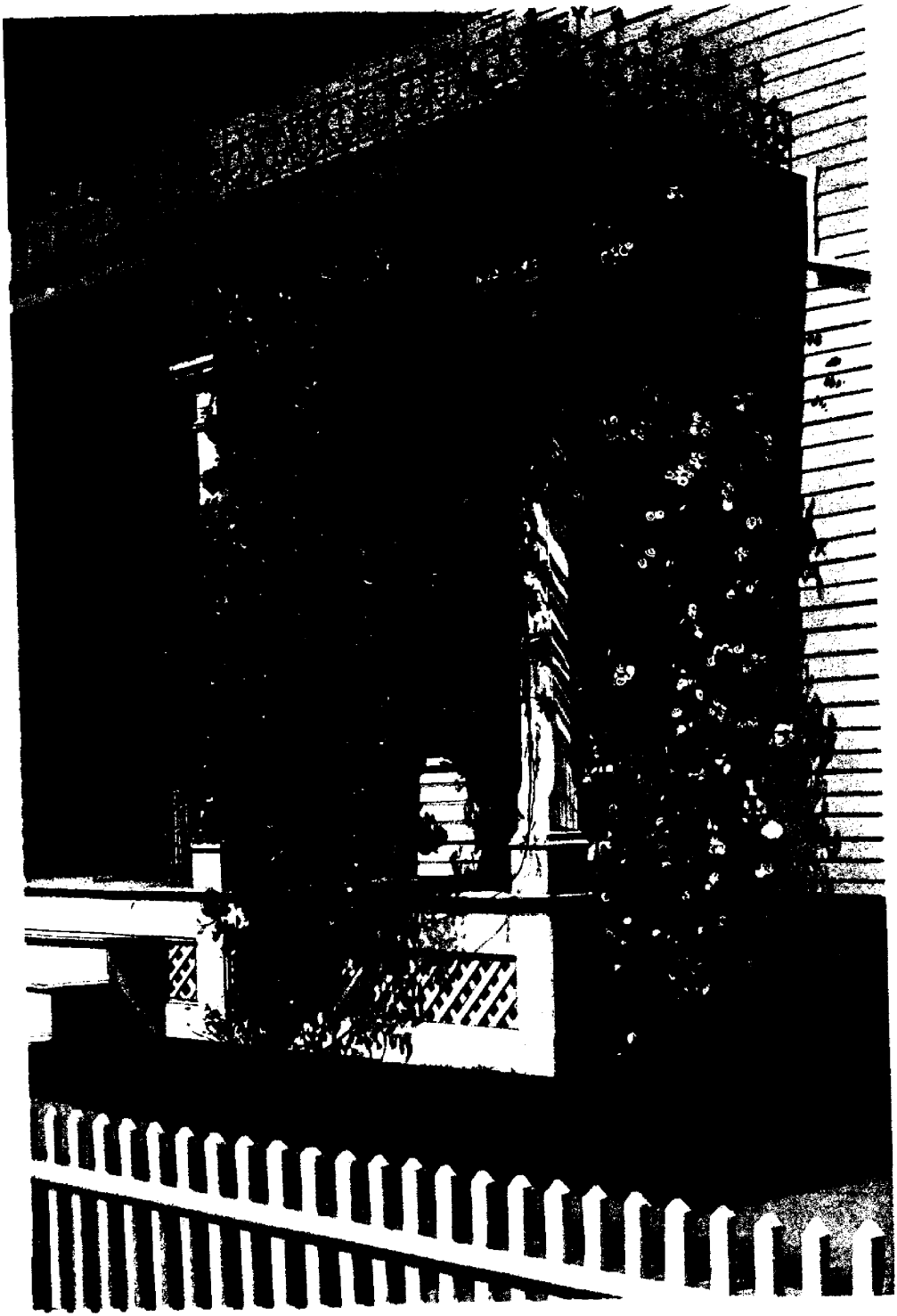

THE

Canadian Horticulturist.

VOL. XIV. 1891. NO. 1.

1891.

(FOR THE CANADIAN HORTICULTURIST).

'TIS midnight! hear the solemn chime,
Which tells the ceaseless flight of Time,
Whose restless wings hath swept away
Old Ninety to Eternity!
The hoary centuries now claim
Another link in Time's great chain,
And e're Aurora lights the morn,
The infant Ninety-one is born.
God bless the Royal, rosy boy!
Child, we hope, of peace and joy!
Hear chanticleer proclaim the birth
Of the great monarch of the earth,
And flaps his wings, to chase away
All gloom from our good friendship's day.
Heed not the Cynic's hopeless moan,
That "naught but bitter herbs are grown,"
Altho' by sorrow, low we 're laid,
There 's hidden blessings in the shade!
And kindly doth "Our Father" stay
His rough wind, in the east wind's day;

So, while we hold to life's sweet dower,
Oh, let us make each thorn a flower!
For Time moves on with rapid force,
Nor joy, nor sorrow stays his course,
Hastening us onward to the "Bourne"
From whence no traveller can return.

Mount Royal Vale, Que. —GRANDMA GOWAN.

CLIMBING ROSES.

IT is not every one who can afford to build and furnish an elegant home. The adornments of art are very expensive, and come within the reach of the few rather than the many, but Dame Nature is kind to all alike,and distributes her choicest decorations with a lavish hand. The dahlia and the carnation, the rose and the lily grow with equal beauty and fragrance in the dooryard of the poor widow and in the garden of the wealthy lord, if only it receives equal attention. Therefore, in drawing the attention of the readers of the CANADIAN HORTICULTURIST to such adornments, we are placing before them objects which may be attained by all, and which have the power to transform many a cold, uninviting exterior to a place of beauty.

In Great Britain the rose grows to its greatest perfection, so that the "rose of England" has become almost a household expression, but many varieties are too tender to endure our Canadian winters, and can only be grown under glass. Among the climbers there are many that will fail utterly if planted outside here, as for instance, the *Ayrshire* roses, which are a class of rapid growers, and much used in England to cover unsightly buildings, and the *Banksia* roses, which have very small flowers like double cherry blossoms and a violet perfume. There is another class against which our readers need to be warned, viz., the "many flowered rose" (*Rosa Multiflora*), one variety of which has been much sold in Ontario by agents from extravagant colored plates. We refer to GREVILLIA, or "*Seven Sisters*," which has double flowers borne in clusters, that in a picture looks very attractive; but really, the flowers are small and possess little beauty, besides it is too tender for our province.

Fortunately we have in the *Prairie rose* (*Rosa Setigera*) a class of hardy native climbing roses, often found growing wild in Michigan and the Western States, which we may plant with confidence. Our colored plate, for this month, represents two of the more commonly known roses of this class, which are favorites everywhere on account of their hardiness, free blooming and the fact of their flowers appearing just after the other varieties are nearly over. They are the well-known QUEEN OF THE PRAIRIE and BALTIMORE BELLE, varieties, that were raised in the year 1843 by a rose grower named Feast, in Baltimore, from seeds of the wild Prairie rose, crossed with some European variety. These two, the former red and

the latter white, when grown near each other upon the same porch, or with intertwining branches, heighten each other's beauty by contrast. These roses are both of rapid growth, and may be employed to advantage for covering any unsightly objects, as walls, old trees, old buildings, etc.

The following is a full list of the most desirable roses of the Prairie class, with the description added, according to Mr. H. B. Ellwanger, in his book on "The Rose":

ANNA MARIA; vigorous, pale pink, very few thorns. Grown by Feast in 1843.

BALTIMORE BELLE; vigorous, pale blush changing to white. Feast, 1843.

GEM OF THE PRAIRIES; free, believed to be from Queen of Prairies crossed with Madame Laffay, rosy red, occasionally blotched with white, large flat flowers, slightly fragrant. Raised by A. Burgess in 1865.

QUEEN OF THE PRAIRIES; vigorous, rosy red, frequently with a white stripe, medium or large size, double, foliage large, five leaflets, quite deeply serrated. Feast, 1843.

TRIUMPHANT; vigorous, rosy pink, medium size, double or full, distinct, seven leaflets are common. Raised by Joshua Pierce, of Washington, D.C., in 1850.

GRANDMA GOWAN.

FOR many years the poems by this talented lady have adorned the pages of THE CANADIAN HORTICULTURIST. Anyone having the least appreciation of true poetry, cannot but discern the poetic genius of the author of these sparkling gems. Our readers will be anxious to know something of the person who so often contributes to their pleasure, and to meet their wishes we here present an engraving of her face, and a few scanty notes of her personal history.

