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The
CANADIAN
HORTICULTURIST.

PUBLISHED BY THE
FRUIT GROWERS'
ASSOCIATION
of **ONTARIO.**



St. Catharines, Ont.

THE
Canadian Horticulturist,

PUBLISHED BY THE
Fruit Growers' Association of Ont.
AT \$1.00 A YEAR.

Remit to D. W. Beadle, Secretary, St. Catharines, Ont.

ADVERTISING RATES.

One column, one year.....	\$22 50
“ “ six months	15 00
“ “ three months	9 50
“ “ two months	7 00
“ “ one month	4 00
Half column one year	14 00
“ “ six months	9 00
“ “ three months	7 00
“ “ two months	5 00
“ “ one month	3 00
Quarter column, one year	7 50
“ “ six months	5 75
“ “ three months	3 75
“ “ two months	3 00
“ “ one month	2 00
One-eighth column, one year	5 00
“ “ six months	3 00
“ “ three months	2 00
“ “ two months	1 00
“ “ one month	0 75

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SMALL FRUITS.

Jewel, Woodruff No. 1, May King, Atlantic, Cornelia, Prince of Berries, and other new and old Strawberries.

HILBORN, the new black cap Raspberry, will be offered for sale this fall without restrictions. Large, jet black, hardy, very productive, of better quality than any other black cap I have seen.

In introducing this new Raspberry I will give description as correct as possible, and let it work its own way to the front, without electros. or coloured plates.

Send for descriptive circular and testimonials.

Nemaha, Marlboro', Hansell, Shafers, Caroline, Souhegan, Tyler, Gregg, and many other varieties of Raspberries.

Gairnor, Early Cluster, Snyder Blackberries.

Downing and Smith's Imp. Gooseberries.

Fay's Prolific, Baby Castle, White Grape, Black Naples, Lee's Prolific Currants.

Empire State, Niagara, Early Visitor, Worden and many other varieties of Grapes.

FIRST-CLASS PLANTS, LOW PRICES.

Send for Price List.

ADDRESS

W. W. HILBORN,
ARKONA, ONT., CANADA.

WOMAN WANTED SALARY \$35 to \$50 for our business in her locality. Responsible house. References exchanged. **GAY & CO., 14 Barclay St., N.Y.**

NIAGARA FALLS NURSERIES.

The very best varieties of

Small Fruit Plants for Profit.

GREGG, Mammoth Cluster, Souhegan, and other Black Caps.

CUTBERT, the Queen of the Reds.

BABY CASTLE, the most profitable Currant.

Norway Spruce, other Small Fruits, Arbor Vita, &c.

E. MORDEN,

Niagara Falls South P.O.

1831 **THE CULTIVATOR** 1886
AND
Country Gentleman

THE BEST OF THE
AGRICULTURAL WEEKLIES.

THE COUNTRY GENTLEMAN is the LEADING JOURNAL of American Agriculture. In amount and practical value of Contents, in extent and ability of Correspondence, in quality of paper and style of publication, it occupies the FIRST RANK. It is believed to have no superior in either of the three chief divisions of

Farm Crops and Processes,

Horticulture & Fruit-Growing,

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while it also includes all minor departments of rural interest, such as the Poultry Yard, Entomology, Bee-Keeping, Greenhouse and Grapery, Veterinary Recipes, Farm Questions and Answers, Fireside Reading, Domestic Economy, and a summary of the News of the Week. Its MARKET REPORTS are unusually complete, and much attention is paid to the Prospects of the Crops, as throwing light upon one of the most important of all questions—*When to Buy and When to Sell*. It is liberally illustrated, and is intended to supply, in a continually increasing degree, and in the best sense of the term, a

