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*Catherine Mermet*  
Paris 1902

CATHERINE MERMET.

THE  
Canadian Horticulturist.

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No. 5.



CATHARINE MERMET ROSE.



OF all the pink tea roses, probably Catharine Mermet, is the finest. The buds are long and pointed, and very beautiful, exhaling, as they open, a most delightful perfume. The flowers themselves are large, full and well formed, and, although not produced in great abundance, the variety cannot be called a shy bloomer.

The rose is flesh color, and characterized by a peculiar silvery lustre, like that of La France. Rose growers marketing cut flowers, consider this variety one of the very best for their purposes; while, on account of its beauty, it is most highly valued for exhibition purposes.

Catharine Mermet was introduced to the public by the celebrated rose growers, Messieurs Guillot fils, of Lyons, France, who are also the originators of a dozen other good roses, among them that well-known half hardy tea, the La France, which is so great a favorite in the garden of the amateur.

## APPLE INSPECTION.



THE solid advantages which might accrue to Canadian fruit-growers through a proper inspection of fruit intended for export, has been twice discussed at meetings of our Association. As things now are, it is impossible to sell for cash f. o. b. to an English buyer, because he cannot be satisfied of the quality and grade until the apples have crossed the ocean and come under his personal inspection. In this way the Canadian grower or shipper is entirely at the mercy of the English buyer, who has the goods in charge.

If it is possible to plan some definite system of grading, so that a distant buyer would know, from the mere mention of the grade, just what kind of stock was being offered him, there is not the slightest doubt that apple growing in Canada would be a much more remunerative occupation than it is; for the Canadian grower could sell for cash at his own home for the full value of his stock, and a Canadian shipper would always know exactly what margin he was allowing himself on any lots he was handling.

By reference to our combined reports for the years 1890 and 1891, it will be observed that this subject has been pretty fully discussed, and that a committee was appointed to urge upon the Minister of Agriculture for the Dominion, the importance of a systematic inspection and branding of Canadian apples for export. We have drawn up an outline of the duties that would be expected of such an inspector, and defined what would be understood as meant by grades No. 1 and No. 2, expressing as nearly as possible the sense of our meeting on the subject, and submitted it to the committee. As it soon may be presented for consideration at Ottawa, we have thought best to publish the outlines of the inspector's work, in order that the committee may have the benefit of criticisms from any of our readers.

## DUTIES OF THE DOMINION APPLE INSPECTOR.

- (1) To make headquarters at the most important shipping part of the Dominion, probably at Montreal, during the fall, and at Halifax during the winter months.
- (2) In the inspection of closed packages of apples, the inspector shall open out so many of the packages, say, one in ten, less or more, as shall enable him to judge fairly of the grade, and of the manner of packing.
- (3) Upon satisfying himself of the grade, he shall apply his inspector's brand, marking them "Canadian Apples, No. 1, inspected," or No. 2, as the case may be. There should be no No. 3 inspected; any such stock going forward should go without the inspector's brand.
- (4) The inspector shall have a special care to avoid branding any package, unless he is satisfied that it is honestly packed through and through. He may refuse further attention to any carload of apples, which he finds faulty in this regard; and the shipper of such carload shall forfeit the privilege of having any further attention from the inspector for the current season.
- (5) The inspector shall hold himself in readiness to inspect all fruit within one or two days after receiving notice, and engage a sufficient number of assistants to accomplish the work speedily, without delaying the loading of a cargo.

(6) No person shall be obliged to have his fruit inspected, but, if he desires the benefits of the higher prices which will be eventually secured by the inspector's brand, he will be expected to pay a fee of at least one cent per barrel for each barrel branded by the inspector.

(7) On account of some lots going by Suspension Bridge and New York to Great Britain, and other lots going to Chicago, the inspector should have, as soon as practicable, one or two trained assistants in Western Ontario during the apple season, ready to go when called upon, to any station for the inspection of carlots of apples which are ready for shipment.

(8) The inspector may make arrangements, wherever practicable, to do the work of inspection at railway stations where apples are being loaded, providing a certain number of car-loads are in readiness.

(9) The inspector shall also make it his business to see that all lots of apples branded by him are properly named as well as graded.

(10) The inspector shall take especial care to make known to growers generally his address, and business, and also to give them a full description of the proper methods of packing and grading as to the No. 1 or the No. 2 brand.

(11) Grade No. 1 shall consist of well-grown samples of the variety named, somewhat uniform in size, well-shaped, of normal color, free from scab, worm holes, curculio knots, etc.

(12) Grade No. 2 shall consist also of apples free from scab and worm holes, but which, for lack of uniformity in size, deficiency in color, abnormal shape, or for any other reason, are considered by the inspector unfit to be graded No. 1.

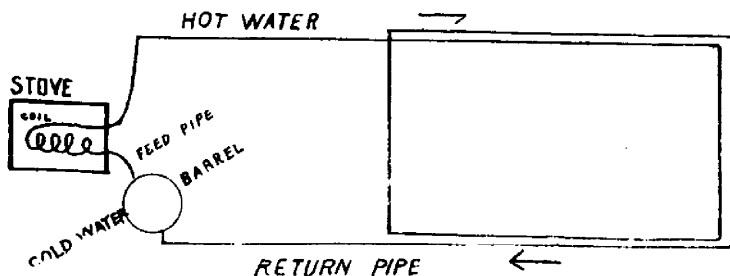
(13) In addition to the ordinary grades No. 1 and No. 2, the inspector may use his judgment in the use of one or more stars, in cases of very fancy stock in his opinion having especial merit.

(14) Any inspector proven guilty of receiving compensation for his work from interested parties, and thus being in any way influenced to favor any particular shipper, shall at once forfeit his position, and be subject to a heavy fine.

(15) It might, perhaps, be well, the first season, to have little or no fee for inspection until the benefits of the work begin to be appreciated, and growers begin to find that they can sell for cash f. o. b. to distant buyers their inspected stock, on account of the confidence gained by the brand.

### A CHEAP GREENHOUSE.

SIR,—In your March number you have a plan for heating a greenhouse. I send you the plan of one we made ourselves. It works very well, and costs very little. We use old gas pipes, costing only one cent a foot, a box stove for the



coil, and a barrel for water. The size of the greenhouse is 30 ft. by 16 ft. The pipes run under the beds. I send you ground plan of it, and will be pleased to answer through your journal, any questions concerning it.

*Mount Clemens, Mich.*

H. J. JOB.

## POINTERS TO SUCCESS IN FRUIT-GROWING.



IN fruit-growing, as in any other useful line of life, there are certain characteristics which need cultivation and practice in order to succeed, and prominent among these are *pluck* and *patience*; especially are they needed in fruit-growing, for there is something so enticing in entering upon it that very many engage in it without sitting down to count the cost, and when they are called to face some stern-visaged realities they falter, waver, get discouraged, and give it up in despair! Many would-be horticulturists, who have followed some line of business successfully, and have means to retire, think that all they have to do is to buy a piece of land, lay it out to their taste, stock it with fruits of various kinds, invest in novelties and ornamental shrubbery, erect buildings, provide tools, etc., etc., and, of course, in their estimate, *success is certain*. But, in nine cases out of ten, their fancy has anticipated what they will never realize, and instead of gliding smoothly into a realization of their animated expectations, they are forced to sit down in dependency, and the next thing, visible as a fruit of their experience, is a shingle posted on some prominent point of their premises, reading thus :

## THIS PLACE FOR SALE.

Now, what is the required elements of success in such cases? Not so much a need of experience in carrying out details, but a settled determination to succeed, and patience to bridge over the unforeseen difficulties which have presented themselves. Of course, experience is part of the capital invested, if one has it, he will acquire it by the way, if he persevere! Another useful thing is a habit of observation, coupled with a spirit of enquiry. If you find your neighbor succeeding in any one or more productions, be inquisitive, and try to find out the secret of his success, and put it in practice yourself. Have a heart in your work, get practical ideas and carry them out, putting your own hand to the work, not entrusting it to a foreman, who in turn hands it over to a "hand" to perform what you ought to do yourself. I would emphasize the idea of self-experience for two reasons, first, because it is economical, and second, it draws you into and cultivates the experience you need. Gentlemen, gardening seldom pays until the gentleman turns worker.

Out of all the published theories which meet your eye, try to sift out the wheat of practical utility to suit your own special needs, and you will be surprised at the amount of "chaff" you will be obliged to reject as impracticable. There is a large percentage of *paper* gardening and farming afloat, that, if one attempted to practice, even on a small scale, he must leave the question of *pay* out altogether, and that will never do. Unless your fruit culture *pays*, that is something beside the cost of production, you will soon get weary and give it up.

Few can afford a drain upon their resources for the sake of gratifying a *taste* for the work of fruit-growing.

