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LARGE MONTMORENCY

THE

Canadian Horticulturist.

VOL. IX.] JUNE, 1886. [No. 6.

LARGE MONTMORENCY CHERRY.

Why is it that our markets are so poorly supplied with cherries at the time when this fruit is in season. In any of our larger towns we will find the market usually well furnished with other fruits, berries of all kinds are to be had in almost unlimited quantities, and there is usually no lack of pears, plums and grapes. But the demand for good, ripe cherries is far in excess of the supply.

Probably one reason of this paucity of cherries is to be found in the fact that the attention of fruit growers has not been turned to the production of this fruit. Our horticultural papers have not been filled with glowing accounts of the "millions in it" that have been given of many other fruits; and another reason may be found in the fact that the growing of cherries for market is surrounded with some difficulties which require careful attention to overcome. Our fine sweet Bigarreau and Heart cherries are very apt to rot on the tree just as they are becoming ripe enough to use, so that the crop is lost, or else gathered and sent to market in so unripe a condition that the fruit does not meet with a ready sale. And again the birds are very fond of cherries, and sometimes help themselves so bountifully as to leave but little to the owner. But the difficulties in the way of growing cherries for market are not insuperable, and we believe there is a satisfactory margin of profit to be realized by the fruit grower who will bring good judgment, and attention to bear upon the business.

We have in what is known as the Duke and Morello class of cherries a number of fine varieties which are eminently suitable for planting in our climate. The trees are hardy and healthy, and seldom fail to bear an abundant crop. The fruit is not apt to rot on the tree and if properly gathered and handled not apt to spoil after being gathered. Very few persons gather cherries in the proper manner. They should always be gathered by seperating the fruit stems from the tree, not by seperating the stems from the fruit. If gathered in this manner and sent to market either, as we do strawberries, in quart boxes, or in ten quart baskets, they would not soon spoil after being gathered. For all culinary purposes and for canning and drying this class of cherries is very highly esteemed, most

persons prefering them for these purposes to the sweeter cherries.

The Early Richmond is probably the best known of this class, this and the Mayduke have been in cultivation in this country for a long time. Our colored plate is a fine illustration of a variety not so well known, but which is worthy of attention by all cultivators of this beautiful fruit. It is both large and of handsome appearance, as will be seen by reference to our illustration, it is also juicy and rich, and when fully ripe of a very agreeable acid flavor. These three varieties, Early Richmond, Mayduke and Large Montmorency, together with the Royal Duke, Reine Hortense and Empress Eugenie make a collection of half a dozen sorts of great excellence, that can be commended for planting anywhere within the limits of our cherry region.

A CANADIAN SEEDLING OF THE JAPAN QUINCE.

We have received from Mr. James Stewart, of Saltford, Huron Co., some blooms of a seedling raised by him from the Japan Quince, which are quite distinct from any variety that we have ever seen or heard of before. The flowers are not uniform in color, some being nearly all white, others white shaded with pink, others marked with crimson. The bush must present a beautiful appearance when in full bloom.

THE ROUGH OSMODERMA.

(Osmoderma Scabra.)

We received some time ago from Mr. C. Julian, of Presque Isle, an insect, with the request that we would give the name and habits. On examination it proved to be the female of Osmoderma scabra. In the larval state this insect feeds on decaying wood of the apple and cherry, and in the imago state feeds at night on the sap which may exude from any wound of the bark. The injury done by this insect, if any, is of a very trifling character.

THE SUMMER MEETING

Of the Fruit Growers' Association of Ontario, will be held on Wednesday, July 7th, 1886, in the Council Chamber, at Lindsay, Ont., commencing at ten o'clock in the forenoon and continuing through the day and evening. An adjourned meeting will be held on the following day, Thursday, July 8th, at Bobcaygeon, commencing at two o'clock in the afternoon. The Directors will meet at the Benson House, Lindsay, on Tuesday evening, July 6th, at eight o'clock.

D. W. BEADLE,
Secretary.

THE NONPAREIL APPLE.

We have received a letter from Mr. Charles E. Brown of Nova Scotia in which he says that he notices in the *Canadian Horticulturist* an inquiry for scions of the Nonpariel apple, inspired no doubt by an article going the rounds of the papers which is an extract from an after dinner speech of the Hon. J. W. Longley at a meeting of the Nova Scotia Fruit Growers' Association, and says that if the inquirer will apply to Mr. C. R. H. Starr, Secretary, N. S. Fr. Grs. Association, Port Williams, King's Co. N. S. he will be pleased to send them to him.

Mr. Brown adds that he has no trees of the Nonpareil; cut down the last in disgust, they being in his soil and climate terribly subject to canker, and the fruit would not grow *there* at all; nor does he esteem the apple in the least, it

will keep well, but as for quality it is worthless. It might be better in Ontario than in Nova Scotia, just as most kinds are. However it was as an export apple that the Nonpariel was commended, Mr. Brown continues, and that is all right; one will hardly find a dozen really good judges of quality among one's own friends in the best fruit countries, how can we expect to find them among millions.

CACTUS FRUIT.

We have received from J. P. Cockburn, of Gravenhurst, a sample of fruit which he described in his letter as a new fruit of Muskoka production, that had been just one year in coming to its present ripe condition. He says, "I have not tested any but presume they are good to eat, at least it has the fragrance of a ripe pine apple. Is it common? I have never seen it before. The flowers dry on the end of the fruit and remain there until it is ripe."

We replied that we had never seen the fruit before, but presumed it to be the fruit of some species of cactus, and requested him to tell us what species it was. In answer he sent to us another sample of the fruit with the flower adhering and the whole yet growing from a piece of the parent cactus plant. In his letter accompanying the second specimen he says, "I do not know the specific name, it is generally known, I believe, as the Sword Cactus; but I am of the opinion that this is not the correct name. I am told that they are very good to eat and considered a great boon to the weary traveller in some parts of Mexico and southern Texas."

The piece of the plant to which the fruit was adhering greatly resembles one of the Epiphyllums. The fruit is about an inch long, somewhat fig-shaped, of a deep red color, which color continues through the pulp, the fragrance somewhat like that of the pine apple, and the taste like a podophyllum, *May Apple*.

THE ANNUAL MEETING

Of the Association of Nurserymen, Florists and Seedsmen is to be held in the buildings of the Department of Agriculture at Washington, District of Columbia, U.S.A. on the 16th of June next, continuing three days. Any information concerning programme of proceedings, hotel and railroad arrangements can be obtained by writing to the Secretary, D. Wilmot Scott, Galena, Illinois, U. S. A.

THE MASSACHUSETTS HORTICULTURAL SOCIETY

Is offering special prizes for Hybrid Perpetual Roses at the coming Rose Show, June 22 and 23rd., 1886. A prize of $30 is offered for the best 24 Roses, named; $25 for the best 18; and $15 for the best 12, all named.

QUESTION DRAWER.

MEMBERSHIP IN FRUIT GROWERS' ASSOCIATION OF ONTARIO.

DEAR SIR,—I am well pleased with the *Canadian Horticulturist*. Could you let me know the conditions of membership in the Fruit Growers' Association of Ontario, also the rights and privileges of a member. An answer in the *Horticulturist* or otherwise will oblige,

Yours truly,

J. K. DARLING.

REPLY.—Every subscriber to the *Canadian Horticulturist* becomes entitled to membership in the Fruit Growers' Association, the rights and privileges of which are: 1st. To receive a copy of the Annual Report. 2nd. To receive such article from the

list of trees, plants or seeds offered for trial by the Association as may be preferred. 3rd. To attend all meetings of the Association, and vote thereat upon the election of Officers or other business. 4th. To contribute of his experience in the growing of fruit, flowers, or vegetables, through the columns of the *Canadian Horticulturist*, for the benefit of fellow-workers.

TREES AND SHRUBS FOR THE LAWN.

Which ornamental trees and shrubs are most effective on the lawn?

1. Planted singly.
2. Planted in groups.

Innerkip. M. H. M.

REPLY.—Much depends on the size of the lawn. Maples, Cut-leaved Birch, Maiden Hair Tree, Purple and other Beeches, Catalpa Speciosa, Horse Chestnut, &c., make handsome specimen trees planted singly, so do the Evergreens. If the lawn be large, they may be grouped, planting the Beeches, Birches, Maples, &c., in separate groups. The shrubs look best in groups, planting the Viburnums in one group, the Weigelas in another, and so on.