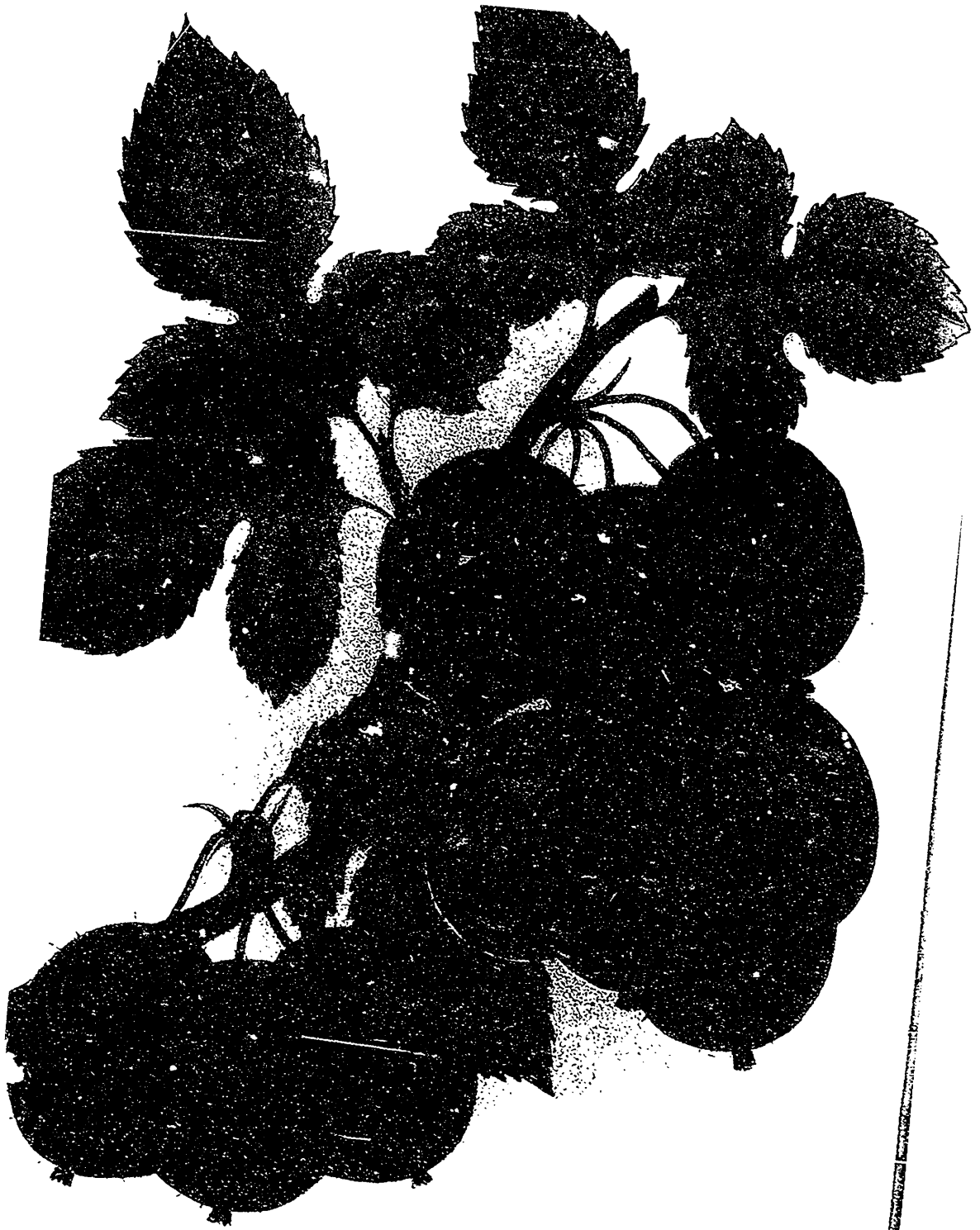
LIVE AGRICULTURAL NEWSPAPER.

Although the COUNTRY GENTLEMAN has been GREATLY ENLARGED by increasing its size from 16 to 20 pages weekly, the terms continue as heretofore, when paid strictly in advance—*When to Buy and When to Sell*. **ONE COPY, one year, \$2.50; FOUR COPIES, \$10, and an additional copy for the year free to the sender of the Club; TEN COPIES, \$20, and an additional copy for the year free to the sender of the Club.**

All New Subscribers for 1886, paying in advance now, WILL RECEIVE THE PAPER WEEKLY, from OUR RECEIPT of the remittance, to January 1st, 1886, WITHOUT CHARGE.]

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ALBANY, N.Y.]



PAINTED FOR THE CANADIAN HORTICULTURIST.
INDUSTRY.

THE
Canadian Horticulturist.

VOL. VIII.]

DECEMBER, 1885.

[No. 12.]

THE INDUSTRY GOOSEBERRY.

We have at present but a meagre supply of desirable gooseberries adapted to our climate. The English varieties will succeed in but few localities, and our American species have not yet been brought up to the standard in size and quality. It is to be hoped that some of our experimenters will be so fortunate as to raise seedlings from our native varieties which will not be subject to mildew, whose fruit will compare favorably in size and flavor with the European sorts.

The Industry, of which our colored plate is a good representation, is a foreign variety which Messrs. Ellwanger & Barry have found to do well on their grounds, it having fruited with them for four seasons without shewing any signs of mildew. In a letter written in reply to our inquiry as to its behaviour this season they say that it has during the past season of 1885 fully sustained its character for health, vigor, and productiveness, but cannot say that it has not shown any sign of mildew. The season was bad, wet, with sudden changes of temperature, and a little mildew was observed in some cases, but was scarcely noticeable, and did no harm. Even the

American sorts were affected. Mr. Thos. Beall, of Lindsay, says that the Industry Gooseberry was very seriously affected with mildew this season on his grounds. We have had it for only one season and find it to be a very vigorous grower. In the summer of 1884 we saw it in the grounds of these gentlemen, and were very favorably impressed with the quality and size of the fruit. They have also found it to be immensely productive. Should this variety prove on general cultivation to be able to maintain its vigorous and healthy character, we shall have much reason to thank these gentlemen for bringing it to the notice of fruit growers.

During the past summer our small sized American gooseberries brought very satisfactory prices, yet the few Whitesmiths that found their way to market brought nearly twice as much, on account of their superior size. Could we have varieties as large as the Industry and as productive as our native sorts, which can be depended upon from year to year, the grower would find their cultivation exceedingly remunerative. We are moving even now in this direction.

THE END OF THE YEAR.

To our SUBSCRIBERS :

It seems but yesterday that we placed in your hands the number for January, now we lay before you that for December. These pages have been filled throughout the year with useful information, such as will keep you abreast of the times on horticultural subjects, and be of service to you in this part of the world in which we live. There have been no serial stories, no humorous anecdotes, no column of witticisms. It is our intention to maintain this character for the *Canadian Horticulturist*. Does this meet with your approbation? If it does, will you kindly express your approval by promptly renewing your subscription so that it will reach this office by the fifteenth of December. The publishing committee has decided for reasons of economy to print only sufficient copies to supply subscribers whose names have been received at the time of going to press. This will make it impossible to supply back numbers. Subscriptions will run for one year from the date on which they are received. Therefore if you desire to secure all the numbers of the *Ninth Volume* it will be necessary that your subscriptions reach us by the day mentioned.