Mrs. Jessie Gowan's biography is somewhat of a romance. Little inclined to tell us much about herself, she says, in reply to our request for some notes: "What can I say? Must I begin with my grandmother being an eloping, disinherited lady of high birth, and her daughter, my mother, marrying a landscape painter, and of my six brothers being noted in the city of Edinburgh, Scotland, for their high talents. Four of them were the 'Ritchie sculptors' and two eminent artists, one Alexander A. Ritchie, *nom de plume* 'Dot,' illustrator and designer, designed the stained glass windows of the Houses of Parliament, England. He died at the age of thirty-four, while his historical paintings were on exhibition at the Scottish Academy. My brother John died of yellow fever in the Governor's house at Trinidad, West Indies, while decorating the reception room artistically

"And what of sister 'Dotty,' your humble scribe? Well, she went to teaching school for a few years, then married Mr John Gowan, who was bookkeeper to Messrs. Cowan & Co., paper makers, Edinburgh, for over twenty years. Messrs. Cowan & Co. had possessions in the United States, and I went with my husband

to the States, also to Upper Canada. When the war of 1861 broke out in the States my husband went to the south with his regiment. In 1862 he died.

"I was invited by General Sir David Russel to take the management of a Christian mission of his, which I did for nearly twelve years. I then went to the far West to my married daughter. Five years later I came to Montreal, where I hope to end my days in peace and hope.

"I may say I had great encouragement in my love for scribbling from my dear friend Mr. James Ballentyne, author of "Castles in the Air," and other poetical works. I used to write for the *Child's Companion* when I was a girl, in the *Penicnick Journal*, the *Gillovedian* and the *Ladies' Journal*.

FIG. 1.—GRANDMA GOWAN.

"I am glad this talk of mysel, is over, and I hope, if you say anything, you will cut it very short, for I don't see anything at all interesting in my life."

Referring to the photograph, which she sent in response to a special request for it, she says: "What a toothless old thing my photograph is! I have a fine set of teeth, but when I first used them my dear boy cried and said he would never kiss me with them in. I threw them aside, declaring I would rather have his dear loving kiss than the best teeth in the world. I have kept my word and never used them, and never will."

The loss of her dear grandson Gowan Johnston, in Idaho—

"Gowan, with the golden hair—
Golden hair and starry eyes,"—
Vide Vol. 8, p. 216

was a great grief to Mrs. Gowan. He was a boy of remarkable promise, and had closely entwined himself about his grandma's heartstrings. His death took place last May, and, bowed down with grief, she wrote:

"My angel boy, my darling Gowan,
I feel thy presence very near,
I know thou seest poor grandma bowing,
Imploring strength her grief to bear.

"And we shall walk on streets of gold,
Hand-in-hand together;
Grandma will not be frail and old,
But strong and young forever."

Gowan Cottage, the home of Mrs. Gowan, is pleasantly situated in Mount Royal Vale, a suburb of Montreal, and here it is that she entertains her children and grandchildren when they come from distant Idaho, or New Mexico, to pay her visits that seem all too short.

She has passed the allotted three score years and ten, and will soon have no need to read our poor literature on fruits and flowers, for will she not have access to the celestial gardens and to the tree that bears the "twelve manner of fruits"!

Long may she be spared to us, and many be the opening odes prepared by her for future volumes of our journal.

THE RUSSIAN APRICOT.

THE *American Garden* gives a good deal of space to the Russian Apricot, and from the correspondence of various correspondents concludes that it is not an entire failure. Its conclusions are that it is somewhat hardier than the peach, being able to endure one or two more degrees of cold, but on account of its very early blooming it is very liable to have its fruit-buds destroyed in the spring. Another difficulty in obtaining fruit from it is its great liability to the attacks of the curculio and the plum gouger. The seedlings are, many of them, worthless. We would therefore warn our readers against buying a tree that is simply a "Russian Apricot" without any name. The varieties that are considered the best are the Alexander, Nicholas and Budd. There are quite a number of other varieties, but they are less desirable. All these are inferior quality of fruit to the older varieties of apricots such as are grown in England and California, but by hybridization good results may be attained.

Our readers will have noticed in our "Letters from Russia" that all these varieties of Russian apricots, brought out of the Mennonites, are from Southern Russia; while some varieties, grown farther north, are much hardier and of superior quality.

There is also a variety brought from China, known as "Shense" which is very promising.

SELLING FRUIT ON COMMISSION.

OF late years this mode of selling perishable fruits has come into very common patronage among growers. The necessity for quickly disposing of fruit, and the difficulty of getting a connection with retail shops for such a short season, has brought this about; and, no doubt, very much fruit thus finds its way into market, which, only for the commission merchant, would have perished in the orchard. This middle man, therefore, is a benefactor, and his usefulness should not be under-estimated. But, in an experience of twenty

years growing and shipping fruit, the writer has always found the net returns from commission salesmen very far below those from direct sales. This is accounted for in several ways. First, the commission agent never knows what quantity of fruit he will have to handle until the arrival of the train, and he is therefore unable to make sales in advance. All must be sold at some price, or the whole may be wasted. The result is that there are great gluts in the height of strawberry season, raspberry season, and so on through the list. Fruit is sold at an awful sacrifice, scarcely paying the shipper for gathering it, when at the same time there may be a famine of the same fruits in many a small town, not fifty miles away. Secondly, we find that commission men often buy on their own account, and in that case always sell such purchases before that consigned; the latter must take the poorest chances, and sometimes be dumped, while waiting for its turn. Thirdly, many commission merchants consider it the lawful thing to sell all consignments to themselves at the very lowest market price, in order to fill orders, or to be used for their own retail sales. From this price they deduct the commission, and in consequence the shipper gets a very small net sum for what might perhaps, if a fair chance were given it in the open market, bring a high price. For instance, a grower once forwarded a quantity of apples to a commission merchant (not in Toronto) and received an answer to the effect that they were worth $1.12 to $1.25 per barrel. Not being satisfied he journeyed to the city, and actually bought his own apples from the salesman at $2.25 per barrel. In an hour or two he returned, undisguised, and, on enquiring the state of the market, was informed that good apples realized $1.00 and $1.25, very prime as much as $1.50.

What remedy to propose, or to practise ourselves, is a perplexing question; but there is no doubt that selling direct to a reliable retailer is a step in the right direction. But what is to be done with the surplus on those days when there is more than can be sold in this way? At present there is no help, it must go to the commission house.

The auction system has been worked with great success in England, and although a former attempt to establish it in the city of Toronto was a comparative failure, that does not prove that it might not be a success. Surely an open sale would be more in the interest of the shipper than the present mode of shipping indiscriminately to commission merchants. What do our readers think on this question?

MR. PERRY ON GROWING STRAWBERRIES.

MR. PERRY, a noted Ohio gardener, has lately published a book on How to Grow Strawberries, from which the following extract is made:—

We may safely say that the total value of the crop from several rods less than half an acre at wholesale prices was $287. No attempt was made to get the last dollar out of them, or the receipts might have been pushed up to

$300. The exact yield in bushels was over 100, or considerably over 200 bushels per acre. We sold to dealers only, or to families who wanted a half-bushel drawer. I fixed the price of our best selected berries at $3.20 a bushel, and of the small ones for canning at $2, and held it there without any regard to how low others were selling. Our town people after the first day took all we had, so that we did not have a single quart of berries spoil after they were picked.

Nothing in the world but extra quality gave us this good market in this season when berries were so plentiful. The markets were all glutted with common berries; but such as ours were not crowded in the least, and never will be. I went through the market in Cleveland during the best of the season, and through most the fancy groceries on Euclid Avenue: and in all that great city there was not half a bushel of berries that would match what I was furnishing to our grocers.

I drove to Akron (12 miles) with three bushels, to see what I could do, not dreaming that Hudson would take all we had after that. Before I got there I met men returning who said I might as well turn around, as Akron never knew such a glut of berries before, and no more could be sold at any price. But I went on. I thought to myself, "Here is just the chance I want to prove—whether or not excellence pays." I drove up before a grocery, the owner of which I knew appreciated a good article. I found him at his desk, and it was with much difficulty that I at last induced him to come out; he was utterly sick and disgusted with berries. But he finally came. I uncovered them. He bought them. I went home. Before night of that same day he wrote me to bring him four bushels more of these berries, offering an advance of twenty-five cents a bushel, and one dollar if his market should recover any so that he possibly could. But our home trade wanted them all, and I did not go to Akron again.

As for cultivation to raise such fruit, we set out the plants as early in the spring as the ground was fit to work, and let the runners grow as soon as the plant was able to throw out strong and thrifty ones in abundance, which was about the 20th of June. We went over the piece two or three times, training the runners a little, after they got well started, so they would as soon as possibly cover all the surface with plants. We cut the runners just near enough so they would not cross and get mixed. About the middle of October, we stretched lines through between the rows; and one man with shears cut runners, and another, with a hoe, cleaned out paths sixteen inches wide. This left two-thirds of the ground covered with plants. Next we went through these plants and took out the old ones set in the spring, all the little weak ones, and enough of the strong ones so that what were left stood not less than six inches apart on an average.

