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HONEYSUCKLES.

FOR CANADIAN HORTICULTURIST.

THE
Canadian Horticulturist

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HONEYSUCKLES.



AMONG the few desirable climbing plants suitable for the adornment of the home grounds, and hardy in Ontario, the Honeysuckles claim a prominent place, both on account of the beauty of the flower, and the fragrance of most varieties. The name honeysuckle is probably got from the practice of sucking the flower for the drop of sweet juice at its base. It has long been the favorite creeper to adorn the pillars of the porch, and to cover a lattice screen, as it is witnessed by Shakespeare, who, nearly three hundred years ago, wrote

"Beatrice, even now,
Couched in the Woodbine coverture,"

referring, no doubt, to the Honeysuckle, so common in England, known as *Lonicera caprifolium*, or else the *Lonicera periclymenium*, both of which were introduced from the Continent, and known as Woodbines. The former was also called Goat's-leaf, which is simply a translation of *chevre feuille*, the French name for

the whole family of Honeysuckles, and of *Caprifoliaceae*, the Latin name for the botanical order to which they belong. We find John Milton, speaking of the Honeysuckle, miscalls it the Eglantine, a name poetically given to the Sweet Briar (*Rosa rubiginosa*),

"Through the Sweet Briar, or the Vine,
Or the twisted Eglantine."

The genus *Lonicera*, or Honeysuckles proper, received its name from Adam Lonicera, a German botanist, who flourished between the years of 1528 and 1586. This genus is a very extensive one, about eighty species having been enumerated, some of which are hardy, some half hardy, some deciduous, some evergreen, some erect, and some climbing.

In our colored plate we have represented three of the most popular of the climbing Honeysuckles, viz., beginning from the left hand side:—*Lonicera flava* (Yellow Trumpet), light yellow, fragrant, a native of North America, which was introduced into cultivation in the year 1810. *Lonicera Periclymenium Belgica* (Monthly Fragrant or Dutch Honeysuckle), which we referred to above as a native of Europe. The

flowers are red and yellow, and continue all Summer. It is also very fragrant. *Lonicera sempervirens* (Scarlet Honeysuckle); the flowers of which are of a beautiful scarlet, but inodorous. This is a strong rapid grower, and very handsome.

In some future number we hope to give a plate of *Lonicera Halleana* Hall's Honeysuckle, which is one of

the best bloomers of all, continuing from July to December; its flowers are a pure white, changing to yellow, and very fragrant. It is a strong grower, and holds its leaves until January, so that it may almost be called evergreen. Perhaps of the whole list, no variety can be more confidently recommended for general cultivation than this one.

SEASONABLE HINTS FOR FRUIT GROWERS.

THE fruit season of 1889 is close upon us, a time of hurry and of hard work for fruit growers, and, of late years, a time of small returns for labor and money invested. Many a man who has taken up fruit culture for profit, without capital and without a knowledge of the business, has utterly failed; and even some more experienced fruit growers, owning large orchards of apple trees, have found them so unproductive, or else have met with such misfortunes in the disposal of the crops, that they have become discouraged, and openly declare that apple culture is no longer profitable. Some have even gone so far as to dig out their orchards, although they consisted of choice varieties of fruit trees in the prime of life.

Now, we claim that this is a serious blunder, and that, properly treated and economically managed, the apple orchard will average a far better return for the money invested than any other farming crop which could possibly be grown upon the same quantity of land.

One great obstacle in the way of successful orcharding is the gathering of the crop. Handling every apple, one by one, twice over, first in gathering from the tree, and then in assorting, is very expensive work in a large orchard, as the writer knows to his cost, and usually a large quantity is ruined by falling, before the work is completed. Now, if we can find some more rapid way of gathering our crop in the busy months of September and October, an important step toward turning the scale in the way of profit would be taken.

On page 297 of vol. xi. allusion was made to a Yankee invention for gathering apples, and, since the apparatus received favorable notice at the last meeting of the Western New York Horticultural Society, we have thought best to draw attention to it in these columns. At that meeting it was stated that from six to eight acres of orchard could be gathered with it in a week, and that five men would gather 200 barrels per day. The great fear we had was

that fruit would surely be bruised by its use, but it is stated by those who have used it that the fruit is in better condition than that picked by hand. We have secured a cut of the

APPLE GATHERER,

which will be of interest to our Canadian growers, even if the Gatherer itself should not entirely fulfil our expectations.

The weight is not very great, for two men can take it up and carry it to any part of the orchard. In size, it is 18 ft. across at the top; can be folded to occupy a space 4 x 4 ft.,

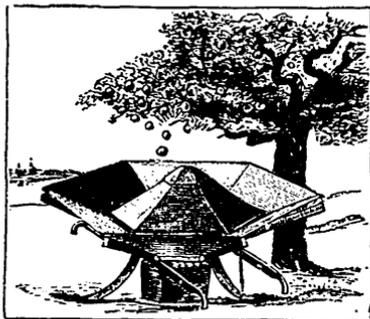


FIG. 39.—APPLE GATHERER.

and is 11 ft. high. The shaking of the branches is easily performed by using a pole with a hook on the end, and, where the lower branches are in the way, they may be easily pulled aside by such an instrument while the apples above are being shaken down.

The cost of this machine is \$50. We hope soon to test it at Maplehurst fruit farm, and will then be prepared to say more about its merits and demerits.

A USEFUL LADDER.

The time has not yet by any means

arrived when we can dispense with the ever-useful ladder, for, even should the Apple Gatherer come into general use, it would only be in large commercial orchards, and, even there, ladders would be needed for stripping the trees of apples, which could not be shaken down into it, from the tops and middles of the trees.

Among the various styles of lad-

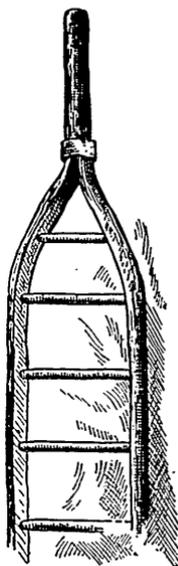


FIG. 40.—FRUIT LADDER.

ders, such a kind as was described by the writer on page 56 of vol. I. of this journal is most useful. It is made of one stout pole, mortised into a base made of scantling, and having rounds driven through it for climbing upon. Such a ladder can be very easily made on a rainy day, and can be used in cases where the ordinary two-barred ladder is useless; for, by reason of the single pole at the top, it can be safely rested in any crotch, while the scantling at the bottom pre-

vents it from turning. Such a ladder is convenient in the peach orchard, among very tall trees, where a step-ladder is too short, unless of an unwieldy size.

In a recent issue of the *Farm and Home*, Mr. Niles, of Vermont, gives directions for making a ladder which has the double bars at the lower part and the pole at the top. He says:

"Cut a spruce pole, or one of some other suitable wood, of the desired size and length. Have it as free from knots as possible. Bore holes through it every eighteen inches, and let the holes have a diameter of at least an inch and a half. Beginning at the thickest end, split the pole to within two feet of the top with a rip saw. At this point fit a ring around the pole. Now spread the halves apart as the engraving shows (fig. 40.) The ring will prevent the pole from splitting further, and if it be green and tough it will not break. Strong rungs, which have already been prepared, should be inserted and the pole pinned to them. The bottom of this ladder should be a trifle wider than the top. The beauty of the contrivance is that it can be inserted in any part of the tree and will not tip over worse than ordinary ladders. I prefer it at picking time to any step-ladder I ever saw."

A PACKING HOUSE.

Among our building plans, that of a suitable house for the fruit grower to store and pack fruit of all kinds has not yet appeared. The growing and shipping of fruit to distant mar-

kets is a comparatively new business, and has not yet been furnished with all the best appliances. Most of us in the Niagara Peninsula use our barns and carriage-houses as fruit packing-houses during the fruit season. The writer has a building about 72 x 36, two stories high, all of which he devotes to storage and packing of fruit, and the storage of baskets, barrels, etc. Besides this,

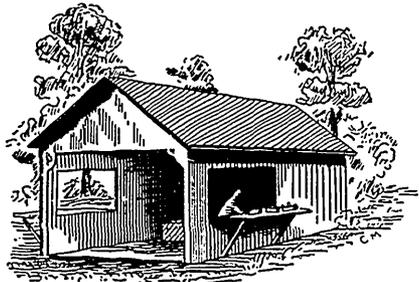


FIG. 41.—FRUIT PACKING HOUSE.

temporary sheds are erected outside near the strawberry patches for use in packing time.

A very neat berry packing-house is shown in the engraving, copied from the *Orchard and Garden*, which would be a great convenience in a plantation of small fruits, providing a dry place for the storage of baskets and crates, and a cool, airy room for packing and storing the fruit until ready for shipping. Where the plantations are separate from each other on the same farm, a movable house of similar design might be constructed of light lumber on a smaller scale, and having runners made of pieces about 3 x 6 in., so as to be drawn about as required from one patch to another.

TOMATOES TESTED.

AT the Agricultural College, Michigan, 148 varieties of tomatoes have been tested. A large number of the so-called varieties have been found synonymous, or so nearly alike that they could not be readily distinguished; still the result of the work greatly simplifies the work of the gardener who, when selecting, need only consider the groups, and not the



FIG. 42.—WONDER OF ITALY.

sub-varieties, which differ little from each other.

For pickling and preserving, the Cherry, the Pear and the Plum tomatoes are commended. One of the varieties of the latter group, known as "Wonder of Italy," is shown in our engraving.