It is well to try a variety of productions with a view to profit ; if one fail or is a partial success, another may turn out well, and the next year *vice versa*, so that an encouraging remuneration may respond to your efforts. The greatest discouragement arises, if, after you have anticipated at the opening of the season, to realize certain good profits on some particular productions, and find something come across your estimates and reduce them to a fraction of what you had purposed to realize. The best way is not to anticipate, or forestall any stated return, but go confidently forward, taking the best care of details, and making the most of appliances by the way, and leave the result to the Giver of all returns.

As general principles have thus far been the burden of this paper, I will turn briefly to details and close. One reason my strawberries bear a good price, and sell readily in the Ottawa market, is owing to their size and flavor. I pick on the green side, begin early and always keep well picked up to ripening. The vines are kept clean, the matted rows not *too* matted, or plants not allowed too close, any old ones worked out, leaving room for the young vigorous ones to well mature their fruit. I uncover the vines late, keeping back the main picking as late as possible to meet the preserving demand, and to avoid competition with the shipping rush from the South, as the home grown product always comes up after the poor, sour, cheap berries are off the market.

We put one-half of a barrel, sawed in two, round each rhubarb plant as a *quickener*, taking care to bank dirt up around outside to keep out cold winds. We are just now (April 12th) enjoying a "norther" that is trying everything, even the cabbage and tomato plants in the hot beds. It requires some skill and a good degree of patience to pursue gardening and fruit-growing up here in the "cold north," but *nil desperandum et spera meliora* (never despair, and hope for better things) is the encouraging motto to adopt here.

Out of six Russian apricots, four Lombard plums, two Saunders ditto, and two Prunus Simoni, with which I have tried this climate, I have only two Russian apricots remaining. I thought I would leave off the "wraps" the past winter, hence the above result.

My apples, Wealthy, Duchess, Scott's Winter, Yellow Transparent, Northern Spy, etc., have come through without extra care, except tramping the snow at the beginning of winter, and putting some long manure around a few of them after the ground froze, in order to keep back too early flow of sap. All my Early Richmond cherries, and two black Tartarian out of six came through without any extra care, but the few pear trees I tried are all killed. But vacancies must be supplied with something hardier, perhaps the native wild plum which sells well on the market. But I am getting tedious and must close.

*Nepean, Ont.*

L. FOOTE.

## SOME PROMINENT CANADIAN HORTICULTURISTS.—XV.

MR. DAVID NICOL.



THE annual meeting of our Association held in Hamilton in December, 1889, our present representative for agricultural district No. 3, was elected and has since filled his office, as one of the directors of the Ontario Fruit Growers' Association, to the satisfaction of all concerned. Mr. D. Nicol, of Cataraqui, is a man of wide experience and excellent early training in horticulture. Indeed, there are very few Canadian horticulturists who can boast of so careful an apprenticeship in all the practical details of the nursery and fruit growing lines, as the subject of this sketch. Mr. Nicol, however, is a man of such modesty that it was only by a series of questions from the editor of this journal that the facts necessary for this sketch were obtained.

David Nicol was born on June 1st, 1847, in Montrose, Forfarshire, on the east coast of Scotland. There he served his apprenticeship at market gardening and the nursery business with his father, Daniel Nicol, of the Hedderwick Nurseries, at Montrose. After completing his training at home, he served two years as foreman in the gardens at Fasque Castle, Kincardineshire, the seat of the late Sir John Gladstone; two years as foreman in the gardens of Kinnaird Castle, the seat of the Earl of Esk, Forfarshire, and one year as foreman in the Royal Botanic Gardens at Glasgow.

In 1854 Mr. Nicol determined to try his fortune in Canada, and coming to this country he entered upon the fruit growing and nursery business at Lyn, near Brockville, where he carried on his place for some eleven years. Finding the necessity of being near some large market for his fruit, an important consideration to every fruit grower, he removed to Cataraqui, near Kingston, at which place he still resides.

Mr. Nicol has spent much time, labor and money in experimenting, and as a result, he finds that, while many kinds of apples can be profitably grown in his agricultural district, which includes Frontenac, City of Kingston, Leeds and Grenville North, Leeds South, Grenville South and Brockville, there are but very few varieties of pears, plums and cherries that can be grown with profit. In his apple orchard of ten acres, he has discarded, out of a large number of varieties, a large part as entirely worthless. The kinds which he finds most profitable and which he chiefly raises for shipping purposes in his own orchard, are Golden Russet, LaRue, Fameuse, Canada Red, Brockville Beauty and Red Astracan. His work as an experimenter emphasizes the importance of having such work systematically conducted by the Government for the general good. As things are now, fruit growers all over the province are spending a large part of their lives, and wasting much time and money in endeavoring to find out what





MR. DAVID NICOL.

varieties are suited to their soil and climate. During the last fifteen or sixteen years our Association has been endeavoring to do as much plant-testing as possible, through our directors and members, and this we consider one of the most important departments of our work. In the future we hope to receive some substantial encouragement for the more careful carrying out of our distribution of trees and plants for testing, and for the collating of the results.

As a writer on agricultural and horticultural subjects, Mr. Nicol is favorably known throughout the Province of Ontario. In the annual competitions for prizes offered by the Agricultural and Arts Association for the best essays on these subjects, Mr. Nicol has been awarded nine first prizes.

As a landscape gardener, Mr. Nicol's talents have been recognized by the people of Kingston. The laying out of the Cataraqui cemetery, of Kingston, was placed in his hands and he continues to have this work in charge, a task which absorbs no small amount of his time.

For several years Mr. Nicol was president of the Frontenac Agricultural Association and was a member of the Board of Directors for over twenty years. He has also taken a share in the work of conducting the Farmers' Institutes in connection with the professors of the Ontario Agricultural College at Guelph, and has been sent out to this work three successive seasons. For this work he is well suited having had large experience, not only in fruit growing, but also in general farming and stock raising.

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#### THE DESIRABLE CHRYSANTHEMUMS.

Mrs. Cleveland, Snowstorm, Moonlight and B. Rose have attracted a great deal of attention of late. The number of really valuable early kinds is quite small, and it is a question whether such as we have of the very early ones are desirable, for they come at the height of the aster season, and are in no way superior to them, though they require much more trouble in cultivation. If we could have varieties equal in beauty to the November flowering kinds there would be no doubt of their desirability, but such do not seem to be forthcoming. Those that have proved most valuable are Mad. C. Desgrange, white; Mlle. Lacroix, white; Alex. Dufour, amaranth; Lady Selborne, white; Mandrin, white, shaded yellow and pink; and Roi des Precoces, crimson. On the other hand, there are a few varieties that extend the chrysanthemum season far into the winter; indeed, it is not unusual to see them at Christmas. The following are valuable in this way: Grandiflorum, bright yellow; Mrs. Charles Carey, white; Ceres, pink and white; Gloire de Toulouse, amaranth crimson; Snowstorm, white; Thunberg, yellow; Bi-color, orange and yellow; and the new variety, Le Suprenant, crimson and yellow.—*Forest and Home*

## LETTERS FROM RUSSIA IX.

## URIUCK APRICOT.



IN the Russian provinces of Central Asia, Bucharia, Chive, Turkestan, and even as far as the boundary line of China, is met, both in the wild and the cultivated state, a variety of apricot, known locally as Uriuck. As I am better acquainted with the Semirechenskaja district, with its principal town Vjerny, than the other districts in Asia, I will, therefore, make some observations on this apricot as grown in that locality. I think it necessary to observe that Vjerny and its suburbs have a climate subject to great drought in summer and extremely cold north-west winds in the winter, and frequently there are very sharp changes from heat to cold.

The Uriuck apricot is growing at Vjerny in wild situations in the woods, where there are still to be found very old trees which endured the severe winter of 1877. They have thick trunks about one meter in diameter, with low, broad, but roundish, heads. But such giants are only left in protected places. The cultivated Uriuck is grown in the gardens of Vjerny, as also in other places in Asia, entirely from seeds. Previous to the occupation of this country by Russia, the Uriuck was the chief fruit grown in local gardens. Now the inlanders have learned from the Russian people how to grow other varieties of fruit also, especially the popular Alexander apple. They sow the seeds of the Uriuck directly in the place where they wish the trees to grow, usually in the time of the season when fresh gathered from the fruit, spring planting not being so favorable. The Uriuck does not bear transplanting well, because the trees thereby become more bushy and liable to injury from gumming. As soon as the stone opens, it sends out long, vertical roots, which take hold deep down in the ground and supply the plant with water during the extreme heat of the summer. The seedling soon grows up, if there is sufficient moisture, and throws out lateral twigs on the lower part of the trunk. The seedling should be pruned in the second or third year, or else these lateral twigs dry up and render the trunk unsightly. In the third year the seedling usually blooms for the first time, the flowers being small, white, or rose-colored, and in the fourth year it bears fruit. The Uriuck blooms earlier than other fruit trees and sheds its bloom sooner. The time of ripening of the Uriuck at Vjerny begins in July; the wild variety in the mountain ripens later. The color of the Uriuck is orange yellow, blushed on sunny side, though not always. In the ripe fruit the stone parts freely from the flesh. In taste, some are sweet, juicy and aromatic, not inferior to our apricots, others are inferior in quality.