When you remit the subscription will you please mention which of the premiums you desire should be sent to you in the spring. If this is not done then there is danger that you will forget to do it afterwards, and be disappointed at not receiving the article you want, and by that time think you have asked for.

Another favor. If you think our *Canadian Horticulturist* worthy of being sustained, and its publication continued, please to show it to your friends, and use your influence to increase its circulation.

Pardon us. One more request. Please communicate the results of your

own experience, whether successful or unsuccessful. Your experience will be helpful to some fellow-toiler; and your giving of it to others an act of kindness so akin to mercy that it will be twice blessed.

"It bleaseth him that gives, and him that takes."

SUBSCRIBERS' PREMIUMS.

The object which the Fruit Growers' Association of Ontario has in view in offering these plants and seeds to the subscribers to the *Canadian Horticulturist* is two-fold: the first that these may be planted and tested in our Province; the second that the person testing will report his experience, favorable or unfavorable, as the case may be, through the medium of this Magazine, so that intending planters may have the benefit of that experience to guide them in their selections. The Directors regret that so few have taken the trouble to make a report of their experience. They consider that every subscriber who accepts of one of these premiums does so with the understanding and implied promise on the part of the recipient that a report will be made to the *Canadian Horticulturist* of the receiver's experience with the article received.

Every subscriber will receive, in addition to the monthly issue of this Magazine, the Fruit Growers' Association Report for 1885, which is already in the hands of the printer, and whichever one of the following articles the subscriber may designate to have sent in the spring of 1886, namely: (1) Three plants of the *Ontario Strawberry*; or, (2) a yearling tree of the *Russian Yellow Transparent Apple*; or, (3) a plant of the *Lucretia Dewberry*; or, (4) a yearling vine of the *Early Victor Grape*; or, (5) two plants of the *Marlboro' Raspberry*; or, (6) a package containing a paper of seeds of *Gypsophila pariculata*, *Aquilegia Cerulea*,

and *Delphinium*, mixed colors. These will all be sent by mail, post-paid.

SEEDLING APPLES FROM ELORA.

We have received from Mr. James Middlemiss, of Elora, a sample of a seedling apple, the tree of which is some fifteen years old and has been in bearing a number of years. We are told that the crop this year was quite heavy, though there was a very good show of fruit both last year and the year before. The sample received was about the size of a well grown Grimes Golden, of a rich yellow color, and in good eating condition. In quality it will rank as "very good" by Downing's standard of "good," "very good," "best." Mr. Middlemiss states that he kept this fruit last year until past the new year; and thinks that with care it would probably keep till the end of January.

BEAUTIFUL FLOWERS WITHOUT COST.

Have you considered what a variety of beautiful things are offered you for the trouble of obtaining only five new subscribers? If you want a sample copy of the *Canadian Horticulturist*, or of the Fruit Growers' Report, or of both of them, you have only to address a postal card to the Editor, St. Catharines, asking for them, and they will be mailed to you at once. Is there anything more beautiful than the various collections of flowering plants offered you? That *Chionodoxa* with its light azure blue flowers with white centre is just charming; the lily has large beautiful snow-white, trumpet-shaped flowers; *Fritillaria* bears lily-like flowers, singularly chequered; the Spanish Iris are most richly colored; and the Narcissus flowers are snowy white with a lovely red cup. But it is not needful that we describe these beautiful things, the most of them are well known to our readers as very desirable orna-

ments in every flower garden, as charming adornments to every home. Can you not spare a little time and show our *Magazine* to your friends and neighbours and send us their subscriptions for the coming year. They will surely thank you before the year closes for calling their attention to a monthly that imparts so much information, that is so very useful to every cultivator of the soil, even though it be but one mere rood of land; and you will have helped us to make it yet more attractive and useful, and by increasing its circulation to scatter yet more widely the seeds of improved Canadian horticulture.

CANADIAN HORTICULTURIST, VOL. VIII.

And the *Report of the Fruit Growers' Association* for 1884, will be sent to any subscriber, post-paid, for *sixty cents*, so long as there are copies on hand to send. A few copies of Vol. VII. and of the Report for 1883 yet remain, which also will be sent on receipt of sixty cents. The whole will be mailed to any address on receipt of one dollar. This is an unparalleled opportunity to secure a large amount of practical information worth many times the cost. Indeed it will save to any one interested in any way in horticulture many an expensive experiment.

CROWS DEVOURING APPLES.

A correspondent residing in Nova Scotia writes us that the crows are very fond of the Gravenstein apple, that being the only one out of a large number of varieties which they condescend to eat, and that this fall he lost over a barrel, the crows alighting on the tree and pecking the apples until they fell half eaten and ruined, but they would not touch them on the ground. He was finally compelled to gather them to save what remained.

PREMIUMS FOR NEW SUBSCRIBERS.