For ordinary cooking and table use, the apple-shaped varieties are the best, as Advance or Hathaway's Excelsior for early, and almost any in the group of Cardinal, Paragon or Perfection groups for main crop. Of these latter, the Ignotum,

of the Paragon group, is especially commended in the following terms:

Among the older varieties the Ignotum deserves special mention. This tomato was obtained as a sport from *Eiformige Dauer*. This year it exhibited some tendency to revert, but it furnished us the largest and finest fruits we had. They were thick, solid and quite smooth. One of the earliest to ripen, the plants remained vigorous throughout the season notwithstanding the dry weather, and still bore a number of

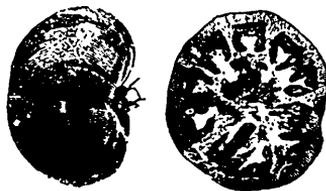


FIG. 43.—IGNOTUM.

green fruits when killed by the frost. The variety was tested by quite a number of specialists, and without exception they spoke favorably of it. Prof. Goff, of the New York Experiment Station, writes: "Although the fruits were not very uniform, some were as fine as anything in the shape of a tomato I have ever seen; of good size, remarkably solid and perfectly smooth. With a few seasons' selection it will doubtless be unsurpassed."

The *Mikado* is described as quite early, and averaging the largest of any tomato grown; the *Acme* is of thin skin, making it too tender for distant shipment.

STACHYS TUBERIFERA.

THERE seems to be a great difference of opinion respecting the value of this new vegetable. Mr. E. S. Goff, of the Geneva Experiment Station, says:—

Stachys Tuberifera, a so-called new vegetable from Northern Africa cannot be pronounced a very great acquisition. It belongs to the Mint family, and produces small, fleshy tubers, which in our trial only attained the size of acorns.

A correspondent of *The American Garden*, says he is certain that it grows in the district of the Bay of Chaleur, P. Q., being, perhaps, brought there by the early settlers from France, but whoever introduced it, he considers it as great a nuisance as the Canada thistle or the dandelion.

It is just possible that the variety of *Stachys* growing near the Bay of Chaleur is not the same as the one recommended for a garden vegetable, as there are at least 160 named species, some of which are of a very weedy character and grow very freely.

Monsieur Fr. Burvenich, Professor in the State School of Horticulture of Belgium, in an article in the March number of the *Bulletin d'Arboricul-*

ture, etc., speaks favorably of the *stachys*, so far as his experience goes, and adds:—

"This new vegetable has been favorably noticed at the National Exposition of the Art of Cookery, held at Brussels in December, 1888. One of our friends, a great lover of vegetable culture, once said to us that the Cronos (*Stachys*) were at



FIG. 44.—STACHYS.

least no worse than artichokes. But the question of taste is a settled one, for at the banquet given to General Carnot, upon his accession to the presidency, all the guests found the dish a delicious one."

We copy from this journal a cut of the plant showing the tuberous roots in their relative size.

SOME PROMINENT CANADIAN HORTICULTURISTS.—VII.

R. MCKNIGHT, OWEN SOUND.

IT is always interesting to trace the history of those gentlemen who have made their own way in

this world, and from humble positions gained wealth and honor. The consideration of such instances is

inspiring to our young men, imparting ambition to excel, and suggesting hints for their guidance.

Such an example is set before them in the case of Mr. R. McKnight, of Owen Sound, who came to Canada from Ireland in the year 1836, at the age of nineteen, to seek his fortune. His first employment was in a saw mill, where, owing to his ambition to stand first to his qualifications, he became, in six months time, manager of the concern, a post he held for three years.

In 1860 he turned his hand to school teaching, which profession he pursued with ability for six years, and, later on, devoted himself to mercantile life, which he conducted successfully in Markdale, Cookstown, and last of all, in Meaford. Not long since, he was appointed Registrar for the County of North Grey, a position which led him to reside in Owen Sound. His home surroundings at the latter place testify to his taste and skill in horticulture, and, although more properly classed among the bee-keepers from the especial attention he gives to that pursuit, yet as a fruit grower he holds no mean place, and merits a notice in these pages.

In reply to a letter asking Mr.

McKnight for some notes of his life as a horticulturist, he wrote the following letter which we insert in full:—

DEAR SIR:—Referring to your favor of the 10th April, in which you note receipt of electrotype, kindly offering to use it if furnished with notes, I have to say in reply that nothing I have done in the way of horticultural pursuits entitle me to be classed among the prominent promoters of the industry. I have never been other than what may be fairly termed an amateur in the business. I have two orchards; but my home one receives most of what attention I bestow on the culture of fruit. In this I cultivate all the fruit—large and small—adapted to this section of Ontario. Some years ago I thought of growing what peaches would serve my own family, if that were possible. To this end I ordered one hundred trees of the most suitable varieties, and planted them. I regret to say there is not one of them alive to-day, nor did I even get a fruit from them. Most of my spare time has been devoted to bee-keeping in recent years. When in London at the Colonial Exhibition (where I went as one of the delegates in charge of our honey exhibit) I thought it would be a good opportunity to secure a future market for the one hundred or so barrels of apples I yearly have to sell. I accordingly made the acquaintance of John Draper & Son—one of the largest fruit handling firms of



FIG. 45.—R. MCKNIGHT, OWEN SOUND.

Covent Garden, London. I wrote home; had three or four barrels of apples sent out, which arrived and were sold under my own eye. The venture was the reverse of profitable, and anything but creditable to the country. Depending upon others to pack them, they were put up in the usual way with the usual result; superb fruit thrown away through careless handling in the orchard. London is a good market for good fruit, but a poor one for inferior fruit. Fruit, especially Canadian apples, always does and will continue to bring a good price. But it is worse than folly to send them to arrive in a damaged state. There is a class of dealers in London with whom quality is a first and price a secondary consideration, and who never touch inferior or damaged fruit. The

latter are slaughtered among the costermongers and East End corner grocers and fruit men. The men who successfully cater to the wants of the first class may calculate upon uniformly good prices year after year. I was present at the sale of a number of consignments from Canada, and could not help blushing at the folly of our people in sacrificing fine fruit through carelessness in packing and sorting. Nova Scotia sends a great quantity of apples to London. Their barrels are not so large as ours. They are sold as "Nova Scotia Barrels," while our packages are always advertised as "Canadian Casks." There is money for the man who uniformly succeeds in laying down our apples in London, carefully graded and in prime order.—R. McKNIGHT.

FIGHTING INSECTS.

THE CODLING MOTH.—The experience of others confirms our own regarding the benefits of spraying, and therefore we are doing the work more carefully than ever among all our fruit trees. Mr. A. C. Hammond, Secretary of the Illinois Horticultural Society, says he treated his trees twice, at an interval of ten days, with London purple, and as a result from 60 to 75 per cent. of his apples were perfect, and about 85 per cent., marketable, while adjoining orchards not sprayed did not produce a peck of perfect fruit.

We would advise all orchardists reading this journal to lose no time in giving their trees a careful spraying, and we shall be glad to have the results for publication. The proportion of Paris green that we recommend is one quarter of a pound to fifty gallons of water, or one ounce to every ten gallons.

PLANT AND BARK LICE.—The spraying pump comes in most useful for these insects also, as it is impossible to apply kerosene emulsion with a brush or broom, except to the trunk and larger limbs. These we first scrape carefully with a hoe, and then scrub thoroughly with a wash of potash and water in the proportion of two pounds of the former to seven quarts of the latter. But sometimes when the bark lice are very bad we find them tar out on the branches, and then nothing will do but spraying with kerosene emulsion. For this Prof. Cook recommends the following formula: Kerosene, one pint; soft soap, one quart; and boiling water, two gallons. A stronger emulsion, which is also suitable for spraying our cherry trees for the black aphid, is made as follows, and is one we use for all purposes, viz.: Soap, half a pound, mixed to strong suds

with one gallon of boiling water, and while still hot add two gallons of kerosene. This may be used diluted as wanted with ten parts of water, and sprayed over the whole trees about the first week in June, when the young lice are first hatched out. Some are afraid to use kerosene for fear it will destroy the bark of the trees, but diluted as above described there is not the slightest danger. To test the danger of its use, we applied clear kerosene with a brush to some trees affected with bark lice, giving one application to one tree,

again three weeks later. Another, recommended by Prof. Saunders, is simply soft soap reduced to the consistency of a thick paint by the addition of a thick solution of washing soda in water. Apply in the morning of a warm day, and it will soon dry, and not be easily dissolved by the rains. The treatment should be given early in June, and again during the early part of July.

There are two kinds of apple tree borers—the round-headed, and the flat-headed, the latter of which we described in vol. xi., p. 147. The former is known scientifically as *Saperda Candida*, and was first noticed as destructive to our apple orchards in the vicinity of Albany, New York State, in the year 1825. Our readers may be able to recognize the full grown beetle from fig. 46-c, which is about three quarters of



FIG. 46.

an inch long, and pale brown on the back, with cream-colored stripes. While the flat-headed borer deposits its eggs very often on the upper side of the large branches, this one chooses only the trunk, near the surface of the ground, and usually upon the south or south-west side. These are laid singly during those months, and hatch out within a fortnight into a whitish larva, with a chestnut brown head, with black jaws about an inch in length, and without feet (see fig. 46-a.) In this destructive stage it remains about three years, the first just beneath the bark, and later excavating through woody portions of the tree until ready to transform into a chrysalis (see fig. 46-b), and two or three weeks later into a perfect insect.

THE BORER is much more troublesome in our orchards than we like to admit. We find that where trees are situated on unfavorable soil, or are for any other reason somewhat stunted in growth, the borer is especially destructive, and treatment should not be neglected. A good preventive is made as follows: One pint crude carbolic acid, one quart soft soap and two gallons hot water. Thoroughly mix and apply with a cloth to trunk and large branches, two weeks after blossoms fall, and

again three weeks later. Another, recommended by Prof. Saunders, is simply soft soap reduced to the consistency of a thick paint by the addition of a thick solution of washing soda in water. Apply in the morning of a warm day, and it will soon dry, and not be easily dissolved by the rains. The treatment should be given early in June, and again during the early part of July.