There are many varieties of Uriuck which, in general terms, may be divided into wild and cultivated. Usually the wild Uriuck bears a small fruit, oftener

round than oval. The color of this is dark green; the kernel of the stone is sweet or bitter in taste. The cultivated, or improved varieties of Uriuck are a larger fruit, often oblong, leaf lighter, but the kernel of the stone is not always sweet, occasionally it also is bitter.

It is the general opinion that the best sugar Uriuck grows in Vjerny, being brought there by the Sartes. These are a people of ordinary intelligence, occupying the lovely fruit-growing and kitchen-garden district. They have also very good vegetables, especially melons. The Sartes brought the sugar Uriuck from South Turkestan. It is a variety much resembling that grown in our European gardens. There are also many other varieties of Uriuck, but there is no great difference between them. They are sold under the name of Gargens, where they were raised. In China there are growing several varieties—but chiefly four, two early and small kinds, known as the Kandak Uriuck and Khasake Uriuck, white, and two late, large, very delicate kinds, Pivande Uriuck and Pchar Uriuck (yellow, with rose blush).

In the outskirts of Vjerny we still meet occasionally with the Black Uriuck (*Prunus Armeniaca*), which grows at the town of Djargent, situated at farthest border toward China. The trees bear large fruit, almost round and almost entirely brown in color. The stone is not free. In taste, it resembles a plum more than an apricot.

The people living in the inland use the Uriuck fresh and dry it for winter. The Russian ladies cook the Uriuck green in sugar until the stone is soft, and, in such a state, it is also pleasant to the taste. The Bucharians dry a great quantity of the Uriuck apricots in the sun, and their trade in this article is large. It is brought on the markets from Northern Siberia and from the governments bordering on the Volga. It is possible to buy dried Uriuck even in the market at Moscow.

But, as a garden tree about Vjerny and the outskirts, the Uriuck is the favorite, on account of its early growth, and its merits for cooking, for which purpose it is largely grown. The wood of the Uriuck is also valuable as a material for wood work. Things made from it are very beautiful, but very heavy.

With regard to the hardiness, a Russian officer who lives in China, Peter Alexanderovsk, writes, speaking of its hardiness. He says: "In the years 1888 and 1889 heavy frosts continued for about two months, from the middle of December until the middle of February. Some days it was  $-37^{\circ}\text{F.}$ , occasionally it was  $+5^{\circ}\text{F.}$  to  $-2^{\circ}\text{F.}$  In February a south wind blew and the thermometer rose one or two degrees. Afterwards it soon fell to  $-13^{\circ}\text{F.}$  Notwithstanding such severe changes, only the old trees of the Uriuck were injured, and this not everywhere. Young trees came out all right, just the same as if there had been mild weather. Rich people living inland had no crop, but the poor had every tree full of fruit, and early varieties were very heavily laden. At first view, this is difficult to explain, but the fact is that riches and poverty are measured at China

by the quantity of water controlled. Rich people watered their grounds during the whole summer, but the poor watered theirs very little on account of the scarcity. I am inclined to think that it is almost certain that the luxuriant growth caused by the frequent waterings was the cause of their failure to fruit."

I shall be much pleased if the Fruit Growers' Association of Ontario, of which I have the honor to be a member, will call public attention to this useful fruit. It will be a gratification to me to see the time when the Uriuck apricot will

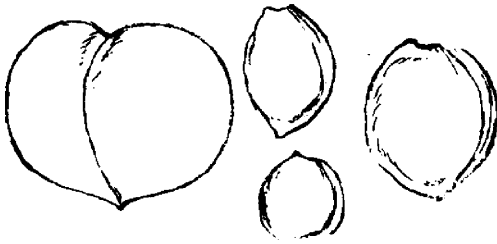


FIG. 35.—THE URIUCK APRICOT.

occupy, in the orchards and gardens in your country, a place along with the other highly prized novelties.

I send some pits of the Uriuck apricot. The illustration accompanying this article represents the fruit of medium size, and pits of various sorts.

*Winnieza, Podolie, Russia.*

JAROSLAR NIEMETZ.

NOTE BY EDITOR.—These pits of the Uriuck apricot which are sent us by our friend, Mr. Niemetz, together with scions of other valuable Russian sorts of fruit, have been placed in the hands of Prof. Wm. Saunders, Director of the Experimental Farm, Ottawa. He will test them carefully at that place, and, if they are found to be desirable, they will be distributed to the members of our Association, who will experiment with them still farther.

THE LAWN.—A lawn that is carefully prepared and served with a mixture consisting half and half of red top and blue grass before May 1st, will usually be a fine expanse of velvety green before September, provided it is kept clipped by a mower, once or twice a week on the average.—*From Long's "How to plant a place."*

HOW TO EAT STRAWBERRIES.—The very height of strawberry-eating is with coffee. Nobody ever really tasted coffee who has not drunk it in alternate mouthfuls with strawberries, and nobody knows the strawberry flavor excepting immediately after the clearing of the taste which comes from drinking coffee. The clearing property of coffee is familiar enough, but there is strange ignorance of this special application of it. The best of strawberries with the best of coffee makes the supreme refinement of indulgence in the fruit.—*N. Y. Post.*

## SEASONABLE HINTS.

## THE RASPBERRY PLANTATION.



HE work of pruning out the dead canes should have been attended to ere this; but, in case it has not, no delay should be made in finishing the work. At the same time, all superfluous young canes should be removed. Four or five canes are enough to be left to each stool; any more will not increase the amount of the crop, and will draw the nourishment from the others. The pruning of the bushes themselves should be done very closely, as the small, weak ends of the canes will not yield much fruit, and yet they withdraw strength from the bearing buds. These should be cut back to where the buds are strong and well developed; and the side branches should also be cut back in the same way as the canes, leaving short stubs from three to four inches in length. Both blackcaps, and red raspberries, the Cuthbert especially, may be treated in this way. The method will be better understood from the accompanying engraving (Fig. 36) than from a whole paragraph of reading matter.

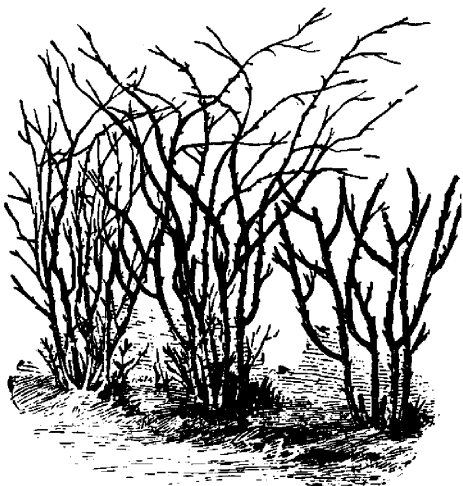


FIG. 36.—HOW TO PRUNE RASPBERRIES.



FIG. 37.—RASPBERRY ANTHRACNOSE.

THE RASPBERRY CANE RUST has been observed in New York State by the Cornell Experiment Station last season, both on the raspberry and blackberry canes. It attacks growing canes, giving them a scabby, pitted appearance, as in Fig. 37.

These blotches were brownish-black and quite conspicuous at picking time. As a result the canes and berries dried up as if by drouth. A vigorous condition of the plants is important in overcoming this disease; and all old diseased plantations are better cleaned out and burned. One station advises spraying in early spring, before growth begins, with sulphate of iron, one pound to a gallon of water, and with Bordeaux mixture after the leaves appear.

## STRAWBERRY GROWING FOR MARKET.



R. R. M. KELLOGG is a successful strawberry grower, living near Ionia, Michigan. He read a paper on the subject before a recent meeting of the Michigan Horticultural Society, a few extracts from which we give our readers in view of the near approach of the season for this fruit.

The first question treated is, *Will it pay?* Mr. Kellogg's reply is: "If you are willing to play second to everybody else and comply with all the conditions of failure, you will not get very rich. If you are willing to spend your time cultivating for thirty to fifty bushels per acre of small, second-class berries, with which you will always find the market glutted, I tell you most emphatically, no, it will not pay. If you are one of those energetic, pushing, investigating, painstaking fellows, who comply with the conditions of success, you will do as hundreds of others have done, have a good fat living and even get rich at it."