I am more than ever convinced that the very heavy manuring practiced by some is all unnecessary on good soil where clover is grown in rotation and the best of tillage is given; also that fresh manure plowed under is better than rotten manure harrowed in on the surface. The latter will be more likely to grow an excess of vines, on my soil, with small fruit yield; and the former moderate vines and abundant fruit.

TWO WEEKS AMONG THE OHIO STRAWBERRY GROWERS.—II.

ON the morning of the eighth of October Mr. Crawford and I left Cuyahoga Falls by rail for Medina, Ohio, on a visit to A. I. Root. A portion of the country between these points is very picturesque, resembling many parts of Canada.

The first thing that strikes the traveler on leaving the cars, at the Medina station, is a large factory with the inscription cut in a large block of freestone, inserted in the building, "In God we Trust." Near this building we saw a person coming, when Mr. Crawford said to me "There is Mr. Root himself." He recognized Mr. Crawford and surmised who the other was. Such a greeting! It was quite in keeping with what we might expect from a man who would place such a motto on his building as the above.

After tea, we had a walk through his vegetable garden which is a large one. There had been no frost then to do any harm to the most tender plants in this portion of his garden, for it is the highest point on his land. He has a windmill and a tank which holds 360 barrels, with pipes laid all over his grounds and to his factory also. Mr. Root has in his employment 150 men and women, all professing Christians, and to his credit be it said, he will not have a man in his employ who will drink any spirituous liquors, or smoke tobacco, or use profane language.

All his workpeople have half an hour at noon each day to read the Scriptures and a talk thereon, also an early closing of work each Saturday evening. We remained with him over night; the next morning we went with him over his small-fruit grounds which are large and well kept. He has all the small fruits usually grown by nurserymen, but I think he does not set any plants except strawberries, and of these he has all the popular kinds.

Both Mr. Root and Mr. Crawford have adopted a new plan of propagating strawberry plants, by making beds six feet wide and the length needed. The soil, in these beds, is made very rich. On the top of this is put fine clean sand about one inch deep, which is kept damp. The plants, as soon as formed on the vine, without roots, are taken off with about an inch of the runner attached, pressed into the sand in rows about three inches apart. These beds are covered wirh cotton shades, which are kept on till the plants are rooted. The sand must be kept moist all the time. I saw the plants growing in these frame beds at both places. They were better plants than those grown the usual way. There is no patent on this plan and I would advise others who wish to propagate plants quickly to try it.

If spared, I will write more about my rambling by and by.

Granton, Ont. JOHN LITTLE.

LAST SEASON'S FRUIT CROP.

IN scarcely any section of the province can it be said that the apple crop has been an abundant one. The trees blossomed with great promise in the spring, but a blight, apparently caused by the cold, wet weather, sadly diminished the chances for a heavy crop of fruit. In the extreme south-west the leaves of apple and pear trees assumed a rusty reddish color, and the newly-formed fruit dropped in considerable quantities; and in many other localities the fruit dropped while yet immature. In the counties of Essex, Kent, Elgin, Lambton and Middlesex the apple crop was nearly an entire failure, and of other fruits there has been not more than a sufficiency to supply local demands. In most of the West Midland counties there has been a small surplus of winter apples, and there as well as in the Niagara peninsula pears, plums, cherries and grapes and other small fruits have been moderately plentiful, but grapes are the only fruit of which any considerable shipments have been made. All variety of peaches were scarce, although occasionally an extra sample has been produced. Apples were a good crop in the counties of Grey, Bruce and Huron, and also moderately good in Simcoe. From the first three ot these counties large quantities have been shipped at good prices. From the township of St. Vincent (Grey) it is stated that fifteen thousand barrels have been shipped. Pears were moderately plentiful also, and have generally turned out better than apples. Throughout the eastern counties there has been a small surplus of apples, and other fruits have been about adequate to the demand. Winter apples vary greatly in size, shape and quality. The fall varieties are generally uneven in shape and of scabby appearance, but the supply has been moderate. The general appearance of fruit trees is satisfactory, very fair growth having been made, Blackknot on plum and cherry trees appears to be gradually increasing, and in some districts trees have been almost exterminated by it. Every possible precaution ought to be taken to prevent its encroachment on districts at present unaffected.—*Bureau of Industries, Bulletin 35.*

THE MEETING OF MICHIGAN FRUIT GROWERS.

SIR,—As I cannot well manage to attend your meetings which are always so full of interest to me, I will try and comply with your request, and send a brief summary of our meetings at Kalamazoo the first of the month. I did not get there to hear the President's address. In the report of the committee sent to Chicago to take part in the organization of horticulturists for the WORLD'S FAIR in 1893, they made a strong protest against the schedules of Department "B. Viticulture, Horticulture and Floriculture." Mr. Sanfield explained that it is proposed to divide this Department into groups thus:—Viticulture, fourteen classes; Horticulture, four classes, vegetables only;

Floriculture, twelve classes; Arboriculture, three classes; Pomology, four classes; Appliances, six classes. The special faultiness of this was shown to be the great prominence and diversification of the grape culture groups (which include seven classes wines and brandies with appliances for expressing juice of the grape, fermenting, stoning, racking, bottling, and packing), the subordination of pomology, the restriction of horticulture to the kitchen garden, etc. Strong resolutions were passed condemning this wholesale advertising of Californian wine-making. I enclose herewith copy of circular sent out to other societies, also copy of the objectionable grouping and classification of Department "B."

The evening of the first day was mainly devoted to the discussion of the FORESTRY question, with various suggestions for encouraging planting and preserving forests, particularly on our poor sandy lands. Several very interesting papers on forestry were read.

The morning of the second day was devoted to celery culture. Two interesting papers were read relating to its culture, storage, etc., also giving description of soil (marsh land muck, with loose sand and gravel bottom), preparation, etc., and one paper on its cultivation in Iona, showing that Kalamazoo was not specially favored above all other places, but intelligent work brought prizes from several State fairs over that grown in the latter place. Without attempting to follow the order of the work, I will only refer to a few things which seem to have especial interest. One of these was Prof. Cook's report of the operations of the currant borer, of which he described three distinct varieties whose work was essentially the same, that is the depositing of eggs in the tender branches, the worm developing in the pith and killing the stalk. He recommended the cutting off of all such dead stems as far down as they were injured, and the burning of the brush to be done just before the opening of leaf. This would ensure comparative freedom from the insect and worm, and give good crops.

INFLUENCE OF STOCK ON THE FRUIT.

Mr. Beecher, of Flushing, read a paper on the effects of stock on fruit, in which he gave detailed experiments and results, extending through a period of twenty to twenty-four years. He worked our tender or poor-growing varieties or hardy varieties that were peculiar for strong or thick matted roots. Those top-grafted on seedlings, were not uniform in strength of growth or hardiness, on wild or cultivated varieties of crab, haw, etc., not at all satisfactory. Duchess of Oldenburgh gave strong deep growing roots with healthy stock. Talman Sweet, fibrous good feeding roots, but his best results were from those worked on the Liscome apple. After twenty-four years' trial there was no difference in measurement of stock and graft, and twelve trees did not vary two inches in diameter.

Mr. R. Morrill, of Benton Harbor, said that hearing the above called to

mind a fact in the same line that he had never thought of before. Several years ago he had occasion to regraft a promiscuous orchard. He had in mind Northern Spy worked on Talman Sweet and Rambo trees; and though his attention had not been called to it before, he remembered that the crop on the trees worked on Talman Sweet was heavier and fruit larger and more fair than that on the trees grafted on the Rambo, and this difference would amount to several dollars in value of crop on each tree for one year. This being true, how great would be the difference in the value of an orchard of one hundred trees during their natural life!

Another member spoke of an orchard mainly of Baldwins, Greenings, and Golden Russets top-grafted on Colvent stock twenty-four years ago. The Greenings bore one good crop at the age of twenty-one and no other, but Baldwins and Russets none at all, yet the trees were large, vigorous and healthy. He asked if this was attributable to the Colvent stock. None could answer. It occurred to me that here was a good field for investigation. Have any of your fruit growers any experience in this line? In planting an orchard shall we buy all Duchess or all Talman Sweet or Liscome and then top-graft? Was it a fatal mistake grafting that large orchard on Colvents? Can anyone tell?

In conclusion let me say that from the discussions on cut worms, curculio, borer in peach, apple, and currant, army worm, moth, yellows, black knot, etc., that the golden harvests of our friends in the west part of the State are the price of eternal vigilance and untiring industry, and perhaps that the same intelligent labor would develop many other places where fruit growing would be profitable, though perhaps not to such an extent as there.