ARBORVITÆ PYRAMIDALIS.

Please to let me know through the columns of the *Canadian Horticulturist*, whether the Arborvitæ pyramidalis is hardy. GEO. CRAWFORD.

Copleston, Lambton Co.

REPLY.—We presume that it is perfectly hardy. We have never heard that this variety is any less hardy than the typical form, which grows far to the northward. Will those who have grown it in our colder sections please to give their experience.

LONDON PURPLE—BARK LICE.

(1.) Please say in your next if London Purple answers as well as Paris Green for Apple, Plum and Peach trees.

(2.) And what is the best remedy for Bark Lice? R.

Toronto, 18th April.

REPLY.—(1.) London Purple being of very variable strength is not as safe to use as pure Paris Green.

(2.) Strong alkaline solutions. Lye from wood ashes, or potash, one pound dissolved in two gallons of water.

GRAPE VINES.

Allow me to ask the following questions:

1. Is it desirable to remove the loose bark from grape vines in the spring when putting them up?

2. Will growing lettuce or other small things around the roots, and thus shading the ground until the berry is formed and partly grown, be an advantage?

Yours truly,
W. C. ADAMS, V.M.C.

Toronto, 6th May, 1886.

REPLY.—1. In the vinery—under glass—it is desirable to remove everything that will harbor insects. It is not so important in the vineyard.

2. We can see no advantage whatever in shading the ground at any time; would prefer that it should receive the sun's rays without hindrance.

PERPETUAL ROSES.

DEAR SIR,—I have a variety of hybrid Perpetual Roses that has bloomed in Conservatory during winter, and I want

them to flower again next winter. Now should they be planted out in spring with ball, or should earth be shook off from the roots, and should they be cut back when planted out?

GEO. BOND.

Prince Albert, Ontario Co.

REPLY.—You will do well to shake the earth out, prune both roots and branches, the roots moderately, plant in good strong soil, and cut off during summer all flower buds that appear.

SPRUCE TREES.

DEAR SIR,—Can you tell me what is wrong with my Spruce trees. I enclose a diseased twig. It will cover the whole tree in two or three years, and then the tree dies. What is the remedy?

JOHN SAILES.

Little Britain, April 6th, 1886.

REPLY.—We are not able to say positively what is wrong with your Spruce trees. The twigs sent to us look as though they had been preyed upon by some parasite, such as goes under the general name of mildew. We suspect that there is something wrong with the soil in which they are trying to grow. Lime rubbish we have found to be very prejudicial to most Evergreens.

INSECTS ON A PLUM TREE.

DEAR SIR,—I have a Plum tree in my garden known by the name of the Weaver Plum Tree. Last September I noticed that many small black ants were on its branches, afterwards a small worm, about three-quarters of an inch long, of black color, having light streaks on its sides, were observed on the leaves and caused them to wither. I applied a solution of Paris Green to them, but, perhaps, it was too strong, for all the leaves withered and fell from the tree shortly afterwards, but it killed the worms. I was afraid the application would kill the tree, but now the tree seems healthy and budding freely, with many blossom buds on it. The ants are also on it, and a small dark grub, or the larvæ of some grub, are in large numbers clustered around the stems of the blossom buds. A few of which I have enclosed in a small vial in a tin box for your inspection, which I send to your address through the Post Office. Will you be pleased to let me know what they are, and the best remedy to prevent them destroying the fruit or the tree. Any information you can give me on the subject will be esteemed a great favor, and

I remain, yours truly,

W. F. ROSS.

Woodstock, April 30, 1886.

REPLY.—The insects found on the buds were the black aphis. The ants were numerous because they feed on the sweet liquid exuded by the aphis. Syringing the tree with strong tobacco water will rid it of the aphides.

PLUM AND PEAR TREES.

I have a Plum tree named Smith's Orleans, it has been planted about eight years, and borne fruit for two or three years. Last season the bark began to split and part from the trunk of the tree. It has now got about two-thirds round the tree and about three feet up from the ground quite clear of bark. I bound cow manure on last season, thought that might help it, but it was no use. Can you give any remedy for this sort of thing. The fruit all dropped off last season when about half grown. I dont expect to save this tree, but may save others if there is any cure for them.

I have spent a good deal of money buying Pear trees, and have only two living now, one Vicar of Winkfield and one Sheldon. They would live and thrive well for three or four years, and just when blossoming out would die. My soil is a sandy loam, which does not seem to suit Pear culture. One of the Pear trees living is growing on clay taken out of the foundation of the house when I built it, and bears a good crop every year.

By answering the above in the next number of *Horticulturist*, you will much oblige yours,

J. LAWLESS.

REPLY.—The Plum tree is suffering from some cause, probably the soil is too wet, and therefore cold. What is the condition of the subsoil into which the roots have penetrated? If that be very cold and usually saturated with water, it will account for the death of your Plum tree.

It is very evident that your sandy soil does not agree with Pear trees. You had better get some clay and make a border of it, into which you can plant Pear trees with some hope of their yielding fruit.

OYSTER-SHELL BARK LICE.

Can you please answer the following questions:

Enclosed you will find a piece of bark taken from one of my Apple trees. What is the insect attached to the bark, and what can I do to kill them? I have washed my trees with soft soap, and just water enough to make it spread, is that any good?

J. LAWLESS.

REPLY.—The insects are bark lice, Soft soap will kill them.

STRIKING DAHLIA CUTTINGS.

How do you strike Dahlia cuttings in the spring and summer?

GRAINGER & DUKE.

Deer Park.

REPLY.—We place the dry tubers in moist soil with sufficient warmth to start the eyes into growth. When the shoots have attained to a couple of inches in length we cut them off, insert them in a shallow box of pure sand and put them on a gentle bottom heat. As soon as they have struck root they are potted off into thumb pots. Sometimes we put the cuttings into thumb pots having a large proportion of clean sand mixed with the soil that is in them, and place the pots on bottom heat.

SALTED FISH AS MANURE.

What use can we make of a large quantity of salt herrings which have got stale? Would they make good manure for grapes? How can we prepare them so as to get the best results from them?

GRAINGER & DUKE.

Deer Park.

REPLY.—If you have an asparagus bed spread the fish, brine, and salt on the bed between the rows of plants and dig them in sufficiently deep to cover the fish completely so that no odor will escape from them. If you have not such a bed of asparagus, the fish can be composted with stable manure in alternate layers, and the heap covered with soil until the fish are absorbed into the compost. Use the same as any compost wherever wanted, in the grape border or elsewhere. If the proportion

of fish is very large, it will be a very strong fertilizer and should be used accordingly.

HENDERSON STRAWBERRY.

Do you know anything about the new strawberry "Henderson?"

GRAINGER & DUKE.

Deer Park.

REPLY.—We have not yet fruited the "Henderson." Through the kindness of Mr. John Little, of Granton, Ont., we have been put in possession of some plants of this variety, and as soon as they shall have fruited we will give our opinion of its merits.

If Mr. Little has fruited this strawberry, will he please to favor our readers with his estimate of its qualities.

PEAR BLIGHT.

Is pure or raw linseed oil the best for pear blight? R.

Toronto.

REPLY.—The raw oil, if pure, may be safely applied, but we need more experiment to establish its efficacy as a remedy for pear blight.

A WORD FOR OUR CORRESPONDENTS.

We frequently receive inquiries coupled with the request that we will answer them in the very next number of the *Canadian Horticulturist*. Some of the inquiries that are answered in this number came to us in a letter bearing date April 27th, yet requesting us to answer them in the May number. This was simply asking an impossibility. The May number goes to press not later than the 20th of April, and in order that this can be done it is necessary that the copy be in the printer's hands by the 10th, which gives only ten days for setting up, sending the proof to us, returning it to the printer, correcting and putting in page form, sending again to us for final revision, returning to printer and making last correction. All communications must reach your Editor's hands not later than the tenth day of the month previous to the month of issue.

CORRESPONDENCE.

REPORT ON PLANTS RECEIVED.