An important point which he emphasizes is, the development of a *good home market*. Our city markets are frequently glutted, and if the near markets of our smaller towns were better developed, there would be more room for the business. He says: "The great secret of developing a home market lies in getting every family in town to eat several quarts of fruit daily instead of one. It is utterly astonishing how much fruit people will use in the course of the season if you manage them rightly. If they get tired of one variety, have another of different color, flavor and appearance for them to try. Don't allow them to think they can go without for a single meal, and you will be surprised to see how quick it will cease to be regarded as a luxury but an absolute necessity. Teach them that a fruit diet means clearer heads, cooler blood and better equipoise of brain and muscle, and will save, in many cases, its cost in doctor's bills. Bear in mind, it's keeping people everlastingly eating that makes a home market. You have a right to make your fruit look as neat and attractive as you please. The corners of the box should be filled up even and the points of the berries turned up, making them even and as full as they can be crated. Small berries look decidedly neat fixed in this way, and the big berries can be put in the bottom to surprise your customers when the beauties roll out of the box. They will appreciate the joke. Never offer a customer berries in an old, broken, or dirty box. If berries once mold in a box the spores remain in it, and they will ever afterwards mold very quickly. This is especially true of raspberries.

Personal appearance goes a great way when calling on customers. The fruit should be delivered direct to the family, and it must not be mussed by rough handling. I had a fruit wagon built with side springs nearly seven feet long. It rides as easy as a boat. No matter how fast I drive my fruit is never 'jumped'

or bruised. It is handsomely painted and lettered in gold, and provided with a large gong bell so I can let people who do not buy regularly know I am in the vicinity, as I only call at the door of customers who purchase every day. Customers decide on what they want before I get to the door. I provide each one with a properly printed season card, which they bring to the door and have their order charged, and they pay weekly. Women don't usually have change, and would go without fruit if they had to pay each time; besides, making change takes a great deal of valuable time."

Some good hints about *planting* are also given. For marking the rows, his plan is thus given: Take a small rope, say one-half inch in diameter and the length of the field, one man at each end with a stick as long as the rows are to be apart, so as to have all the rows exactly even. We set three and one-half feet for slow growers, and four feet for those having large foliage. Draw the line perfectly straight and lay it on the ground, drawing it back and forth a few inches, and the mark is quickly made. If, for any cause, it will not make the mark sufficiently plain, each man takes a hoe, rubbing the back of the edge on the rope till they meet in the middle of the field. The work can be done very rapidly.

Most growers use a marker making a furrow two or three inches wide and the same depth; it is sure to dodge around, making crooked rows, and it is impossible to tell how deep the plants should be put in; besides, the dry, loose dirt is always falling in the openings for the plant. The ground cannot be harrowed through the plants, as recommended elsewhere, on account of the unevenness of the crowns, causing many times as much work as if done according to our directions.

*Digging the Plants.*—The most convenient thing to carry the plants from the propagating bed to the field is a common market basket. Place a whole sheet of manilla wrapping paper in the bottom so as to hold about an inch of water, which it will readily do for several hours. Take up the plants with a four-tine spading fork and shake the dirt off the roots carefully so as not to injure roots or crowns, and remove all dead leaves, and, if growth has started much, a part of the green leaves should be taken off. Take a handful of plants with crowns as even as possible and cut the roots back to about five inches. A number of new roots will start out where the roots are cut off, greatly increasing their number, occupying every particle of soil, which will greatly increase their growth and vigor.

*Setting the Plants.*—Insert a common spade directly in the mark about seven inches deep, push it from you so as to make an opening about one inch wide, then bring it towards you far enough to raise the soil so as to leave a small chamber at the extreme bottom, so that all loose and dry dirt will fall clear down out of the way. Withdraw the spade and pass along as rapidly as you can do the work well. Put Wilson plants about twelve to fourteen inches apart, and eighteen inches for the free-growing kinds, like Crescent, Haverland, etc.



The other man, with his basket of plants, follows closely, using both hands, and spreads out the roots like a fan so the soil will come in contact with every part of the roots, leaving the top of the crown just even with the top of the ground. This is very important, as the fine teeth of the cultivator must slip around the plants when you come to cultivating. If you get the plants too deep they will rot, if not deep enough when the ground settles it will expose the roots. Now quickly press it down so that no dry dirt from the top will fall in on the roots, and press it firmly that no air may get to the roots.

After speaking of the great advantage of *cutting off all runners* in order to raise very large, rich, high-colored berries, he says :

