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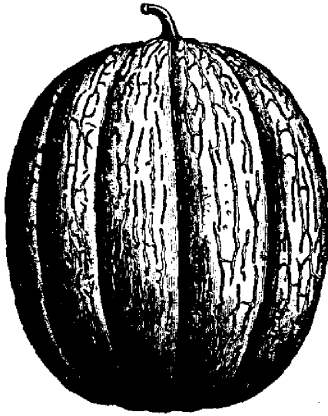
The CANADIAN HORTICULTURIST.

PUBLISHED BY THE
FRUIT GROWERS'

ASSOCIATION
of ONTARIO.



L. Woolverton, M.A., Editor, Grimsby, Ont.



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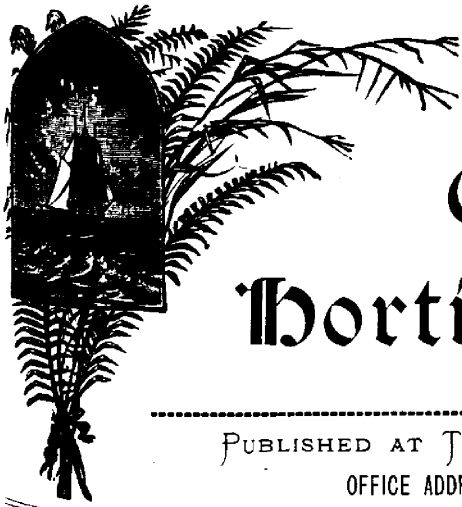
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The
Canadian
Horticulturist.

PUBLISHED AT TORONTO AND GRIMSBY, ONT.
OFFICE ADDRESS—GRIMSBY, ONT.

VOL. X.]

JUNE, 1887.

[No. 6.

Flowers.

LILIES.

The Lily fair, so richly drest
In jewelled robes bedecked with gold,
Still teaches in its royal vest
The same sweet lesson as of old.
Where Western streams like coursers run,
And Eastern vales in verdure lie,
It spreads its glories to the sun,
And lifts its chalice to the sky.
And gathered in from every land,
From valley, hill and mountain glen,
Its ranks in regal splendor stand,
And glorify the homes of men.
Its fragrance still from age to age,
Shall breathe to all the blessed line,
That stands on inspiration's page,
And bids us trust the POWER DIVINE.

Mrs. Perkins in THE MAYFLOWER.

PERHAPS no family of flowers has attracted so much admiration from old and young in all ages as the Liliaceae. No wonder that Mrs. Lincoln in her

introductory lectures to the Linnean system of Botany chose the Lily as her model flower; the parts are all so perfect and so easily distinguished. No wonder either that the inspired writers of old selected the white lily as a type of purity and excellence; or that the Great Teacher himself called the attention of over anxious humanity to the beauty of this flower, which, without toiling or spinning, was clothed by its Creator in array so beautiful that even a Solomon in his magnificent regal robes could not compare with it; an object lesson, teaching his hearers more implicit confidence in Divine Providence.

To this family belongs the Adder's-tongue of our woods so often miscalled Violet, the stately Yucca, the humble Lily-of-the-Valley, the Star-of-Bethlehem, and the Day-Lily: and beside, such natives, it also includes the Tulips the Crown Imperial, the Hyacinth and

the Tuberose. The Calla, though beautiful enough to be a member of this family is totally distinct, being a member of the Arum family, of which the Indian Turnip and the Skunk Cabbage are familiar examples.

Of the genus *Lilium*, we have two or three native species all valuable for our flower gardens and offered for sale by our Florists, but procurable in their native haunts by any lover of wild flowers, viz;—the Wild Orange Red Lily (*L. Philadelphicum*), the Wild Yellow Lily (*L. Canadense*), and the Turk's Cap Lily (*L. Superbum*).

Besides these, most florists offer for sale some forty or fifty varieties of cultivated species, and also numerous sub-varieties, all of great beauty and excellence. Among the Japan Lilies, the Gold-Banded, (*Lilium auratum*) shown to the left in our coloured plate,* has become exceedingly popular. H. T. Williams, editor of the Horticulturist (New York), 1869, p. 246, said of it:—"This species of Lily cannot fail to become one of our most popular flowers. Its magnificent size, great beauty, and, above all, its peerless fragrance, surpass all of the same species we have yet met. When the price can be brought down to 50c. instead of \$1.50 or \$2—the sales must be counted by hundreds of thousands, instead of, as now, by thousands only."

But, now that this has come to pass, and a dozen can be purchased at the former price of a single bulb, we fear that this variety is less sought than it should be, simply because it is no longer

a novelty. When will the day come in which we shall have learned to value both flowers and fruits, not upon the score of novelty, but wholly upon the ground of their absolute and intrinsic merits?

We leave the subject of the care and cultivation of the Lily to be treated in a future number by our esteemed contributor, Mr. Hermann Simmers.

POND LILIES DOMESTICATED.

At the New York State Experimental Station, says the *New England Farmer*, there is a barrel cut down to convenient size, and then set in a hole dug in the earth upon a corner of the lawn. The top of the barrel is just level with the surface of the lawn. It has about four inches of river mud in the bottom, in which were planted a few roots of the common white pond lily. The barrel was then filled with water and is kept full from a faucet in the aqueduct pipe, the water being turned on as often as necessary. The barrel has been a beautiful miniature pond of white lilies all through the season.

In the fall, after the weather gets cold, the barrel or tub is removed to the cellar, where it is protected from freezing, and where the roots of the lilies will be kept in conditions similar to what they would be surrounded with, in their natural state. There can be nothing more charming in the way of flowers on a lawn than a small pond of water lilies, blooming daily the whole summer through. Of course, the barrel must be set where teams and persons would not walk into it by day or night. If the tub is tight, the trouble of keeping it supplied with water will not be great on any lawn.—*Floral Instructor*.

* NOTE.—The other lilies represented in the front piece are *L. Lancifolium rubrum* and *L. Lancifolium album*.

NEW ROSES.

BY FREDERICK MITCHELL, INNERKIP, ONT.

As you invited me to give my opinions on the latest novelties in roses before the meeting of the Fruit Growers, held in February last in Chatham; and as I failed to attend that meeting, perhaps a few notes on the subject would not be out of place in the columns of our magazine.

This season has not been as prolific as usual in the production of much-lauded varieties. The rose that has created the greatest *furor* in the rose world, is a Tea, and is called

"THE BRIDE."

Mine has not yet bloomed, but I have seen it in bloom elsewhere. I do not like to say very much in favor of a rose of which I have had so short an acquaintance, but I certainly think that this rose has come to stay. It is white, and in the style of Catharine Mermet. I do not consider the buds or blooms to be quite equal in value to that fine old white Tea rose Niphetos, but is apparently far ahead of it in growth and vigour of plant. I will write again of this rose as soon as I have had more acquaintance with it, but from what I have already seen of it I have the best of hopes for its future.

SOUVENIR DE VICTOR HUGO

is another new Tea that some of nurserymen are trying to boom this spring. I have it in bloom at the present time. I have not yet seen anything about it to specially commend it. In colour it is a blending of cream and pink, nearly of the same shade as that best of all roses for the amateur, Marie Van Houtte. Although it may turn out to be a good rose, I do not see anything sufficiently marked about it to make it an acquisition, or even to save it from the general oblivion into which so many new roses sink after the first year or two of their existence.

PERLE D'OR

is a new Polyantha for which great things are claimed. I have it in bloom. It is not nearly such a rich unique colour as it is claimed to be. It is nearly of a salmon colour when first opening, but fades very quickly to a shabby-looking dead white. It is much too large for a Polyantha, and has none of the beautiful irregularity in shape found in Pagnerette and others of this class. The best thing about it is its rich Tea perfume.

Since I wrote in the September number of *The Horticulturist* there has been but little opportunity to study the merits of out-door roses. As to the Hybrid Tea,

WILLIAM FRANCIS BENNETT,

of which I wrote somewhat disparagingly, I have nothing to take back, but still hold that for the amateur at least it is not even a third-rate rose. I notice that some of the leading American nurserymen who last year boomed it as perhaps rose was never boomed before, have this year dropped it from their catalogue altogether. I have nothing to add to my remarks on other new roses mentioned in the article referred to, but will take them up again as soon as they again commence to bloom.

WATER AND BOG PLANTS.

MR. W. A. MANDA, of Cambridge Botanic Gardens, is writing a series of articles to the *American Garden*, on "Our Native Plants." He gives a list of bog plants which may be made very useful to the cultivator for beautifying streams, or unsightly marshy places, or for which an artificial place might be prepared in the lowest part of the garden.