For five new subscribers and five dollars we will send prepaid any one of the following collections of choice bulbs or plants. This is an opportunity to secure a fine assortment of beautiful flowers and valuable plants without cost, other than the pleasure of doing a favour to your friends by introducing this monthly to their notice, and of enlarging the circulation and extending the usefulness of the only horticultural magazine published for the benefit of Canadian lovers of fruits and flowers:—

Collection No. 1, one *Chionodoxa lucilla*, one *Lilium longiflorum*, two *Fritillaria meleagris*, two Spanish Iris, and two *Narcissus poeticus*; No. 2, five Tulips, two Chinese Peonias, one Spotted Calla, one Tiger Lily; No. 3, a collection of five different Lilies; No. 4, a collection of five different sorts of Iris; No. 5, two double and two single Hyacinths, and three double and three single *Narcissus*; No. 6, five Herbaceous Perennials—*Fraxinella*, *Dianthus*, Japan Anemone, Japan Spirea, and *Clematis Erecta*; No. 7, three hardy flowering shrubs—*Hydrangea paniculata*, Spirea Van Houtte, and Purple Fringe; No. 8, a collection of twelve different sorts of Flower Seeds; No. 9, four hardy Roses; No. 10, four Tea Roses; No. 11, three Polyantha or miniature Roses; No. 12, four Climbing Roses; No. 13, ten plants, to be chosen by you from the following list: Geraniums, single; Geraniums, double; Fuchsias, single; Fuchsias, double; Petunias, double, blotched and fringed; Abutilons, rose-coloured; Abutilons, white; Abutilons, straw-coloured; Begonias, scarlet; Begonias, rose-coloured; Begonias, white-flowered; Coleus, with most beautifully variegated foliage; *Hydrangea Thomas Hogg* and *Hydrangea Otaksa*. These plants will be securely

packed and sent by mail. You are at liberty to choose the ten from any one or more of these different kinds of plants. No. 14, six beautiful clove-scented carnations; No. 15, six Double Dahlias, different colours; No. 16, twelve *Gladiolus* bulbs; No. 17, twelve Tuberose bulbs and six *Gladiolus*; No. 18, a Jessica Grape-vine; No. 19, a Niagara Grape-vine; No. 20, an Amber Queen Grape-vine.

For ten dollars and ten new subscribers we will send, prepaid, any two of the above collections you may designate; or if preferred, we will send you one strong yearling tree of the Russian Vladimir Cherry, grown from trees imported by the Fruit Growers' Association direct from Russia.

If you prefer books, we will send you, prepaid, on receipt of three dollars and three new subscribers, *Every Woman Her Own Flower Gardener*, 148 pages, bound in cloth.

For five dollars and five new subscribers, *Window Gardening*, 300 pages, illustrated with 126 engravings.

For twelve dollars and twelve new subscribers, Saunders' *Insects Injurious to Fruits*, 436 pages, 440 engravings, bound in cloth.

For fifteen new subscribers and fifteen dollars, the *Floral Kingdom*, a magnificent art book, splendidly bound, 450 pages, 200 illustrations.

THE RITSON PEAR.

We have received from Messrs. Stone & Wellington a specimen of this pear, which they inform us had its origin at Oshawa, Ontario, and that the original tree is now over sixty-five years old and still bears large crops of fine fruit. While other varieties have been planted in the same field that after a few years succumbed to the pear-blight or perished from some other cause, this tree has never been affected in any

way, either by the severity of the weather or by disease of any kind.

The pear received by us measured two and a half inches in length and six inches in circumference at its largest part. In shape it is obtuse pyriform, light green in color with splashes of russet. The flesh is tender, juicy, sweet, somewhat gritty about the core, quality "good." It seems to be in season from the middle to end of October. This may prove to be a valuable pear for some of our colder sections because of the apparent hardness and healthiness of the tree.

ONTARIO FRUITS FOR THE COLONIAL EXHIBITION.

The President of the Ontario Fruit Growers' Association, Wm. Saunders, Esq., London, Ont., has undertaken to superintend the preparation of a collection of Ontario fruits, for the Indian and Colonial Exhibition, to be held in London, England, next summer. He desires to receive contributions of choice specimens of fruit from persons residing in any part of Ontario, which will be preserved in fluid in glass jars. He now wishes to obtain all the varieties that can be had of apples, pears, grapes and nuts. Of large fruits three or four specimens will be sufficient; of medium size, six specimens; of small size, sufficient to fill a quart jar. The samples should be carefully named, and forwarded in baskets, by express. The express charges will be paid in London.

It is important for the credit of our Province, and the advancement of its fruit interests commercially, that this collection should be of great excellence; therefore, Mr. Saunders hopes that all who can will forward, and induce their neighbors to forward, samples of any fine fruit that may be had in their neighborhood. All such contributions will be duly acknowledged.

The following is a list of those who had contributed up to the 3rd of November:—

A. M. Smith, St. Catharines, 8 varieties of apples, 4 pears, 1 of crabs, 1 peaches, 3 grapes, 2 quinces, some peppers; also egg plants, and tomatoes.

S. Parnall, St. Catharines, 3 varieties apples, 3 pears, 1 crab apples, 1 grapes.

Beadle & Dunlop, St. Catharines, 3 varieties apples, 3 grapes.

Albert Pay, St. Catharines, 8 varieties pears, 1 peaches.