You will get almost as large fruit and very much more of it by setting plants about eighteen inches apart and then allowing about five runners to take root, placing them somewhat in this shape : Let "A" represent the mother plant, and "b" the runner allowed to take root :

```

b b b b b b b b b b b b b
b A b A b A b A b A b A b
b b b b b b b b b b b b b

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the outside plants being at least eight inches from the mother plant. All the plants will be about 18 inches apart. New runners will now form, but a narrow garden hoe will chop them off pretty fast after you have taken the Planet Jr. lawn edger and removed the "plow" and run along each side. This is the finest thing I have ever seen for the purpose. It is the greatest mistake to let plants form too thick. You have no right to expect a big crop of berries with a plant on every square inch.

Our practice is to chop them out as evenly as we can with a narrow garden hoe, and then go over them rapidly, after having used the Planet Jr. runner cutter, and pull them out as you would weeds.

Some time ago we gave Mr. J. H. Hale's plan of *keeping tally* with the pickers. Comparing notes of this kind interest all strawberry growers. Here is Mr. Kellogg's plan :

We formerly used tickets similar to those used by milkmen, having them of the denominations of one and four quarts, with 24 and 50 quart tickets to exchange for smaller ones, so they would not get too cumbersome to the pickers. They were frequently lost, and the superintendent sometimes dropped them, which caused much trouble and dissatisfaction. We now use a check slip of heavy manilla paper, or shipping tags can be had very cheaply, giving each picker one each day with date put on back with rubber stamp. They are made "not transferable," and if lost cannot be collected if presented by anyone else. The name of each picker is written at the top. A hole is made in the corner so it can be attached to the button-hole with string, and when their picking stand is full they go to the packing shed and have the number of quarts punched out by the shed tender with a conductor's punch. When the tickets are presented for

payment, you can readily tell how many quarts were picked each day and if the full amount of fruit was delivered.

The following is the form of the tally card we now use. To prevent mistakes, the lines for the four quart column are made much heavier than those of the one quart column. It should not be over one and a quarter inches wide, and five inches long, with spaces for about one hundred and fifty quarts.

..... FRUIT FARM. ..... PICKER'S CARD. (NOT TRANSFERABLE) For .....	1 qt.																			
	1 qt.																			
	4 qts.	<hr/> <hr/>																		
	4 qts.	<hr/> <hr/>																		

If you want to tell if there are leaves in the bottom of the box, you can do so without emptying out the berries, by running a timothy straw down to the bottom.

*Picking Stands.*—Berries are always jammed and bruised where pickers are allowed to set them down in the rows, and permitted to carry a number at once to the packing shed. Take common lath, and cut long enough to make a band in which four boxes can be placed. Nail them together as firmly as possible, and out of some old crate covers make the bottom, which is closely tacked on. Some hoop stuff from the cooper shop or basket factory makes the handles. They will soon pay for themselves by preventing the breaking of boxes. We use these in picking all kinds of berries. We have tried all sorts of wire boxes attached to the person for picking raspberries and blackberries, but they were not satisfactory. Four boxes is as much as the average picker will handle at once.

*Paying Pickers.*—We pay weekly and have a uniform price. One and a quarter cents per quart for short term pickers, for strawberries, and one and three-fourths for raspberries, and for those who pick through to the close of the season a bonus of one-quarter cent is added to each quart they have picked. This evens up the good and bad picking, and gives the best satisfaction. The rows are all numbered by placing a stake in the centre of each row, with a square board nailed on, and figures large enough to be seen from every part of the field; and when a picker commences on a row the number is put opposite his name in the overseer's book.

## FRUIT TREES ON SANDY SOIL.



N the March number of your journal I notice an inquiry from Mr. S. G. Fischer, of Leamington, Ont., about fruit trees on sandy soil, with quicksand sub-soil. In your answer you say that plums, pears, and apples do better on heavier soils. I know that that has been the general belief, but experience sometimes changes our popular theories. Now, I would say that here we have sand ridges, intermediate sand with quicksand bottom and swamp muck land, besides this, nearly one-half of the country is clay in all of its variations, from clay loam with some gravel, to hard, heavy clay. Of course, the clay loam is the most natural for the growth of these trees, I think, because it usually is dug, but the best small fruit plantations and the best orchards of plum, pear, and apple is on this sand with quicksand bottom, which a few years ago was covered with pine stumps, while between was only a coarse grass, such as is always seen on such cold lands. Mr. John M. Huffman, of this city, took such a piece and put in under-drains four or five feet below the surface, and commenced growing small fruits. Six years ago, I sold to him 25 Lombard plum trees, of which 24 grew; on the fourth year he picked and sold 50 bushels of plums at \$1.50 per bushel—\$75 from the 24 trees. Last year was the off year, but he had one-half bushel per tree, same price. Now his trees are as large again as two years ago, and promise as well in proportion. S. D. Willard says, "plant plums and pears 8x16, this gives 340 trees per acre," so from this you will see that so far the prospects are good for a reasonable profit per acre. This is the sixth year from planting. Pears planted at the same time yielded about half as well in money—I mean, on the 4th year. He has planted a good many more trees on the same soil.

Joseph Penten and R. S. Benthuff have small fruits and other larger fruits on same soil, and are both very successful. It must be remembered that these men all under-drain very deeply. It is a question how deep they may put the drains and have them successful. The deepest they have them—that is, five or six feet deep—is better than more shallow, and the question is, with them, would it still make an improvement to have them deeper? These men all give high cultivation and an abundance of manure.

S. D. Willard, of Geneva, New York, says that a few years ago a company was formed to plant an orchard on the south banks of the James' river in Virginia, about half way from Richmond to Hampton Rhodes. The land was high, rolling, and sandy, a coarse, clean sand, 60 feet deep to the level of the river. On this ground 22,000 pear trees were set out, and they have proved a success. The sixth year they paid a dividend of 10 per cent on the stock, and have steadily up to 50 per cent.

There is no reason for our friend Fischer to be discouraged if he can get an outlet for good drainage. If not, it is of little use to try to raise anything on such land; the longer that he works it, the worse off he will be. Better work out for 75c. per day than to lose his time.

Yours truly, L. B. RICE.

THE SPRAYING SEASON.



THE importance of always having the proper formula just at hand, leads us to repeat some of those most commonly needed. *Bordeaux mixture* (for apple scab, grape mildew, etc., etc.) In a barrel that will hold forty-five gallons dissolve six pounds of copper sulphate, using eight or ten gallons of water, or as much as may be necessary for the purpose. In a tub or half barrel slake four pounds of *fresh* lime. When completely slaked add enough water to make a creamy whitewash. Pour this slowly into the barrel containing the copper-sulphate solution, using coarse scaking stretched over the head of the barrel for a strainer. Finally, fill the barrel with water, stir thoroughly, and the mixture is ready for use. Prepared in this way, the cost of one gallon of the mixture will not exceed one cent, the cost of copper sulphate being seven cents per pound, and lime thirty cents per bushel. In all cases it is desirable to use powdered copper sulphate, as it costs but little more and dissolves much more readily. It is highly important also that fresh lime be used.

*Kerosene emulsion.*—This insecticide acts by contact and is applicable to all nonmasticating insects (sucking insects, such as the true bugs, and especially plant-lice and scale-insects), and also the mandibulate or masticating insects, such as the apple worm or plum curculio, when the use of arsenites is not advisable. Kerosene emulsion may be made by means of various emulsifying agents, but the most satisfactory substances—and those most available to the average farmer and fruit-grower—are milk and soapsuds. In each of these cases the amount of emulsifying agent should be made one-half the quantity of kerosene.

One of the most satisfactory formulas is as follows :

Kerosene.....	gallons..	2	67	Per cent.
Common soap or whale-oil soap.....	pounds..	½	} 33	
Water.....	gallons..	1		

Heat the solution of soap and add it boiling hot to the kerosene. Churn the mixture by means of a force pump and spray nozzle for five or ten minutes. The emulsion, if perfect, forms a cream which thickens upon cooling and should adhere without oiliness to the surface of glass. If the water from the soil is hard, or has a large percentage of lime add a little lye or bicarbonate of soda, or else use rain-water. For use against scale-insects dilute one part of the emulsion with nine parts of cold water. For most other insects, dilute one part of the emulsion with fifteen parts of water. For soft insects like plant-lice, the dilution may be carried to twenty to twenty-five parts of water.

*Paris Green* (for codling moth and curculio) may be applied to plum and other trees, except the peach, at the rate of one to two hundred pounds of water.

For the peach, much more caution is necessary, as the foliage is very susceptible to injury, but, by the addition of a little lime to the mixture, it may be safely applied, even at the rate of one pound to 150 gallons of water, and in much greater strength to the apple, or other trees of strong foliage.

*Alkaline wash* (for bark lice, etc.), two pounds of potash to five gallons of water.

*Sulphide, or sulphuret, of potassium* (for gooseberry mildew) simple solution in water of  $\frac{1}{4}$  to oz. to the gallon.

*Insect powder* (for slugs, cabbage worm, etc.). (1) In solution in water, one oz. to three gallons (2), or it may be dusted on plants with little bellows, in dry powder.