These plants may be propagated from the seed or by root division. A good way to sow the seed of

WATER-LILIES

in a pond, is to put the seeds in a small ball of clay, and then drop them into the water. One and a-half feet of water in summer, or less, is sufficient to produce the best results, while deeper water is an excellent protection from frost in winter.



The beautiful large Water Lily (*Nymphaea Odorata*), so common in ponds and inlets of Lake Ontario, is certainly the most charming of our native water plants. It grows in great abundance near the Grimsby Park, and many a boating excursion is made by parties of young men and maidens to the pond where these lovely water nymphs abound. The rosea, or rose-coloured variety, we have not noticed in Canada, nor the species *N. tuberosa* which Mr. Manda describes as having "very large leaves, usually standing straight above the water, while the flowers, which often measure nine inches in diameter, are snow white." Perhaps some of our readers may have been more observant.

The Yellow Water Lily is quite common, especially *Nuphar advena*, but is not so captivating. Mr. Manda speaks of several other varieties of the Yellow Water Lily, viz.: *N. luteum*, which has floating leaves and yellow flowers; *N. sagittifolium*, which has arrow-shaped leaves and flowers of bright yellow;

and the western *N. polysepalum*, which has the largest flowers of this genus. We should be pleased to hear whether any of these, except the first, are known in Canada.

The *Caltha palustris*, or Marsh Marigold, which Mr. Manda commends as ornamental with its large, numerous golden flowers is quite common here. Just now, on the 12th of May, it is in its full glory in our swamps. The other day, when out for a ramble in the woods, we came suddenly upon a little stream dotted with these bold, showy plants. The children screamed with delight at the discovery, and as a memorial of the trip, one of them now decorates a shady spot in the garden, with its bright yellow goblets.

MONEY IN FLOWERS.

THE following from the pen of an intimate friend (Mr. Goldie), himself a great florist, goes to prove that there is in money in flowers. Writing on the 6th April, he says:—"I returned last week from a visit to New York and Boston, and had a good time amongst some of my old gardening friends, and oh! such fine flowers as I saw. Orchids of almost unearthly beauty. Roses—and such roses!—as large as coffee cups; and many other flowers too numerous to mention. It would astonish any one not used to such things, to hear of the amount paid for flowers. In New York, when any grand party takes place, the flower decoration often costs them from \$500 to \$5,000. In fact I heard of one wedding party that cost \$7,000 for flowers alone. What would Canadians think of that?"

I need not say that people there make their money more easily than we do. Marriage in New York seems to be an expensive thing. If I thought the people of Morrisburg would ever be affected with the flower fever, even to half

the extent of the above, I would hesitate to give up Sunnyside.—*J. C. in an exchange.*

CULTIVATION OF THE PÆONY.

BY HERMANN SIMMERS, TORONTO.

PÆONY CHINENSIS, or Chinese Pæony is another valuable permanent addition to the flower garden, and one might say indispensable, as there is no plant flowering during this month that requires so little attention. The amateur may not notice, under the above heading, that this is the ordinary plant very often termed *Red Piny*, but the above is the correct botanical name. The amateur also may not be aware that the Pæonies have almost as great a variety of colours as the Rose, with a somewhat similar fragrance; I have had many people mistake them for very large Roses, when a bouquet has been made up of partially opened flowers. The Pæonies of late years have been very much improved in variety of colours, and now the colours vary from pure white to light and dark pink, pink and white variegated, etc., all exquisitely fragrant, which is not the case with the ordinary dark red variety. The best season of the year for planting, in my experience, has been from the middle of October until frost comes. Almost any soil will grow them successfully. The great disadvantage in planting in the spring is that the warm weather comes on us so very rapidly that the stems appear above ground before the amateur thinks of planting. By planting in the fall, they flower easily the following summer. Propagation is by division of roots, which may easily be done by cutting the heart of the root, together with an eye or bud and as much of the roots as can be conveniently spared. In my estimation there is no more easily grown, and more satisfactory plant than the Pæony. I would suggest not to always grow the

common dark red variety, but to choose the lighter colours, which are oftener the newer varieties. Another advantage is that, as yet, this plant has not been attacked by insects of any kind, the stems and leaves being of a harder substance, does not suit the palate of the insects.

CHRYSANTHEMUM CULTURE.—“Amateur,” in *Popular Gardening*, gives the following rules for Summer Care of these popular plants, viz. :—

- (1) Never keep them in doors when they can possibly be in the open air.
- (2) Never let them become pot bound until they have budded to bloom.
- (3) Never shift *immediately* after nipping.
- (4) Never let them stay dry.
- (5) Never let them want food.
- (6) Give them plenty of sun and not too much wind.
- (7) Pinch freely.
- (8) For fine flowers, rub off three out of five, and toward fall all that may appear.

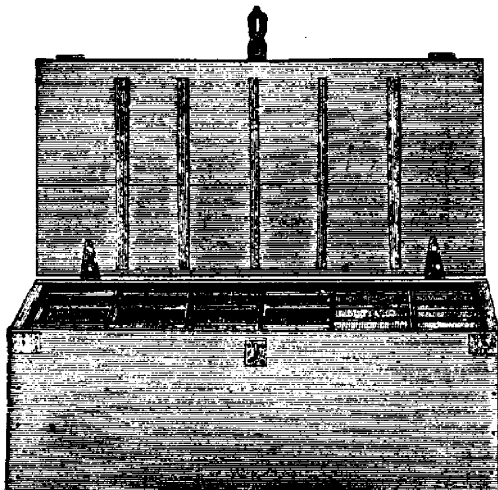
Fruits.

FRUIT PACKAGES.

IN GROWING FRUITS for shipping to city markets, it is a great mistake to postpone the purchase of barrels, crates and baskets, until the time approaches when they are positively needed. It is already high time to secure crates and baskets for the strawberry crop, for before the end of the present month, there will be business enough in gathering and marketing the fruit, without any solicitude concerning a sufficient supply of baskets. Indeed, we who live on the south shore of Lake Ontario, usually begin shipping strawberries about the 20th of June.

For many years fruit growers in Canada used the wooden crate holding 54

quarts, for packing their small fruits for shipping. It served an excellent



54-QUART BERRY CRATE.

purpose, and was very popular. But there was a difficulty in getting them promptly returned, and often many of them would go astray. It was also a great deal of trouble to the fruit merchant to collect from his customers the quart baskets, so as to return them safely to the shipper, as he was in duty bound to do. The careful packer, too, found that after two or three trips the wooden crate became much racked, and the baskets inside so soiled as to detract very much from the appearance of the fruit.

The plan of using

GIFT PACKAGES,

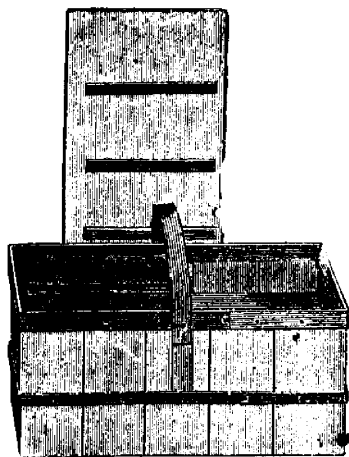
made possible during the past two or three years by the introduction of new machinery into our basket factories, has grown more and more popular in Canada.

First the little baskets were offered cheap enough to be given away with the fruit, and now the crate itself is offered in the same way.

To a Grimsby fruit-grower belongs the honor of devising a basket-crate, which is rapidly superceding every other package for small fruits, and which is now being manufactured by Mr. W. B. Chisholm, of Oakville, as well as at Grimsby.

This basket-crate holds twenty-four quart baskets, and is now offered for sale at so reasonable a price that it may be given away with the fruit. This greatly facilitates trade, and the distribution of small fruits to distant points all over our Province.

Another advantage of this crate is its handle. Express messengers are not always careful, and a heavy box gets many a toss, or fall, which a lighter crate would naturally escape, especially if it is provided with a handle. The cover of the basket-crate

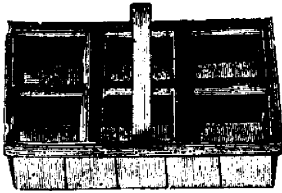


24-QUART SHIPPING BERRY BASKET.

is usually fastened on with a piece of wire or tin drawn over it near each end; but if a more secure way could be planned of fastening the cover to hold the fruit more snugly, so that it could

not move in the least, it would be still more satisfactory.