THE LARNE APPLE—ALIAS, THE BAXTER.

By D. NICHOL, CATARAQUI, ONT.

NOTICING that this magnificent apple is now gaining some prominence, and being, perhaps, the only one now living who can give its correct history, I deem it expedient to ask you the favor of its publication in the HORTICULTURIST.

In the year 1855 I started nursery business in company with the late Mr. Rich. Coleman, of Lyn, near Brockville. During the following Winter I observed an old gentleman (Mr. Baxter) peddling in the village some very handsome, large, red apples at five cents each; I purchased a few, and being so struck with their appearance I made inquiry as to where they were grown, and so forth. Mr. Baxter informed me that the tree from which the apples were plucked was growing at Larne's Mills, on the north shore of the St. Lawrence River, about thirteen miles west of Brockville. I asked him for some scions from the tree, and in a few days thereafter he kindly brought me twenty-five strong shoots, which I root-grafted, and from which I raised about fifty trees. These, I believe, were the first trees of the kind ever propagated. I named them the "Baxter."

The following year I spoke of my discovery to Mr. George Leslie, nurseryman, Toronto, and at his request I purchased for and sent him a bunch of scions of the "Baxter" apple tree.

Subsequently becoming anxious to see the parent tree with the fruit growing on it, and to ascertain its

habits, I drove to Larne's Mills, and I found it growing in an old orchard belonging to Mr. Billa Larne, who told me he brought with him from France, in the year 1813, the seeds from which the tree grew, and that he was entitled to the name of the apple, although Mr. Baxter had a large tree top-grafted with the same; so henceforth it was called the "Larne" apple; that is its proper name. I have of it here in my orchard at Cataraqui, twenty trees in robust health, yielding annually profitable crops. In Kingston market the fruit sells more readily and at rather higher price than any other apple offered for sale, although it is not by any means equal in quality to the N. Spy.

At the same time the Larne trees were planted, which is twenty-one years ago, I planted 100 Spys and am now digging out the last of their remains. I will not longer strive to produce my favorite apple in this climate. In trying to produce good fruit of the Spy, Greening, Baldwin and King, I think I have expended more time, labor and money than any other living man, but am now forced to the conclusion that these choice sorts can only be grown successfully in a very small proportionate area of Ontario.

In apples our great need is a hardy, long-keeping, showy apple of good quality, which could be shipped to foreign markets with advantage. Tree hardy as the Duchess, fruit hardy as the Baldwin, color, size

and flavor approaching the Spy; whoever will produce such an apple would be entitled to a bonus equal to that offered to the genius who will kill all the rabbits in Australia.

We have innumerable varieties of good Fall apples which thrive well north of here, but a good hardy Winter apple we do not possess. The chief value of the Larne consists in the hardiness, robustness and durability of the tree, its regular bearing habit, and the showiness of the fruit. As a cooking apple it is decidedly preferable to the Alexander, and it keeps three months longer. Its flavor is infinitely superior to the Ben Davis, and with

the Larne there is no small trash. But it is not really a shipping apple, unless we obtain better shipping facilities with more careful handling than we have at present. If the Larne could be presented in good condition in the English market, I have no doubt it would bring the very highest price. I have shipped to England a good many barrels of different kinds, but the only kind which arrived at their destination in good condition was the American Golden Russet. The demand for it, however, seems to be limited, on account of its rather small size. But I fear I transgress on your valuable space.—*May 11th, 1889.*

HORTICULTURAL REMINISCENCES.

BY GEORGE LESLIE, SR., TORONTO, ONT.

SOME time ago I gave your readers some notes* of my first ramble among the American nurseries of the early days. My second visit was nearer home. In the Spring of 1840, I found Mr. Barry, of Rochester, a clerk in the seed store of Messrs. Ronald & Batome, corner of Buffalo and State Streets, and Mr. Elwanger in charge of the greenhouses of the same firm. With the exception of a few small patches covered by a miscellaneous collection of young trees there was nothing about Rochester to indicate a forthcoming nursery centre. In the Fall of the same year Messrs. Elwanger & Barry entered into partnership, and leased six acres of land near

Mt. Hope from a Mr. Gilman for the purpose of starting in the nursery business. I found these industrious young men busy fencing and plowing their land. That Fall I could not find all the stock I wanted, although I got some samples from Mr. Row, of Greece, five miles west of Rochester, who was beginning business. I purchased a few apple trees from Boarden Brothers, and some roses and shrubs from Mr. King, who had four acres under nursery near Mt. Hope. Gathering these small purchases together I took them to Toronto on the schooner *Voller*. At this time I was still in the seed business in my old store on Yonge Street, where I also occasionally dealt in such fruits as were

See vol. xi., p. 101.

obtainable in those early days. My intention was to make a purchase of some apples while in Rochester, but, being very scarce, the price was high, and I did not purchase.

I visited Messrs. Elwanger & Barry again in 1841, when they had their little field well planted with an assortment of fruit trees, from which I selected my first order to that firm.

In 1842, Messrs. Elwanger & Barry proposed a partnership with me in Toronto, this city being then considered a better centre for such a business than Rochester. We accordingly agreed upon terms, one of them to take charge here with me, and the other to continue the Rochester business. Our first field was twenty acres leased from the late Charles Small, which field now forms a part of the present grounds on the south side of Queen Street. In 1848

I purchased the interests of the other members of the firm for \$5,000, they finding that their Rochester business was increasing so rapidly that it required the attention of both. In the early part of 1847 I sold out my seed business and turned all my energies and capital to the nursery, where my tastes had always led me. From a beginning of twenty acres my nursery reached fully 250 acres, while Messrs. Elwanger & Barry, by honesty, hard work and constant application have made for themselves a great name. It is wonderful what good may be accomplished by honest perseverance. Although I have grown old in the business my interests are as fresh as ever, and looking about this country almost from ocean to ocean it gratifies my old heart to know that my labors have to some extent helped to beautify and enrich many homes.

STRAWBERRIES TESTED AT THE AGRICULTURAL COLLEGE GROUNDS, GUELPH.

PROF. PANTON, in a bulletin, dated 15th April, 1889, gives the results of experiments made with ten varieties, grown in matted rows, on clay loam, as follows:

Wilson's Albany has done excellently and may be ranked first. It yields well and is a very suitable variety for shipping.

Crescent Seedling ripened sooner than Wilson, and has been quite productive, but there is a tendency among these berries to be imperfect, owing to incomplete fertilization of

the flowers, but this is overcome by having a variety rich in pollen planted near, or among the rows. We overcame the difficulty by planting the Wilson side by side. Crescent Seedling seems to bear more pistillate flowers than staminate. The foliage of the Crescent, being somewhat sparse, does not assist in keeping the berry so clean as the varieties that grow more leaves.

Early Canada ripens soon, but is liable to be caught by frost, and on the whole has done poorly with us.

Arnold's Pride, is a clean, good-sized, nice berry, but has not been very prolific.

Monarch of the West proved to be a large berry, but only gave a fair yield.

Captain Jack was somewhat late, but very prolific and a good berry.

Alpha has been a slim bearer, but it has a delightful flavor.

Nicanor gave only a fair crop and ordinary berry.

Maggie's was rather small in berry, and as comparatively poor a bearer.

Cumberland Triumph is a large and irregularly shaped berry, with only a fair yield. It is a variety more for the amateur than one desiring to raise berries for market.

CONCLUSIONS.

1. Strawberries will do well in a locality such as ours, if the soil is rich, friable and well drained.

2. Ground for strawberries should have a good supply of plant food, be easily worked, and should certainly be well drained, kept clean of weeds and well cultivated.

3. We are inclined to favor growing in rows where large quantities

are to be grown, and to renew the plants every two years.

4. In well drained, sheltered and good soil, planting out in September is advisable, so as to enable the plant to get thoroughly established. A fair crop next season may be expected; but if such conditions are absent, then plant in Spring and only a medium crop may be looked for.

5. Strawberries may be grown in almost any climate if care be taken. Where the climate is severe protect the plants by scattering over them pea-straw or some other light covering. Avoid heavy substances such as manure; some place boughs with good results.

6. The following is a list which embrace varieties that are likely to succeed well:—Wilson, Crescent Seedling, Daniel Boone, Manchester, Sharpless, Alpha, Prince of Berries, Bidwell and Jewell. Crescent Seedling and Manchester, being poor in pollen, require such as Wilson among them. Sharpless is large, delicious, but somewhat late. Bidwell is a good family berry, sweeter and larger than the popular varieties, Wilson and Crescent.

FORESTRY NOTES.

By T. M. GROVER, B.A., NORWOOD, COUNTY OF PETERBOROUGH.

PLANTING TREE SEEDS.

IN the May issue of the HORTICULTURIST, you give a letter from Mr. Hulee, of Nebraska, stating his practice with tree seed to be a thorough soaking for five or eight days till every seed is fully sprouted, and not till then does he place them

in the soil. Though I have never tried just this treatment, Mr. Hulee may be right. In the case of the large hard nuts, like walnuts, generally so slow to sprout, taking sometimes one, two or three years in the soil (and after we are done looking for them) before they come up, this

will render it practicable, as so many desire to plant the nuts just where the tree is to stand, even over a large plantation. Mr. Thomas Meehan, the well-known seed dealer and nurseryman at Philadelphia, in his price list says his method is to plant his seed very early in the moist earth, even while partly frozen, and trust to shading and natural dampness of the soil to sprout the seed, and he and many others say they never knew any good arise from soaking the seed. But by keeping the seed under treatment till the last one has shown sign of germination, and where we can see just what we are doing with them, and at the same time fully work the soil and keep down the weeds and by putting the seed in the clean soil just when ready to open its seed leaves, we would save great trouble and disappointment. The seed of white ash has a tough coat, and unless in very moist ground I find it very apt to lie two years, and a great many seeds are lost entirely. I find it useless to plant it in the Fall, as even if a few come all right, there is a great loss, and invariably some of the seeds, however planted, do not germinate till the second year. The weeds always start too soon for ash as well as maple seed, and if there is no other objection to Mr. Hulee's practice of soaking, I see so many advantages that I will try it in future.