Port Huron, Michigan. L. B. RICE.

LETTERS FROM RUSSIA.—V.

BABUSKINO OF GRANDMOTHER APPLE.

THIS Russian apple may be classed with the best winter varieties. I think it is known in America, perhaps under some other name, but with us this is its only one. For localities, where the high winds prevails, there is no better variety than this, because the fruit has such a tight hold upon the tree that the most vigorous storm cannot knock it down.

The tree is a spreading grower, has a large leaf, is hardy and very productive. The fruit, which hangs firmly by its stem, may be gathered about the first of October, at which time it is quite green and flavorless. About Christmas time it becomes a light yellow color, with a little red, and by the spring it becomes a rich yellow with a deep red blush, covered with small russety dots. It keeps in good condition until the end of June and even later. At maturity, this

apple has an excellent flavor, with an especially agreeable degree of acidity. The flesh is very juicy and aromatic. It is little affected by the curculio, probably because of its thick skin.

As yet, this apple is not very widely disseminated in Russia, but those fruit growers who have found out its merits prize it above any other. I am of the opinion that in Canada, also, it would soon become the chief market variety; therefore, unless you have it already, I will be glad to send you some scions.

THE HAMBURG PEAR.

This pear is growing in the Chernigov Government, having been brought there from St. Petersburg. It is a pear of the Bergamot type, not large, yellowish green in color, with russety dots, juicy, of very pleasant flavor, and ripens in September. It may be kept in the cellar for about three or four weeks.

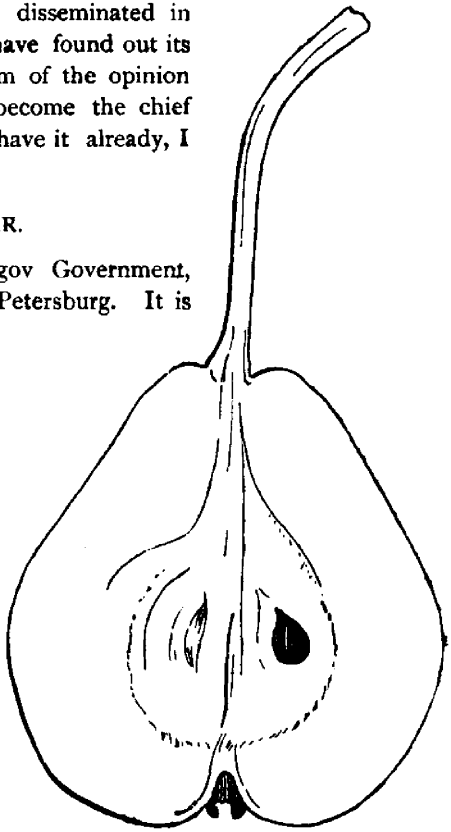

FIG. 2.—THE HAMBERG PEAR.

As there is such a small selection of really good pears that can endure severe cold, the Hamburg has considerable value for horticulturists in cold countries. It has been well tested in the Chernigov Government and has been found to be perfectly hardy, while most other varieties entirely succumb. This is explained by the fact that its flower-buds are firmly closed and therefore not sensitive to the action of the frost. I have sent you cuttings of this variety.

Rovno Wolinia, Russia. JAROSLAV NIEMETZ.

New or Little Known Fruits

Persons sending in samples of New Fruits to the Editor for notice are requested to include at least three specimens. Great care should be taken to prevent them from bruising in transit.

THE AUNT SALLY APPLE.

SIR,—I had a call to-day from Mr. Slaight, Inspector of Mines for Ontario, and a fruit grower on the Lake Erie shore. I showed him some specimens of a local apple known by the jaunty name of "Aunt Sally," saying that I thought of sending you a sample. He told me by all means to do so, as it was a fine, crisp, juicy apple. This apple is highly esteemed in this locality as a fine cooker and a very fair keeper. It is grown by Mr. Wm. Bailey and two or three others in this neighborhood, being propagated by grafts from the original tree which is supposed to have been a seedling grown by Mr. McGee (whose wife's name was "Sally"). Mr. Bailey can easily get the same price for this fruit as for his Fameuse apples of which he always grows some fine specimens. I will be glad to hear what you think of the one sent by same mail, which is neither the largest nor smallest but a fair medium specimen.—W. H. WYLIE, *Carleton Place, Ontario.*

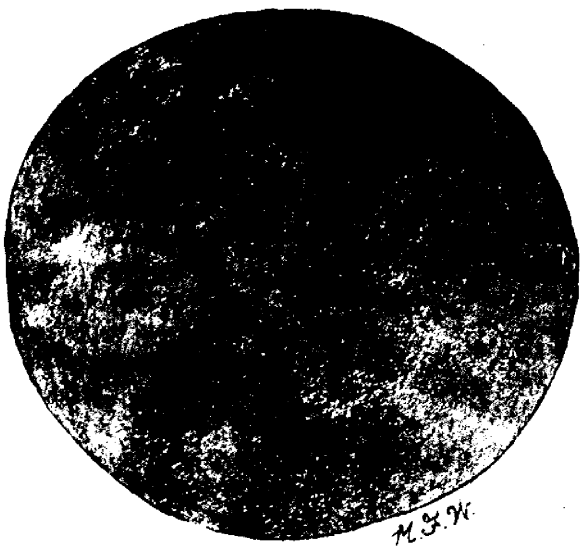

FIG. 3.—THE AUNT SALLY APPLE.

The apple is rather an attractive one, with its light yellow skin, tinted with red on one side. It is a little small to be a valuable cooking apple, but as a desert apple it might become a favorite.

Description.—Size, below medium; form, roundish oblate; stem, short in an even coirf of average size; calyx, nearly closed in a moderate sized slightly wrinkled basin; skin, light yellow with small brown dots and a light crimson cheek with spots of dark crimson; flesh, creamy white, fine grained, tender, crisp, somewhat juicy, and of a brisk, slightly aromatic, very agreeable flavor; very good to best; season, February.

THINNING OUT FRUIT.

OCCASIONALLY someone refers to this subject as something new, while it is as old as horticulture itself. I have practised it for more than forty years, and never yet failed to gain by it. Most people maintain that it might do on a small scale, but that it would never pay in extensive orchards. I have the proof that it will. Yesterday afternoon five trees were gone over in my orchard, two Mt. Henry Pippin and three Newtown, from two o'clock until six. This would be at the rate of twelve trees in ten hours, the hours of a day's work, costing say $1, which will be a little over eight cents per tree. Now, these trees will average about six bushels apiece if the season is favourable, and there will be but very few culls. The difference in the price of one bushel of these apples will more than pay for the thinning. It is true not everyone will handle himself on a ladder or tree as I do, but then we will allow one hour more to the day, as on the farm the ten-hour system is not so rigidly adhered to as with mechanics. Supposing I had a thousand trees like these and had to pay $85 to have them gone over, the crop being 6,000 bushels. If I could get but ten cents more per bushel, which is quite a low estimate, it would make $600, which is pretty good pay, I should think. What I left on will measure as many bushels when harvested, as if all had been left on the trees, although I took at least three bushels off each tree, of course in all cases the small, deformed, rusty and wormy ones. When it comes to picking them the difference in work and sorting will nearly make up for the thinning. But this is not all, for, by this thinning out, the trees are relieved of quite a burden; they will not have to mature the seeds of all those taken off, which is a great item. Every scrubby, small apple has about an equal number of seeds with the largest, and seed-ripening is the great tax on the vitality of the tree. Another feature about it is that in a drought like this it may prevent the premature dropping of the fruit, so much complained of in this region. At my work alluded to I found that the fruit let go its hold much too easily to promise staying there until the proper time, and believe that my thinning will save what are now left. A few years ago there were scarcely any codling moths here, no black-rot nor scab on the apples, but they are all coming, and spraying will have to be resorted to in coming years. If I had an orchard of ten thousand bearing apple trees that were overloaded, they should all be thinned out. Another advantage of thinning I did not mention, is that it will give us apples every year, unless an unusual spell of weather destroys blossoms. These off-years, as some call it, don't happen in my orchard. Have had pretty regular crops for ten years, the only miss being when a tree was overloaded, and I failed to thin out. Invariably the following year was a miss, which is quite natural; for a tree cannot bear an overload and at the same time store up blossom buds to do the same next season.—*S. Miller, Montgomery Co., Mo.*

PEARS FOR PROFIT.