The address may be put on with a tag, or by means of a stencil. Our habit is to use a stencil for the names of both consignor and consignee; as when so marked the address cannot be lost or obscured, and is seen at a glance. A stencil, with name and address, can be cut in tin by almost any tinsmith, if it is not convenient to order one from those who make a business of their manufacture; and all that is needed in using it is a box of blacking and blacking-brush.



FIELD BASKET.

The carrier, or field-basket, is also a very useful article in berry-picking season. Each picker is provided with one of these, by means of which he can carry safely six quarts of fruit at one time to the packing house, without danger of tipping or spilling.

In another number we may speak of packages which are suitable for our other fruits. In the meantime we shall be pleased to hear the experience of the readers of this Journal in the use of packages for fruits.

PACKING PEARS.—The French, who export more pears than any other nation, cover the inside of the boxes with spongy paper or dry moss, which absorbs the moisture. Each pear is then wrapped in soft paper, and placed in layers in the boxes, the largest and least mature in the bottom, filling all interstices with the dry moss. Thus they will keep a month or more. They are so packed that they cannot touch

each other, and all motion is prevented. If one decays the others are not harmed. —*Gardners' Chronicle.*

BLACK GRAPES AT CLARENCEVILLE, QUE.

BY WM. MEAD PATTISON, CLARENCEVILLE, QUE.

As my contribution in May number of last year was confined to the newest white grapes, I will now take up recently introduced black, as far as tested at this place. From an acquaintance with most of the grape propagators in the United States, I am enabled to obtain for trial any new variety likely to be adapted to this Province somewhat in advance of their introduction for sale to the public. Consequently, the varieties touched on here will mostly be new to readers of *The Horticulturist*, but will give them a knowledge of some perhaps destined to come into general cultivation in Canada in a few years.

On black grapes in years past, found of more or less value to us in the north, we are indebted to Bull, Rogers, Ricketts, Worden, Moore, Dr. Grant, Miller, Rommel, Ives, Steel, Underhill and Garber of the States; Arnold and Dempsey of Canada, most of whom obtained their successes by artificial hybridizing. But John Burr, of Kansas, U. S., has experimented in a new direction by grouping the varieties intended to be crossed, relying on natural fertilization, and selecting for propagation the largest and best matured seed from the best fruit in the "group."

A very important point has been gained by Mr. Burr's long study and persistent labours in producing foliage resisting our trying climatic changes and frost, obtaining at the same time grapes of a superior flavor and earliness. Of his varieties worthy of our trial as soon as they are offered to the public, I have found three of great promise, viz.:

"STANDARD," a black grape of medium bunch and berry, not comparable in size to the showy fruit of Roger's

well-known blacks, but far superior to them in quality, more of the character of the Delaware.

"IDEAL," of same description, is judged by some as superior to the Delaware, the standard for high flavour.

"JEWEL" surpasses his Early Victor in earliness, quality and size. In view of the encomiums passed on these new grapes by such authority as *Coleman's Rural World*, their trial here is watched with a great deal of interest.

"NORWOOD" originated at a place of that name in Mass., U. S.; bore here last summer clusters of great size and beauty, ripening a few days earlier than Concord, and superior to it in size and quality. The fruit at time of writing, February 12, is well preserved, a point of great consideration in its favour.

"ROCKLAND FAVORITE" (from Ellwanger and Barry), a new Concord seedling, till last year was viewed with some misgivings. It has proved, however, to be an enormous bearer, carrying the heaviest bunches in my vinery. Some earlier and a trifle better than its parent. Early in the season fully one-third the clusters were removed; even then it showed a slight tendency to drop its berry when fully ripe, which was attributable to overtaking the vine.

"PEABODY" (Ricketts') came fully up to its originator's description, viz.: "Hardy; bunch, medium to large; berry, size of 'Iona'; black, with blue bloom; flesh tender, juicy, red and sprightly." Ripened with Concord.

"BELVIDERE" has for some years proved early and very productive here; quality only fair. From the size of the bunch it takes readily in market, though it needs to be picked just as soon as ripe, or it drops its berry.

"EARLY VICTOR" (Burr) cannot be classed as an early, but a medium early variety. Its maturity in a great measure depends on removal of a good proportion of its clusters soon after formed.

It is yet a good grape for home use, for table or wine.

"WAVERLY" (Rickett's) is one of the most delicious grapes when properly cared for. Its foliage being weak, it only matures a small quantity of fruit for home use.

"EARLY DAWN" though earlier than the last, has the same trait, quality good, but a poor bearer; scarcely pays for cultivation.

"BURNETT" (Dempsey) did not ripen well this year on account of the very unfavorable season. On ordinary years at this place it proves valuable as a very delicious table grape.

"ROMMEL'S BLACK DELAWARE SEEDLING" bore for the first this year before Delaware, with which it compares favorably in size and quality.

"FLORENCE," comes next to Champion in earliness, is superior in quality, though small, and holds good a very short time.

Of the older varieties

"LINDEN" (Miner) is of no value here, as the fruit when ripe is too acid.

"OTHELLO" is often subject to mildew, and its fruit at best is indifferent in quality.

"CANADA" the birds appropriate, and with the two above are to be discarded.

"MOORE'S EARLY" though good in quality, proves with us an unproductive and slow growing variety.

"WORDEN" is growing in popularity yearly and must take the place of Concord in this Province; it is quite as vigorous and productive, and more appreciated for home use and market.

"EUMELAN" is becoming a favorite for home use. It is now twenty years since it was first introduced from the Hudson. Wherever it has given dissatisfaction it may be traced to setting out poor and enfeebled plants at the start.

AMINIA, WILDER, ESSEX, BARRY AND HERBERT, Rogers' famous blacks, are our most valuable varieties, when we consider their fine appearance and good keeping qualities. These hybrids should have made E. S. Rogers, of Roxbury, Mass., a wealthy man, if he had shown the acuteness of the introducers of the Niagara.

For commercial purposes grape growing is not entered into in this Province to any great extent.

SEEDLINGS FROM THE NIAGARA GRAPE.

BY D. W. BRADLE, ST. CATHARINES, ONT.

Mr. Geo. W. Campbell, of Ohio, has been raising some seedlings from the Niagara grape, and thinks that many of them will prove to be more valuable than the parent. It is most remarkable that while the Niagara has a very decided foxy smell and taste, several of the seedlings have been entirely free from this fault, and seem to him to be better in flavor than the parent. The one that he considers to be thus far the most promising bears a large handsome, oval berry, of a light lemon color, and ripens its entire crop while the Niagara is yet hard and green.

A grape of such earliness, if it possessed the requisite hardiness of vine and good qualities of fruit, would be much prized in many parts of Canada. We are yet in the infancy of grape culture. Wonderful strides have already been made in a comparatively short period of time, but the coming ten years will probably give us grapes, of higher quality which will ripen in our northern climate, than is possessed by any we are now cultivating.

What are our producers of new fruits doing? We had our Arnold and Saunders and Dempsey, and others. The first named of these is living on the banks of the river that flows amid the groves of that tree which yields its fruit every month; but what of the others?

Mr. Bucke, of Ottawa, is in just the climate where by careful hybridizing he should raise a grape as hardy as the northern pine, and as luscious as any we are now growing.

I have two vines of a native Russian grape. They are as hardy as any iron-clad, but the fruit is small and not of as fine a flavour as many of the grapes we already are growing. But it seems to me that this Russian grape vine, which ripens up its wood so very early, should be the mother of a race of very hardy grape vines, yielding fruit of superior quality, and which would ripen in our coldest latitudes. This can be soonest accomplished by hybridization. I will cheerfully supply cuttings from these Russian vines to any one who would plant them, and try the effect of crossing with some of our best early ripening grapes, such as the Delaware, Jessica, etc.

Vegetables.

SWEET CORN TESTED.

T. C. ROBINSON, OWEN SOUND.

OUR lake climate, with its chilly spring winds and sudden extreme changes of temperature until July, is peculiarly unfavourable for that class of vegetables which requires the whole season and a high degree of heat in the soil as well as in the atmosphere. Hence, Sugar-Corn is a risky crop with most people, except skilled market gardeners, and early varieties are extremely desirable.

With a view of finding out the earliest and best, I experimented last summer with the following kinds:—Cory, Squantum, Marblehead Early, New Self Husking, Perry's Hybrid, Shaker's Early (long grain, from Henderson), Shaker's Early (broad grain, from Vick), Henderson's Sugar, Old Colony, Boston Market, Amber Cream, Asylum, Mam-

moth Early, Triumph, Potter's Excelsior, Livingston's Evergreen, Pee and Kay, Early Minnesota, Moore's Early Concord.