DEAR SIR,—I herewith send you a report of the plants I have received from year to year:—In 1883 I got the Worden Grape. It has made slow growth, but looks well this spring; it has not fruited yet. In 1884 I got the Prentiss Grape. It is twice the size of the Worden, seems quite hardy and I think will fruit this year. In 1885 I got Fay's Prolific Currant. It has made good growth, but will not fruit this year. Last week I received the Marlboro' Raspberry. I am afraid they will not live: were very dry when received, appeared to have been too long in the mail bag. My location is on a northern slope, five miles north of Lake Ontario, north-east of Cobourg. I lay my vines down in the fall, and cover them with earth, and in the spring they come out nice and fresh. J. LAWLESS.

Baltimore, May 11th, 1885

MULCHING WITH FLAT STONES.

MR. EDITOR,—I will give "J. S." my experience with flat stones for mulching: I find them superior to any other mulching for newly planted evergreens and deciduous trees and shrubs. I made the change to them three years ago, and my yearly use of them since has proved to me their superiority. I use small pieces for small trees, and larger ones for larger trees. I do not put them so close to-

gether as to exclude air. There is another advantage in using stones: they steady the tree while forming new roots.

Yours, &c.,
M. O. H.

Cowansville, April 12, 1886.

VIBURNUM DENTATUM.

DEAR SIR,—The native shrub referred to on page 82 of your April No., must be a Viburnum—probably dentatum, a fine shrub.

Yours respectfully,
P. BARRY.

Rochester, N. Y., April 6th.

CURRANT BORER.

SIR,—In reply to your correspondent's enquiry in reference to the "Currant Borer," I may say that when residing in Japan, I found a worm of this nature a deadly enemy to many fruit trees, and especially to apple trees, cherry trees, and other fruit trees not indigenous. The only ways of stopping its ravages, were to watch for the first symptom of its being at work, and then insert a fine elastic wire into its hole, pushing it up and down; or to take a glass syringe with a fine point, and pump kerosine or other like liquid into the hole. I do not know if the borer of this country is the same as that of Japan: The latter is a white maggot, which works its way by a small hole into the stem or branch of the tree or shrub, and hollows out a circular channel up the branch, of perhaps two or three feet length. A little heap of what looks like sawdust lies at the foot of the tree, as the sign of his deadly labour—deadly, for the tree soon succumbs, if not attended to.

The climate of Japan (excepting the north) of course differs exceedingly from this, but perhaps this experience may be useful.

Yours faithfully,
A. J. WILKIN.

Pine Creek, Calgary, Ap. 16, '86.

GRAPES AND STRAWBERRIES.

As yet I can say nothing definite of the value of the premiums received. It was necessary to move Moore's and Worden a year after planting, so that I am so far unable to sit under my own vine without danger from sunstroke. In my garden the soil is sandy, and rather poor. There is a full east and south exposure, with a shelter belt on the north and north-west. In such a situation Prentiss made a poor growth and failed to ripen half of that, while Moore's, Worden, Pocklington and Brighton ripened to the tips. Fay's Prolific is a vigorous grower.

In August, 1884, I purchased some potted plants of Bidwell, Manchester, Sharpless, Seneca Queen, Early Canada, Jersey Queen, Triple Crown, Shirts, and James Vick. They were planted in rows in very rich soil, inclined to sand, runners cut, and a light covering of straw thrown over the bed after the first freeze-up. Last season Manchester and Seneca Queen bore heavy crops of very large, handsome berries; Early Canada and James Vick produced a large number of berries, so small that it required a great deal of patience to pick them. The others are valueless with me.

J. McN. MALCOLM.

Norval, Halton Co.

BARK LICE REMEDY.

MR. EDITOR,—When I used the Bark Louse Remedy, I mentioned to you, my trees were but three or four years old. One bag in the fork of the tree was then sufficient, and I think one bag so placed would work into the sap generally and be sufficient for any sized tree, yet I have put it on a few large trees and used from two to four bags to a tree, with the view of making it more surely effectual, and placed the bags so that the wash made by the rains on the ingredients would come in

contact with the trunk and trunk ends of as many main branches as possible.

Yours truly,
D. YOUNG.

Adolphustown, P. E Co.

NOTE BY THE EDITOR.—Does our correspondent suppose that the ingredients of the composition used by him are taken up through the bark into the circulation, and that the sap is thereby rendered poisonous, so that the young lice are killed by feeding on it?

STRIPED MELON BUG.

I noticed in the April number of the *Horticulturist* that J. P. Williams, of Bloomfield had considerable trouble in getting rid of the striped squash beetle; if it is the same as the squash bug my remedy would be to put some fresh cow dung into a pail, put on some water, stir it up, and sprinkle the vines and plants with the mixture; the beetles will seldom wait for a second dose.

NONPAREIL APPLE.

J. P. Williams enquires for the famed Nonpariel of Nova Scotia. I have some grafts of the above-named apple now growing, and in another year may have some to take off.

EDW'D C. SCARLETT.

Conway, Lennox Co.

GRAPEVINE TRELLIS.

MR. EDITOR,—I cannot help expressing my gratitude to the party writing that article on grape culture. I find that others have trouble with their trellises as well as myself, but I have experimented until I have got a trellis that I can recommend to any of your readers who may require them. It is this: put in your posts two feet in the ground, fifteen feet apart, five feet high, and then instead of a wire, get small cedar poles, then four inches from the top bore a two-inch auger hole and in them fit your poles between the posts; that serves for the top wire, then put in two wires below the poles, then the end posts cannot pull together, which has been all my trouble. The wires must go through the centres of the posts, by boring holes through them. This trellis will stand any amount of pressure, for the wire can be strained as tight as necessary without any bracing.

Yours,
A. C. MCDONALD.

Dunlop, Huron Co., Ont.

AMBER QUEEN GRAPE.

The Amber Queen came through the winter without any other protection than the snow, in an exposed position, where it had been forgotten. Of course it was lying on the ground.

J. P. COCKBURN.

Gravenhurst, Muskoka.

THE JAPAN QUINCE.

In reply to the enquiry of "Subscriber," Walkerton, I would say that the Japan Quince has proved itself perfectly hardy here. Even in the winter of 1884-5, the severest known to the oldest settlers, when nearly every Baldwin Apple tree in the neighbourhood suffered, the Japan Quince came through uninjured. With my experience I can confidently recommend it for hardiness, while for beauty, when in bloom, it excells all other deciduous shrubs.

J. H. WISMER.

Port Elgin.

STRIPED MELON BUG AND HYDRANGEA PANICULATA.

I notice in the *Horticulturist* for April an enquiry for a remedy for the the ravages of the striped squash bug. I have used saltpetre for years, with the best results. Dissolve a tablespoonful of saltpetre in a patent pail of water and soak the ground around each

vine with the fluid, using about a pint to a hill. Do this after sundown, as the bugs descend into the soil about that time for the night, and they will not be in a condition to come up again next morning. A second or third application may be necessary where the bugs are very numerous. The saltpetre will not injure the plants.

Another correspondent in the same issue fears that Hydrangea paniculata will not prove a success at Barrie. Unless I am greatly mistaken I saw a very fine plant at Allandale Railway Station in August, 1883, that had evidently bloomed profusely, for the dead trusses were still upon the plant.

Permit me to express the gratification I feel upon the arrival of the *Horticulturist* each month. I consider it invaluable to all who cultivate fruit or flowers, whether for pleasure or profit, particularly so to Canadian horticulturists.

Yours faithfully,
WILLIAM KAY.

Chesley, Bruce County.

STRIPED BUGS.

If Mr. J. P. Williams, who had so much trouble fighting the striped bugs last season, will take inch lumber 8 inches wide, cut in pieces 14 inches long, nail four of these together, and over the top fasten mosquito netting, he will have nice, handy, bottomless boxes that he can place over each squash, melon or cucumber hill that he may desire to plant, and he will have the most effectual remedy against striped bugs yet discovered. If the ground should be uneven, pull the earth against the sides of the boxes to prevent the bugs from getting in underneath. Put these boxes or frames over the hills as soon as planted as they answer the double purpose of protecting the young plants against striped bugs and late night frosts. They can be left on till the squash plants crowd hard against the netting and the melons and cucumbers have made six or eight leaves. By that time they can be safely removed in ordinary seasons, as most of the bugs will have disappeared, and the few that may remain, in exceptional seasons, will not be able to harm the plants much when they have attained the size indicated. The frames, if well nailed together when first made, will last nearly a lifetime; the netting will need to be replaced every three or four years.