A SUCCESSFUL Hudson river grower of pears says, in the *American Garden*, that the conditions for successful pear growing are so local that there is little danger of over-doing the business. He advises a strong loam, heavily fertilized, and obtains the best result by using both stable and commercial fertilizers. Of the latter, he uses chiefly unleached ashes and prepared bone. He believes in cultivating the pear orchard throughout its entire existence, ceasing, however, about the middle of July of each year. With regard to the question whether standard or dwarfs are more profitable, he thinks that most people will succeed better with standards, but, upon right soil, and with the right man to handle them, dwarfs may be the more profitable. Mr. Powell emphasizes the importance of handling pears for market in the following words: "Pears are ready to pick as soon as the stem parts readily from the spur when the fruit is raised up by hand. The entire stem should always be left on. If you are growing pears for a fine market, as I am doing, the fruit should be ripened under cover by piling them in a dry room and covering them with blankets. A high and rich color and the very highest flavors will be secured in this manner. As soon as the color becomes pronounced, place them upon the market. Fine fruits should be marketed in small packages, for it then ships better and is more attractive. I have exported pears to a large extent, and I find a good and growing foreign market. Even in France the demand for American pears is considerable. Of the medium size or small pears, as Clairgeau and Lawrence, I place four dozen in a box for exportation, and of the larger kinds three dozen. The fruits are wrapped in paper and packed in layers separated by excelsior.

My choice for standards is as follows: Tyson, Clapp, Bartlett-Seckel, Sheldon, Anjou, Bosc, Clairgeau and Lawrence. For dwarfs I have had best success with Bartlett (preferably double-worked), Anjou and Duchess. For export I grow Bosc, Clairgeau and Lawrence."

It appears to the editor that two excellent summer pears are left out of account, viz., Summer Doyenne, which ripens about the 20th of July, and is a pear of good form and color; and the Beurre Giffard, which comes in early in August, quite as soon as the Tyson, and very much its superior in appearance. The Seckel we would leave out of the list altogether. It is too small for any Canadian market, and we do not care to be the one to try to make so small a pear profitable when there are so many of finer appearance, even though they are behind it in quality.

FRUIT DANGERS AND REMEDIES.—An excessive amount of fruit, or if eaten in an unripe or over-ripe state, produces various disturbances in the system, chiefly so because of its tendency to ferment and decompose within the digestive tract, and to produce stomach and bowel disorder. If these disturbances are not too-

great, or too prolonged, they need occasion no special anxiety. A dose of castor oil, to which a few drops of laudanum has been added, is usually sufficient to clean out the irritation "debris," and in a day or two the natural equilibrium is restored. It there is much griping and pain with the movements, and these become too numerous to be comfortable, the dose of oil should be followed by curtailing activity—by quiet and repose—by a diet of meat broths, containing rice, barley or sago; by rice and milk, milk toast, etc.—*Medical Classics.*

FRUITS AS MEDICINE.—Fruit is more than a luxury, it is a necessity, in some cases. We cannot give too much emphasis to this. I am almost a crank on this subject. For several years I have had fruit, in some shape, constantly on the table. A few years ago I was thought to be subject to a hereditary disease which seemed sometimes to almost deprive me of my senses, and at times could not do mental work on account of severe headache. It was suggested to me that I adopt a fruit diet, and I have eaten fruit every meal since, and the result is good. Since putting this in practice neither myself nor family have been sick, and have paid no doctor's bills. I am not a vegetarian, but am in the habit of eating meat. I believe we should use plenty of fruit, as I am of the opinion that it is conducive of good health.—*Prof. Stockbridge, Indiana Hort. Society.*

REASONS AND RULES FOR CURVED DRIVES.

THE chief reason why drives and walks should be curved in all places which make any pretence of natural landscape, is because such drives increase variety; and variety here as elsewhere, "is the spice of life." There are three leading reasons why a curved drive augments variety. 1. It presents different views from each part. 2. The drive is hidden from itself: one does not look ahead over a straight and monotonous roadway. 3. The curves augment variety because they force upon the rider a constant change of direction and position.

I often meet persons who fail to recognize curved drives and walks as a part of a natural arrangement. One can only reply that drives and walks are at best almost entirely artificial, and the best we can do with them is to throw them into natural-like and varied forms. We simply treat an artificial object in a natural-like manner. Curves are universally present in nature. Rivers and creeks and ravines follow graceful curves. Even when they appear at sight to be straight a casual observation brings out flowing and varied lines of margin and direction. Even cow-paths are not straight; and I have often remarked to students that the trails which they make across large lawns as short-cuts are always curved, and these curves are many times sufficiently pronounced to answer all the purposes of

landscape gardening. I have often chalenged a teamster to drive in a perfectly straight line across an open ten acre field, without taking sight upon a fixed point. Not one has done it.

But it is not every curved drive which is attractive ; in fact, I often think that more drives are spoiled by curves than by straightness. A straight drive always has the merit of directness and convenience, while the unusual curves and indirectness of a poorly conceived curved drive distract the attention and obscure any merits it may possess. A few simple and general rules may prove useful.

1. All curves should appear to be necessary or useful. This rule really determines the whole character of the drive. The rest are corollaries.

2. Avoid balanced curves—a cork-screw or snake-like moonti.

3. The curves should be direct ; their general trend in the direction of the object to which they lead. The drive should go where it appears to go.

4. The successive parts should be hidden from each other by tasteful plantings along the borders.

5. The branches of a drive should diverge strongly at their juncture, and they should usually be wholly or partially concealed from each other by plantings or other objects. If drives diverge, they appear to lead in nearly opposite directions and therefore have the appearance of usefulness. If the parts have the same direction, one portion appears useless. A broader statement is the following :

6. No two drives or parts of drives, should be parallel or appear to lead to the same object.

7. The nature of the curves should conform somewhat to the character of the landscape. In rough or bold grounds drives may have much bolder and more spirited curves than in tamer places.—*American Garden.*

✳ Flowers ✳

THE NIGHT-BLOOMING CEREUS.

THE Night-flowering Cereus (*Cereus grandiflorus*) has gained a fame which entitles it to prominent notice, and plants might well be included in every garden, for its flowering in a source of interest to the least observant persons. In the character of producing its blooms at night, it is not alone, as several of the slender-growing species have a similar habit, but none equal this in beauty and fragrance.

"That flower, supreme in loveliness and pure
As the pale Cynthia's beams, through which unveiled
It blooms, as if unwilling to endure
The gaze by which such beauties are assailed."

FIG. 3.—THE NIGHT-BLOOMING CEREUS.

The flowers are really magnificent, and a plant with a dozen or two expanded at the same time has a superb appearance, particularly in the early evening when the flowers first expand, and the powerful fragrance they emit is very agreeable, having been aptly compared to vanilla. The stem is nearly cylindrical, with a few faintly marked ridges bearing small clusters of spines, and rarely exceeds one inch in diameter, but attains a length of many feet, freely branching. The flowers vary in size from six to twelve inches in diameter, the usual size being eight or nine inches. The sepals are narrow, acute and spreading, about one-quarter of an inch broad, four to five inches long, and thirty to forty in number, forming a beautiful fringe round the broader pure white petals, which are more in the form of a cup, the stamens being exceedingly numerous, with very long filaments.—*Lewis Castle* in *American Garden.*

WHITE ROMAN HYACINTHS should be planted as soon as received in flats or boxes, and placed either in a cold house or frame until they are well rooted. They must be kept shaded during this time, after which they may be brought

into a house where the temperature ranges from fifty to sixty degrees. When far enough advanced transpose into a warmer house for forcing; Roman Hyacinths being such easy forcers a constant supply may be had during the winter months, by regulating the growth according to your wants. Blue and Rose Roman Hyacinths should have the same treatment as the white, but they will not force as quick nor as early; consequently they should remain a longer time in a cold house or frame before they are brought into a hothouse for forcing.—*Florists' Guide.*

WINTER CARE OF HOUSE PLANTS.

AIM to secure the best light, a south or east window being much better than a north or west.

2. Secure as moist air as possible, by keeping a kettle of water on the stove at all times will greatly help. Sponges soaked with water and hung in the branches of the larger plants will be found a great help as the moisture comes so directly in contact with the leaves. If one can have a plant shelf made water tight, and with board raised a couple of inches around the side to make a sort of box, and fill with soil well watered, it will save much time in watering the plants in pots. Moisture supplied in above ways prevents the red spider's depredations as well as contributing to the plant's healthy growth.

3. Air the plants every day no matter how cold, but do not commit the mistake of an amateur whom I once knew of opening the window directly on the plants the coldest days which resulted in their freezing. Draughts must be avoided. Supply the fresh air by opening a window or door of an adjoining room.

4. Secure perfect drainage for all subjects. This is very important, and is the cause of perhaps one-half the ill health of all window garden plants. It is of much more importance than good suitable soil.