All of these nineteen kinds were planted from 6th to 15th June—most of them on the 10th—except Cory and Marblehead Early, which were planted mainly on May 20th for early market purposes, but some rows of these were also put in at the same time as the other varieties, for purposes of comparison.

The soil was a rather poor, sandy loam, and very little manure was applied; but the cultivation was fair to good, with all except the "Self Husking," Henderson's Sugar," and, I think, "Amber Cream." These got put on new land which grew up so fast with weeds that they had to be left out of the race.

Of the remaining sixteen varieties I got such a good test that I consider I learned all I want to know about all of them except three or four of the earliest.

First of all, to mature for boiling, was the Cory. Planted May 20th, it was ready to market early in August, which, for this lake climate, we consider remarkably quick growth. A few days after, the Marblehead Early came in. It seems to be nearly or quite as large as the Cory. They both have the same fault of redness of cob and frequent redness of grain; and for all practical purposes these two sorts are almost identical, with the exception of the extra earliness of the Cory, which is a most important difference! Soon after the Marblehead, came, of course, the Early Minnesota with its pretty little white cob. This point is a decided merit, but it fails to make up for the advantage over it gained by the Cory, or even the Marblehead, by being in the market a week or two sooner. People will grumble at the Cory's red

cob, but they are not willing to wait for the white, and so they buy the Cory and grumble, and buy again—at a good round price too: and when the pretty little Minnesota does come fairly in the price is down. For a limited quantity, the Cory probably pays the best of any corn that grows.

About the time the Minnesota is fairly under way, we come chuckling along with the crop of Perry's Hybrid. The appearance of this sort is not to be mistaken. Stalk and leaf and ear-coverings are a dull, greenish-red, which seems rather uninviting. I know of no other variety that looks like it. But the proof of the corn is in the ear, and the ear of the Perry's Hybrid with me was almost fully up to the size of the Mammoth varieties. If both had been grown on rich soil, no doubt the Marblehead Mammoth, Livingstone's Evergreen, &c., would have been considerably larger; but on the poorish, sandy soil mentioned the Perry seemed about equal. The cob of this variety is rather red also; but it has not the deep red which stains the water in cooking and blackens the grain. Particular inquiries of my men who did the peddling, fail to show a single case of customers grumbling at the red cob of the Perry's Hybrid.

Shaker's Early, Boston Market and Moore's Early Concord came in close behind the Perry. The only one that I found to compare at all with Perry was the Shaker's Early—the broad-grained variety, I think. The ear was almost as large, so near it in fact that we could scarcely see the difference, and the cob is white. But the slight difference in earliness tips the balance, in my estimation, in favour of Perry's Hybrid. I only grew a couple of short rows of Shaker's. I grew the Perry in quantity for market; hence, I have confidence in the Perry which I fail to have in the other, and this is intensified from the

fact that Shaker's Early was on first-class soil, while I grew the Perry on both good and bad land. Planted June 10th, Perry's Hybrid matured in quantity for market early in September. I consider it the best early corn tested to follow the Cory, and the *only* main crop variety worth growing in a climate such as that of the Owen Sound District. Early Pee and Kay was about two weeks later, and smaller.

By special favour of the Clerk of the weather, or otherwise, I got a test of Marblehead Mammoth, Triumph, Squantum Sugar, Livingston's Evergreen (an improvement on Stowell's Evergreen), and others. Late in September they made a spurt, and early in October the ears were marketable, and we furnished them to customers until the latter part of October, when patient Winter fore-closed his mortgage and stopped the fun. Of course we had slight frosts before, but a protecting orchard and fences moderated it, so that the corn could grow until, I think, about the 23rd. Generally we get too much frost for corn late in September. Had such occurred last fall my corn experience would have been materially curtailed.

Hence these late sorts will not do for us.

Shaker's Early, Perry, Cory, Marblehead, Early Minnesota, Moore's Early Concord and Boston Market we managed to select ears of on one day that were fit to cook and compare. I tested them carefully when cooked, and found so little difference that my prejudice in favour of Cory and Perry, caused by their remarkably good behaviour as to earliness, size and crop, proved strong enough to make me think Cory and Perry tasted a little better than the others. Probably most people would be unable to distinguish any difference in the quality of these varieties.

I conclude that whoever will develop

a white-cobbed variety of Cory—call it what name he pleases—and the same of Perry, will do the public and himself a benefit. Were this once done, I know of no other varieties worth growing in comparison.

Cucumbers for garden use do much better when on stakes made of portions of trees that afford six inches or so of side branches. They climb small stakes by tendrils, which cannot attach themselves to thick stakes. For cucumbers, therefore, a lot of twiggy brush-wood should be tied around the heavy stake. The cucumber will then climb up easily.—*Gardener's Monthly*.

Celery.—Henderson's White Plume celery is having the effect to make every man a celery grower. Farm hands and day laborers now find ways to have a row of this appetizer in their gardens. How easy the cultivation when good plants can be had. A liberal quantity of old manure is spread on the top of the ground and well spaded in; some necessary hoeing and stirring of the soil after setting; some banking or tying up of the plants—sometimes neither, and last of all the plants are dug up and stood away closely in a box in a cool cellar, and where rats do not molest, and the celery keeps till wanted, sometimes into March.—*The American Garden*.

CELERY LEAF BLIGHT.

A writer in the *Botanical Gazette* writes from Missouri:—

This disease (*Cercospora apii*) annually destroys about one-half the celery planted in this section; last year (1886) the loss occasioned by the parasite was not so great as in former years, owing no doubt, to the dry weather which prevailed in this section. Frequent showers, and heavy dews followed by hot sunshine favors the

growth of the fungus. The fungus usually appears in this section about the first of July, and at the approach of cool weather, which usually comes on in September, the fungus gradually disappears. When fresh the conidia germinate readily in three hours, by sending out a delicate, colorless thread from each cell. So long as the celery leaves are kept dry, but few of the conidia germinate, but if the leaves are frequently moistened, the fungus quickly destroys them.

Celery protected from the direct rays of the sun, either by natural means, as planting under trees, or by screens made for the purpose, is rarely attacked by the parasite.

In preparing celery for the table, we save the outer stalks not sufficiently blanched to be eaten raw. Clean them and cut them into pieces half an inch long. Stew them in water until tender; drain off the water, add butter, a little flour, and sufficient milk to make a sauce to cover the celery; season with salt and pepper, heat to boiling and serve.

HOW TO GROW ONIONS.

On my farm I keep a heavy stock of pigs and sheep, and make a large quantity of rich manure. By this I mean, that the pigs and sheep are fed on malt sprouts and other food, particularly rich in nitrogen, phosphoric acid, and potash. Notwithstanding this fact, I find great advantage from using, in addition to the farm manure, a liberal dressing of superphosphate and nitrate of soda. I am not a business man, or I should probably keep these facts to myself, and let some men, whom I have in my mind, go floundering in their ignorance and prejudice. It would serve them right. They think they know all about manures, when in fact they know nothing. They put on some commercial

manures costing one hundred dollars per acre, when they could get the same effect for less than half the money. Market gardeners sow from one to two tons of commercial manure per acre, costing fifty dollars per ton. They think that it pays. I do not deny it. I only claim that they are working in the dark. It might have paid the Chinaman to set fire to the sty, when he wanted roasted pig. But we have discovered cheaper and better methods of preparing food for the table. And we have discovered cheaper methods of manuring our land, than applying one hundred dollars worth of commercial manure per acre. Try this experiment the coming spring. Get two tons of "blood and bone fertilizer," costing one hundred dollars. Sow it broadcast on an acre of land prepared for onions. On an adjoining acre, sow at the same time:

500 lbs. superphosphate, at 1½ cent per lb.	87 50
600 lbs. nitrate of soda, at 2½ cents per lb.	15 00
	102 50

If it does not produce as great a growth of onions as the two tons of raw bone manure, I am greatly mistaken. On my own farm we sow the nitrate two or three times during the growth of the onions. I never saw a finer growth of onions than we had last year and produced in the above way. There was not a scallion in a hundred thousand.—
JOSEPH HARRIS, in *American Agriculturist* for Jan.

APPLES.—Those who are fortunate enough to hold choice long keepers can make long prices, sales having taken place during the week of russets and spies at \$5.00 to \$6.00 per bbl. Less desirable kinds ranging all the way from \$2.50 to \$4.00 per bbl. Stocks of finest assortment are small and in few hands, and prices are bound to be well maintained.—*Montreal Produce Bulletin, May 19th.*

Scientific.