As soon as their services are no longer required in the garden or field they should be stored away in some outbuilding.

Where very large plantations of squashes or cucumbers are made this method is not feasible, but where the amount does not exceed the fourth of an acre, this is the cheapest and most thorough way of disposing of the striped bug. For melons and cucumbers the pieces can be cut twelve instead of fourteen inches long. I think this answers Mr. Williams' question, "Is there really any known remedy for the striped bug?" in the affirmative.

H. L. JANZEN.

Berlin.

FRUITS IN NORTH SIMCOE.

As you invite the members of the Fruit Growers' Association to give their experience in fruit growing, in their respective localities, through the columns of the *Horticulturist*, a few items from the northern part of Ontario may not be out of place. With respect to apples, the past year has given evidence of the necessity of planting only the very hardy kinds. Of course the winter of 1884-5 was an exceptional one. But it played sad havoc with the apple orchards in this county; hundreds and thousands of trees were frozen to death. It was

quite a common sight last summer to see numbers of trees in every orchard with yellow leaves and scathed trunks, as if they had been scorched by fire. As to the cause there is a difference of opinion. Some think it was the rain that fell about Christmas, followed by severe arctic weather. Others that it was the premature warm spell we had in spring that started the sap too soon, and then froze and burst the bark. Perhaps both are partly right. The three varieties that stood the best were: 1st, Duchess; 2nd, Talman Sweet; and 3rd, Golden Russet. I agree with Mr. Williams, who wrote in the April number that he is looking to the Russian Family for something to turn up to replace the kinds we have now; and if we can get among the Russian fruits an apple as fine as showy and as hardy as the Duchess and that will keep to spring, that would be *the* apple for North Simcoe.

WITH REGARD TO SMALL FRUITS.

The last year seemed very favourable for grapes and berries, notwithstanding the severity of the preceding winter. But this may be explained by the fact that grapes are mostly put down and covered, and then the snow lay very deep and so protected the small fruits. Strawberries were a splendid crop, and the same may be said of raspberries. The Cuthbert is my favourite red, and the Gregg the best black cap. All the varieties of grapes that I have, ripened well—Champion, Concord, Moore's Early, Vergennes, Early Victor, Prentiss, Rogers' No. 3, 15, and 17, Worden and Brighton. Last fall was exceptionally free from early frosts. We can bring all those varieties of grapes through the winter all right by covering them; the vines grow well through the summer, and if we can only get them ripe before the early fall frosts catch them, we can grow a very fine sample of fruit.

Everyone as far as I can learn in this district is highly pleased with the premiums sent out by the Association. The Catalpas sent last spring all grew splendid, also the Dahlias and Fay's Currants. I have not heard of a plant that failed. I only wish that more in this county would join the F. G. A. If they would subscribe to the *Horticulturist*, and not give so much to Yankee tree agents for worthless trash that never lives to produce fruit, they would be vastly benefited. I am highly pleased with our little journal; it is getting better every month. Every farmer, every gardener, and every man or woman who takes an interest in fruit or flowers should take the *Horticulturist*.

G. C. C.

Vespra, April.

FRAGRANT CLIMBING ROSE.

How can I tell you anything about roses without "carrying coals to Newcastle?" Yet you say so positively in the report of the Fruit Growers' Association that you do not know of *any fragrant* climbing rose, that I want to tell you of one that thrives here, although it *might not in Canada*. A friend of mine here, Mrs. Hentzley, has one that covers her verandah, and is fast running over the roof of her two-storey house. It has a delightful odor, very similar to that of the tea roses, and it has the same glossy leaves. It is evergreen, and with the thermometer at four degrees below zero, as we had it one night in January, it was not hurt at all. She calls it the Banksia. Some people here call it Lady Banks. It is a profuse bloomer, and had *some* blossoms late in the autumn. It is a very pale yellow, and the open rose is not specially pretty, but the buds are beautiful. Mrs. Hentzley is trying to start some cuttings for me, but finds it hard to make them grow. I feel as if I were very officious in offering you

this little bit of information, but I do it because of what you said to the Fruit Growers. NELLIE COOKE PETERS.
Dallas, Texas, U. S. A.

NOTE BY THE EDITOR. — We are under obligations to our fair correspondent for so pleasantly reminding us that such comprehensive expressions as were used by us on the occasion to which she refers are apt to be misleading. We were speaking to a Canadian audience, and had in mind at the time, and should have so stated, such climbing roses as can be grown in the open air in the climate of Canada. There are many fragrant climbing roses, but they are largely climbing tea roses, such as Gloire de Dijon, or Noisettes, as Marechal Niel. The Banksia roses, both the yellow and white, are tender in this climate. The climbing roses that can be grown in any considerable portion of Canada in the open air are of the Prairie rose class, Rosa rubifolia, the best of which are the Baltimore Belle and Queen of Prairies, but all the roses of this class are scentless, so far as they have come under our observation. Doubtless at Dallas, Texas, Gloire de Dijon and Marechal Niel could be grown in the open air. We saw a splendid specimen of Marechal Niel in Doctor Kenworthy's garden, at Jacksonville, Florida, covering a space of 30 by 40 feet.

BIGNONIA RADICANS.

This plant, which is alluded to in the present month's number, is certainly worthy of a place in every garden and grounds. Care as to protection during winter is necessary. The greatest trouble to contend with is its spreading propensity, as it would soon monopolize the flower border. The best way to manage it is to put it into a tub of sufficient size, cedar wood being the best, then plunge into the earth almost to the surface. S. R.
Berlin.

PARIS GREEN FOR CABBAGE LEAVES.

It appears from an article under this heading in the last number of the *Canadian Horticulturist* that Mr. D. Dempsey had something to say at the meeting of the F. G. A. in Stratford with regard to using Paris Green against the ravages of the so-called cabbage worm. However effectual and safe the application of Paris Green to cabbage may prove, in the hands of experienced and careful men, I for one would unhesitatingly and utterly condemn this practice as altogether too dangerous to be recommended to the general gardening community. The use of it on a vegetable where the leafy part, on which the Paris Green must be sprinkled, is consumed, especially since Mr. Dempsey recommends the sprinkling to be continued until the cabbages are full grown, is exceedingly dangerous. I grow from 8,000 to 10,000 cabbages yearly, and find but very little annoyance from the cabbage worm. I attribute this freedom from their ravages to the fact that I invariably plant nearly all of this quantity in one solid block. If for any reason I find myself obliged to plant a few hundred heads by themselves, and especially if near the shelter of fences, buildings or orchard, or where the air cannot circulate freely, they are sure to be doomed to destruction through the ravages of the cabbage worm.

My advice to all that grow, say from twenty-five to a few hundred heads of cabbage, is to select that portion of their garden that is most exposed to

the free circulation of the air. If you have no such plot at your disposal, but are hedged in on every side, as very many gardens are, by buildings, high fences or orchards, and your calling is such that you cannot find the necessary time to hand pick the worms, sooner than resort to such a dangerous remedy as Paris Green, do not attempt to grow cabbages, but buy them on the market of parties you know are not obliged to resort to its use in their cultivation, and devote your time and ground to the growing of other vegetables or small fruits.

I have had occasion within the last ten years to try many of the remedies recommended for the destruction of the cabbage worm, but the only one I ever found effectual and at the same time practical (aside from hand picking) was to take water when about at the boiling point and pour it over the cabbages with an ordinary sprinkling can.

H. L. JANZEN.

Berlin, Ont.

THE MOCCASIN FLOWER.

With reference to some of our native herbaceous plants and shrubs, alluded to by Mr. Goldie in the January number, I would beg to state that the Cypripedium spectabile, or as it is called, the Moccasin Flower, one of our most charming flowers, is difficult to transplant into dry, exposed ground, it being a swamp orchid. I tried it twice, but failed in both cases, the first specimen I bought, and the second I discovered, and notwithstanding having brought along a quantity of muck to plant it in, I failed to get any satisfactory results. The only way to treat it successfully is to plant near the edge of a pond, or creek which may be on or running through pleasure grounds partially shaded.

The Lobelia cardinalis, or Cardinal Flower, intense scarlet, is more easily handled. I found some fine specimens of this plant growing in a dried up black ash swail, and it will grow satisfactorily when planted in a soil of a similar character.