*Carbolic Acid Emulsion*.—1 part carbolic acid to 5 to 7 parts of a solution consisting of 1 part soft soap, or 1 part hard, in two gals. water. This applied to affected trees destroys bark lice and the borers. It should be well rubbed upon the parts attacked.

*Carbolized Plaster*.—A mixture of carbolic acid and land plaster, 1 pint of the former and 50 lb. of the latter. A remedy against flea beetles.

*Tobacco*.—The refuse from cigar manufactories answers the purpose. A strong solution added to one gallon water destroys plant lice and flea beetles.

*Alkaline Wash*.—A strong solution of washing soda mixed with strong soap until about as thick as paint. Applied to the trunk of trees destroys the borers, and gives a healthy vigorous tone to the tree.

*Hellebore*.—Obtained from the powdered roots of a plant (*Veratrum album*). May be applied dry or as liquid 1 oz. to 3 gals. water. Excellent against currant worm and cherry slug.

*Ammoniacal solution of copper carbonate*.—Copper carbonate, ammonia and water. Dissolve 3 oz. copper carbonate in 1 quart ammonia, and when about to use dilute to 22 gals. Some use more water (28 gals.) Used to destroy mildew and apple scab. In the latter disease it has been very successful.

*Pyrethrum*.—Made from the powdered flowers of the genus pyrethrum, a plant of the sunflower family. It should be fresh, and hence should be kept in closed vessels. Used in dry form, 1 part pyrethrum, 5 to 8 parts flour; or liquid 1 oz. in 3 gals. water. A good remedy for cabbage worm.

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## A MICHIGAN PEAR-GROWER'S EXPERIENCE.



THE first mistake I made was in planting some varieties in which there is no profit for me. The next was in not planting dwarfs deep enough, nor keeping them headed back properly, and in earlier years in not being prompt to cut out the blight. Another was in planting varieties on soil not adapted to them. My experience and observation is, that there are but few varieties which, if planted on soil suitable for them will not be successful and profitable. Usually a strong, clayey soil is best for pears, but there are a few varieties that do well on the lighter soils, if kept well fed and cultivated. Of these there are the Bartlett t Howell and Louise Bonne. It will not pay to plant Duchess, Anjou or Sheldon on any but strong, fairly heavy soil.

The ground should be well-fitted before planting, by being worked very deep by the use of a subsoil plow. Make it rich with fertilizers, if it is not so naturally, and work or underdrain it so that no water will stand on the surface very long after heavy rains. I have an orchard of 1,000 trees, most of which are twelve years old, and it has been thoroughly cultivated every year during that time, except a portion of it that was left in grass for two years as an experiment, which was very unsatisfactory. The past season I had but one tree that showed signs of blight, while trees within three miles of my place, standing in sod, were nearly ruined the past two years.

The standard pear needs but little pruning, but cut back nearly two-thirds of the young growth of dwarf trees. If this is not done, and they are not planted deep enough, they will become a sort of half standards, and they will get top-heavy and tip over.

The past season my pears were sprayed thoroughly with the Bordeaux mixture before they blossomed or leaved out. After the fruit set, I sprayed three or four times more, at intervals of a week or two, according to the weather. In the later sprayings I put in Paris green at the rate of 1 lb. to 200 or 300 gals. of water, to destroy the codling-moth and the curculio.—*J. N. Stearns, to the Michigan Horticultural Society.*

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## SUMMER PRUNING GRAPES.



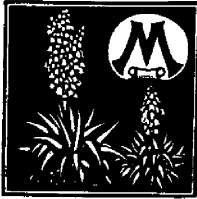
HE time to commence is when the young shoots are six to eight inches long, and as soon as you can see all the young bunches of the embryo fruit. We pinch with thumb and finger just beyond the last bunch and the next leaf. If the shoots are not sufficiently developed to show their condition (the setting of the fruit) we pass them by and go over the vine again after a few days.

This early pinching of the young shoots has the tendency to throw all the vigor into the development of the young bunches and the leaves remaining over the shoots, which now develop with astonishing rapidity. It is a gentle checking and leading the sap into other channels—not the violent process which is often followed, long after the bloom, when the shoots have so hardened that the knife must be used, and by which the plant is robbed of a large part of its leaves to the injury of both fruit and vine.

Let anyone who wishes to satisfy himself summer-prune a vine according to this method and leave the next vine until after the bloom; he will soon be convinced which is best. Since I first practiced this method, now about twenty years, it has added at least one-third to the quantity and quality of my crop and is now followed by most of the intelligent growers of my State.

The bearing shoots all being pinched back we can leave the vines alone until after the bloom, only tying up the young canes from the spurs, should this become necessary. When they have bloomed the laterals will have started from the axils of the leaves on the bearing shoots. Then go over the vines again and pinch these back to one leaf. This will have a tendency to develop the remaining leaf very rapidly, enabling it to serve as a conductor and elevator of sap to the young bunch opposite and shading that as it becomes fully developed. The canes from the spurs, which we left unchecked at the first pinching, and which we design to bear fruit the next season may now also be stopped or pinched back when they are about three feet long, to start their laterals into stronger growth pinch off all the tendrils unless where they serve as supports to the young growth. This is a very busy time with the vine dresser and upon his close attention and diligence now depends in a great measure the value of his crop. A vast deal of labor can be saved by doing everything at its proper time.—PROF. HUSMANN, in *Vineyardist*.

## PLUM KNOT ACT IN NEW YORK STATE.



R. S. D. WILLARD, who was appointed by the New York Horticultural Society to draft a bill for the destruction of black knot, sends a copy of the Act, which has now passed the Assembly, and will become law in New York State. We have not room here to give it in full, but will give an outline of it.

Section 1 makes it unlawful for any person knowingly to keep on his place any plum or cherry trees affected with black knot, and makes it allowable for any one to enter upon his premises and destroy the affected part, or parts, of any tree.

Section 2 provides that the mayor of any town or city where such disease exists, may appoint three competent freeholders as commissioners, and section 4 makes it the duty of such commissioners, or any one of them, with or without complaint, as soon as it comes to notice that the disease black knot exists, or is supposed to exist, within the limits of any town or city, to examine without delay the trees supposed to be affected, and, if the disease is found to exist, to place distinguishing marks upon the affected parts, or, in case the commissioner or commissioners judge that any tree should be entirely removed, they must girdle such tree and give a written notice to the owner containing a statement of the facts, with the order to effectually remove and destroy by fire the part, or parts, of such trees so marked, and entirely destroy every tree which has been girdled, within ten days from the date of the notice above required, such order to be signed by the three commissioners, or by any two of them.

Section 5 provides that whenever any person refuses to comply with the order, the commissioners are to carry out the directions of the order and remove and destroy by fire every tree, or part of a tree, so girdled or marked, the expense to be charged to the town or city.

Section 6 specifies the penalty for not carrying out the order. The person neglecting or refusing to carry out the order, shall be guilty of misdemeanor, and be punished by a fine not exceeding \$50, or by imprisonment in the county jail not exceeding fifteen days, or both, in the discretion of the Court, and any Justice of Peace of the town or city in which the offence shall be committed shall have jurisdiction thereof, and all the fines shall be turned over to the mayor of said town or city, to be placed by him in the contingent fund of said town or city.

Section 7 allows the commissioners \$2 a day for their services, in addition to all other reasonable charges or disbursements.


The Act is to take effect immediately.

As before stated, our own Act on Plum Knot is useless, and must be remodelled. Let everyone come to our next meeting fully prepared to discuss this important subject.



## The Garden and Lawn.

### FANCY GOURD BASKETS.

“ O you know how gourds can be made into odd flower vases, fern pots, etc.?” said a lady recently. She showed two fancy ideas, from which our artist has made sketches. The lady mentioned, said that she took some apple or cherry boughs of odd shape and wired them together in a sort of a cradle and then fastened the gourd in securely, and painted the whole with gold and silver bronzes from Mills & Richardson Co., of Burlington, Vt., then decorated with a delicate ribbon. Of course it looked neat without the flowers. Before putting in the flowers she lined it with tinfoil, without a joint, to prevent

the moisture from leaking through, filled it with sphagnum or moss, and wetting it, stuck the flowers in on their own stems, with a few bits of tradescantia, which rooted and grew. As fast as the flowers withered she replaced them with others, and so kept a fresh bouquet in a decidedly odd and ornamental vase.



FIG. 38.—GOURD FLOWER VASE.

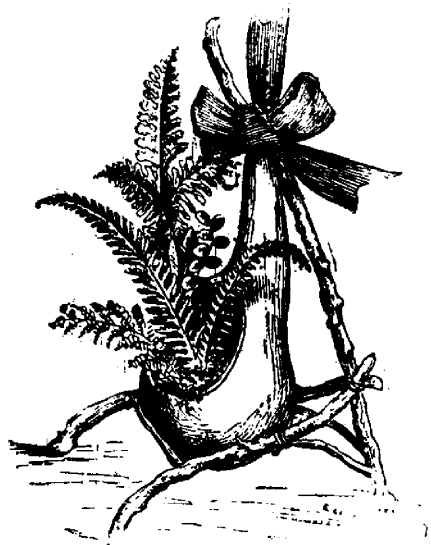


FIG. 39.—GOURD FERN VASE.

The fern vase was a large Hercules' Club gourd, arranged in the same manner, lined with tinfoil, in which the ferns were planted in soil, just as they came from their native woods. She made quite a number in odd varieties, and after filling them sent them as presents to friends. The styles which ingenuity can produce is almost without limit. An assortment of gourd seed will produce all sorts of odd shapes and sizes. They should be planted in different parts of the garden, and will grow in almost any odd place where nothing else will succeed.

In making the baskets two or three can be combined in one group, one for live ferns and two for flowers. The old fashioned Dipper gourd and the Hercules' Club are the best for the larger vases. The latter will grow long and straight when it is made to rest at the bottom on something and by its own weight forced to grow crooked.