T. R. Merritt, St. Catharines, 6 varieties of pears.

W. Fletcher, St. Catharines, 6 varieties of pears.

W. Haskins, Hamilton, 7 varieties of grapes.

S. Burner, Hamilton, 20 varieties of grapes.

H. Saltmarch, Hamilton, 8 varieties of grapes.

John Mellon, Hamilton, 6 varieties of grapes.

S. Woodley, Hamilton, 18 varieties pears.

D. Murray, Hamilton, 5 varieties apples, 5 pears; also 11 jars of grapes, crab apples, and peppers.

Thomas Harper, Hamilton, 5 varieties pears.

John Gordon, Hamilton, 22 varieties apples, 3 pears.

J. W. Sinclair, Hamilton, 5 varieties pears.

R. Postan, Oakville, Niagara grapes.

Chas. W. Culver, Simcoe, fine Alexander apples.

B. Gott, Arkona, 2 varieties apples, 13 grapes.

P. E. Bucke, Ottawa, 9 varieties grapes.

W. Graham, Ottawa, 6 varieties grapes.

A. McD. Allan, Goderich, a very fine collection, consisting of 31 varieties apples, 16 pears, and 4 plums.

Thos. Beall, Lindsay, 6 varieties apples, 11 bottles of gooseberries, 2 strawberries, 1 currants, and an excellent sample of Niagara grapes.

S. P. Stipes, Barton, 1 variety pear.

Wm. Rynor, Barton, 3 varieties apples, 5 pears.

John Lamont, Barton, 3 varieties apples.

S. Lovel, Barton, 6 varieties apples.

D. Vanduzer, Grimsby, 3 varieties apples, 8 pears, 3 peaches.

W. P. Coyne, London, 1 variety apple.

P. Mackenzie, London, 2 varieties apples.

An excellent collection of apples and pears, forwarded by Mr. A. McD. Allan,

from the Ridgetown Exhibition, contributed by the Howard Branch Agricultural Society, consisting of 33 varieties.

George Nixon, Hyde Park, several varieties each of apples, pears, and crabs.

Wm. Kotnire, St. Catharines, 6 varieties apples, 2 pears.

R. D. Colgrove, London, 2 varieties apples.

D. Nicol, Catarqui, 3 varieties apples.

J. B. Osborne, Beamsville, 4 varieties pears, 3 apples, 1 grapes.

James Briody, London, 3 varieties apples.

P. C. Dempsey, Albury, a fine collection, including 36 varieties apples, 4 pears, and 33 grapes.

Henry Woodruff, St. David's, Niagara grapes.

Dr. Flock, London, yellow egg plums.

James Griffiths, Westminster, Wilson's Early blackberries.

T. H. Parker, Woodstock, Glass' Seedling plums.

James Emmerson, Valencia, 10 varieties apples.

George Davy, Valencia, 3 varieties apples.

Henry Paffard, Niagara, four very fine samples of grapes, one being a very large bunch of Black Hamburgs, grown in the open air.

J. Ormond, Niagara, 3 varieties peaches, 3 apples, 1 pears, 1 grapes.

Gage J. Miller, Niagara, 7 varieties pears.

Edward Brammer, London Township, 6 varieties apples.

F. Farncomb, Newcastle, 7 varieties apples, 8 pears.

James Dorman, Byron, 5 varieties apples.

John Plummer, London, a fine sample of walnuts.

Judge Hughes, St. Thomas, Jonathan apples.

J. M. Denton, London, 3 varieties apples.

THE REYNARD APPLE.

Mr. Charles E. Brown, a life member of the Fruit Growers' Association of Ontario, says: "We have a seedling in this county, the Reynard, season November to February, a very large, symmetrical, round apple, greenish yellow, with sometimes a faint blush, that I should like to see tried in Ontario, and would be glad to send scions gratis to any one who will try it, with the assurance that they will be pleased with the result; also scions of a Cornwallis seedling, Bishop Bourne, from

seed of Ribston Pippin, of which you will see a notice in next report of the American Pomological Society. My idea concerning the Reynolds is that the quality would improve in a warmer region, and that it would be a valuable market variety."

We will give Mr. Brown's address to any one wishing to try one or both of these varieties of apple in Ontario.

VERBATIM HORTICULTURAL REPORTS.

In noticing the report of the Fruit Growers' Association of Ontario the *Rural New-Yorker* spoke in terms of commendation of the peculiar feature of these reports that the words of the speaker are taken down exactly as spoken by a skilful shorthand writer. One of its correspondents takes notice of this fact in the following terms:—The *Rural* is right, as usual, when it says that a full report of the discussions at horticultural meetings makes the most valuable part of the record when published. If *verbatim* reporting ever pays, it pays there. Even a little shade of expression from an expert, fully given, will sometimes speak volumes.

A DISHONEST TREE AGENT.

We notice that a dishonest tree agent by the name of Archibald Drinkwater has met with his deserts. It seems that he forged several orders for trees by increasing the amount ordered after the order was given, and that he tried this game on at least two different nursery firms for whom he engaged to sell trees. Fearing he might be called to account he fled the country and domiciled himself near Chicago, not being aware that the extradition treaty covered his case. He was hunted up by a shrewd detective, brought back and tried at the Fall Assizes in Owen Sound, and sentenced to five

years in the penitentiary. 'This may serve as a commentary on the old adage that "honesty is the best policy," and be a warning to others.

THE SMALL FRUIT GROWERS' ASSOCIATION.