The Hepaticas and Sanguinarias are easily grown in any common garden soil.

S. R.

Berlin.

WATER LILIES, &c.

Parties who have a small pond near to their premises should not omit to procure some water lilies (although not lilies really, still they are known best under that name). They are easily transplanted. I have seen them growing in abundance in the township of North Dumfries, and a few of our Ranunculus might be transplanted on the edges. Our native lily will bear transplanting very well. Some of our native shrubs must not be forgotten, such as the Comptonia asplenifolia (sweet scented fern), for its fragrance, and the Potentilla suffructicosa, for its pretty yellow blossoms. Both are easily removed.

S. R.

Berlin.

THE WEIGELA ROSEA.

This charming shrub is grown here without winter protection, at least on my grounds, but in localities where it is exposed and partially winter killed, it would be as well to give it protection during winter, either by covering with evergreen boughs, or what is just as good, a piece of packing sheet, or such like, taking care to bend the canes gently and fastening with hooked pegs.

This shrub is a native of China, and was introduced into Europe by Weigel, a Russian botanist, hence its name. There are many varieties now in cultivation evidently seedlings of the original Rosea, all of which are no doubt equally as hardy. The var. Variegata,

illustrated and described in the February number of the *Horticulturist*, is certainly an acquisition, and no person having a taste for gardening should be without at least one specimen on his grounds. The Weigela is of easy propagation from cuttings.

In protecting the Weigela, you may at same time apply the same *modus operandi* to the Japan Quince (*Cydonia Japonica*), and instead of having a few scattering blossoms at the base of the shrub, you will have a magnificent floral blaze.

S. R.

Berlin.

THE CANKER WORM.

Your article on this subject is very opportune. Although this pest or rather insect epidemic has not reached this locality, that I have heard of. Some parties seem to think it has, but I think it is a mistake. Possibly it is the fall web worm they allude to. None are on my premises yet, but I suppose it is only a question of time. However, it is as well to be on the lookout, forewarned is forearmed.

The poor horticulturist has many troubles to contend with, but must content himself with this, the only satisfaction, that there is not much danger of his brains becoming inert.

Berlin. S. R.

THE CURRANT BORER.

This pest, to a considerable extent, can be controlled. The egg from which the grub is hatched is usually deposited towards the tip of the young shoot or sucker from the base of the bush, first being very ingeniously girdled in order to reach soft liber or pith ; and just as soon as you will see the end of the twig lean out and wilt, then is your time to head the grub off by cutting back, say about an inch of the new wood, below where it was girdled. If allowed, it will soon work its way downward, eat its way through, and get transposed to a winged beetle, ready to engage in the same profession that its parents did previously.

I could not for a long time understand why so many currant suckers were wilting at the tips ; finally I saw the insect in the act of girdling a rose sucker, but being rather smart for me, escaped. It appeared to be about three-fourths of an inch in length, with brownish scale wing coverings, and fly shaped. No doubt entomologists know it.

Simon Roy.

Berlin.

PANSIES.

To have pansies for early spring bloom, and all summer as well, I sow the seed in August. When seedlings are up nicely I prick out and pot in verbena-size pots (one plant in a pot). I then thrust the pots into earth in my cold frame up to the rim, cover with glass, and water when required. By the time of first frost they will be beautiful large plants, and some of them in flower. When severe cold sets in I cover the glass with some old boards to protect the glass, then cover with old vines and leaves. It is best to elevate your cold frame a few inches to keep dry. I also keep in such frames carnation cuttings, and other plants that will not stand our long, severe winters very well. In early spring I uncover the frame to the glass, and in two weeks time their saucy faces will be peering up at you. When the weather becomes somewhat settled I take them out, tip them out of the pot and put them into the border. Be cautious about manuring with strong manure ; a good dressing of leaf mould I have always found sufficient ; put a little salt on the surface to retain moisture, for pansies require plenty of moisture. In dry, hot weather the

watering should be done late in the evening, after the earth has cooled; if they are watered while the ground is hot they will throw out strong, straggling shoots and often die.

WALTER S. GAMSBY.

Orono, Ont.

NOTE BY THE EDITOR.—With this communication we received from Mr. Gamsby a most magnificent collection of pansy blooms of unusual size. We took the trouble to measure the largest and found it to be fully 2½ by 2 inches. Many of the others were but a little less. Mr. Gamsby does not tell us where he obtained his seed. There is quite a difference as to size in the several strains that are grown by florists, which, combined with Mr Gamsby's excellent treatment, may account for their great size.

JAPAN QUINCE AND WEIGELA.

I may say that the Japan Quince and the variegated Weigela needs protection during winter here.

GEORGE BOND.

Prince Albert, Ontario Co.

STRIPED MELON BUG.

DEAR SIR,—In the *Horticulturist* for this month there is a remedy recommended for the three-striped Yellow Squash and Melon Bug, which remedy is a very troublesome one. For many years past I have always planted tomato plants near my melons, and as soon as the scent of the tomato gets strong, which it soon does, it banishes the bug at once. This is a certain remedy and gives no trouble. I have never known it to fail.

Yours truly,

Toronto. W. W. R.

CATALPA SPECIOSA.

The Catalpa is hardy here and comes out in good condition, better than the Russian Mulberry, which is sure to indicate the snow line when developing the buds in spring, all buds above the snow being at least four days later in coming out.

J. P. COCKBURN.

Gravenhurst, Muskoka.

BARK LICE ON APPLE TREES.

As you published the remedy for bark lice I assume that you do not discredit it. Its action, I imagine, *is purely as an external wash*, and not that it is absorbed and carried with the sap through the ramifications of the branches. C. E. B.

MEETING OF THE MICHIGAN HORTICULTURAL SOCIETY.

The annual June meeting of the Michigan State Horticultural Society will convene at North Lansing, on the evening of June 15th, and continue for three sessions on the following day. The exercises will be unusually interesting, and a novelty will be introduced in the way of short essays and addresses upon special topics by classes from the Agricultural College, under the direction of Dr. Beal, Prof. Cook, and Prof. Bailey.

The meeting is arranged to follow closely the semi-centennial celebration at Lansing, so as to take advantage of the greatly reduced railroad rates, and give an opportunity to take in both entertainments at one visit.

For further particulars address

CHAS. W. GARFIELD,

Grand Rapids, Michigan. Secretary.

THE POTATO ROT,—ITS CAUSE AND REMEDIES.

By J. Hoyes Panton, M.A., Professor of Natural History at the Ontario Agricultural College.

The use of the microscope in the fields of scientific research has revealed much that is of importance to man. Many forms of disease, about whose origin little was known, have had much light shed upon them since this instrument was employed in their study, both among animals and plants. We find now that man is constantly lashed by invisible foes—some attacking himself and others the food which he eats. During the past summer and fall a striking example of this occurred in the prevalence of the so-called "potato rot," which has proved a great loss throughout the Province and in many parts of the United States. In the bulletin issued in November from the Bureau of Industries, we learn that the "rot" prevailed through the whole southern belt of the Province. In many cases one-half to three-fourths of the crop was destroyed, and in some it was not worth digging. With such disaster around us, the questions are naturally suggested, What is the cause of the "rot?" and, What remedies can be adopted?