THE OYSTER-SHELL BARK LOUSE.

(*Mytilaspis pomorum.*)

Very few have any idea how common a pest this is in our Canadian orchards. Many people are wondering why their orchards are so unfruitful, and why they are so stunted in growth, and look so sickly, when the whole trouble is due to this pernicious little louse, which, unnoticed by them, is preying upon the bark of their apple trees in immense numbers, sucking out their strength and life.

Last summer toward the end of May a neighbor brought in to the writer a branch of a young tree from his orchard asking, "What is the matter with this tree?" The tree would not grow, and he had discovered that the bark was curiously rough with numerous tiny scales about one-sixth of an inch in length, as shewn in fig. 1. Upon lift-



FIG. 1.—OYSTER-SHELL BARK LOUSE.

ing one of these scales and using a hand glass the question was soon solved. To his astonishment, there were revealed nearly one hundred wee little lice, too small to be readily seen by the naked eye, and which ran about with the greatest speed over the bark as if delighted at their liberation from the confinement of the maternal shell. No wonder the tree was stunted!

This louse belongs to the genus *Coccidae*, and is allied to the aphid, bed-bug, and body-louse. It was introduced into this country some eighty years ago from Europe, and although the female cannot fly, and hence migrates slowly, it has now become more or less distributed throughout our whole country.

The time to destroy these bark lice is early in the month of June, because at that time the young brood escape from under the scales where they hibernated, and which are actually the dead bodies of the mother lice. The loose bark should first be scraped off with a hoe, because the cunning youngsters hide away carefully beneath it, as if they were trying to escape discovery.

Then the trunks and large limbs must be washed with a strong solution of soft soap and washing soda, with enough water to enable one to apply it with a paint brush, or scrubbing brush. If the lice have spread over the limbs, the whole tree must be syringed with a solution of washing soda and water in the proportion of half a pound to a pailful, or potash and water, two pounds to seven quarts. Caustic soda and water is recommended as still more effective.

There are several insects which prey upon the bark louse, as also some insectivorous birds, but unfortunately this hateful insect increases out of all proportion to the number of its destroyers, and unless vigorous remedial measures are employed, some of our best orchards will die of premature old age.

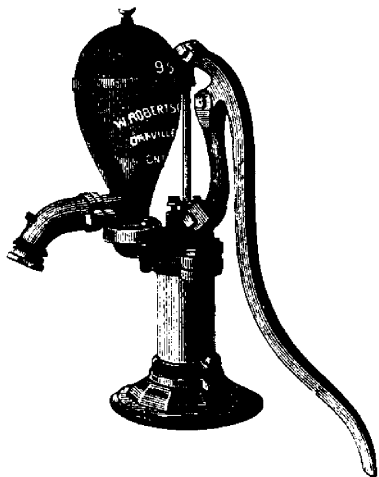
PARIS GREEN AND THE CODLING MOTH.

This month is the time to destroy the Codling Moth, and therefore we may perhaps be pardoned for writing a few lines upon so trite a subject as the use of Paris Green.

That it pays the orchardist to use it has been established by repeated experiment. Prof. Forbes, State Entomologist of Illinois, has proved to his satisfaction that its application will save about three quarters of the fruit usually lost by the work of this insect, and many of us in Canada have become convinced of this statement.

The writer has now used it for two years quite extensively and with excellent results. Last year he applied

it quite early in June, using a Canadian-made force pump, which was found fully as good as Fields force pump, and less expensive. By favor of Mr. Wm. Robertson we here show a cut of this pump.



ROBERTSON'S FORCE PUMP.

The instrument was firmly screwed fast in the end of a kerosene barrel, and the whole arrangement firmly tied fast in an express waggon, by means of four ropes, one attached to each corner of the box. This precaution was most important, for horses are often very timid over the spray, and the noise of the pumping, and most serious accidents might result from carelessness in this respect.

As to quantity, three ounces to forty gallons of water were found to be quite sufficient. It was first mixed with a small quantity of water and then pail after pail poured in until the barrel was full.

Prof. Forbes advises the use of a pole long enough to reach the tops of the highest trees, but surely this would be exceedingly awkward to handle. We question whether the professor ever tried a day's work handling such a

pole, say 20 feet long with 20 feet of hose attached to the end. With eight feet of hose and no pole at all, we could force a fine spray over trees 20 feet in height, and surely a pole 10 feet in length would answer for the highest apple trees.

The time of application last year with us was the second week in June, but the time of greatest benefit will of course vary with the season. Repeated applications every two or three weeks as advised by some writers is wholly unnecessary. Once is trouble enough, and fortunately effective if applied when the calyx end of the apple still stands upward; but later, when the apple turns down by reason of its weight, it is of little use. The reason is that the egg of the Codling Moth is deposited in this end, and the tiniest drop of poison lodging here will kill the young larva before it has found its way coreward. Besides, if the poison is lodged in the stem end of the apple it might possibly remain there long enough to destroy lives more precious than that of the hated apple worm.

HYPOSULPHITE OF SODA FOR FUSICLADIUM.

The following letter is in reply to an inquiry concerning the best time and mode of applying the above remedy for the apple scab:—

Sir,—I should think that a fully satisfactory trial of hyposulphite of soda for fusicladium would require that it be used first just as the leaves are coming out, and several times afterward during the early part of the season. The theory of its action is, that it prevents the germination of the spores and establishment of the fungus. The fungus winters over on the bud scales, and is ready to start into active growth as soon as the young leaves are formed. Of course a heavy rain washes it from the tree, and the application

should therefore be renewed as soon after a heavy shower as the tree has become dry or nearly so, if the highest efficiency is to be secured.

It is also a very good plan to spray but half of the tree, in order to have the other half to compare with. If a sufficient number of trees are used, some of them might be totally sprayed, however. It does not seem to me that the results so far obtained are sufficiently positive to warrant one in spraying more of the orchard than is necessary for an ample experiment.

Yours truly,
J. C. ARTHUR.

N. Y. Experiment Station, Geneva, N. Y.

DRAINAGE WATER.

BY C. C. JAMES, M.A., PROFESSOR OF CHEMISTRY.

In estimating the worth of a fertilizer, commercial values are set only upon the nitrogen, phosphoric acid and potash; sometimes the lime is considered. The three first mentioned are of most importance, since nearly all soils contain sufficient of the other plant foods to sustain ordinary crops. To grow crops it is necessary, therefore, to supply nitrogen, otherwise the land will become exhausted. The ordinary crops annually remove from the soil the following quantities of nitrogen per acre:

		Lbs.	Lbs.	Total Lbs.
Wheat.....	(30 bush.) Grain	33	Straw ... 12	45
Barley.....	(40 " Grain	35	Straw ... 12	47
Oats.....	(45 " Grain	38	Straw ... 14	52
Hay.....	(1½ tons)			45
Red Clover	(2 "			70
Turnips.....	(17 " Roots	63	Tops ... 45	108
Mangels.....	(22 " Roots	85	Tops ... 46.5	131.5
Potatoes....	(6 " Roots	42	Tops, etc. 18	60

The rain carries into the soil from the atmosphere every year from five to ten pounds; other sources of supply besides that of direct applications of a nitrogenous fertilizer are, as yet, somewhat uncertain.

The nitrogen, however, before it is in form available for the plant must be

converted into a *nitrate*, a compound resulting from the union of nitric acid with some such substance as lime. This formation of nitrates in the soil is called *nitrification*, and producing the various fermentations. It is found in all fertile soils, and for its development and work demands a supply of air and water. Tillage therefore assists in the process. The presence of too much water excludes the air and hinders the work, even undoing it. Drainage therefore increases the range of nitrification and deepens the fertility. A proper degree of heat is also most important. Nitrification ceases below and near the freezing point. As the temperature rises to 98° Fahrenheit activity increases. From that point it again diminishes to about 131° when it ceases. Under these conditions nitrification proceeds most actively during the summer, and continues even into the autumn. The nitric acid thus formed unites with lime principally, forming nitrate of lime, or *calcium nitrate*.

In the spring there are few, if any, nitrates to be washed out of the soil; in the summer there is but little, if any, drainage to wash out the nitrates; in the autumn, therefore, when nitrates have accumulated and drainage is also abundant, we may expect the greatest loss.