THREE FAST GROWING TREES.

Ash, Locust, Catalpa.

The best growth I have yet seen in this climate is in the case of the *Catalpa speciosa*, and I regret that it is not quite hardy enough to be

desirable here, as it is at the same time such a handsome and useful tree; it ought to be a favorite in the warmer parts of Ontario. One American paper counts it as a great advantage that its leaf is rather late in appearing in the spring—hardly in its favor, in my opinion. I do not care to see the bare limbs so long after other trees are fully out, and a good many of my neighbors who have a few trees have thrown them out, thinking they were dead, when, if they waited till June they would have found plenty of showy foliage. It is so easily transplanted, as well as raised from seed, if planted after the soil is warm, and its cultivation offers no difficulty to its general distribution. Frequently it will grow eight or nine feet, and I have doubt that, as is claimed for it in Ohio, it will produce a railway tie in ten years.

The yellow locust, very common and just as easily raised from seed, is nearly as rapid in upright growth, increasing in diameter a little more slowly. It offers no trouble in the nursery except that it is not quite hardy the first year, and is a most useful timber tree both for fuel and for manufacturing. It will grow from the seed to be three, five or eight feet high the first year, and transplants readily. It also is very late showing a leaf, and loses all its foliage very early in the autumn, and like the *Catalpa*, I do not admire it for an ornamental tree. Farmers do not like it from its liability to spread by sprouting from the root if wounded, as well as from its seed, the light legume being carried by the wind too easily. In foliage and limb it is

too thin to be much use for a shelter belt, but its timber has few equals.

The ash is well-known and is a little more trouble to get from seed, though transplanting just as readily. It is not generally called a rapid grower, but a two year seedling in fair soil will soon grow into a very handsome tree, very straight and clean in trunk and limb, and useful for street decoration or forest plantation and hardy enough for any climate. It is largely sold by the American nurserymen as a tree for timber claims and sent out at one or two years old, when it varies from one to three feet in height. It is said that some of them use the green ash, a more rapid grower, from a little further south, and sell them for white ash. I think some of them tried this on me, for one lot of seedlings supposed to be white ash, which I imported from the States, has turned out not to be quite hardy and freezes back nearly to the snow, which I know white ash should not do. The white ash of my own raising from the seed are straight, plump, and sound to the terminal buds with very solid root, and so are some imported seedlings; so I think if any of us find our ash seedlings suffer from frost, we may conclude we have not used the true white ash.

This ash is a tree of which no one can speak disparagingly—it cannot be abused for any defect in growth or habit and cannot be surpassed in vigor, beauty, or usefulness. What more do we want, except more of them?

SECOND GROWTH WALNUT.

The *Hamilton Spectator* of a late

date quotes the following:—"United States Consul Albert Roberts, in a report from Hamilton, Ont., on wood and woodenware, says: 'Much of the imported walnut has been planted in the United States by men not yet old.' If Mr. Roberts will inform us in what portion of the United States the walnut he mentions as having been planted is cut, he will let in a side light on the lumber business that will be an astonisher. Somebody has been stuffing Mr. Roberts." (*Northwest Lumberman*.) and remarks "the walnut makes more rapid growth than hickory and large quantities or second-growth hickory are imported into Canada. We believe Col. Roberts to have been quite correct in his statement."

It is evident that Col. Roberts is mistaken, and the learned Editor of the *Spectator* a little out of his latitude too.

The *a priori* argument from hickory is just as absurd as it would be to predict an annual cutting of walnut from the example of the osier willow.

Second growth hickory used for spokes, handles, etc., in thicknesses of less than an inch can be got from very young seedlings. At the last meeting of the Fruit-growers Association it was suggested that walnut forty years old was only fit for repairing barns; for manufacturing, seventy to eighty years would be the earliest age, and, although I believe walnut is a most valuable tree to plant, and agree with the *Spectator* so far, I at the same time consider the *Lumberman* perfectly right that second growth walnut is not an article of commerce. There are no old planta-

tions where it could be got. For one thing, it is only an odd tree that can be heard of, as the walnut does not sprout as the hickory; it differs from hickory also, for the small hickory is the more valuable, whereas the elegant finishing wood for furniture,

or such work as the Hamilton Court House where the meeting was held, must be over 100 years old. I hope the Editor of the *Spectator* will be able to attend future meetings of this Association.

NOTES FOR FRUIT GROWERS.

WE notice in *Popular Gardening* that Mr. Samuel Miller favors selling fruits in

SMALL TOWNS IN PREFERENCE TO LARGE CITIES.

He says:

"It is a mistake to think that the large city is the place to sell best. The reverse is the case. I live but one hundred miles from St. Louis, and have been growing fruit here for nearly twenty years, yet in all that time I only sent five consignments of fruit there, and each time received less for it than in the smaller towns in the interior of the state. Neither was my fruit of inferior quality, for I don't send that kind. Plant good varieties, cultivate well; don't let them overbear; then sell as near home as possible, avoiding express charges, commission, etc. As a rule, these two items take half of the receipts, while the grower has to raise, gather and pack for the other half. The man who can devise a plan whereby the grower can obtain what he earns in growing fruit, will deserve a monument."

There are some good points in the report of Mr. Curtice's address on

THE CANNING INDUSTRY

at the meeting of the Western New York Horticultural Society. He said that growers and cannery must work hand in hand, as their interests are identical. Only white cherries are

generally wanted for canning, especially Bigarreau, Spanish and Napoleon, or any good-sized fair meated sort, of the red acid sorts. Montmorency is good, had paid 14 cents per pound for them. He knows of a single cherry tree having yielded \$80 for fruit in one year. Plums pay the grower well. He has paid from \$5,000 to \$8,000 a year into the little town of Webster for plums, and yet there is nothing that might be called a plum orchard. Imperial Gage, Monroe Egg, Reine Claude, and a variety he only knows under the name of "Mottled Egg," are the ones used for canning. Prunes are too high for canning purposes. German prunes average \$3 a bushel. Prefers the Bartlett to all other pears for canning. The supply of fine quality in fruit does not keep up with the demand, and the cannery have hard work to get such fruits as they want. The persistent grower of superior fruits will be successful financially, and need not to be discouraged by the cry of low prices and overproduction. Cannery want an acid, firm strawberry, and the Wilson is now the only one used. Of red raspberries, Cuthbert is as good as any. The demand for Quinces is rather limited, but for good Western New York peaches there is no limit. Growers should not confine themselves to Early Crawford, as it lasts only a short time. Any large, yellow-meated

peach is good, Wager, Allen, Foster, etc. By planting these varieties besides the Crawford, the season can be greatly extended. The Crawford, however, is best in flavor. Of currants, the Dutch is highest flavored and best for canning. He pays 4½ to 5 cents a pound in the average.

Regarding the

DISPOSAL OF FRUIT

to the best advantage, the following remarks of Mr. J. N. Stearns are worth quoting:

"I received in Chicago \$3 a keg for my pears the past season, a keg holding a trifle over one bushel. For the past two or three years, however, this market has been so flooded with almost worthless fruit that growers are beginning to be discouraged, and so we have the query: 'What shall we do with our fruit?'

"As one of the means of securing this trade, I sent small consignments of fruit to reliable dealers in small towns with my card, guaranteeing the fruit select, placed in each package. I find plenty of consumers who prefer to purchase of the producer at an advanced price, expecting of course to get what they pay for. It should be remembered that fair treatment will hold a customer.

"I have been engaged in fruit growing as a business for many years, and never with more satisfaction to myself than at the present time. I find the demand fully keeps pace with the increased production."

PINCHING BACK THE CUTHBERT CANES.

A writer in the *Country Gentleman* says:

"I have just finished trimming a row of Cuthbert raspberry bushes which, partly at Mr. C. Mill's suggestion last year, I left untouched until now. There is a decided contrast in appearance between it and the rows pruned according to the method I practice, namely, pinching the new canes before they reach three feet in height, and shortening

the laterals to nine or ten inches when clearing out the old wood, which is done as soon as it is convenient after the berries have been picked. The Autumn-trimmed canes resemble bushes with six or seven short, well-seasoned branches of the size of a lead pencil; the Spring-pruned ones are simply bare poles. I have counted the buds on half a dozen canes of each kind of pruning, and the bushy ones average sixty-three buds, or five to seven laterals to a cane, while those without laterals average eighteen. With the exception of just the tips of a few late-growing, unpinched laterals, no injury was done by frost, and as to winter-killing generally I do not think either way of pruning has an advantage, certainly not in this section. The canes on which the buds were counted are marked with tags, and I shall weigh or measure the fruit on each to satisfy myself which plan is best. Pinching the canes when young I think has a tendency to produce laterals at the head, making the bushes top-heavy when loaded with fruit, and consequently more liable to be blown or beaten down by severe storms, as was the case on July 10th last year; but where properly supported or fastened to a wire the berries are out of danger of being covered with dirt or grit during heavy rains.

"Each succeeding year that I grow the Cuthbert only increases my liking for it, and did it ripen ten or twelve days earlier I should consider it the most reliable and profitable red raspberry grown."

HOW TO MAKE THE ORCHARD PAY.