Cause.—This disease has received a great deal of attention from botanists since the days when it became a scourge in Ireland and other parts of the British Isles, and it is now conceded to be the result of a minute fungus called *Phytophthora infestans.* This attacks all parts of the plant—leaf, stem and tubers. By those ignorant of the life history of this tiny parasitic plant little attention is paid to its appearance on the tops, and no alarm is experienced until the potatoes are affected. But being very contagious, its presence on the leaves should become a serious matter, especially when we remember that it spreads with great rapidity. It is usually indicated by the tops presenting a blotched, brownish, spotted, dead appearance. A close examination of the potatoes showing this will discover innumerable slender stems growing up out of the surface of the leaves and stems of the affected plants. These branch and swell out at the ends into pear-shaped minute bodies (spores), which are produced by millions. When ripe they separate from the stem and being exceedingly light pass into the atmosphere, where they are wafted about, many of them finally reaching the ground or settling upon plants. Under favourable conditions of moisture and heat the contents of a microscopic spore may push out a long minute tube, which can penetrate into any part of the potato plant and give rise to the fungus; or may separate into several distinct portions (swarm spores) which burst through the spore-wall and become the source of the parasitic plant. The mature plant which lives in the tops and tubers is very minute, and can be seen only by the aid of the microscope. It consists of many colourless, branching, thread-like structures. These penetrate the tissues of the potato and feed upon the juices, so that it soon weakens and begins to waste away. From the thread-like structures tiny stalks arise, assuming beautiful plant-like forms and bearing upon their branches the spores already referred to. They live but a short time, but the thread-like structure is perennial and hardy, and from fragments of it new fungi may arise. It is said by some that another kind of spore is produced which can winter, and thus give rise to the organism in another season. These are the so-called resting spores, apparently for the purpose of keeping the species over certain periods, while the spores already considered are produced rapidly so as to hasten the spread of the fungus under favourable conditions. This minute microscopic

plant is certainly a low form of vegetable life, incapable of manufacturing food from the mineral kingdom, but fastening upon other plants and feeding upon their juices. A wet season supplies conditions well adapted for its development, and hence we find the "rot" associated with such weather. There is no doubt that many spores are always more or less present, but they are prevented from being a source of trouble because the weather is not suited for their growth.

Remedies.—The "rot" usually appears about the first two weeks in August, and if the weather is favourable its spread is very rapid, for as soon as the thread-like structure which arises from the spore is developed it immediately becomes spore-bearing. Hence the importance of examining the plants for the appearance of the brownish spots that indicate the presence of the fungus.

1. As soon as discovered, dig the potatoes. Delay will allow it to spread to the stems, and thence to the tubers. If it reaches these and damp weather comes, "rot" will certainly appear.

2. After digging, the potatoes should be put in a cool, dry place, thus surrounding them with conditions unfavourable for the growth of the fungus, if any happens to be upon them.

3. Growing early varieties is worthy of consideration, so that they may mature before the season arrives when this parasite is likely to affect the crop.

4. All potato stalks in affected lands should be gathered and burned, so as to destroy the millions of spores which may be upon them.

5. Use none but good seed. If at all affected, reject them; and plant in well-drained land. If the potatoes to be used for seed have been taken from cellars where affected ones were kept, they are likely to have the microscopic spores on them and escape notice. It would be best to get seed from unaffected districts.

6. It is scarcely necessary to remark that it would be injudicious to plant potatoes in the same field the following year after a visitation of the "rot," inasmuch as the ground may retain the germs of the disease.

7. Avoid planting upon heavy clay soil, but prefer a light and dry soil. This presents the fewest conditions suitable for the growth of the fungus.

The nature of our climate is not so favourable for the development of this injurious fungus as that of Britain; yet as we are sometimes visited by it, and although scarcely viewed as a scourge, it is well that we should remember its nature and habits and always be ready to guard against failure if it appears. As last summer was favourable for its propagation, great care should be exercised in the selection of seed this spring.

The above paper was prepared by Mr. Panton at the request of the Ontario Department of Agriculture, and deserves the careful consideration of all cultivators of the potato.

SMALL FRUITS.

(Read before the East Lambton Farmers' Institute, at Watford, by W. W. Hilborn, of Arkona.)

There are no fruits which can be so extensively and profitably grown in Ontario as the small fruits, and none that give such quick returns. No crop on the farm is

MORE PROFITABLE.

While I would not advise every farmer to go into growing small fruits for market, I would very earnestly recommend all to grow enough for their own use There is no other way in which you can have the same satisfaction as to grow them—not in a small enclosure, where all the work has to be done by

hand, but out where you have plenty of room to do most of the work with horse and cultivator. There is no other crop on the farm that will pay as well as a good collection of strawberries, raspberries, currants, blackberries, gooseberries and grapes, if they receive reasonable care. There are many places where it would pay well for farmers to go into small fruit growing for market. Every neighborhood should have at least one person engaged in small fruit growing for market; but to be successful, those engaged in it for profit must have

A LIKING FOR THE BUSINESS,

and be willing to work, not only with their hands, but with their brains. There are many farmers that have small farms, with perhaps two or three sons, for whom they would like to buy more land, but do not find it an easy matter to do so, as land is high in price in all good localities, and times are dull. If such farmers would go into small fruit growing they would not require more land, and would find it more profitable, that is, if gone into intelligently. Some will say, "The supply will soon be greater than the demand." Why not be afraid to grow wheat for the same reason? There is not the slightest doubt but that it will pay as long as people continue to have a taste for fruit.

THE PAST SEASON WAS A FAVORABLE ONE

for strawberries, and the supply was equal to the demand in most parts of the country, especially in large towns and cities. Small country places and farmers in many places did not get a full supply even last year, when the largest crop was gathered that has ever been grown in this country. I sold five hundred bushels from five acres, grown with just good ordinary field culture. After deducting expenses for picking, boxes, marketing, etc., they give a net return of

FULLY ONE HUNDRED DOLLARS PER ACRE.

The supply did not equal one-half the demand for raspberries, currants, gooseberries, and blackberries, and is not likely to fully equal the demand for many years.

At the present time I think it is very doubtful if there is any other line of our great agricultural industries of Ontario that will give a greater return for the outlay required than small fruit growing. Do not for one moment suppose that you can go right into the business on a large scale and make a fortune in two or three years without any knowledge of the business. The only sure way to succeed is to begin on a small scale, and as you gain practical knowledge of varieties, manner of cultivation, marketing, etc., you can enlarge your plantations and do so intelligently. There is great competition in all branches of trade, but those who are not afraid to work, both with their hands and brains, need not fear competition.

ONE OF THE MOST IMPORTANT POINTS

in growing small fruits for market is to try always to have them put up in nice packages and well filled with good fruit, and always sell the fruit for just what it is—never put the large berries on top of the box and the small ones in the bottom. Another very important matter is to plant well-tested varieties, and plant some of all the small fruits—strawberries, raspberries, gooseberries, currants, blackberries, and grapes. Plant several kinds of each, so that you can extend your supply of fruit over as long a period as possible, which gives you a greater length of time in which to market. You can also market at a much cheaper rate, as you do not require so many boxes, crates, etc.; you also have time to do more of the work yourself, thus reducing expenses. Having a regular

supply will help to find you a market, as all dealers like to buy from those who can give them the most regular supply, and for the greatest length of time. I will give a

LIST OF THE MOST PROFITABLE SORTS

for market, so far as tested in this county. First on the list is

Strawberries.—For first early, plant Old Iron Clad; next early, Crescent Seedling; for medium, Wilson and Daniel Boone; for late, Manchester and Atlantic.

Red Raspberries.—Turner, for early; Cuthbert, for late. Shaffer's Colossal is a very dark red or purple; it is the most productive and best for canning, and none more hardy.

Black Raspberries.—For early, Tyler and Souhegan; for medium, Mammoth Cluster; for late, Gregg.

Red Currants. — Victoria, Raby Castle and Fay's Prolific.

White Currants.—None better than White Grape.

Black Currants.—Lee's Prolific and Naples.

Gooseberries.—Smith's Improved and Downing.

Blackberries.—Snyder.

Grapes.—Concord, Worden, Moore's Early, Delaware, Rogers' No. 9 (Lindley), and Brighton.

The above are all well-tested varieties, and will

ADAPT THEMSELVES TO ALMOST ANY SOIL,

and where they will not succeed it would be useless to look for any that will pay. There are some of the new grapes that show such decided merit that I will give the names of a few, although I do not like to say much about new varieties in a paper of this kind. Ulster Prolific I believe to be one of the most promising new red grapes I have seen for this country. Empire State and Niagara are both very fine white grapes, and well worthy of a place in every collection.

BAGGING GRAPES.

(From the Philadelphia Weekly Press).

The following replies to inquiries as to the results of using bags upon grape clusters this season, the difference between fruit thus treated and that left uncovered, the influence of the bags upon early ripening, flavor, bloom, soundness, etc., will be found instructive.

IN NEW JERSEY.