The gourds form a numerous family, and are exceedingly dissimilar in character. The plants are useful for covering old trees, arbors, fences, and for summer screens of any kind. The culture is the same as for melons and squashes; the seeds must not be sown until the weather is warm and settled.—

*Vick's Monthly.*

#### SOME VALUABLE ROSES.



AMONG the many varieties of recent introduction, the following are a few of the greatest promise, as noted while in flower last season.

Mrs. Degraw (Bourbon). Somewhat resembling Appoline, but a more abundant bloomer, more compact and dwarf in growth, and quite as hardy.

Clothilde Soupent (Hybrid Tea Polyantha). This is quite a novel variety, being a cross between the Tea and Polyantha classes, color pure white, deepening to rose in the centre, will be valuable either as a pot or bedding variety, it will be found hardy.

Snowflake (Tea). Said to be identical with Marie Lambert, produces an abundance of pure white flowers all summer, a splendid pot variety.

Meteor (Hybrid Tea). One of the finest hybrids yet introduced, dark velvety buds of great substance, can be wintered out with protection, makes a good garden rose, and is excellent for pot culture.

Waban (Tea). A deep pink sport from Catharine Mermet, but holds its color better than that variety, and fills a place long felt as a florist's forcing rose.

Madam Georges Bruant (Hybrid Rugosa). A cross between Rugosa and Sombrenil, and retaining in a great measure, the vigorous habit and beautiful rugose foliage of the former, bears long pointed buds of the shape and color of Niphetos (white), said to be very hardy.

Duchess of Albany (Hybrid Tea). A red sport from La France, and seems to be quite as desirable as that very popular variety.

*Hamilton, Ont.*

WEBSTER BROS.

## ↻ The Kitchen Garden. ↻

### CUTTING, BUNCHING, AND SHIPPING ASPARAGUS.



THE green part, or that which grows above ground, being all that is eaten of asparagus, the more green there is the better price it will command in market. For the south and early cuttings it may be cut when two to three inches above ground. But for near-by and later, it should have from four to six inches of green stem, and be cut low enough to leave some white on, as the white part of the stalks will not shrink or draw up and loosen the bunch. The bunches should be from eight to nine inches long, and four and a half across the butts. The asparagus should be sorted or culled, leaving all broken and small sprouts, which can be bunched by themselves and sold as culls. The heads should be all placed evenly at the top, and the butts cut off squarely, using great care in handling not to bruise nor injure the heads, which soon ferment and decay. The heads should be kept dry, as moisture causes decay.

Good, strong Japan Raffia is the best to tie with ; and it is necessary to use a box or a bunching machine, so that the bunches may all be of a uniform size, and tied so tightly that they will not fall to pieces in handling. The best knife for cutting is a carpenter's thin firmer gouge, one and a half inches wide, nearly flat, and the thinnest that can be obtained, ground on the convex side or back, about one inch from the end, which should be rounded off on the inside to prevent them from injuring sprouts near by. Take the sprout between the fingers of one hand and run the knife close to the sprout, the concave side next to it. Tip the handle away to give it the proper slant ; shove down until the cut is made, and then pull the sprout. After cutting and sorting, take a convenient number of sprouts by the upper ends, and rinse the bottoms in clean water to free them from dirt, taking care not to wet nor bruise the heads. Then put them in the buncher, keeping the heads all up even against the stop. Lay them straight, and when there are the required number to make a bunch, press down lightly, but not hard enough to crush them. Put a tie around them three inches from the top, and another four inches below that, making the knots secure. With a sharp knife cut the butts square and even. To keep them until ready for shipping, set on wet grass or moss, in the shade.

Crates for shipping should have two ends and a middle piece, each twelve inches wide, eighteen inches long, and about three-quarters of an inch thick. The bottoms, sides and slats are twenty-eight inches long. Nail on the bottom

boards close together ; have side boards six inches wide, and put slats on the rest of sides and top, leaving broad interstices between them for ventilation. Put in enough wet grass or moss to pack down two inches thick ; stand the bunches butts down on the moss, tightly, leaving the heads about one inch below the slats. When the crate is full, crowd some wet moss all around, to prevent shifting during transportation.—*American Agriculturist*.

### ASPARAGUS BUNCHER.

The accompanying engravings of an asparagus buncher may be of special interest to some of our readers at this season. They are copied from "Parks and Gardens of Paris," Robinson.

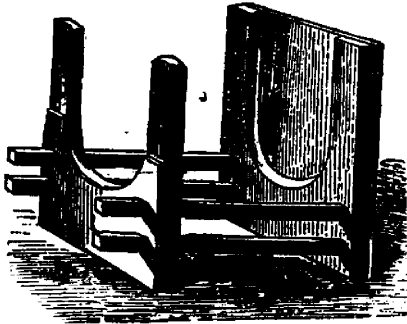


FIG. 40.

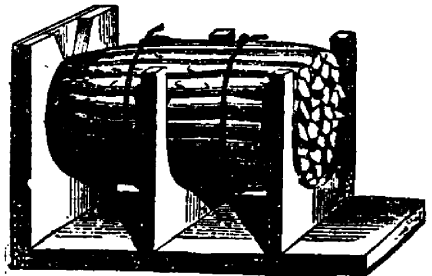


FIG. 41.

EARLY WATERMELONS.—After having tried a simple experiment on having early watermelons, I will offer my plan to your readers, feeling that it may be of benefit to some. Take tin cans (oyster or salmon) and heat them hot enough to melt the solder ; then remove the tops and bottoms, and also open the joints on the sides. Tie a string around the cans to hold the edges together, and set on a plank, that they may be moved out on sunny days, or in a warm, dry place, where they will be protected from the cold, and fill with dirt. Plant the seed in the cans, and give them plenty of air and light. When frost is over, take to the field, open a hole in the hill and place the can in it. Then cut the string, remove the can by pressing open, and the plant will grow off as rapidly as if first planted in the hill. Have rows ten or twelve feet apart and hills ten feet apart. Thin plants to two in a hill ; if attacked by bugs, dust them with ashes. By this means melons may be had very early.—A. A. SUTTON, in *Farm and Home*.



## 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.

BLANK FORMS for renewal of membership fees to our Association have been sent out, in order that all should be reminded in time to secure a share in our plant distribution. In some cases these have been quite unintentionally sent to persons who had just renewed, but whose names had not yet been entered. We hope any such persons will pardon the almost unavoidable oversight.

---

### THE FLOWERING THORNS.

The Flowering Thorns are among the most highly prized of small lawn trees. They grow only from ten to fifteen feet in height, are compact and erect, but branching so as to form a good head, and late in spring cover themselves with blossoms. The foliage is handsome and abundant, and the trees at all times appear to good advantage. The most highly prized of the thorns are the common Hawthorn and its varieties, especially the Double White, the Double Scarlet and the Double Red. These varieties planted together in a clump make a brilliant show in their blooming season. Another fine variety of the same species is the Parsley-leaved thorn, the leaves being finely cut and crimped, giving it a novel appearance; the flowers are white, single.

Whoever has seen a fine specimen of the Cock-spur thorn in bloom, as it grows in our thickets and fence corners, has had a sight to delight the eye. A variety of this species is cultivated, having narrow, bright green, glossy leaves, superior to those of the wild tree, and blooming as freely, being literally covered with its single white flowers in its season; this is the *Pyracantha*-leaved thorn. Another variety of the same, is called the Glossy-leaved thorn. The flowers of all are pleasingly fragrant.—From "Trees for Small Places," in *Vick's Magazine*.

## ✧ Question Drawer. ✧

### CLASSES OF CHERRIES.

SIR,—What is the difference between Duke, Morello and Bigarreau cherries, and what are the best varieties of each?  
J. S. W.

Since the varieties of cherries have so multiplied, the old divisions have become less distinct; especially have the Hearts and the Bigarreaus shaded off into each others characteristics, and the Dukes and the Morellos. The main characteristic of the two former varieties is the large vigorous growth of the trees, as compared with the latter. In general, the Heart cherries are tender in flesh, and the Bigarreaus firm. Mr. Barry in his Fruit Garden classifies them thus:

Class I. Heart cherries. Fruit heart-shaped, with tender, sweet flesh. Trees of rapid growth, with large soft drooping leaves. Class II. Bigarreau cherries. Chiefly distinguished from the former class by their firmer flesh. Their growth is vigorous, branches spreading, and foliage luxuriant, soft and drooping. Class III. Duke and Morello cherries. Very distinct from preceding. Trees of smaller size, and slower growth; leaves thicker, more erect, and of a deeper green. The fruit is generally round, and in color varying from light red, like Belle de Choisy, and dark brown, like Mayduke. The Dukes usually, have stout erect branches, and some of them, like Belle de Choisy and Reine Hortense, are quite sweet. The Morellos have slender, spreading branches, and, invariably, acid fruit. Suitable for dwarfs, and more hardy than class I and II.

According to Nicholson's Dictionary of Gardening, the Dukes and Morellos are derived from the Dwarf cherry (*Cerasus caproniana*), and the Bigarreaus from the tall Gean (*Cerasus avium*), both natives of Great Britain.

Of the Hearts, we have had best success with Black Tartarian, Elton, Governor Wood, and Knight's Early Black; of the Bigarreaus, with Napoleon Bigarreau, Elkhorn, Great Bigarreau and Windsor; and of the Duke and Morellos, with Early Richmond, Empress Eugenie, Montmorency, and Reine Hortense.

---

### BEST PEARS.

SIR,—Which are the best varieties of pears for (1) Summer, (2) Fall, (3) Winter?  
J. S. W.

The following are reliable kinds for profit (Summer), Beurre Giffard, Bartlett, Clapp, Doyenne Boussock (Fall), Duchess, Howell, Sheldon, (Winter), Anjou, Lawrence, Josephine de Malines.

## THE TREE CRICKET.

SIR,—Enclosed you will find a cherry slip, with some eggs. I found several of them on my trees, and would like to know, through the CANADIAN HORTICULTURIST, what they are?

W. S. SHORT, *London, Ont.*

The twig of cherry tree sent us is full of eggs of the Tree Cricket (*Ecanthus niveus*). The insect will do very little injury to the cherry tree, but it is one of the most troublesome insects in the raspberry plantation.

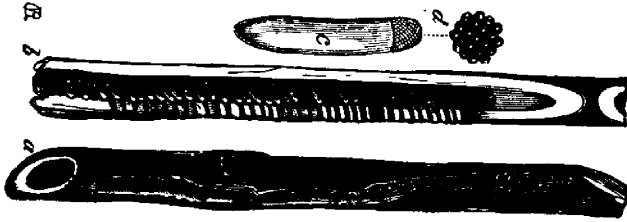


FIG. 42.

Towards the end of the summer the female moth, desirous of placing her progeny in a safe place, chooses the young and tender wood of the plum, cherry, or other trees, and more particularly the raspberry bushes, in which to deposit her eggs. By means of a long ovipositor, she is able to place them in the young wood in long rows, each standing obliquely, as shown in Fig. 42. The mature insect, with its ovipositor, is shown in Fig. 44.