Dr. Hoskins writes in *Vick's Monthly* as follows:

"I have never yet seen an orchard too rich for profit, or one upon which the last load of manure did not pay the most profit. An orchard of the Williams' Favorite Apple in the vicinity of Boston is kept 'as rich as

a barnyard.' The fruit is double what might be called the normal size of the variety; every apple is handled like an egg, and is got in the market at just its point of perfection. This orchard, though small, is very profitable. The only orchard to rival this that I have seen is in the

City of Montreal, where some seven years ago the fruit of thirty-six trees of Fameuse was sold, ungathered, that season for \$800. They were all very large and perfectly healthy trees which had, all themselves, almost an acre of rich land."

FLORICULTURAL.

Pruning Roses.

The low bush or dwarf form is the best on all accounts for our so-called hardy Roses. The shoots that grew the previous year should be cut back in early spring to six inches or a foot from the ground. From these stems that are left will be new shoots which will bear the present year's bloom. In all cases the shoots that flower start from the wood that grew last year, and the object of pruning is to keep this new growth down close to the ground, and to regulate the amount of bloom by the quantity of last year's growth that is allowed to remain. In spite of the best of pruning the tendency of the plant is to make its new wood higher up each year, but the skilful pruner will attend to this, and not allow his plant to get up too far; a shoot sometimes starts voluntarily, or if not, it can be forced out low down, and advantage is taken of it to renew the whole plant, cutting away all the older growth above it. Thus, with a little care, the Rose bushes can be kept low, and in this form they are easily sheltered in winter, easily syringed, and their flowers are produced where they are best displayed. The yearly care required for a dozen Rose plants in the garden need not exceed twelve hours—an hour apiece. These remarks about pruning

apply to the most popular kinds of Roses, those commonly cultivated, the Hybrid Perpetuals and Mosses. It would not do to prune so closely the hardy Yellow Roses and the climbing Prairie Roses. But the general principle of shortening in the growth of the previous year applies the same to these. The little Polyantha Roses, also require to be well cut back, every spring.—*Vick's Magazine.*

That Garden Long Ago.

I REMEMBER, I remember
A garden, long ago;
'Tis not laid out in modern style,
In curious bed and row,
And only sweet, old-fashioned flowers
Grow freely, gay there,
And make a mass of glorious bloom,
And perfume all the air.

Along the narrow gravel path
The violet Iris grows,
And on each side a Snowball bush
And royal Damask Rose;
While Hollyhocks, and Four O'Clocks,
And Pinks, and Poppies glow
In every nook and corner
Of that garden long ago.

I remember, I remember
The branching Lilac tree,
Its fragrant purple blossoms
So oft in dreams I see!
Once more I stand in wonder
To see the primrose blow;
Ah, these are only mem'ries
Of that garden long ago.

—F. A. REYNOLDS.



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.

THE PLANT DISTRIBUTION. — Owing to the very rapid advance of vegetation this Spring, it was found impossible to fill the last orders received with any prospect of giving satisfaction. We therefore ask those who have not received their plants this Spring to have the kindness to wait until next Fall for them. The same list will be continued for the Summer, so that subscribers sending in their names may still select from it.

THE CRANDALL CURRANT.—We wish it to be plainly understood by our readers that we do not endorse anything that has been said in these pages concerning this currant, and that the writers are alone responsible for the statements made. The Crandall is quite a new thing, and as in the case of all novelties we desire as quickly as possible to test it on our own grounds, and to receive the testimony of planters from all quarters. Our object is to defend the interests of the growers of fruit, and not to boom any nursery stock. Now while Mr. Summey's experience with this currant seems to have been favorable, the experience of some horticulturists at Rochester, expressed to us personally, is adverse, to the

effect that it is a poor bearer, and that its peculiar odor is serious fault. We await further testimony with interest.

THE NEWTOWN PIPPIN. — An English correspondent of the *Garden and Forest* writes in high praise of the Newtown Pippin, an apple which we well know brings the highest price in the English market, sometimes selling for as much as \$7 per barrel. He says that in point of flavor he considers it the best apple in the world, and wonders that so little is said of it in our journals, and that we do not value it more highly than we do. He does not know of a single apple in either France or England which can compare with it in high flavor and lasting quality.

Now, as applegrowers, we certainly do wish to plant and grow only the very best kinds, and we know that this apple stands at the head of all apples, but we have also long ago found that it is a failure in the apple regions of Ontario and New York on account of the apple spot (*Fusicladium*), to which it is particularly subject.

If, however, the use of hyposulphite of soda or of copper solutions should

prove reliable as remedies for this dreaded plague of our apple orchards, we may yet grow the Green Newtown Pippin as our best Winter apple, the Fall Pippin as our best fall Apple and the Early Harvest as our best summer apple.

SCHOOL GROUNDS is the subject of the editorial in a recent number of the *Garden and Forest*, in which the editor commends Mr. Chase's suggestion that prizes be offered for the best kept and most tastefully embellished school grounds. Would it not be even better if the Government would give a special grant to every school for excellence in this way, the amount to be based upon the approximation to some high standard of excellence which should be designed anew every year by an expert, and distributed among the trustees or teachers of each section. One very important feature in planting school grounds is the educational; they should teach not only the proper disposal of walks and lawns, and flower beds among trees and shrubbery, but also some knowledge of our native trees themselves, and with this in view it is a mistake to plant too many of a kind. We think that each returning Arbor Day it should be the rule that no tree be planted which is a duplicate of any already growing on the school grounds, and thus, with a proper system of labeling, our school grounds would soon become a place where our children would become familiar with the characteristics of our many varieties of forest trees almost without any mental effort.

RURAL NEW YORKER No. 2 POTATO has been tested at the Michigan Agricultural College, and is thus described:—

In form, nearly as broad as long and flattened. Skin, white; eyes, few and inconspicuous. Generally very smooth and regular, although an occasional prong manifests itself. Flesh, very white and mealy when

cooked. This potato is quite productive and is an extremely valuable variety. Had it been grown under better conditions it might have headed the list. Well worth planting.

THE PURPLE LEAVED BEECH.—The *Garden and Forest* advises grouping this tree with beeches of the normal hue, or failing in this, with the Horse Chestnut, or the Scarlet Maple. Grouped with the White Pine or Norway Spruce, its effect would be ruined. As a general rule, however, it is better planted as a single lawn tree, where it attracts much attention on account of its peculiar color and beautiful symmetrical form.

OCEAN RATES FOR APPLES.—Mr. George Thom, of the Beaver Line, sends us a sailing card, and quotes the rates for apples to Liverpool at two shillings and sixpence, or about 60 cents.

The Woodpecker.

MR. NICOL'S article on the Woodpecker, page 95, calls forth the following comments from the *Orillia Packet*:—

How mortifying—after your little friend has flitted away on his kindly errand—to take up the April number of the *CANADIAN HORTICULTURIST* to find all your pretty theories knocked into a cocked-hat. Your favorite, with the red top-knot, is also a sap-sucker; and while he has been gammoning you with the idea that he has been catching insects, he has, in reality, been boring holes and sucking the sap—nay, the very life—out of your white birches; every hole he makes being, so to speak, “a nail in its coffin.” This places you on “the horns of a dilemma,” and the notion of a full grown man or woman being put into such a degrading position by a six-inch-long woodpecker, or sap-sucker, seems absurd, but shows what mites we are with all our swag-gering. You can't “eat your cake

and have it"; that is to say, you can't let your woodpecker eat your white birches and preserve him and them! *Happy thought*—blaze away at him with blank cartridge and keep him on your neighbor's lots, so as to be able to admire him over the fence! Not a bit of good, my dear Madam or Sir. After fifty shots or so he will begin to enjoy the fun; will bring over his whole family, and will encamp on your premises for the season. Several sleepless nights of thought will make you decide to shoot him, using fine shot so as not to injure the bark of the tree; but when you have killed him you cannot—as a self-elected member of the Audubon Society—wear him on your hat as an ornament. If however—waiving all considerations—you determine on so doing, you will be perpetually haunted by a fear that he might resuscitate himself and peck a little hole in your head to see what is inside. Supposing that he did and found sap instead of brains; where on earth could you "hide your diminished head?" and Echo answers—where?"

Peach Yellows.

Now that this mysterious disease is being made a study by so many practical and scientific horticulturists, we hope that some solution will be forthcoming, and an effective remedy discovered. We have already referred to Prof. Erwin Smith's elaborate preliminary Report, which shows clearly the symptoms of the disease, and the history of its distribution, but nothing definite concerning its nature; and also to the theory held by several cultivators in Massachusetts that it is a result of true starvation, for want of a sufficient supply of potash, and that by liberal applications of this substance the tree can be saved. Now we have another theory, this time from Virginia, by Mr. W. H. Massey, who

says he believes the Yellows is caused by the black aphides upon the roots. These, he claims, destroy the small, hair like appendages of the roots, and thus interfere with the absorption of a sufficient amount of those mineral matters upon which the perfection of the assimilative substance in the foliage depends, and a yellowish, sickly color is the result. He claims that of a large number of affected trees examined, he has never found one which was not covered by millions of black aphides destroying every young and tender rootlet.

Let our peach growers give this matter their attention and report the result.

Canning Fruit.

As the season for Fruit Canning is again at hand, the ladies who read this journal may be interested in the following table from an old paper:—

FRUIT.	TIME FOR BOILING	SUGAR TO THE QUART OF FRUIT.
Cherries	5 min.	6 ounces.
Raspberries	6 "	4 "
Blackberries	6 "	6 "
Strawberries	8 "	8 "
Plums	10 "	10 "
Whortleberries	5 "	8 "
Pieplant	10 "	8 "
Sour pears (whole)	30 "	4 "
Bartl't " (halves)	20 "	6 "
Peaches (halves)	8 "	4 "
" (whole)	15 "	4 "
Pineapples (sliced)	15 "	6 "
Crab apples	25 "	8 "
Sour apples	10 "	5 "
Ripe currants	6 "	8 "
Wild grapes	10 "	8 "
Gooseberries	8 "	8 "
Quince (sliced)	15 "	10 "
Tomatoes	20 "	* No sugar.