5. When water is given, do it thoroughly, and remove promptly from the saucers of all plants which have been over supplied.

6. Remove all faded flowers and leaves as fast as they show, and use the pruning knife where necessary.

7. In placing in the window take care that one subject is not crowded into another. One kind of plant leaves touching another often causes them to turn brown. The Heliotrope is an example of this.

8. Keep free from dust by frequent syringing and on smooth-leaved plants brushing off with a soft cloth. Always cover up plants with a paper in sweeping or dusting the room.

9. Allow no one to handle plants but the one who cares for them continually. It should be his or her duty to rapidly acquire the knowledge of best position in the window for each kind, and no one should be allowed to move them. Plants are not made to be handled more than is necessary, but rather to be admired.

Nothing makes the successful cultivator more nervous than to see his fine specimens roughly handled by visitors who do not realize the harm, and for the most part will not take offence at being asked to desist.

10. Stir the soil in the pots frequently, using for a hoe, a hair pin, or table fork.

11. Keep free from all insects. Nothing is more indicative of a person's slothfulness than to allow plants to become infested with vermin. There are plenty of good remedies for all troublesome house-plant insects.

12. Keep pots scrupulously clean. Dirty pots invite vermin and disease to house plants.—*Warren E. Mitchell in Canadian Queen.*

TOO MANY WINDOW PLANTS.—Do not crowd your window plants. One handsome plant is worth a dozen crowded into the space one should occupy. Never turn your plants, if you want them to be strong and nice looking, and never move from one window to another. Do not wash them to death. Do not make the mistake so many amateurs make, of putting in too large pots. Give them, as nearly as you can, their natural condition, and let them alone.—*Report of Illinois Horticultural Society.*

✳ The Vegetable Garden ✳

HOW TO MARKET CELERY.

IN the preparation of celery for market all depends upon how well it has been grown and blanched, as no after arrangement will atone for the lack of these qualities. All green stems should be trimmed off, leaving the blanched portion and the heart fully exposed. In trimming off the roots a knife large enough to reach one-quarter around the plant should be used, so that four cuts will leave a perfectly square root one inch in length below the crown. In washing I use the common whisk broom, holding the stalk of celery in one hand by the root, top down, and brushing with the whisk and water until clean. To form a nice square bundle I have a board with pegs set (eight inches apart one way and ten the other), and place the stocks in the form tightly (in two layers usually), and tie with one string tightly around the square butts of the celery. This will not injure the stalks. I now revolve the board and tie another string at the top. So tied and packed solid in bulk, celery can be preserved brittle and tender for weeks if kept cool and away from frost.—*Theodore F. Baker, Cumberland County, N.J., in Farm and Home.*

STRIPED CUCUMBER BEETLE.

I HAVE tried the various remedies mentioned by you and other papers, such a Persian Insect powder, slug shot, etc., with little effect. Lime dust, however, does the business. I took several good-sized lumps of fresh lime and put them into a coffee sack. The lime soon begins to slack, forming a fine dust. By shaking the sack on the windward side of the plants, the fine dust settles on the under side of the leaves as well as on the upper side. I made three such applications, the dust being more than the bugs could stand. This remedy must be used with caution, as an overdose will injure the vines. Shake the sack at the side of the plants, not directly over them. The heavier particles of lime will then fall to the ground, and only the dust will reach the plants. The material costs but a trifle; it takes but little time to apply it—and it has done the work.—*E. H. Benedict, Nebraska.*

BLANCHING CELERY.—A crisp, delicacy of flavor seems to be only obtainable by a generous banking with earth. Previous to banking, tie the stalks in a compact bunch; the earth is then packed as high around the stalks as it deemed advisable. A simple way to prevent the possible objections in damp weather, that the stalks are crooked in tying or the stalks stained or nibbled by earth worms, is to take strips of straw paper, ten to twelve inches wide, and wrap each stalk in place of tying. A trowelful of earth will hold the paper in place when the banking can be done. The earth should be drawn up nearly to the top of the paper. Leave the base of the hill broad, so that more earth can be drawn up, if necessary.—*Canadian Ex.*

Forestry

DESIRABLE TIMBER TREES.

ONE of the most valuable native trees is the White Ash. The wood of this tree is always in good demand for oars, tool handles, etc., on account of its lightness, elasticity and strength, while its beautiful grain commends it for interior finish. It is a rapid grower on moist soils, and succeeds even on poor soils. A growth of ash has been known to realize for the planter a clear profit of $600 to $700 per acre on tracts of ten to twenty acres, from trees only twelve years old. As this would amount to more than fifty dollars per acre per year, aside from other considerations, the profit is a good one. Surely the rocky, hilly, and otherwise unprofitable lands could be, in this way, turned to a very profitable account. The only drawback would be having to wait for twelve or fifteen years for first returns. But they would then come with compound interest. The trees may be readily produced from seed, although the young trees of this and all other kinds needed for timber culture may be obtained from most of our larger nurserymen at very reasonable prices in large quantities.

The Catalpa is a soft and fine-grained timber. It is very popular on account of taking a beautiful polish. It is one of the most durable kinds of timber. It is a rapid, vigorous grower, with rather straggling habit when alone, but straight and upright when grown in groves or close plantations. Cabinet makers are learning its desirability for their work, and are using it to a considerable extent. Of the different species, the *Catalpa speciosa* is the hardiest and best adapted to the North, producing large white flowers, which give great beauty during the time of bloom.

The Willow is considerably planted, and can be grown profitably in situations too moist for the successful growth of other timber. It will, however, grow on poor or hilly spots. Its growth in such places may be not quite so rapid, yet it equals most other trees in similar situations. Its wood is used for furniture, for ox bows, for handles, and many other uses (especially basket-making) where strength, lightness, and toughness are desirable; its closeness and evenness of grain admits of a handsome polish. Its bark is in demand for tanning, and the charcoal from its wood is used in the manufacture of gunpowder.

The European Larch has been but little grown in this country, being a native of the Alps, the Tyrol, and other European mountainous regions. In point of extreme hardiness there is nothing to be desired, while it is a very rapid growing tree on land which is thoroughly drained, as are hilly and mountainous districts.

It is scarcely necessary to write at length of the profits to be gained in planting the American Sweet Chestnut and Black Walnut; both trees, besides pro-

ducing valuable and salable timber, will produce, in a few years, crops of nuts which will alone pay a good percentage of profit annually, while the trees, for the timber, will be constantly increasing in bulk and value.

Among the several other kinds of trees which may be grown for timber are the White Oak, Sugar Maple, White Pine, Elm, Butternut, Hickory, Cottonwood, Birch, Poplar, Box Elder, and the Soft Maple, all of which have their special uses. It need not be feared that timber culture will be overdone, for the distinctive American desire to get rich rapidly will prevent it for a long time to come. It involves the waiting (except in the case of nut-bearing trees) of from twelve to twenty years for returns. It would be well for young men, especially, to carefully look into this important matter. Though the first returns are slow, they are sure and very generous when they do come.—*David Z. Evans* in *American Agriculturist.*

FILBERT GROWING IN ONTARIO.

SIR,—Since the notice in your Journal of the nut question, parties have written to me for further information on the subject. Having only a dozen trees in bearing no attention was paid to them, and their bearing qualities can not be fairly estimated. We gather from two or three gallons on an average, once or twice as high as eight gallons. The trees are planted about twelve feet apart but have spread and intermixed, making quite a wind break. With care, cultivation and selection of nuts, one might expect much better results. Having about twenty young trees coming into bearing and some attention being now paid them, before long I may be able to make a better estimate as to bearing qualities.

Two springs ago I planted a quantity of nuts (kept dry in the house), a part only came up; but this spring the balance sprouted nicely up. From that I infer the nuts should be planted in the fall, like the peach and walnut. Having planted a good many this fall, should I succeed in raising sufficient for market purposes, will notify the public through your journal. Will also forward you for experiment in the spring some two-year-old trees.

Pelee Island. E. WARDROPER.

RAISING LOCUST TREES.