The following may be practised either to clean dirty land or to rest exhausted land: In the former case, to avoid excessive loss by drainage, recourse may be had to roots *thoroughly cultivated*. To improve an exhausted land, instead of allowing the land to lie fallow a whole year, a green crop might be plowed under, thus keeping all the nourishment in the soil, increasing it by drawing on the air and subsoil, and by decreasing the drainage. For green manuring, red clover, rye and buck-wheat are especially recommended; other

crops such as rape, white mustard, scarlet clover, etc., are also used. These should be plowed under just before full blossom.

On the whole most soils will improve best under a combined treatment of green manuring and fallowing, where resort is necessary to such treatment.—*From Bulletin IX., Agricultural College, Guelph.*

LIQUID MANURE.

There are quite a number of farmers within our acquaintance who save all the urine of their stock, and find a profitable use for it by applying it from a sprinkling cart to their grass fields. But they have found that some precautions are needed. The best time to apply it is when the young grass is starting vigorously, and there are frequent showers—or, say, about this season of the year. Four or five hundred gallons to the acre, applied in this way, will give a very heavy growth, without other manuring. The rankness of leafage and the dark color which the grass almost at once takes on, indicate an over-supply of available nitrogen in this urine, and a continuously urine-dressed grass plot tends to run into a rank, weedy growth. The trouble here arises, as we have shown in previous articles, from the excess of nitrogen over phosphoric acid in urine. A field laid down to grass, with the view of applying liquid manure as a top-dressing, should have about 400 pounds of finely ground steamed bone per acre harrowed in on the furrow before seeding.

* * *

In beginning to use a new fertilizer, we must be sure we are using it correctly, before we hasten to condemn it. There is abundant evidence of the fertilizing properties of liquid manure. Many gardeners depend upon it almost wholly to force forward their crops. If

at first an experimenting farmer does not succeed, we advise him to look the matter over, and "try, try again." There is a great deal to be learned about farming yet, even by the oldest of us, and both brains and knowledge are necessary to enable any of us to keep near the head of the procession.—*Dr. Hoskins in Rural Vermonter.*

Paris Green, says the *Chicago Inter-Ocean*, should be used with the utmost care, when applied to the potato vine, as it does sometimes poison the tubers. The effect upon persons eating a potato so poisoned is to produce dryness of the throat, intense thirst, and violent pains in the stomach.

We doubt whether such danger need be feared except in cases where the tubers are above ground, as the arsenic is neutralized by the soil as soon as it is mixed with it. Have our Canadian growers any caution to give us?

Open Letters.

ENCOURAGING.—SIR, It would give me much pleasure to see the circulation of the *Horticulturist* very largely increased. I have seldom let an opportunity slip of saying an earnest word in its favour, having found it exceedingly interesting, and quite practical throughout. Yours,

LEONARD H. WILDER.

Cooksville, Ont.

WYLIE'S SEEDLING PLUM.—SIR, I send two or three of my young red plum trees that I wrote you about last fall. If you will plant them you will find them grow very fast and be very productive, and the fruit is large, juicy, and pleasant. It does well here in clay loam, and bears early. Fruit ripe in August. I will send you some fruit as a sample this year.

The tips, at least, of my Lombard and Moore's Arctic plums are gone this spring. The winter was very severe.

Yours, &c., W. H. WYLIE.
Carleton Place, Ont.

USE FOR OLD STRAWBERRY BASKETS.

—SIR: Last year I planted out 1000 cabbage plants. "He that observeth the wind shall not sow," so I set them out when they were ready. The day was bright, and before night they were a long way off the perpendicular. I had as many old strawberry baskets at hand with which I covered them. My plants in a few hours were started for life, the baskets none the worse. Unless your readers fancy working in the rain, they will find the plan a good one.

J. C.

Aultsville, April, 1887.

IMPROVING.—A Seaforth subscriber writes:—SIR: I had little notion of becoming a subscriber this year, but I have received five numbers, and I think they are an improvement on last year's. I get some useful hints in them which makes them interesting.

[This is a sample of many letters which have been received. It is certainly the wish of the Directors to make each volume of our Journal better than its predecessor, until no Canadian farmer or fruit grower can afford to do without it.]

FARMERS' INSTITUTES.

The Editor Canadian Horticulturist.

I was interested in a note on *Farmers' Institutes* in the May number, and as it corresponds to views too often expressed in essays and in print, I may be excused for briefly referring to it. The "notion" referred to is as follows, that the so-called uneducated man is practical, while the college professor is theoretical. In this case the term *theory* is often applied in the sense of *reason*, words of a very different signification.

2

No doubt some college professors deal too much in theories, and some of the other class are truly practical. I have attended a very large number of gatherings where both of the classes above named took an active part, and in my judgment the college man is beaten out of sight in the number of theories offered by the so-called practical man.

W. J. BEAL.

Michigan Agricultural College,
10th May, 1887.

HARDY APPLES - A CORRECTION.

The Editor Canadian Horticulturist.

DEAR SIR: My article from the *Am. Garden* was quite incorrectly quoted in the *May Canadian Horticulturist*. In the fifth line "two" should be *true*. Yellow Transparent and Oldenburgh are true ironclads; while Shiawasse Beauty is entirely distinct from the Fall Queen—hardly any two apples more so in all points. If Westfield Seek-no-Further does not suit your locality, I would strongly advise trial of McClellan; and also of Salome, a newly introduced Illinois apple, hardy, but not ironclad, and a very productive and salable market fruit, which I should prefer to the American Golden Russet. Tinmouth is well worth planting as a choice family apple, and Nod-head (Jewett's Fine Red) has few superiors in its class of early winter apples.

Yours truly,

T. H. HOSKINS.

Newport, Vt., May 11, 1887.

[NOTE.—We regret the omission of the word Haas after Shiawasse Beauty on p. 101, which in the article referred to is correctly given by Dr. Hoskins as another name of the Fall Queen. The apple has been largely sold in Canada under the name of Haas. It is also known as Gros Pommier.—ED.]

Question Drawer.

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

47. Salt as a Fertilizer.—*Please let me know through your paper whether salt is good for strawberry plants set on heavy land.*

[W. A. SMITH, Coverdale, N.B.]

Prof. Panton, of Guelph, would not advise the use of salt for strawberry plants on such soil. He recommends a liberal application of wood ashes as being an excellent fertilizer for the strawberry bed.

A writer in the *Country Gentleman* says:

"Salt should not be used on cold, heavy or moist soils, and if any one does, he will be disappointed in the result, as its tendency is to keep the ground cool and moist. It will do such soil more harm than good.

"I do not think salt is much of a fertilizer in itself, though plants take it up, as you can tell by tasting and by the stiffening and glazing of straw of a plant grown in salted ground. I think it acts upon and assimilates the gross matter in the soil so as to make it available food."

48. Red Spider.—*Does it destroy the bark louse.*

It is thought to hibernate under the scale of the bark louse, but not to be parasitic upon it.

49. M. P. Wilder Rose.—*Do you know if the Marshall Pinkney Wilder Rose can be bought in Canada?*

[L. H. WILDER, Cooksville.]

Mr. Frederick Mitchell, Innerkip, writes that he is propagating a limited number. He says it is a thoroughly good rose, no other possesses more good

points, but its similarity to Alfred Colomb detracts from its value as a novelty.

50. Aphis on Roses.—*What do you find most effective in the destruction of the rose aphis?* [W. F. BURTON, Hamilton.]

REPLY BY D. W. BEADLE.—I have found tobacco water, made by soaking stems of tobacco in a pail of water, applied with a garden syringe an effectual cure, killing the aphides. It may be necessary to go over the rose trees two or three times before the insects will be all destroyed.

Some care must be taken lest the infusion be so strong as to injure the foliage of the roses. The addition of whale oil soap is recommended by many, but I have found the tobacco water quite sufficient.

[NOTE.—A writer in the *Horticultural Times* (Eng.) says he has used hot water (150°) upon his chrysanthemums for the destruction of the black aphis with excellent success; and that the plants, instead of being injured, were induced to a more healthy growth.—ED.]

51. Effect of Cold Water on Plants. Sir: *I have the city water in my garden, and last summer being unusually dry, I was compelled to use the water freely, but the results were so unsatisfactory that I am now of opinion that the water was too cold, and therefore checked growth and, consequently, productiveness. 45° is the present temperature of the lake water taken at the hydrant, but I fear to use it, although the soil is light and needs water badly. Will you please give me the temperature below which it would not be prudent to apply the lake water to vegetation?* [J. L. THOMPSON, Toronto.]