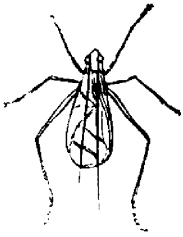


FIG. 44.



FIG. 43.

The young insects hatch out about midsummer and much resemble the perfect insect, except that they have no wings. They do no further injury to the raspberry bushes, their food being plant lice and ripe fruit. About the only remedy is careful attention during the winter in cutting off and burning the injured branches.

## USE OF COAL ASHES.

SIR,—I sifted coal ashes in my cow stable, as an absorbent. What effect will it have upon the manure as a fertilizer?

G. W. HODGETTS, *St. Catharines, Ont.*

Coal ashes are a very good absorbent, and, so far as we know, would not have any injurious effect, used as our correspondent proposes. Coal ashes contain no great elements of fertility in themselves, but they have a mechanical effect upon the soil, which seems in some cases to be favorable to the growth of vegetation.

## KIEFFER PEAR.

SIR,—What was the conclusion arrived at with regard to the Kieffer pear at the meeting of the Western New York Horticultural Society lately held at Rochester?

W. H. HOPKINS, *Burlington, Ont.*

There was really no conclusion reached by the Society as a whole regarding the Kieffer pear. A great many opinions were expressed, but very few spoke favorably of it. Some, however, claimed that it was one of the most profitable pears they had grown, on account of its great productiveness and its beautiful appearance, which commanded a ready sale for it in the market. All agreed, however, in condemning the flavor as being inferior. Its chief use is for canning, and for this purpose it is highly commended.

## BEST PEARS.

SIR,—What four kinds of pears would you advise me to plant in an orchard? Last year I planted one hundred Kieffer, some Duchess and Doyenne Boussock.

W. H. HOPKINS, *Burlington, Ont.*

This is a question which it is impossible for any one to answer decidedly. We might say what ones we would prefer to plant in our own orchard, but to say what ones would be best in another's orchard, in different circumstances, would be an impossibility.

Would the readers of our journal who are experienced in pear culture please send in to the editor, by post card, the names of the four varieties they have found to be the most profitable.

## BEST PEACHES.

SIR,—Will you please give me a list of the best peaches for home use and for market.

J. S. WARREN, *Vancouver, B. C.*

Six good peaches are Early Rivers, Hyne's Surprise, Foster, Early Crawford, Wager, Steven's Rareriipe. There are many other good varieties. It is impossible to say which are the best for any one planter, without knowing a good deal about the conditions.

Mr. A. M. Smith, one of the most experienced fruit growers of the Niagara district replies to the question as follows :—*For home use*, Alexander, Mountain Rose, Early Crawford, Late Crawford, Early Barnard, Old Mixon. *For market*, Alexander, Early Rivers, Early Crawford, Bouslaugh's Lake, Wager, Steven's Rareriipe.



## \* Open Letters. \*

## BLENHEIM ORANGE APPLE.

SIR,—The letter published on pages 72 and 73 of the March number of the CANADIAN HORTICULTURIST stating, in effect, that the Blenheim Pippin apple is not worthy of cultivation in this province must have surprised a great many apple growers, as this variety is well-known in many sections, and regarded as one of the best in quality, as well as one of the most profitable for market. The article as much as says that the editor of this journal, the fruit committee who prepared the district fruit list, the president and directors of our Association, and all who speak on horticultural subjects at Farmer's Institutes should denounce this apple. I think, Sir, this would be a very serious mistake, for I am certain that hundreds of practical apple growers throughout the country are unanimous in their opinion that the Blenheim Pippin can be profitably grown for market.

The committee of the Fruit Grower's Association referred to was composed of P. C. Dempsey, A. McD. Allan and the writer, the majority of whom, *i. e.* the two gentlemen named, are as well qualified as any one can be to say what variety of apple can be grown in this province. The committee unanimously reported the Blenheim Pippin as profitable for cultivation in five of the thirteen electoral districts in Ontario, and this report was made after consulting with and obtaining the approbation of the directors of the said districts; who, in turn, before sending in their recommendations, consulted with from thirty to forty of the principal apple growers in their respective localities.

Since writing the foregoing, I have received a letter from Mr. F. B. Edwards, barrister, of Peterboro', who is secretary of the local Fruit Grower's Association of that town. In speaking of the Blenheim Pippin, he says: "We have grown the Blenheim Pippin for many years successfully, both as regards the growth of the tree and the quality of the fruit produced, and it has been a profitable variety. We have always regarded it as being, in many respects, our best apple. It has not been, by any means, a shy bearer, and for sale, it is always in demand before all others, excepting, perhaps, the Northern Spy; and, with those who know the apple, it is sold in advance of the latter variety."

THOS. BEAL, *Lindsay.*

## THE SAUNDERS PLUM.

SIR,—In the January number of the CANADIAN HORTICULTURIST, Mr. Race claims to have found the original Saunders plum, and states that it is a late variety. Now this is not the case. The plum is an early variety. In the year 1883, I introduced the Saunders plum at our summer meeting. We then could only get a few of the most inferior specimens, the crop having been gathered and marketed, and it was with difficulty that we kept them for exhibit at that meeting. Mr. Morris, of Messrs. Morris, Stone & Wellington, came down and I went with him to Mr. Ahren's place, and helped him to cut buds from the original tree. Last year, when I went to get buds, the fruit was over ripe; I have not the date. One of the most important claims for this plum is its earliness. It is the earliest plum I have ever seen, hence its wonderful market value.

P. C. DEMPSEY, *Trenton, Ont.*

## THE BLENHEIM ORANGE APPLE.

SIR,—I have two Blenheim Orange trees, fifteen years, from nursery. One, on southern aspect, bears well and large apples. The other, on northern slope, with windbreak to west, bears better and larger fruit. Both trees have borne well for some years—don't remember how many—but the last two seasons they had wonderful crops. As an eating and cooking apple, it is about perfect, and keeps till about the New Year.

GEO. R. PRESCOTT, *Galt, Ont.*

## THE CRANDELL CURRANT, AND THE JAPANESE WINEBERRY.

SIR,—I see in the January number of the HORTICULTURIST, Mr. A. G. Heaven is afraid that his "Crandell Black Currant" is the old yellow flowering currant. Two years ago this spring I bought some bushes from a nurseryman in the States. Last year they fruited, and some of the branches were so heavy with fruit we had to prop them. The first currants on the branches were large, some of them as large as a Clinton grape, growing smaller towards the end of the bunch. Had I trimmed my bushes, I think very likely I would have had still more and larger fruit. I let them grow as they would, because I wanted to propagate from them. As it was they were admired by all who saw them. At the time I bought the Crandell Currant I also bought the Japanese Wineberry: it fruited last year, and was very much admired. The fruit is beautiful, and is as good to eat as it is to look at. It bore quite as heavily as I expected for the first year. It I also let grow as it would in order to propagate from it.

H. J. BRYAN, *Mohawk P.O. Ont.*

## RIBSTON PIPPIN.

SIR,—I see in the appendix to the last year's report that the Ribston Pippin apple is placed where it ought to be, although, in all the discussions it seems to be almost ignored. I find it the most regular bearer of all the sorts I have, and it can't be beat for quality, and as to keeping, if it is gathered early, not left to ripen on the tree (like the pears) I can keep it well until March or April. I gave Mr. Allan a few years ago some good ones, the latter end of April. I have kept them until June. The Ontario is classed much too high as a dessert apple.

I find my question on the apple scab asked last April, brought out some good answers in both April and May numbers of your journal, and it was taken advantage of by a number of fruit-growers, but, as it happened, the fruit was very free of scab last season.

WALTER HICK, *Goderich.*

## PLANTS TESTED IN ONTARIO COUNTY.

Sir,—This is a report of plants, trees, etc., from Association Swazie P. G. is a better bearer than Golden Russet.

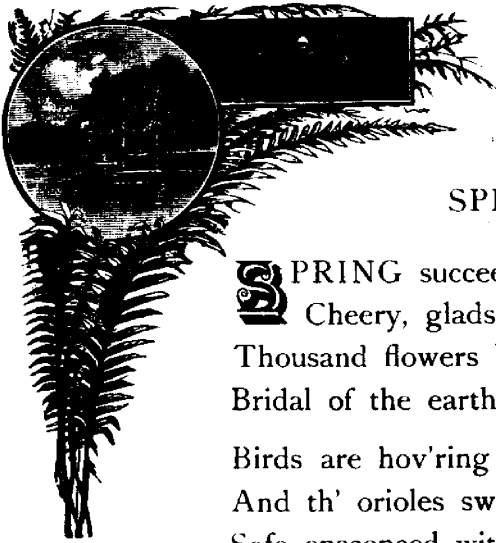
Salem, Brighton, Burnet, Prentis, have done well and been free from disease; Burnet improves with age; also, Lindley, Agawam, Worden, and Champion, have done well in all respects—little difference in ripening. Glass Seedling Plum gave its first good crop last year is healthy. Saunders' raspberry is hardy and bears well. The Gregg and Hilborn do well. This is hard limestone soil, not very rich, being burnt by forest fires. Trees ripen their wood well, and are hardy. Grapes ripen early.

WM. E. TAYLOR, *Beaverton.*

## LITTLE KNOWN FRUITS.

SIR,—I send you by mail some scions of some extra good varieties of plums, which are both heavy croppers and of first quality. They are called the Rocky Mountain and the Greely. I also send you some cuttings of the White Holland currant. This is a good variety, the heaviest fruiter, I think, I ever saw, besides being of good quality. I also enclose you some scions of an apple called "Bon Homme," of which I know nothing, only that it comes recommended as a good winter apple.

A. A. ROLPH, *Orono.*



## SPRING.

**S**PRING succeeds to winter's day,  
 Cheery, gladsome month of May,  
 Thousand flowers beneath our feet,  
 Bridal of the earth! 'tis meet.

Birds are hov'ring on the wing,  
 And th' orioles sweetly sing,  
 Safe ensconced within her nest  
 Mother bird seems quite at rest.

Leaves are bursting out anew,  
 Kiss the sun and sip the dew ;  
 Gentle rains unseal your case,  
 And the winter all efface.

Come you long imprisoned bee,  
 Spring has come and sets you free ;  
 Flowers are waiting on your call,  
 Pollen, nectar, dew and all.

Resurrection of the year !  
 Nature, her new drapery wears ;  
 Cannot man believe and trust  
*His* resuscitated dust ?

*Owen Sound.*

MRS. DR. MANLEY.

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Mar. 31.

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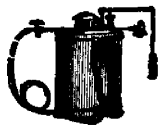
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