THE best way to raise locust trees from the seeds is to sow them in the fall and leave them to grow when they will. The locust is a quick grower, and when left to grow naturally the seeds germinate with a good deal of certainty. This is readily seen wherever a locust tree with ripened seeds has fallen and been left on the ground. In a few years there

will be a circular thicket of young locusts that have sprung up from the seed. If the seeds are sown in the spring, boiling water should be poured upon them, leaving them to soak a few hours until they swell. I, however, prefer sowing them in the fall and leaving them to the natural action of frost.—*S. S. N.* in *N. Y. World.*

FRUIT TREES FOR ROAD SIDE.—In many parts of Europe the public highways through the country are nothing more nor less than avenues of cherry trees, which often extend in straight unbroken lines, as far as the eye can reach. There we find the early and the late, the sweet and the sour cherries, and they seldom fail to yield full crops. It has always seemed to us that trees along the roadside were much healthier, generally, freer from insects, and give larger and better yields than the trees planted out in orchards as we came across them occasionally. We see no reason why we should not follow the good example, and line our roads with cherry trees also. All we have to do is to plant them, give them a good start, protect them while young in some simple way against injury by domestic animals, and then leave them to themselves, to reward us with bountiful crops year after year. Thus we might have fine cherries in abundance for young and old, and what a blessing it would be, especially for young America! Why not? Why should we continue to plant maple and elm avenues, when cherries give us as much shade, as much beauty, and the choicest fruit besides? Occasionally the pear, more rarely the plum and the apple are used for roadside trees in continental Europe. The reason is obvious. The apple is of too spreading growth for this purpose, while neither pear nor plum have the beauty of form, nor the utility as a shade tree possessed by the cherry. Some of our nut trees would also make admirable roadside trees. From New Jersey and Pennsylvania southward, in the coast states, the English walnut might be tried, and the Pecan, wherever it succeeds. The chestnut is perhaps objectionable on account of its low spreading growth when planted singly. The black walnut and hickory are fine for the roadside, and in some sections the persimmon might be tried.—*G R. in Popular Gardening.*

FOR a hedge in a wind-exposed location a mixture of Myrobolan Plum and Privet, two of the former to one of the latter is recommended. It is said to make a hedge sufficiently strong to resist cattle in a short time. If something of a more ornamental character is required, use the American Arbor-vitæ, selecting only single-stemmed varieties.

The Canadian Horticulturist.

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

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

NOTES AND COMMENTS.

A HAPPY NEW YEAR to all our readers. And while we hail you all with our good wishes, we shall do our very best to make our little Journal a bright and cheery visitor to your homes.

At our excellent winter meeting in Hamilton last month, the minister of Agriculture kindly consented to bind in cloth two copies of our report for each member, thus really making each one a present of a book that will be worth his whole subscription money.

Surely under such liberal conditions our membership ought to be doubled this year and we ask every reader to help us by making known the benefits conferred on all members of our association.

THE BALDWIN APPLE IN ENGLAND.

NOTWITHSTANDING the fact that the Baldwin apple is acknowledged by both Canadian and English buyers to be inferior in quality to many other apples, yet on account of its good color, and its excellent carrying qualities, it always commands a comparatively good price in the British market. It is not a very hardy apple and therefore, in many places, it is supplanted by the Ben Davis, an apple of still poorer quality, but of fine appearance.

We are in receipt of a rather interesting chart from Messrs. Woodall & Co., Liverpool, showing the weekly fluctuations of the Baldwin apple, in the Liverpool market, during the past five seasons, the same based upon number one stock. As a rule it appears that the prices run highest in October, March and April, and lowest in November and December. The highest price paid for Baldwins during the past five years, was in April, 1890, when as much as $10.75 was paid per barrel for some samples from Maine, and over $8.00 for some from Canada. The next highest was for some Canadian Baldwins which in April,

1887, brought over $6.00 per barrel. The reverse of the picture is not so encouraging to shippers. The lowest prices paid during the same period were as follows : April 1885, $1.50, (an exception) ; November 1887, $2.50 ; November, 1888, $3.00 ; January 1889, $1.50 ; November 1890, $3.00. It is of course understood that there are not net prices, but the selling prices in Liverpool market.

It is gratifying to notice, however, that the export trade in apples is constantly extending, and the average returns are such as to encourage the commercial orchardist to take the best of care of his orchard, and put up his fruit in such a way as to command the confidence of the English buyer.

GOOD STRAWBERRIES.

MR. E. P. POWELL, writing in the R. N. Y., says he has tested a great many varieties of strawberries and concludes that no one is likely to go astray with the following list : 1, Bubach ; 2, Cumberland ; 3, Haverland ; 4, Sharpless. His soil is a strong clay.

NEW FEATURES AT FAIRS.

MR. A. A. CROZIER, gives in the same journal some hints of new departures in the management of fairs. He proposes that prizes be offered for such items as the following : 1. New fruit produced by hybridising ; 2. Display of wild fruits in greatest number and variety ; 3. Sample of wild fruit, showing improvement by cultivation ; 4. Exhibit showing benefits of treatment for apple scab ; 5. Collection properly named, of living branches of ten deciduous trees, by a boy or girl under twenty ; 6. Best essay on some branch of Horticulture by a boy or girl under sixteen ; 7. Largest collection of apples classified in order of merit ; 8. Exhibit showing the modifications of fruits or vegetables by soil or climate.

INGENUITY PAYS.

A LITTLE ingenuity and good taste often pays well in the preparing of fruit for market. A New York state grower is reputed to have received about half a cent each for his Bubach strawberries, by putting them up in paste board trays such as grocers use for lard and butter, 28 berries in each. He had them sold on commission and netted about half a cent for each berry.

The writer has, during the past season, netted about twelve cents a quart for raspberries when others were only getting about ten, by putting them up in pint boxes. This was not done through a commission agent, but through a retail merchant who found the pints just the thing for his trade. Several lots were sent to a Toronto commission agent, but he objected to handle a new size package not yet known to the retail trade, and sold them at exactly half the price of quarts. Of course this was a loss to the shipper, for the package is more expensive. But rightly handled, it would pay to use pints for raspberries, for they carry the fruit better, and retail at higher prices in proportion than the quarts.

THE BLACK KNOT.

IN bulletin 59 of the Michigan Agricultural College, Prof. Taft reminds us that in order check the devastation of our plum orchards, which will surely result from continued neglect, we must be vigilant even during the winter season, as at that time the old knots of the past year's growth ripen millions of spores which will each be capable of starting a new generation.

Every old knot, whether on plum or cherry tree, growing in fence corners or along roadsides, ought to be most carefully cut out, removing the limb some distance below the part affected, and burned as soon as possible before the spores have had time to float away to trees that are hitherto healthy.

In some cases, of course the trees would be badly injured by this cutting away of the knot, and it has been found that by cutting away as much of the knot as possible and burning it, and then painting over the wound with linseed oil, the fungus can be destroyed. Turpentine has been found still more effective, but it is injurious to the healthy portions of the bark, and must therefore be applied with great caution.

EXPERIMENTS WITH TOMATOES.

BULLETIN 21 of Cornell University, states that by trimming the vines of tomato plants late in the summer, a greatly increased yield of fruit can be obtained. In the experiments, the plants were headed back from three to six inches on all the leading shoots, July 28th and August 25th, and all the sprouts from the base of the plants were taken off. The labor was very little and the result was a decided gain in both earliness and productiveness.

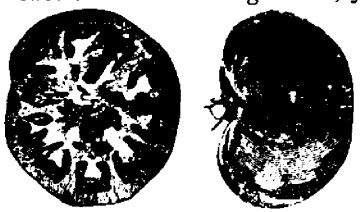

FIG. 3.

There are some forty varieties under test at Cornell, but of them all the Ignotum, (fig. 3), stands at the head.

Another point clearly demonstrated is, that it pays to set plants in the open as early as possible. A batch of Ignotums were planted out on the 9th of May, and another beside them, on the 12th of June, and the difference in earliness was very marked, for by the 5th of September there had been gathered from the early set plants thirty-seven ripe fruits, and from the late set ones, only eight.

PAPER AS SUBSTITUTE FOR GLASS FOR HOTBEDS.

A FLORIDA correspondent of the *American Garden* says he has found either cloth or manilla paper *saturated* with pure *raw* linseed oil, the best substitute for glass for hotbed covers. Boiled oil rots the paper or the cloth, but cloth that has had two coats of raw linseed oil is both air and waterproof, and remains soft and pliable indefinitely. Paper, so prepared, is nearly equal to glass, admitting the passage of light quite freely.

PRICES OF APPLES.

MR. ROBT. BALL used to say that it never paid to ship apples to England when the price reached $2.50 in our own markets. He was one of the earliest apple exporters in the Niagara district, and his experience of an early day, applies equally to these times. Many of us would be money in pocket this season had we sold all our apples in our home markets instead of shipping them to England. Indeed it has been rather surprising that so many have gone over in a year of such scarcity at home. The English papers even tell us that they are surprised that so many apples have come forward after the tales of scarcity that had come to them from us.

As we might expect, prices in Liverpool have been gradually going down, while those in Montreal, Toronto and New York have been gradually advancing. According to late reports, Canadian apples were sold in Liverpool market, during the month of December at an average of $5.00 per barrel, while in New York city they are quoted at $6.00 to $8.00, in Toronto have even touched $4.50 per barrel, and have changed hands in Montreal at $6.00.