*But one-half teaspoonful of salt.

The Plum Curello.

EXPERIMENTS in progress at Champaign, Ill., go to show that this insect feeds upon the plum leaf, both by eating and sucking. It has little choice between the plum itself and the plum leaf, and also feeds upon the blossom and the leaf of the peach

tree. The important point to be noticed in all this is that the curculio begins its work long before it stings the young fruit, and therefore the wisdom of the advice which we have frequently tried to impress upon our readers to spray the plum trees very early with Paris green, even before the blossoms are fully expanded.

It has also been found that spraying the peach with Paris green of

the ordinary strength will kill the peach leaves, but that an application of the poison in a more dilute form is sufficient to destroy the curculio. In an experiment tried in the early part of May of the present year, out of a cheque lot of twelve curculios fed on peach leaves without poison, only one died; but out of twelve fed upon leaves sprayed with Paris green, all died in ten days.

QUESTION DRAWER

The Saunders Plum.

43.—There has been a person around here selling plum trees, which he calls "The Saunders," for the moderate price of \$2. Please give the merits and demerits of this new claimant for public favor through that very valuable paper, "THE HORTICULTURIST," the exposé of humbug and fraud.—R. TROTTER, *Owen Sound*.

The Saunders Plum is no fraud, but was brought before the notice of the Fruit Growers' Association of Ontario at their Autumn meeting in Barrie, in the year 1884, and was named after the then President, Mr. Wm. Saunders, now director of the Central Experimental Farm. It was sent in by Mr. John Arris, of Belleville, as a seedling which had attracted no small attention among fruit growers in that vicinity. It was then described as follows:—Tree, a good spreading grower; foliage, of a bright green color, holds on well to the end of the season; a very valuable point. It bears an immense crop every year, the limbs this year (1884) were just bending under the weight of fruit. The fruit is above medium in size; form, longish oval with a distinct suture; stem, one half an inch long; color, bright yellow with a slight blush where exposed to the sun; flesh, melting, sweet and good; free stone; flesh, yellow. This plum, on account of its hardness, productive habit, good

growth and freedom from black knot, will stand in the front rank as one of the best market plums. It is one of the first to ripen, being several days earlier than the Green Gage.

Of course the price is extravagantly high, and is asked only on the ground that the variety is comparatively new, and difficult to buy except from an agent. Probably the nursery represented by the agent has secured a monopoly of the stock, and so controls the market for a time. We suppose that no one of our readers would pay any such price for a plum tree, except as a luxury; trees for a commercial orchard can usually be purchased direct from the nursery much cheaper than through an agent.

Apple Evaporator.

44.—Is there a sheet iron apple drier made in Canada to set on the stove for family use?—THOS. RICKARD, *Alvinston*.

We do not at present know of any such dryer made in Canada, but R. Ferris, of Essex Co., N. Y., describes a Home Made Evaporator in the *Farm and Home*, which might suit the requirements of our correspondent. He describes it thus:—

A HOME-MADE EVAPORATOR.

I secured a box two feet long, 18 inches deep and two feet high. The

cover was missing, so I inverted it, making the bottom answer for a top. I removed one side, cleating the pieces together near each end and put leather hinges on, fastening it to the former bottom, but now the top of the concern. At the loose corners I nailed on an inch-square strip to hold them firm. Inside, on each of the ends I nailed half-inch strips, two inches apart, as slides for the trays to run upon. The trays were made of strips of half inch stuff, one

the trays, the lowest first. As the second tray is prepared, the first one is moved up and the new one put in next to the fire, until the evaporator is full. The evaporator is placed on four pieces of brick, stood edge-wise on the stove at the corners of the machine. The apples dry off the first evening to some extent, and when the work is done up the following day the evaporator may be lifted on again, and by evening the fruit is ready to put away.

My method of cutting apples is to peel, and take off two slices from each end, then core, and slice the remainder to a thickness of one-fourth of an inch. The trays should be made one or two inches narrower than the box and arranged so that the hot air is driven from front to rear and back again as in the sketch, which gives a sectional view of the evaporator. The door is hung at the top as shown, but should be kept closed except when putting in or removing trays.

A Cook Stove Dryer is shown in fig. 48, which is sold for \$7, and only weighs twenty-five pounds, but this is made in Waynesboro, Pa. For those farmers who have large orchards and wish to go largely into the evaporating of fruit for market, we may mention that we are just in receipt of a catalogue of Fruit Evaporators, from Cincinnati, Ohio. They are made in six sizes and impress us favorably. No. 3, fig. 49, weighs 600 pounds, and its capacity is 15 to 20 bushels of apples per day; it has a furnace with grate for coal, and will also burn cordwood. It is catalogued at \$100.

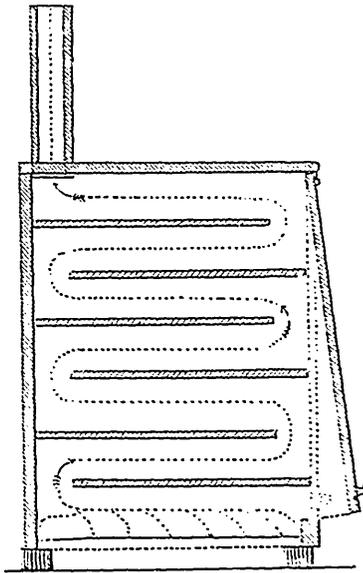


Fig. 47.

inch wide, halved in at the corners and braced by diagonal wires. They are covered with white mosquito-netting.

At the top and side furthest from the door hinges, I removed a piece of the top two inches wide. I then made a chimney two inches wide, two feet long and a foot high, which I placed over the opening and nailed fast. After supper, when the evenings are long, we all set to work at the apples, and putting a few pieces of wood in the stove, begin filling

Gooseberry Maggot.

45. Is there any remedy for the gooseberry maggot? Some insect lays an egg in the berry, when about two-thirds grown, causing the berries to fall to the extent of one-third or more of the crop. The Downing is most affected. I have carefully watched for something on this pest, in vain. The worm

when full-grown is about a quarter of an inch long?—W.E.P.

Mr. Saunders, in his work on "Insects Injurious to Fruits," describes two which injure the fruit of the gooseberry, viz:—The Gooseberry Fruit Worm, the eggs of which are deposited by the parent moth on the young gooseberries soon after they are set, and the young worm which grows to a length of about three-quarters of

would help to keep it in subjection.

We would suggest spraying with Paris green and water, while the fruit is very small, and believe it would be the simplest and easiest mode of ridding the bushes of the pest. We should be glad to hear the result of such an experiment.

Forms of Potash.

46. You will oblige if in an early number

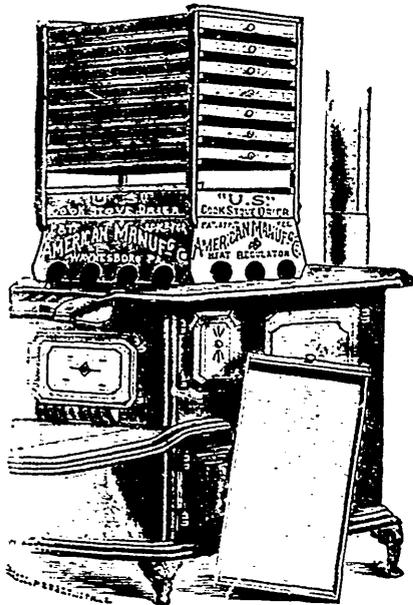


FIG. 48.

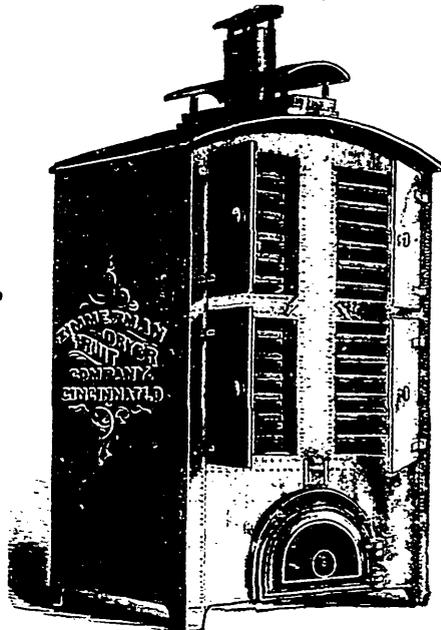


FIG. 49.

an inch, burrows into the young fruit. The latter soon indicates its presence, either by discoloration or by premature ripening. The other is the Gooseberry Midge, a two-winged fly about one-tenth of an inch long, which deposits its tiny eggs within the young gooseberry. These develop into very small yellow larvae, resembling the wheat midge.

Without seeing a specimen we cannot determine what insect our correspondent refers to; but, in any case, Mr. Saunders' plan of gathering and burning of the premature fruit

of the CANADIAN HORTICULTURIST you will give an account of the different forms of potash, similar to that you gave on nitrate of soda. I wish to get at the best form to apply to the soil, where wood ashes cannot be got. Prof. F. Panton, in last year's Report of Fruit Growers' Association, gives what he says are two good mixtures for fertilizers, but he takes wood ashes as the foundation. Now, it is very hard to get good wood ashes in the town where most everybody burns coal. Any information as to the next best thing will oblige, I believe, many others as well as W.M., Oshawa.

Reply by Prof. J. H. Panton, O.A.C., Guelph, Ont.

Potash is employed as a manure in the form of wood ashes; the ashes

of cotton-seed hulls; the *green sand* of New Jersey; *sulphate of potash*; *chloride of potassium*; and as "*pot-ashes*," usually a mixture of hydrate of potash and carbonate of potash.