REPLY BY D. W. BEADLE.—It is thought desirable to have the temperature of the water raised by allowing it to stand in an open tank, where it will have the full benefit of the sun all day, and apply it at evening. I have never

tested the water used in watering my plants with the thermometer, and cannot give the proper temperature in degrees. My own impression is that it is of less consequence to raise the temperature of the water than is generally supposed. I have used the city water here (St. Catharines), direct from the hydrant, without perceiving any injurious effects. But I apply it early in the morning—about sun-rise—and allow the sun to warm it as it ascends towards the zenith. Nor has enough been used to keep the temperature of the soil abnormally cold. Perhaps a liberal application of stable manure would render the soil less thirsty.

REPLIES TO PREVIOUS INQUIRIES.

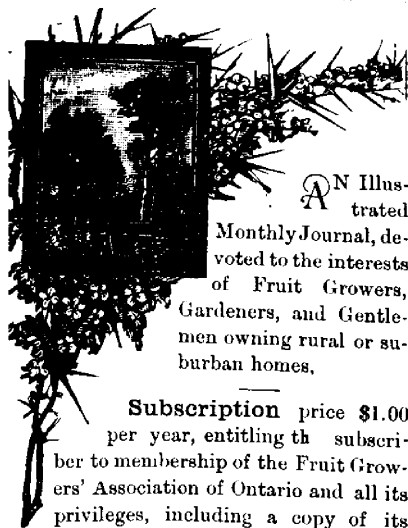
45.—Quart Boxes.—Mr. W. B. Chisholm, Oakville, who advertises in this number, says: "Re M. E's query in May No. I would say that we can make quart baskets, or any other size to order, providing a little time is given us.

Messrs. A. C. Rice & Co., Sarnia, also write: "We make the full quart, the same as are used in the States. We ship them either flat or made up."

Privet makes a very good ornamental hedge, where ornament only is the object. The chief objection we have to it is its rapid growth, requiring rather frequent clipping during the busy season of the year; but if trained in a conical shape the work is much less than if trained with a square top. A writer to the *American Garden* recommends the California privet (*Ligustrum ovalifolium*), and the common kind (*L. vulgare*), to be planted thickly together. He says they make a perfect thick green wall of a hedge.

Another pretty plant for an ornamental hedge is *Spiraea Van Houtti*, one of the prettiest, as well as the hardiest of the *Spiraeas*.

THE Canadian Horticulturist.



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

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

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

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

Paid 86 on your label shows you have not paid for year 1887; but unless the remittance comes to hand by the 20th of one month, the label cannot be changed until the second issue following.

50 cents for 8 months.—This Journal is offered for eight months, beginning with May No., to new subscribers, for 50 cents. We hope all friends of the Association will take this opportunity to increase its usefulness by largely extending the circulation of the *Horticulturist*.

Bound Volumes of this journal may be had in cloth at \$1 each from this office. Vols. VII., VIII. and IX. have colored plates; Vols. I. and II., and Vols. III. and IV., not having colored plates, are bound together and sold as one volume.

Shorthand Wreckers, is the caption of an article in the *Cosmopolitan Shorthand* which rather interests us. In it the Fruit Growers' Association is compared to a noble ship, and the reporter of our Winter Meeting at Stratford to a wrecker who, under the guise of a skilful mariner, undertook to navigate into the fair port of Brevier the stately vessel. It gives examples of a few of the pieces of wreckage, only too familiar to the Secretary, and which may interest some others as literary curiosities. Here are some specimens:

“ Mr. C.—What do you find hardy here and make nice plants?

Mr. A.—What Mr. B. said. I think the Norway Spruce is a very good tree, it makes a good protection. The English Thorne the insects seems to destroy the leaves, and it doesn't seem to stand the spring frost.

Mr. C.—Have you tried Veitchii? Lilacs are all hardy.

Mr. F.—How is Japanese Snow Balls?

Mr. E.—Can you grow Sponkers?

Mr. A.—They grow very little.

Mr. C.—I think with Red Cedar or Arbor Vitæ.

Mr. B.—I like Red Cedar.

Mr. D.—The question by the Secretary that unpronounceable word Veitchii, that is not hardy. I was a little erratical about that. It killed within four or five inches.

Mr. B. * * * I was very much amused when in the west on passing a large wheat field to see some two or three hundred head of cattle having the peculiarity of our cows. There was no dash, nothing of the sort, they were in a good pasture field. There was no

trouble of them getting across the line, and seeing that these cattle were not scattering through this large wheat field; looking for a little distance I saw some of the native ponies with little boys on them, they were a short distance away, if the cows moved away from the rest they would give a peculiar whistle that made the cow turn tail back. There is wire fences there.

These extracts may serve to still further explain the reason why our Report for 1886 is so much smaller than usual. We could not avoid crossing out page after page of such nonsense, and then we made the best sense possible of the rest.

We are glad to be able to announce that the services of Mr. Thos. Bengough, official reporter, Toronto, have been engaged for our summer meeting at Collingwood. It is only necessary to mention this gentleman's name to assure our readers of a faithful report of the meeting.

The next Biennial Meeting of the American Pomological Society will be held at Boston, commencing on Wednesday, September 14, 1887, at 10 a.m., and continue for three days.

The venerable President, M. P. Wilder, had hoped to live to meet his friends once more so near home, but his life was not spared to realize this ambition, to the great regret of all concerned. In the meantime, Mr. P. Barry, of Rochester, the First Vice-President, is called upon to fill the President's office.

All horticultural, pomological, agricultural and other kindred associations in the United States and British Provinces are invited to send delegates.

The Massachusetts Horticultural Society has appropriated the sum of \$500 to be offered in special prizes for fruits to be exhibited during the meeting.

The Balsam Fir and the Norway Spruce are both severely condemned by the *Rural New Yorker* for ornamental planting.

We have long ago discarded the Balsam Fir as being one of the most unsatisfactory of evergreens. When it reaches the age of fifteen or twenty years it is easily blown over by the wind, especially if grown in light soil; and it has an ugly habit of thinning out at the base, which makes it most unsightly. We would not plant it again even in the most remote corner.

Possibly the *Rural* is right also in condemning the Norway Spruce, but we are not prepared to join in so doing. All over Ontario it is the leading evergreen for shelter and ornament, and still very popular. We have a hundred or more about our grounds, many of them twenty-five or thirty years planted, and towering up about thirty feet in height. Except that we have too many of one kind for good taste, we have as yet no cause for regret concerning them. Their colour is good, they spread out their long limbs some ten or twelve feet in every direction, from which hang the most gracefully drooping branches, and there is no thinning out at the bottom.

Perhaps when they reach the age of fifty years or more, we may have occasion to change our opinion, but, if so, it will be with great disappointment when we consider that, not only the writer, but farmers and fruit growers generally throughout our Province, have been planting the Norway Spruce most extensively for windbreak and for ornament, and that, too, acting upon the unqualified commendations of all our leading horticultural and agricultural journals.

Possibly this evergreen is better adapted to our Canadian soil and climate than it is to Pennsylvania, Ohio, Long Island and Illinois, from which States the loudest condemnations arise.

As substitutes for the Norway Spruce, Josiah Hoopes recommends the varieties of spruces technically known as

Picea pungens, *P. alba*, *P. orientalis*, *P. polita* and *P. alcoquiana*.

Arbor Day. *The Educational Journal* for May 1st is largely occupied with plans for the successful conduct of Arbor Day. The setting aside of one day in the year for the decoration of school grounds is certainly most commendable; but the most difficult part still remains, viz., to so direct the army of little workers as to make it a time of real profit.

That it may become an educative power, it will be necessary to have the teachers themselves regarding the grouping and planting of ornamental trees and shrubs, the proper method of making a good lawn, both by seeding and by sodding, and the tasteful laying out and planting of flower beds.

People generally are lamentably ignorant, too, of even our most common native trees and shrubs, and a named collection of these in our public and high school yards, would be of great educational value, especially if the teacher were qualified to instruct his scholars concerning their habits and uses on each returning Arbor Day.

The delay in the distribution of plants this spring has caused us no less anxiety than it has our readers who have been flooding our office with impatient inquiries. We beg to reply to one and all by saying that the orders were placed in the hands of our most reliable Canadian nurserymen about the middle of April, and we had hoped for immediate attention; but to wrap these premiums one by one for two or three thousand members of our Association is no small undertaking. We must therefore "bear and forbear."