We learn from Mr. S. Cornwell that the annual meeting of the Small Fruit Growers' Association of the Counties of Oxford and Brant will be held in the Town Hall, Norwich, on Thursday, January 14th, 1886, at 10 o'clock a.m. sharp. All persons interested in fruit growing are respectfully requested to be present at the meeting and take part in the discussion on fruit growing.

MICHIGAN STATE HORTICULTURAL SOCIETY.

The annual meeting of the Michigan Horticultural Society will convene in Conkey's Opera House, Benton Harbor, December 1, 2 and 3, 1885. Delegates in attendance will be entertained by members of the local society. The Convention will open on the afternoon of Tuesday, December 1, at 2.30 o'clock, and close with an evening session on Thursday. On the evenings of the second and third days popular lectures will be delivered. The first evening and the day sessions will be devoted to the discussion of topics connected with horticultural pursuits, the following being an outline of the programme:—

Tuesday—Market fruit growing.

Wednesday morning—The vegetable garden.

Wednesday afternoon—Ornamental horticulture.

Thursday morning—Amateur fruit growing.

Thursday afternoon—Arboriculture and forestry.

Kindred organizations are cordially invited to send delegations. For rail-

way certificates and further information, address the secretary, Chas. W. Garfield, at Grand Rapids, Michigan.

THE INDIANA HORTICULTURAL SOCIETY

Will hold its Annual Meeting at Purdue University, Lafayette, Ind., on the 1st, 2nd and 3rd of December, 1885.

The following are some of the subjects to be considered: Pears, Plums, and Cherries of North-east Europe, Horticultural Entomology, The Protection of our Birds, Progress in Horticulture, When and How to Plant, When and How to Prune, The Effects of Frost on Plants, Horticulture and School Sanitation, The Ornamentation of School Property, and Its Permanent Influence upon the Pupils, Distribution and Preservation of Species, Fruits for Farmers' Families, What Experimental Stations can do for Horticulture, What Fruit Trees shall we Plant? All persons attending the meeting will be entertained free of cost at the University.

FLOWERS IN THE SCHOOL GROUNDS.

Mr. Morgan, Inspector, has sent a crate of flowers to Orillia Public School.

Mr. Ellis, gardener, proposes to present fifty packages of flower seeds to the Public School, to give the pupils instructions in planting them, and prizes to the most successful cultivators.—*Orillia Packet*.

PRICES OF APPLES IN ENGLAND.

We learn from Keeling & Hunt, fruit brokers, Monument Buildings, London, E. C., England, that on the 21st of October last the following prices per bbl. were realized: Baldwins, from 12s. to 18s.; a few choice, 21s.; Greenings, from 13s. to 15s.;

Jonathan, from 12s. 6d. to 17s. ; King, from 13s. to 16s. ; Spitzenburg, from 12s. to 17s. 6d. ; Spy, from 14s. to 16s. 6d. ; Vandevere, from 10s. to 11s. 6d.

QUESTION DRAWER.

NEW DISASTERS.

DEAR SIR,—The present year's experience has introduced me to two fresh and unexpected disasters—one connected with plums, and the other with grapes; both, however, being some insect or disease which causes the premature death and removal of the leaves. With the (1) plums this commences before the fruit is ripe, and the destruction was not so complete as altogether to prevent its ripening. Although in two or three cases very few leaves being left, and the fruit at the time quite green, I considered it advisable to remove it rather than endanger the life of the trees. With (2) grapes, the Delaware was the greatest sufferer, while Brant, Rogers' 9 and 15, and Clinton did not altogether escape. Of the Delawares not a single bunch ripened or a single berry ever turned colour out of a crop of between 100 and 200 pounds, and I may also say that there was not a leaf on any of the vines, old, young, or seedlings, long before there was any frost to injure them. I noticed a small, light-colored insect under the leaves, and tried Paris green without effect; afterwards wings grew on these insects, and they infested the vines like a swarm of gnats. I suspect them to be thrip, but don't know. On the plums I saw no insect, but noticed dark spots on the leaves, and they became so brittle that at the slightest touch they fell off the trees. Although my vines and trees were loaded with fruit, overbearing could not have been the cause in either case,

for I had both vines and trees that had never borne fruit affected in the same way.

If you can point out a remedy for these disasters you will confer a favor on

Yours truly,

A. HOOD.

Barrie, 9th Nov., 1885.

REPLY.—(1). Plum trees are very apt to loose their leaves prematurely under the following circumstances:— (a) When growing in poor soil, (b) when growing in wet or insufficiently drained ground, (c) in very dry weather or protracted drouth, and (d) if the soil be sandy. The remedies are to plant in a rich, well drained clay soil, and to keep it rich by liberal manuring, and a yearly application of a liberal supply of salt on the surface of the ground, from two quarts to half a bushel, every spring, according to the size of the tree.