I bagged some of all varieties and most of some varieties, the smaller clusters being unbagged. Of the Martha, Niagara, and some others, the exposed cluster was invariably worthless, while those in bags were perfect in every respect. Not every cluster bagged, however, was perfect. Some would have a berry or two affected, others more. Occasionally one was found entirely destroyed. That bags are a great protection is abundantly proven in my experience. I wish I could affirm or believe it was absolute. The quality of the grapes bagged is not in the least impaired. The appearance is improved, the bloom is perfection and the general appearance of the clusters more attractive to the eye than are those grown outside. I think the ripening is generally retarded a few days, but it is none the less perfect. My experience summed up is this: That by bagging I am sure of securing a reasonable amount of fine fruit; without it the result is extremely problematical. To put it more plainly, on my grounds, as far as the choice varieties are concerned, bagging constitutes just the difference between success and failure. If I want to be sure of fine clusters of so common a variety as Concord I bag them.—E. WILLIAMS.

IN CONNECTICUT.

My first experience in bagging grapes was on a very limited scale four years ago, with very little faith that there could be any good in it. However, to

test the matter carefully, soon as the fruit was well set in early Summer, I put a few bags on each vine of every variety in our experimental vineyard, leaving bunches unbagged side by side with the bagged ones, and the results in the Fall were such as to encourage me to repeat the experiment the next year on a larger scale, and for the past two seasons we have bagged all our best grapes and shall continue to do so in the future, for by so doing we get more perfect bunches, berries of larger size, ripening more perfectly, and a more perfect bloom than the unbagged fruit. As to quality, four years' test has failed to show me that it is either improved or injured by the bagging. Mildew has been very prevalent this season, and on some varieties we should not have had a single perfect bunch had it not been for the bags. They also serve as a protection against frost. We have had several hard frosts, and yet every day now we are enjoying many of our best varieties fresh from the vine, and in a perfection of freshness that we have never seen at this season in grapes not so treated. So much in favor of and nothing against the system, except the very light expense of the bags and pins, and the labor of putting them on. I believe it will pay well to bag the fruit in a market vineyard, and I know that for family use the satisfaction of having so much better appearing fruit more than compensates for the slight expense.—J. H. HALE.

IN ILLINOIS.

Last year I bagged a few clusters of Concord and Diana grapes as an experiment. It proved so satisfactory that I this year bagged most of my Champion, Concord, Diana, Brighton and Lady grapes. All those bagged ripened evenly, were free from specks and blemishes, and were covered with a beautiful bloom, but in the midst of nearly every cluster a species of small spider had spun a dense web, which had to be removed before they were presentable.

About two-thirds of those left unbagged were punctured or wholly destroyed by grasshoppers, which were very numerous and very destructive this year. I could see no difference in the time of ripening between those bagged and those not. We used quite a lot for dessert, and I noticed that the bagged were always selected for that purpose; and though the red and white varieties were somewhat lighter in color than those exposed, the general opinion of the family was that they were better flavored—more "sparkling." Bagging made no difference in the color of the black grapes; they were simply black and covered with a heavy bloom.—FRED. GRUNDY.

IN NEW YORK.

We have for several years past practiced covering clusters of grapes with small paper bags. We usually place these bags on the grapes when about half grown, fastening them with a pin, having first drawn the top of the bag about the stem closely, and having slit the lower corner of the bag with a knife to let out any water that might gather in the bag during a rain. Our object in bagging grapes is to preserve specimens of the different varieties in the best possible condition. In localities where rot is prevalent bags are used for the purpose of preventing rot with good results. The grapes reach a higher perfection of color and quality in the bags than without. The bloom, which is a prominent feature in the grape, is undisturbed in the bags, and is apparently more noticeable when thus protected. The only specimens of Lady Washington grapes we have ever succeeded in ripening on our farm, were those enclosed in paper bags, as it has been proven too late for this

locality. It is surprising to learn how many grapes may be bagged in a day by a skillful person, who is quick motioned. The expense, however, is worth considering, and will prevent the practice becoming general, except to prevent rot, and to prevent the depredations of birds and fowls, and damage by frost. If one has only a few vines in the garden, it is an easy matter to make them secure against rot and other serious dangers by bagging them, and the expense is hardly worth mentioning in such cases.—CHARLES A. GREEN.

MAMMOTH SQUASH.

In W. Atlee Burpee & Co.'s Farm Annual for 1886, Philadelphia, the credit is awarded to Mr. Charles Hewitt, of Lunenburg, Nova Scotia, of having grown the largest squash on record, 292 lbs., exhibited at the Dominion Exhibition in St. John in 1883, and in 1885, in competition with the United States, of having won first and second prizes, $25.00 and $10.00, for mammoth squash with 262 lbs. and 223 lbs., and first of $25.00 with 206½ lbs. for mammoth pumpkin.

Thinking it a matter of interest to learn Mr. Hewitt's methods, since whatever will grow mammoth will also grow table squash, I wrote to him recently for his processes in detail, with permission to publish, which he kindly gave as follows:—

"Soil, a clay loam, with some sand and chip manure, not too coarse, a sheltered, southerly aspect. Prepare the ground in the fall, by digging a hole 5 feet by 5 feet 1 foot deep, in which put a bucket of fish offal, with half bucket of night soil; replace the soil. About 20th April put two seeds in a 4-inch pot and place in a window or hot bed; when in four leaves remove the weakest by cutting it off; pulling up may disturb the roots of the other. Take a sash 3 ft. square, make a frame to fit with four pieces of boards, dig out the hole made in the fall the full size; in this put a large barrow load of horse manure, mixing it with the soil removed, form a mound or hill, on which place your frame and sash; in the centre put some garden soil, in which set your plant, with care not to disturb the roots in removing from the pot.

Water when dry with liquid manure, not strong, and not touching the leaves; give air as needed. When danger of frost is past, and the vine fills the frame, remove the frame, pick off bugs, let the vines run and encourage them to root in adjoining ground, which should be heavily manured with stable manure, mixed with fish offal, lobster factory offal, if convenient.

Let the vine cover the space of 10 or 12 feet. When fruit forms, allow all to get as large as cocoanuts, select the most healthy; if from the main vine, so much the better, not too close to the stock, as they feed from the root joints; at the same time pinch off the tip ends of the vines and laterals, keep pinching off as soon as other laterals form, and all fruit as soon as formed, allowing only the one to remain; the concentrated nutriment immediately takes effect, and in twenty-four hours you will be surprised to find your squash growing so rapidly.

When very dry, water once a week with liquid manure, made from cow dung, or from the draining of the manure heap, not too strong; dilute with soft water and avoid touching a leaf. Just before a rain, strew some superphosphate around the plant, and along the vines, and cover lightly with soil. Stirring the soil frequently is better than water, as the ground is apt to bake.

Pegging down the vines securely would be a useful precaution where

there is any risk of disturbance from wind."

The above gives Mr. Hewitt's "How to grow mammoth squash" nearly in his own words, and but slightly condensed.—CHARLES E. BROWN, in *Yarmouth Herald*.

BLACKBERRY NOTES.

Among the blackberries, the Snyder holds it own as the hardiest. It is very prolific, but the berries are not large. The Taylor is also quite hardy, though less so than the Snyder. The berries are larger. The Early Harvest seems to be the earliest of standard blackberries—but there is a doubt as to its hardiness. The berries are small and jet black; the drupes small and uniform. The Wilson Junior is a large berry of fair quality and productive. Whether it is hardier than its parent, the Wilson Senior, remains to be ascertained. The Wachusett is nearly free of thorns. The quality is good; size medium; but the plants are very productive. Stone's Hardy is with us entirely hardy; the berries of medium size. The canes are large and somewhat dwarf, but they do not bear fruit very abundantly.

The Western Triumph is spoken of in some catalogues as a new variety; but we have had it many years. It is very hardy, but unproductive at the Rural Grounds.

Crystal White is a white blackberry of good quality, but not hardy. The Minnewaska is not introduced. It is immensely prolific; the berries are about the size of the Kittatinny, but not so sweet. Its hardiness is yet to be determined.

The Lucretia Dewberry is as early as the Early Harvest. The berries are large and, when full ripe, of good quality. It runs over the ground or may be trained to a stake or trellis. It is quite hardy.—*Rural New Yorker*.

THE LARGEST GRAPE VINE.

Though the largest Grape vine in the world is claimed to be at Hampton Court, England (a *vinifera* variety), and another is claimed by Santa Barbara, Cal. (a Mission Grape vine), yet I believe the farm of Jesse Tarlton, seven miles from Lexington, Ky., has the best right to the honor of possessing the largest Grape vine, at least in size of body. I measured it at six feet from the ground and found it 66 inches in circumference. It is of the *cordifolia* (Frost or Winter Grape) species, and is probably 200 or more years old. It is supported by an Elm nearly three feet in diameter, which it entirely covers, and shows vigorous growth in many branches, though partly dead on one side near the ground, caused by exposure to the sun and trampling of stock.