A chloride of potassium, known as "*muriate of potash*" has been largely used as a fertilizer, so also sulphate. The latter has been preferred; but on the whole the results are not so successful as where wood ashes can be secured. Next them may be ranked the so-called "*Potashes*," a mixture of hydrate of potash and carbonate of potash. This fertilizer is likely obtainable where fertilizers are sold. It is common among American dealers, and sold in considerable quantities.

The Russian Mulberry.

47 I AM much pleased with the improved appearance and management of the CANADIAN HORTICULTURIST. I hope you will meet with corresponding encouragement. Had two fine Russian Mulberries last year just come into bearing. There were a few small berries on each but scarcely worth the name, although I had believed the one was staminate and the other pistillate. They were distant ninety-six feet from each other but one half of each tree intercepted from the other by the interference of a corner of the house. Was obliged to cut down what I believed to be the pistillate. Would it do to graft the staminate one with Downing mulberry? Would it produce fruit?—A SUBSCRIBER.

Undoubtedly the Downing mulberry, where it succeeds, is far superior to the Russian varieties which had only their hardiness and vigorous habit to commend them. You might possibly succeed with grafting the Downing upon the Russian variety, but it is not very probable as the tree bleeds badly when cut. You might succeed with budding upon some of the young wood as soon in Summer as you can get well-developed buds.

Cuttings about two feet long, planted in Spring, in a moist, shady spot, are likely to grow, if taken from matured wood of the previous Summer's growth, and a small piece of

two-year-old wood attached. Only one or two buds should appear above ground.

Hydrangea Culture.

48. I WILL be thankful for a few hints on Hydrangea culture. Mine bud, but not one quarter of the buds mature?—MRS. WM. COOK.

Hydrangeas are of easy culture, and you should have no trouble in getting abundance of bloom. One very important point is to give them plenty of water when growing; and perhaps this was where you failed. Another is plenty of air and sunshine, and a third, is rich soil, such as might be prepared by mixing equal parts of loam and decayed cow manure.

Tuberous Rooted Begonia.

49. DOES the tuberous rooted Begonia require any special treatment.—JOHN S. WARREN, *Orillia*.

These are of easy culture. They require plenty of water during time of growth, and good rich soil in pots, similar to that recommended above for the Hydrangeas. When the season's growth is over, water should be gradually withheld, until the tubers are ready to be taken up, and packed away in dry sand until needed again.

To Drive Away Black Ants.

50. CAN you tell us of anything that will effectually destroy black ant hills in the lawn. We have tried salt, lime, sulphur, coal oil, hellabore, and only succeeded in killing out patches of grass?—MRS. WM. COOK, *Carrille*.

A good many ways have been suggested of destroying the ants and stopping their work on the lawns. For destroying them in the nest, an application of boiling water is recommended; also a liberal dose of hot alum water, made in proportion of one pound of common alum to three gallons of rain water. Bottles of sweetened water sunk in the ground near the hills make good ant traps.

They may also be poisoned by spreading about molasses, poisoned with Paris green, or cyanide of potassium.

For trapping the ants, a sponge moistened with sweetened water may be used, and when black with ants throw it into boiling water. Fresh bones may be used in the same way.

A Pear Tree Beetle.

51. For the past three years our pear trees have been infested with a lead-greyish-brown bug about the time the fruit begins to ripen. Can you tell us a remedy for them?—Mrs. Wm. Cook.

It would be impossible to identify an insect from such a brief description. Can you not send in a specimen this Summer?

The Indian *Cetonia* is a beetle a little more than half an inch in length, with a broad body. The second brood appears in September, and burrows deeply into the ripe fruits and inducing decay. For it, the only remedy suggested is "*Catch 'em and Kill 'em.*"

Duty on Garden Seeds.

(SEE QUESTION 35.)

With reference to this, Mr. G. F. Fawcett, Customs Department, Ottawa, gives us the following list of transfers to the free list.

Green fruits, and edible berries in their natural condition, viz:—Bananas, Olives, Pineapples, Plantains, Tamarinds, Apples, Blackberries, Gooseberries, Raspberries, Strawberries, Cherries, Cranberries, Peaches, Plums, Quinces, Apricots, Lichi-fruit, Mangoes and Melons, Pomagranates, Citrons, Tomatoes.

Seeds, viz:—Anise, Anise-Star, Canary, Caraway, Clover-grass and Flowers, Cotton (crude), Cardamon (crude), Chia, Jute, Mustard, brown and white, Sugar-beet, Seeds of fruit trees and forest, (not edible,) Sesame, Sugar-cane, Anise-Star, Cummin and Tonquin Bean.

Plants, Trees and Shrubs, viz:—Apple, Peach, Pear, Plum, Cherry, Quince and all other fruit trees, and the budded stock of the same: Gooseberry, Raspberry, Blackberry, Currant and Rose bushes, Grape Vines, Strawberry Vines; Shade, Lawn and Ornamental Trees, Shrubs and Plants.

London Purple.

52. I notice some advise London purple as safer to use and quite as effectual as Paris green. Which do you advise?—A. RONALD. *Minesing.*

So far as the safety is concerned, we see little advantage in the London purple, for it, as well as Paris green, is a deadly poison.

Both contain arsenic, and the greatest caution should always be exercised in handling either one. London purple mixes with water better than Paris green, indeed, the latter is not soluble in water, and is only held in suspension by frequent stirring, and in this respect the former is preferable. In strength, however, the Paris green is the more reliable, because it is a chemical compound of constant strength, being an arseniate of copper, and containing about 60 per cent. of arsenious acid. London purple on the contrary is an arseniate of lime, a refuse product from the manufacture of aniline dyes, and varies in relative proportions of arsenic and lime which it contains. Generally speaking it contains about 43 per cent. of arsenious acid and about 21 per cent. of lime. Great care should be taken, however, to secure a pure article of Paris green, as there is a great deal of adulteration practised by vendors. As to price of Paris green, a pure article should be got for 25 cents per pound. Mr. Fisher, of Freeman, writes he can buy it in Hamilton, in 50 pound lots, for 18 cents per pound, guaranteed pure.

OPEN LETTERS

A Letter from Russia.

(Original in German.)

To the Editor of THE CANADIAN HORTICULTURIST :

Sir,—Latterly, America has made so much progress in fruit growing that soon the centre of that important culture will not be in Europe, but in America, as it is already in some branches, e.g., the cultivation of berries. For this reason I make an effort to know the prominent growers in America.

I write you because your journal holds the first place among European growers, and your position in North America interests us very much.

I offer to exchange stock with you, not that I need them for myself or for sale, but because I and some of my friends have experimental farms in different parts of Russia for testing the hardness of various fruits besides the apple.

For this purpose we need trees correctly named, and wish to get these not second-hand, but direct, for which we will pay either cash or Russian fruit trees. We wish to deal with only one or two persons in America, and as they may not have everything which we require, it would be necessary that the lack be supplied by them from nurseries or from other fruit growers. I require:

1. Twelve kinds of the best American pear (the new varieties, Idaho, Leconte, etc., not excepted); 100 trees of each kind.
2. Twelve varieties of the best American peach; about twelve trees of each kind.
3. Six varieties of the best American plum; twelve trees of each kind.
4. Six varieties (my choice) of the American blackberry.
5. All the American raspberry; twelve trees of each kind.
6. Some American gooseberry.

The efforts of Dr. Budd, of his associates, and of those interested in the Russian apple in America, are not without influence in Russia. This has directed greater attention to the native fruit. The 200 kinds of apples which until then were considered the original varieties, are well known and increased. Well known growers have explained to us, apart from local naming, the difference in variety. There is better order in this branch than at the time when Dr. Budd was here and advised only by Dr. Regel in St. Petersburg, a distinguished botanist, but mediocre grower. Many better varieties of apples have been found which are not known in America, and also some good winter pears; also the "Mutter baume" of the same variety, which stood the unusually severe winter of '66-'67. These kinds are only 6-8.

In exchange I offer the following:

1. Six varieties of the best winter apples; about 100 or more trees of each kind. Among these is the Stem Antonooka—not that tree commonly known in America as Antonooka, which is also wrongly called Queen of the Steppes, because this only in northern climates will bear good fruit, and not on the steppes.

The Stem, or Ruddy Antonooka, is more hardy and better flavored than the green.

2. Twelve of the best new Russian apple varieties, about 100 or more of each kind. Among these is also the beautiful new orange-hued Sommerkalivre aus Okuo, the famed "Lindenappel," which ripens early.

3. One hundred trees of a good "bessarabischen" Russian apple, of which I export largely; large (similar to the Belle de Poutois des Remy), hardy, unusually well flavored and juicy. The tree grows very large and lives over a hundred years.

4. One hundred or 200 trees of the hardest and finest apple of Southern Russia—Linop or Linap, unsurpassed for shipping. Before there were any railways in Russia the Linap was the only apple which we could send overland by way of Archangel. The fruit does not rot and keeps for a couple of years. We thought that this tree, which is beautifully cone-shaped, would be well received. This tree in Central Russia has stood 28^o well. It bears every year.

5. Two of the best "Kaukasischen" apples.
6. Two new fine winter pears found in Litan, etc.

When we fully understand one another and enter into negotiations, I can send you each year tested and really good specimens which are suitable for America. Of these we have still a large stock. If you are disposed to accept my offer, answer, if possible, at once (as we must understand one another fully), how and when I shall send the trees, and through whom I'll receive the American stock. As it takes six weeks for a letter to reach America, we can exchange but few letters before Autumn. In case the editor or one of the subscribers is not able to accept my offer, I beg you to hand this letter to one of the large nursery firms in the Northern States or in Canada. I would prefer the latter. Now and again I can send to your estimable journal articles on fruit and vegetable novelties (in the latter we have splendid specimens), but you must translate and arrange these in English. This I know only in theory.