(2). Your insect is probably the grape-vine leaf-hopper, *Erythroneura vitis*. They live over winter in the winged state under the dead leaves or such other rubbish as they may find. In the early summer they lay their eggs on the young vine leaves. When the larvæ hatch out they resemble the perfect insect, except that they have no wings. They feed on the young leaves by puncturing them with their sharp proboscis, through which they suck up the juices. The injury appears on the upper surface of the leaf in the form of yellow or brownish spots, which increase in size with the growth of the insects, at length involving the whole leaf, which looks as if scorched, and at length drop from the vine. This work

is continued during the life of the insect, which in its last stages acquires wings and flies from vine to vine. The Delaware and other thin-leaved sorts suffer more from these insects than the leathery-leaved sorts. The remedy is one of prevention, by gathering all the vine leaves in autumn and burning them, and raking the surface frequently and cleaning up all rubbish where they can hibernate. Syringing with tobacco-water, whale oil soap, kerosene emulsion, etc., when the insects are first hatched is recommended, but these are wholly inefficient when they have acquired their wings.

CATALPA SPECIOSA.

My Catalpa has grown nicely, but it has two shoots forming a fork. Would you advise (1) cutting away one or letting it grow as it is? I planted it in a tub with holes bored in the bottom so that I can remove it to its proper place in the spring, knock the staves away, and plant it without injuring the roots: is this (2) a good plan? I have a Bignonia which has grown about three feet since it was planted in the spring: ought I (3) to lay it down and cover it, or does it spring up afresh in the spring, the old vine dying? I like the appearance of the Catalpa; its foliage is fine; and if its bloom is as nice as represented in the *Canadian Horticulturist* and *Rural New-Yorker*, it will be a beautiful tree. At about what (4) age does it begin to bloom?

R. KENNEDY.

Bethany.

REPLY.—(1), Cut away one of the shoots when you plant it out next spring. (2), Yes, your plan is a good one, especially with trees that are dif-

ficult to transplant, but we have found the *Catalpa speciosa*, or Hardy Catalpa, to bear transplanting remarkably well. (3), You would do well to lay your Bignonia down this fall and cover it lightly. It does not die down in autumn and spring up afresh from the root in the spring. (4), The *Catalpa speciosa* often begins to bloom at three and four years old.

FERN FRONDS.

Among some ferns I have just received from Muskoka I found one, a frond of which I enclose to you, all the petioles of which were covered with what appears to be a parasite, but whether vegetable or animal I cannot judge. I shall be greatly obliged for your opinion on the subject, and for any information about it which you may be able to give. I have quite a collection of native varieties gathered from various parts of the Province, but I never saw anything of the nature of a parasite on any specimens before, and the resemblance of the present example to violet or pansy seed is so remarkable as to excite wonder as to its origin.

S. A. C.

Toronto, 23rd Sept., 1885.

REPLY.—That we might have the opinion of an authority in this matter we sent the specimen to a student of Cornell University at Ithaca, N. Y., with the request that he would submit the specimen to the professor of botany. This was done, and the professor stated that the fern was one of the Moonworts, but so very much dried up that he could not identify the species, that the bodies having the appearance of pansy seeds were not parasitic, but sporangia.

It will be remembered that the Moonworts belong to the suborder *Ophioglossaceae*, the sporangia of which are spiked, and in *Ophioglossum* the coriaceous sporangia are in two ranks on the edges of a simple spike, which in *O. vulgatum* is single and placed on a stalk.

Will you please inform me through the medium of the *Canadian Horticulturist* whether the bulbs of tuberoses and tigridias should be taken up in the fall and preserved in a dry state over winter, or can they be left in the ground?

JOHN KNOWLSON.

Lindsay, Ont.

REPLY.—*Tigridia*—The plants of this family will not bear the least frost. The bulbs should be taken up in the fall, thoroughly dried, and kept in a dry, frost-proof cellar, securely protected from mice. Plant again in spring, when the ground has become warm. *Tuberose* bulbs should also be kept in a warm, dry place. If they are kept in a temperature below 50° F. the flower germ is apt to decay; and, although the bulb may appear sound outwardly, and send forth an abundance of leaves, it will not flower.

HEATING A VINERY.

I have a cold graperly 30 × 15 feet, in which the grapes have not ripened properly for the last two or three years. Will you oblige me by stating in the *Canadian Horticulturist* the best way of heating it?

Toronto.

W. W. R.

REPLY.—The best method of heating a vinery is by means of hot water in

four-inch pipes, with one foot in length of pipe to every fourteen cubic feet of space, running the pipes under the walk within the house. At page 142 of the *Canadian Fruit, Flower, and Kitchen Gardener* will be found a full description of the simplest mode of heating a vinery, with diagrams illustrating the method.

WHAT THE PEOPLE SAY.

NEW GRAPES.

P. E. BUCKE, OTTAWA.

The past season has fully demonstrated the value of two candidates for public favour in the grape line; and though they are not absolutely new, yet their introduction is of such recent date they have neither of them become so universally disseminated as they deserve to be. I allude to the Brighton and the Amber Queen.

The Brighton was raised by Jacob Moore, of Brighton, New York, and is a fine, strong grower. It gives an exceedingly handsome conical bunch, of moderate compactness, neither too loose nor apt to jam; berries large, of a deep red colour; ripens with Creveling or a little before Concord; has a fine, sprightly, aromatic flavour; flesh tender, with a very slight pulp. It is not a good keeper, as it loses somewhat of its flavour when over-ripe. No collection of grapes is complete without the Brighton, and if only one vine is planted it should be of this variety.