RASPBERRIES FOR HOME USE.

PRES. LYON, or Michigan, gives in the same bulletin the following as the best raspberries (of the Rubus strigosus type) for a succession for family use, viz: Thompson, Turner, Herstine, Golden Queen and Cuthbert.

Why he should give the Thompson as first early, instead of the better tested Marlboro', does not appear, for the former is a new variety, originating in Ohio not yet fruited long enough to have established a character. It does not seem to be as productive as the Marlboro' and is not any earlier in ripening. The fruit is bright colored, attractive and of good quality.

Of the blackcaps, (Rubus occidentalis), he gives the following selection for the family garden, viz: Doolittle, Hillborn and Nemaha, with Shaffer for canning. For market purposes he would substitute Gregg for Hillborn. Souhegan and Tyler, he says, are so like the Doolittle that there is practically no difference; Nemaha and Gregg are also scarcely distinguishable. The latter he justly places at the head of the list for market.

TWO NEW STRAWBERRIES TESTED.

MANY of the reports of the Experiment stations have little of practical interest to us as fruit growers. The bulletins are so abstract that few practical men have time to wade through them to get any benefit. In this respect we have to make some notable exceptions and among them those from the stations in connection with the agricultural colleges of Michigan and Massachusetts.

We give one or two extracts from these reports, concerning two of the newer varieties of strawberries, viz.: the Bubach and the Parker Earle.

BUBACH, originated in Illinois in the year 1885, of the largest size; form, roundish, broad, oblate conical; color, bright crimson; a variety, which, though requiring a fertilizer, and lacking the firmness requisite for a distant market, possesses, with uniformly large size, such an assemblage of valuable qualities of both plant and fruit

that it has already assumed a high, if not a leading position among market varieties.—*Michigan Experiment Station.*

This promises to be a most valuable variety. The plant is vigorous, having large finely-formed berries, it is very productive and as yet entirely free from rust. Quality only medium, but far better than Crescent, Wilson or Warfield.—*Hatch Experiment Station, Mass.*

PARKER EARLE, a bisexual variety, received from northern Texas too late in the autumn of 1888 to gain more than a slight hold upon the soil in advance of winter. With only a slight mulch, the plants came out the spring uninjured, and formed a well-matted row during the growing season. This was left wholly unprotected during the past winter and has now very considerably excelled all others in the amount of fruit produced. Unless it shall, in the future, betray weaknesses not yet discovered, its bisexual character, together with its fine size, bright appearance and fair quality, must infallibly command the attention of planters, whether for the family or for the market.—*Michigan Experiment Station.*

A GOOD LIST OF BLACKBERRIES.

MR. LYON also gives the following list of blackberries, viz. : for family use, Lucretia (dewberry), Early Harvest, Kittatinny, Snyder and Taylor. For market, Early Harvest, Wilson, Snyder and Taylor.

We cannot understand his leaving out the Kittatinny for market, except on account of the rust. We have made it our chief market blackberry at Maplehurst for the past fifteen years, and on suitable soil have had large crops of immense sized berries. We prefer it to the Wilson, for, although the latter ripens early the season, it does not equal it in yield. It has of late been very subject to the Orange Rust, and we fear this will soon root out our plantation. On light sandy soils the Snyder grows very small, and is almost unsalable, unless in a very wet season, we therefore do not think much of it where the Kittatinny succeeds. Of course the great fault with both the latter and the Wilson is their tenderness, for they will not endure a climate which is too severe for the peach tree.

Question Drawer

FALL AND WINTER PEARS.

SIR.—Would you please tell me what you consider are the best six varieties of pears for marketing in the late fall, and what six are best for winter market.—E. E. McCOMBS, *Essex Centre.*

The varieties of fall and winter pears which would suit best in our locality might not be the best ones for you. But the following six are all excellent fall pears, and ought to give you satisfaction, viz. : Beurre d'Anjou, Duchess d'Angouleme, Doyenne Bussock, Howell, Kieffer, and Louise bonne de Jersey.

Of winter pears, that are first-class for market, there is a much more limited number from which to select. The following are some of the best : Lawrence, Winter Nelis, Josephine de Malines, Easter Beurre, Glout Morceau and President Drouard.

GRAPE CUTTINGS FROM THE RHINE.

2. SIR,—I am going to put out next spring four acres of grapes. I will have the seedlings sent from my home on the Rhine of Germany. Could your book give me a little information about sending and packing the seedlings for this country. And will there be any duty on them, they are only cuttings of the wine stock.—JEAN GRUENBECK.

Reply by Mr. John Craig, Horticulturist, Experimental Farm, Ottawa.

Now that we have direct communication by steamer with Hamburg, shipping facilities are much better, and there should be less difficulty in importing in safety vines or other fruits than formerly when they were reshipped from Liverpool. The vines should be tied in bundles containing from twenty-five to fifty and packed in strong paper-lined cases. A liberal amount of moss should be used, care being taken that this be damp only, not wet. When packed too moist the buds are apt to swell and sometimes burst while in transit, thus bringing them to their destination in an unfavorable condition. And one that is always attended with a heavy loss to the planter. Each case should be firmly packed, with the moss evenly distributed between the bundles, and a good coating next the box on all sides. The duty on grape vines costing less than ten cents is two cents each, on those costing ten cents and over, twenty per cent. ad valorem is charged.

Before importing these vines, I would suggest that Mr. Gruenbeck consult the catalogues of our Canadian nurserymen, not only as to cost but as to variety. The experiment is doubtless an interesting one, but it might prove somewhat expensive in the outcome, as the success of the German wine grape in Ontario is very doubtful. European grapes have almost invariably failed in this country, their failure being due to defective foliage, tenderness, and attacks of phylloxera. Again, if designed for grafting stocks they will be found much less desirable than our natives, which fact has been keenly appreciated of late by European nurserymen. A prominent writer says, "Already millions of American grape vines are growing in France and Germany, hundreds of thousands in Spain, Italy, Hungary, etc., how much

more then must we look to species which we find indigenous here and to their descendants for success in grape culture." Thousands are imported by France annually for grafting stock. If European varieties are tested here they certainly should be grafted on native stocks. American nurserymen quote vines at very low rates, but in making an estimate of the cost, the duty above referred to must be added.

Open Letters

STRAWBERRIES IN OCTOBER.

SIR,—An article appeared in the Nov. number of the HORTICULTURIST under the caption of a late strawberry. I think your correspondent was in error as to its being a late variety. I am inclined to think it was the Jessie. At that date I had plenty of them and have had them (only fewer) till the present date. The most of them produced from runners without taking root, they were all from the Jessie except one from a seedling of my own. I send you one developed berry with a bunch of blossoms with fruit partly formed, also a part of a raspberry cane in the same condition, to show what nature does in the cold north. I enclose a paragraph from one of our local papers showing the date I had them growing.

"A bunch of ripe strawberries together with some strawberry blossoms, were picked by Mr. F. W. Porter in his garden here on Monday and shown our reporter. Mr. P. says they are not the only berries he has picked lately, but that they have been quite plentiful. Picking ripe strawberries out of a garden in Mt. Forest on Oct. 6th is a rare occurance."—

Mount Forest. F. W. PORTER.

SUBSCIRPTIONS ARE NOW DUE,

And should be sent in at once, naming at the same time the choice of plant for testing; otherwise we cannot guarantee that any plant will be sent.

We give below the list of plants which we propose to send out next April or May. Contracts for them have been made with reliable nurserymen, and we hope they will give satisfaction. It will be understood that these are all of a size, small enough to be sent by mail.

1—Russian Apricot.
2—Simon's Plum.
3—John Hopper Rose.
4—Shaffer Raspberry (four tip plants).
5—Wealthy Apple.
6—Bubach No. 5 Strawberry (four plants).
7—Richardi Alba-Maculata, or Spotted Calla.

Any one sending in new names may have an additional choice of plants for each new name in place of commission, if preferred. Note well the condition on which these plants are sent out, viz.: that a report concerning their success be given the Secretary when thoroughly tested.

NOTE.—Each subscriber will please notice that the Fruit Growers' Association does not guarantee anything concerning the merits of the above list of plants, but simply sends them out on the recommendation of their introducers to be tested by the members and reported upon for the benefit of the public.

GOOD OFFERS.—A Free Copy of the "Canadian Horticulturist" for one year, with Report, and choice of plant, to anyone sending in five new subscribers and five dollars, or a bound volume. Back numbers can be furnished at 10 cents each, and bound volumes of the previous year at 75 cents to $1.25 each, according to style of binding. New subscriptions may begin with any month.

Address, L. WOOLVERTON,
Sec. of the Ontario Fruit Growers' Ass'n,
GRIMSBY, ONT.