Messrs. Smith & Kerman, of St. Catharines, who mailed the Niagara Grape, write as follows: "Sir,—We are sorry that we could not have got

the vines off before; but they are nearly all gone now. We suppose most people don't know that grape vines may be planted later than anything else. We shall have 100,000 to plant after we get through mailing, so you can see we have not served ourselves first. Should any fail to grow we will replace them next fall or spring, gratis.

THE ENGLISH SPARROW.

A subscriber in St Thomas sends us a plea for the sparrow, cut from the *St Thomas Times*. The writer pleads in their favour first that they make delicious pies, and second that they kill May bugs, and peel off the wing covers to prepare them as food for their young. He also pleads that they destroy the plum curculio.

Such pleas in its favour are very scarce. The general testimony of fruit growers and farmers both in the United States and Canada, is that they are perfect nuisances, and one of the greatest enemies we have to contend with.

Only the other day we discovered these scoundrels in a fresh sort of mischief. The plum and cherry blossoms were coming down like snow. It was too soon after opening for them to fall naturally, so we stopped to examine, when lo! two sparrows, as busy as busy could be, picking out the young plums and scattering the waste part of the flower to the ground.

Others may need to try the miserable foreigner a little longer, before they are convinced of his mean spirit, but the writer has determined to show him no mercy.

A LETTER FROM J. J. BOURNE.

SIR:—In the February number of your paper, a letter appeared from me in reference to Messrs. Jackman & Lindsay, of Toronto. I have been in England since, and I am informed that

Jackman & Lindsay complain that my letter may in some way injure them in their dealings with fruit men, and bears the construction that I think they are unreliable and do not act honestly. I never intended what I wrote you to be published in the *Horticulturist*, and much less did I wish to hint that I thought the said firm dishonest. All I had to complain about was that I thought each day after fruit was sold, the commission merchant should send word to the shipper, by post card or otherwise, of the result of the fruit sold, so that the shipper could judge for himself where was his best place to sell. Some other commission houses do this, and I think all should do so. This firm did not do so to me, but they have honestly accounted for all fruit I sent them, and I have no complaint to make except in the one direction I have alone referred to. That is, perhaps, a matter for their own business; but I merely intended that I thought all commission men should adopt this good plan. If I have injured them, I did not wish to do so, and still hope they may do a good business.

May 25, 1887.

JOS. BOURNE.

PROGRAMME OF THE SUMMER MEETING
Of the Fruit Growers' Association of Ontario.
Town Hall, Collingwood, June 28 & 29,
1887.—Open to the Public.

WEDNESDAY MORNING.

10 A.M.—FRATERNAL GREETINGS.

APPOINTMENT OF COMMITTEES.

11 A.M.—THE APPLE.

(a) *Varieties adapted to Simcoe and Grey.*

WEDNESDAY AFTERNOON.

QUESTION DRAWER.

2 P.M.—THE APPLE.—(Continued.)

(b) *Varieties for foreign markets.*

(c) *Best modes of gathering.*

(d) “ “ *packing.*

- (e) *Best modes of storing.*
- (f) *Cultivation of the Orchard.*
- (g) *Fertilizers for the Orchard*
[Paper by Dr. Hoskuis, New-
port, Vt.]
- (h) *Summer pruning of* “
- (i) *Drainage of the* “

INJURIOUS FUNGI, with special reference to the Black Knot and Apple Scab.
[Paper by Prof. Panton, of Guelph Agricultural College.]

WEDNESDAY EVENING.

QUESTION DRAWER.

8 P.M.—THE FOREIGN MARKETS.

[Subject introduced by the President].

- (a) *What fruits and vegetables can be profitably shipped.*
- (b) *How to pack for foreign markets.*
- (c) *How to ship.*

THURSDAY MORNING.

QUESTION DRAWER.

10 A.M.—THE PLUM.

- (a) *Kinds which succeed in Counties of Simcoe and Grey.*
- (b) *Care of a Plum Orchard.* [R. J. Doyle, Esq., Owen Sound.]
- (c) *Packing for the Market.*
- (d) *Yield per acre.*

THE STRAWBERRY.

- (a) *Extent of Strawberry Plantations in the Counties of Grey and Simcoe.*
- (b) *Best early variety.*
- (c) *Best variety for main crop.*
- (d) “ “ “ table. [T. C. Robinson, Owen Sound].
- (e) *Cultivation and Fertilizers.*
- (f) *Gathering.*
- (g) *Packages.*
- (h) *Newer Varieties.*

THURSDAY AFTERNOON.

THE QUESTION DRAWER.

2 P.M.—LAWNS AND LAWN DECORATIONS.

Groups of Shrubbery—suitable for this latitude.

ORNAMENTAL TREES.

- (a) *Shade.*

- (b) *Shelter.*
- (c) *Ornament.*

THURSDAY EVENING.

PUBLIC MEETING, 8 P.M. FREE TO ALL. Ten-minute addresses will be given by various speakers. The President will speak on “The Colonial and its Benefits to Fruit Growers.” Music will be furnished by local talent.

Papers and addresses are expected from other gentlemen whose names we are not yet prepared to give.

A committee will be appointed to examine all fruits or flowers which may be placed upon exhibition during the meetings, and to report thereon. Packages of fruit for exhibition may be sent by express to the care of the Secretary of the Fruit Growers' Association, Collingwood, Ont.

First-class accommodation may be had for all in attendance, at the Central Hotel, or at the Globe Hotel, at the reasonable rate of \$1.00 per day.

Review

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

Transactions of the State Agricultural, Horticultural, Dairyman's Association, and Department of Agriculture of the University, Wisconsin, 1881-2, 1883, 1884, 1885, and 1886. Clinton Babbitt, Beloit, Secretary.

These five volumes are neatly bound in cloth at the expense of the State, and are full of interesting matter. In the Agricultural Report we notice a valuable paper by F. H. King on the Economic Relations of Wisconsin Birds, which deals largely with the food upon which they subsist, showing conclusively what birds are positively beneficial to the farmer and to the

fruit grower. In the Horticultural Report are papers on such subjects as "Horticulture as an Educator," "First Principles of Flower Culture," "Small Fruits," "Our Russian Fruits," "Home Adornment," "Farmers' Garden," "Mechanical Injuries to Trees by Cold," "Raising Seedling Strawberries," etc.

Transactions of the American Horticultural Society for the year 1886.

Parker Earle, Cobden, Ill., President; W. H. Ragan, Greencastle, Indiana, Secretary.

The following are the titles of some papers included, viz., "Nut Culture for Pleasure and Profit" (Lovett), "Small Fruits in New England" (Hale), "Better Culture of Grape Vines" (Campbell), "Selling Fruits by Auction" (Corsa), "Orchard Rusts" (Seymour).

Twelfth Annual Report of the Ontario Agricultural College and Experimental Farm, 1886. James Mills, Guelph, President.

The report of the Professor of Natural History, contains much that is interesting to horticulturists, as for instance the results of six years testing of some four hundred trees and shrubs planted on the College grounds, and of five years testing of some ninety-six varieties of grapes.

Bulletin of the Iowa Agricultural College Experiments. Ames, Iowa, 1886.

Contains some valuable notes on the habits and uses of various grasses.

Journal of the Columbus Horticultural Society, published monthly. W. S. Devol, Columbus, O., Secretary.

This interesting little monthly is published at 50c. per annum by the Society.

Agricultural Science. May, 1887. Published at Geneva, N.Y., at \$2 per annum.

A high-class journal, edited by Charles S. Plumb.

Practical Turkey Raising, Chicago, 1887.

A pamphlet compiled by R. B. Mitchell, 69 Dearborn street, Chicago. Price, 25c.

List of Premiums of the Montreal Horticultural Society. E. J. Maxwell, Secretary.

The Exhibition will be held in Montreal, in July, September, November, 1887.

Humorous.



THINGS ONE WOULD RATHER HAVE LEFT UNSAID.

Herr Professor—"Vat a vunderfoll Dree!"

Lady Godiva—"Yes; isn't it. I love it better than any tree in the place. It's full of sweet and tender associations for me!"

"Herr Professor—"Ach! Zoh! Your Latsyship has perhaps blanted it yourzellff! Yes?"—*Punch.*

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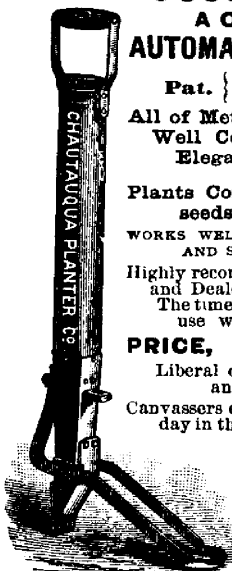
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