A vine of the same species, reported in newspapers of Fla. a few years ago, having a circumference of 69 inches, has always been regarded by botanists as a "fish story," so Kentucky must now bear the palm till good authority from elsewhere shows a circumference of body over 66 inches, six feet or more from the ground.—T. V. MUNSON, in *Am. Garden*.

FREESIA.

The Freesia refracta alba is one of the most desirable of recently introduced bulbs, and is very certain to become a favorite among all classes. It was introduced here years ago by, I think, Mr. Hovey of Boston, but was soon lost, so that it may in a sense be called a recent introduction. The Freesia is a small bulb, easily grown, and bears white flowers of the most delicious fragrance. The flowers last a long time, even after being cut. It may be forced early in the hot-house, but will come into bloom in January and February in the ordinary green-house temperature.

Better still, it will grow well and bloom freely in the sitting-room, if placed near the window and not kept too hot. It is a nice little bulb for all our country cousins. Put five or six bulbs in a five-inch pot. A little freezing will not hurt it when grown in a low temperature. There are two species on sale, F. refracta alba and F. Leichtlinii, between which there is only a trifling difference in color, the latter having a little more yellow in the throat. Both are fragrant, but F. refracta alba is much the better plant, and, with me, has bloomed earlier than F. Leichtlinii. Flowering bulbs may be obtained from the seed in a single year, if sown early and carefully grown; that is to say, seed sown early in the Spring will bloom the following Winter, but not all of them.—*Rural New-Yorker.*

BOOK NOTICES.

THE MICHIGAN HORTICULTURIST for May, is full of valuable papers. Published by W. H. Burr Publishing Co., Detroit, Mich., at $1.00 a year.

THE FORESTRY REPORT of the Kansas State Horticultural Society for 1885, is full of useful information that is worthy of the careful consideration of our people and government. The paper on the use and abuse of our forests is full of eminently practicable suggestions. It contains, also, a list of forest trees, deciduous and evergreen, recommended for that State.

THE HORTICULTURAL ART JOURNAL for May is embellished with four colored lithographs. As a handsome work for the library table it is without a peer among American horticultural publications, and we trust that it is meeting with the support it deserves. It is perhaps very difficult to catch the exact shade of color of the purple filbert, in this case the artist certainly can not be accused of having made the foliage more beautiful than in nature.

ALDEN'S LIBRARY MAGAZINE.—This popular Magazine, which, beginning with the month of May, was transformed from an octavo monthly into a handy, small quarto weekly, has taken other steps in the line of progress. No. 4 of the weekly issue appears in new and larger type, and also with the addition of a handsome cover. In its new appearance it becomes one of the most attractive magazines in the field, while it is beyond rivalry in economy of cost, $1.50 per year. From the amount and quality of the matter it presents it is commonly considered even superior to the great four-dollar monthlies. You can get a specimen copy free upon application to the publisher, John B. Alden, 393 Pearl St., New York.

CANON FARRAR'S NEW BOOK.—A few weeks ago, when Canon Farrar was in this country, tens of thousands of people paid as much as one dollar each to hear a single lecture delivered by him, and were well pleased with what they got for their money. Several of the most important of those lectures and addresses, with other papers, are now published by John B. Alden, of New York, and can now be had in a very handsome cloth-bound volume, for the price of 40 cents. Some of the lectures are also published separately in his *Elzevir Library*, in which form the lecture on Dante sells for 3 cents; on Temperance, 2 cents; on Ideals of Nations, 2 cents; Thoughts on America, 3 cents. The millions of intelligent people who admire Canon Farrar, and who were not able to hear him lecture, will be delighted to find his brilliant, scholarly, and eloquent thoughts placed in this handsome form within their reach. The publisher's illustrated catalogue, 132 pages, is sent to any address on receipt of 4 cents; or condensed catalogue free. John B. Alden, Publisher, 393 Pearl St., New York.

MY NEIGHBOURS GARDEN.

Up to the border of my small domain
My neighbour's garden stretches wide and sweet;
His roses toss against my window-pane;
His jasmine wreathes my porch and doorway seat.

My threshold every May is carpeted
With pale pink petals from his peach-tree blown;
His tallest lilac lifts its plumy head
Up to the casement where I sit alone.

Waking, I hear, as dawns the morning light,
My neighbour busy in his bordered walks,
Noting the added beauties born of night,
Pulling the weeds among his flower stalks.

From early March, when the brave crocus comes,
Edging the beds with lines of blue and gold,
Till the consoling, kind chrysanthemums
Contend against December's cruel cold,

My neighbour toils with wise and patient hand,
Scarce pausing in his work for sun or shower,
Evolving gradually from mould and sand
The germ, the leaf, the perfect bud and flower.

A rare magican he—whose touch transmutes—
Helped by the sprites which rule the airs and dews—
Dry dormant seeds and dark unlovely roots
To graceful shapes and richest scents and hues.

His garden teems with glad and brilliant lives;
There wheel and dive the gauzy dragon-flies,
Bees gather tribute for their distant hives;
And grey moths flutter as the daylight dies.

Sparrows and wrens sing songs which need no words;
And over flower-cups scarce more bright than they,
Green-winged and scarlet-throated humming birds
Hang, tranced with sweet, then whirr and dart away.

From branch to branch, beneath my watching eyes,
His net a black and golden spider weaves;
And scores of many-colored butterflies
Waltz in and out among the dancing leaves.

My neighbour in their midst—thrice favoured one!
Delves, plants, trains, weeds, and waters patiently,
Studies the alchemy of rain and sun,
And works his floral miracles for me.

For me! not one enjoys this Paradise
As I, within my overlooking room:
It is not seen even by the owner's eyes
At once, the whole wide stretch of growth and bloom.

With sight and mind absorbed he little thinks
How all his garden's sweetness drifts to me—
How his rich lilies and his spicy pinks
Send incense up to me continually.

Yet still he labours faithfully and long
My loneliness to brighten and beguile,
Asking for all this fragrance, bloom and song,
Not even the small repayment of a smile.

Unconscious friend, who thus enrichest me,
Long may thy darlings thrive, untouched by blight,
Unplagued by worm or frost! and may there be
No serpent in thine Eden of delight!

And ye whose spirits faint with weariness,
Count not you work unvalued and unkown;
Cheered by your toil, some silent soul may bless
The hand which strives not for itself alone.

ELIZABETH AKERS ALLEN

HOW TO MAKE ALCOHOLIC PLASTIC.—Melt 10 parts of white rosin with one part of beeswax. When thoroughly melted, remove the dish from the stove, and cool until the alcohol will not smoke, then pour in alcohol—continuously stirring—until the mixture, when cool, is of about the consistency of molasses in cool weather. We do not measure the alcohol, but pour in very slowly until the stirring cools the mass. For use in the graft-room it does not need warming. For use in the open air, we place the dish on the top of a lantern-like arrangement with a kerosene lamp under it, regulating its consistency by turning the wick up and down. If covered with a white rag, we do not find this plastic to melt in the sun to more serious extent than the common grafting wax. I will add that during the past four years we have met severe losses in grafting with wax softened with linseed oil.—*Prairie Farmer.*

GRAPE NOTES.—Lady Washington is too late; Jefferson is also late though of of the first quality. It is worthy of trial where the seasons are longer than at the Rural Grounds. Vergennes is also a reddish grape, of fair quality, that keeps well. Eldorado is of superb quality and very early—but it is not a grape that will succeed everywhere. Moore's Early is the best early market grape. Eaton, will make its mark as an early black. The Niagara holds its high reputation for fruitfulness and healthiness. It is probably the best market white grape known at present. Jessica is a very early white grape of some promise. F. B. Hayes (white) is hardy and of good quality for a purely native grape. Ulster Co. Prolific, (let us call it Ulster) and Poughkeepsie Red, are in every way promising. Pocklington is inferior to several white grapes of recent origin. The Woodruff Red disappoints us. It is a large showy, red grape, but foxy.—*Rural New Yorker.*

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