Continue to send me the paper which you have so kindly sent. I do not subscribe for this year only. Could you send me the whole issue of 1888? You will tell me to whom I ought to send the money. If you

wish I can pay it to Stadelmayer, a bookseller in Odessa, who has business connection with a German book firm in New York, H. Herger & Co. In any case send me THE CANADIAN HORTICULTURIST. You may make extracts from my letter for the HORTICULTURIST if you think they would be of interest to your readers.—T. NIEMETZ, *Kaiser Russ. Staatsrath.*

Address: Taroslaw Niemetz, Staatsrath, Odessa, Tamskaiia Str. Realschule.

Fruits in Simcoe County.

SIR,—The past Winter has been the mildest and most favorable for all kinds of fruit trees that we have had for many years. Apple trees never came through a Winter in better shape, and plums and pears are also in good condition. The same may be said of the small fruits. Strawberries wintered well without any protection except the snow, which however, laid very evenly on the ground all Winter. And the Cuthbert raspberries are alive to the very tips, a rare thing for them, for they generally kill back to the snow line. The weather of last year had something to do with this, for the drouth of last Summer and the early and severe frosts of October stopped the growth and caused the new wood to mature and ripen well before Winter set in. We have every indication at this time, (May 16th,) of a fair crop of fruit. But there is yet a danger of frost, as this spring is at least three weeks earlier than usual. The blossoms are as far advanced now as they were last year on the first week of June. Some varieties of apples which have a tendency to overbear one year and skip the next, such as Talman Sweets, will not bear much this year. But regular bearers like the Golden Russet are showing an abundance of bloom. I believe that if people would plant more Russets and less of other kinds there would be no dissatisfaction as to the profits of the orchard. I consider it one of our hardiest trees here, and a long lived and regular bearer, and one that will always command a good price; with careful handling it can be kept till May or June. I believe it is the large quantities of inferior fruit that is grown that glut the market and keeps prices down, and I don't believe there is any danger of our growing too much first-class fruit. I would like to impress upon those who live in the colder parts of Ontario the importance of planting seed and raising seedlings, on which to top-graft the varieties of fruit that are too tender to stand the climate otherwise.

I know by experience that this is the most certain way to succeed in growing the more tender varieties of plums and apples. For instance the King, and the Greening will not stand here as a nursery tree, but when top-grafted on our native seedlings

they grow well and produce even finer specimens of fruit than when grown farther South as nursery trees. The same may be said of plums. I have produced the finest samples in this way. Every farmer's son should learn to graft and have the necessary tools and a supply of wax on hand every Spring. Thus they will become interested in this work and have a keen relish for it when they see what wonderful results they can achieve.—G. C. CASTON, *Craighurst.*

On the Destruction of Moths.

TAKING a stroll on a fine Summer's evening along one of our principal streets to view the electric lights, which were recently erected, my attention was attracted to a large swarm of moths gyrating around the brilliant light, similar to that observed when a swarm of honey-bees, when emerging from the parent hive, previous to settling down. I was informed that the glass globes were almost filled with them every morning, frequently obscuring the light. No doubt those living in the vicinity having fruit trees, will enjoy an immunity from wormy fruit, which, unfortunately, was rather abundant in the neighborhood of late. On a smaller scale, but equally effective, is the burning of lamps, inserted in a basin of water. Moths are generally of nocturnal habits, the mischief is usually done during the first part of the night. They are, however, easily attracted by a bright light; even an open flame is attended with good results, many will incautiously drop into it.

I have found very satisfactory results follow by trapping insects of all kinds that are of an injurious character, by suspending wide-mouthed bottles, such as those used for pickles, half-filled with a mixture of water and vinegar, from the lower limbs. In a short time you will be astonished at the number thus destroyed.—SIMON ROY, *Berlin.*

A Mistake.

SIR,—It is with pleasure that I renew my subscription to the CANADIAN HORTICULTURIST, as it is the best dollar's worth I get in any way. I followed my trade in London as a cabinet and chair maker, every spare moment I was in the garden, so of course I had a good garden. My love for it made me come here where I could get cheap land. I have fifty acres, of which eight is cleared, twelve partially, and the balance rough bush, with no good lumber left. The land is good, compared with that about London, but it is full of thistles, and generally dirty, besides the fences were all worse than bad, so that to me it has been a very dear place. The cattle destroyed nearly everything I grew last year; for both cows and pigs run the road at large. The place would be dear to me rent free; indeed

six clean acres would be better, if well fenced. I have spent all my money, and earned nothing. I borrow the dollar I send.—SAMUEL PEDDLE, *Whitechurch, Ont*

Had our correspondent followed the advice of this journal, he would not have left a good trade to engage in fruit culture. To succeed in any line one must have a thorough knowledge of it, and it would be a marvel if any person in these days of close competition, could make money in fruit culture without any previous training in the business. Would our friend advise a farmer to leave his farm and try to make a fortune at cabinet making? No more do we think that a tradesman should leave his trade, and expect to make money in fruit gardening without either capital, or knowledge of the business.—EDITOR.

Digging Up Strawberry Beds.

I OBSERVE that it is generally recommended to dig up strawberry plants after they are one or two years old. I have a strawberry bed 16 years old, and they bear just as well now as ever they did.—W. W. R., *Toronto, April, 1889.*

Fruit in Lanark Co.

SIR,—Pressure of business has prevented me from acknowledging my premium "Winter St. Lawrence" apple tree, and the copy of the Ont. F. G. Ass'n Report for 1888, both of which I fully appreciate. The little tree is in full leaf and growing nicely. Small fruits, viz., strawberries, gooseberries, and currants promise great abundance of fruit

this year. Some of my bushes are pictures of plenty, being bent to the ground already with their growing burden. Plums are a small crop; apples also, except Alexanders, which with me are fully loaded. Caterpillars are very numerous and they are attacking forest trees as well as fruit trees; this pest is becoming a serious one and will be hard to keep in check if the race continues to increase as it has done during the last few years.

In this vicinity we have so far escaped late spring frost, and vegetation is very much advanced, in fact the growth has been quite phenomenal. The weather is at present wet and chilly, and there is still danger of a damaging frost, barring which there is likely to be plenty in the land.—W. H. WYLIE, *Carleton Place, May 28, 1889*

The Crandall Currant.

Your Postal at hand. Rather late to plant the Crandall, but we mail you a plant, well cut back, that may grow, also a twig of green fruit that will show something of its productiveness.

The cut of Crandall please keep. We may order it sent to some other paper sometime. The Crandall is now a wonder to behold, with its load of quarter-grown fruit bending the bushes to the ground.—FRANK FORD & SONS, *Ravenna, Ohio.*

[The branch of currants is certainly an object of great interest, being loaded heavily with fruit of a promising appearance. We have planted the bush in our testing grounds, and will report as soon as possible concerning its value for Canadians.—EDITOR.]

OUR FRUIT MARKETS.

Montreal.

Apples.—The season for old apples is now about over, with the dumping grounds full of their remains. May our dealers never see the like again. It will not be long before new apples in crates will make their appearance from the South. Bankers in the West, it is said, took a greater interest in the apple market last year than ever before in their lives. Their connection with it, however, will not contribute anything towards their dividends.

Strawberries.—Supplies from New York fair, with sales at 20c to 25c per quart.—*May 24, '89.*

Representatives for Montreal houses are already making arrangements down in Tennessee for securing the product of some of

the earliest orchards. It will therefore not be long before the first shipments of the new crop of apples are received.

Strawberries.—A new feature in the market was the arrival of Chicago berries at the beginning of the week, which sold down to 10c and 11c per quart by the case. Receipts of New York berries are larger, with sales at 12c to 15c per quart. Great damage is said to have been done Canadian strawberries, but dealers think the injury has been exaggerated.

Cherries.—California "black hearts" have met with fair enquiry, with sales at \$3.50 per box. The fruit is very fine and tempting.

Apricots.—The first lots of California fruit came to hand this week in very good con-

dition, and were picked up readily at \$5 per box.

Cabbages.—A car of Southern cabbages has just been received which sold at \$3.50 to \$4.50 per crate.

Onions.—The market is quiet and prices are somewhat easier, Bermudas being offered freely at \$1.50 per crate.

Potatoes.—There is a fair demand at the cheap prices ruling, which has helped to increase consumption. The sale of a carload was made a few days ago at 42c per bag, but the quality was very choice, and we quote car lots 35c to 42c as to quality and jobbing lots 45c to 60c.—*Trade Bulletin, May 31.*

OUR BOOK TABLE.

SEVENTH ANNUAL REPORT OF THE BOARD OF CONTROL OF THE NEW YORK AGRICULTURAL EXPERIMENT STATION, 1888.

The report of the HORTICULTURIST in this volume, contains some points of interest to us as fruit growers. One is the further trials of hyposulphite of soda for the apple scab, which go to prove that though not wholly effective in ridding the fruit of this fungus, it yet very much lessens the amount of the injury, and well repays the slight additional cost of adding it to the solution of Paris green when spraying for the codling moth. We notice that the proportion used in 1885 was one pound to ten gallons of water, and

in 1888 only one ounce, and that the latter was less effectual than the former.

THE JOURNAL OF MYCOLOGY, devoted to the study of Fungi, especially in their relation to plant diseases, from the United States Department of Agriculture.

FOURTEENTH ANNUAL REPORT OF THE ONTARIO AGRICULTURAL COLLEGE, 1888, from Mr. Jas. Mills, M.A., President of the Agricultural College, at Guelph.

NOTE SUR LA CULTURE DE LA VIGNE SOUS VERRE and other interesting French pamphlets, written by Monsieur Ch. Joly, Vice-President de la Société Nationale d'Horticulture, de France, from the author.