The Amber Queen, which I obtained from Messrs. Stone & Wellington, nurserymen, Toronto, some three years ago, produced a good crop this season. The plant is a vigorous one, and has not been attacked with any disease. The grapes are free from rot and mildew; the berries hang well on the bunch; it is the earliest red grape I have so far

fruited ; it has a sweet, rich flavour ; berry a little smaller than Brighton, but much larger than Delaware ; it is a good keeper. The leaves on the young shoots of this variety have a beautiful golden bronze appearance, and are quite ornamental.

The Delaware is the most sought after by the public of all the red grapes ; but it is believed when the Amber Queen and the Brighton come to the front, as they are bound to do, they will take the highest rank both for market and table, their appearance and flavour being of first quality.

GRAPE NOTES.

BY T. C. ROBINSON, OWEN SOUND.

As the vineyard season comes and goes, what sweet spots and streaks are indented on the memory in judging the merits of the multitudinous varieties that so successfully claim our attention ! Some of the introductions of recent years are certainly remarkable for their excellence. Among these the one which has attracted the most attention, perhaps, is the

Niagara.—I find it well up to the claims made for it. Season of ripening about with Worden ; cluster large, and quite compact without cracking ; berry as large as Concord, rather oval, of a fine shade of greenish yellow ; and quality very sweet and delicious, though not as rich as some others ; while the vine is a remarkably strong grower, very productive, and the foliage is of the healthy *Labrusca* type. Unfortunately, my crop of all varieties was cut short by a late spring frost ; but the abundant blossoms showed what the *Niagara* could do. In spite of the strong foxy smell which it develops when kept in the house for some weeks, I would rather grow it for profit than any other variety which I have tested.

Jessica.—I have not yet fruited this, and shall watch the columns of the

Horticulturist with interest for the reports of those who have it in bearing. Some vines that I have have grown well.

Moore's Early.—Perhaps this grape will pay the best of all the black varieties that can be grown for a distant market, provided it is given rich soil. This condition touches its weak point, viz : its lack of vigor in growth. I would not like to call it a *poor* grower, yet it is notably behind Concord and the Rogers' varieties in this respect. Yet we cannot expect to have the great advantages of extra earliness, size, etc., without paying for them in some way. And when the Moore puts so large a measure of its sap into fine clusters of very large, firm, handsome, and well flavored fruit, that ripens along with Champion, we should not grudge a little extra manure and elbow-grease, to enable the vine to stand the strain, and grow enough wood to do it again next year. I find the fruit to be tougher-skinned than either Concord or Worden, and the quality about like Concord.

Lady is another variety which labors under the same defect. If it gets good treatment it ripens about with Moore and Champion, and while the clusters are only of medium size, yet the berries are often as large as Concord. It seems a rather slower grower than Moore's Early, with rich soil and fair cultivation. I think it will be found of great value as the earliest white grape in general cultivation. The fruit is sweet and good, and the foliage, like Moore's Early, is of the hardy, insect-proof and disease-resisting Concord type. The fruit of the *Lady* is too tender-skinned to ship far.

Champion.—What a poser this grape is. How one would like to kick it out for its sourness when first colored, and for its poor quality that is worse than sourness when fully ripe ! And yet,

with its extreme earliness, its good-sized berry, and compact (if not good-sized) cluster, its healthful foliage, and great vigor, hardiness and productiveness,—*there it is*,—come to stay, I verily believe! We may talk about kicking it out; but as long as men find that with Champion vines they are sure of big grapes and lots of them, so long it will rear its crest triumphant. People will certainly be shy of all black grapes on the fruit stands while the Champion is around, yet most folks who buy would prefer Champion grapes to no grapes. So let us as a remedy try to work market quotations into a separate rate for Champion, and then let this irrepressible *Labrusca* have its fling!

I don't succeed with *Pocklington*, or *Prentiss*, or *Lady Washington*. I have them in a sunny spot on very rich soil, but where we neglected proper cultivation. Some other varieties with poorer treatment have done well. Some have utterly failed. So I am not competent to pass an opinion upon these from experience.

Jefferson has been a disappointment. The fruit sent me some years ago, upon its introduction, was the most delicious I remember ever tasting; the foliage is of the healthy native type, and the growth vigorous. But it winter-killed with me, when left exposed, so that I have never grown a cluster: I must experiment further. It proves fully as late as Concord, on the grounds of a friend in town.

It would never do to omit mention of the "old reliable"

Concord.—This has ripened here this season; that is, it has fully colored. But was it ripe? The fact is the Concord demands a longer period of sunshiny weather than we usually get in this northern lake region: so that even when it does color you have to lay it down, gently or otherwise,

with the sad conviction that you are eating Concords that are not Concords. The Concord body there, but the Concord soul is hence!

But whatever our Concords lack in sweetness, etc., is more than made up in its noble child, the

Worden.—Here we have to the full the thrip-proof, mildew-proof, Concord leaf, almost the Concord vigour of growth, more than Concord size of cluster and berry, a time of ripening close behind Moore's Early, and by far the purest, most delicious flavor of all the Concord family. Indeed, after comparing it with well ripened Eumelan, Early Victor, Delaware, the best of the Rogers varieties, and with well ripened Concord from southern districts, I must confess that, so far as this season's grapes are concerned, I prefer the Worden to any other whatever.

After giving such an unusual opinion (which I hope some of the newer varieties may give me reason to change) perhaps I had better not go on to speak of the Rogers, and other hybrids, at this time.

GREAT STRAWBERRY YIELD.

In looking over the September number, I see Mr. Croil mentions a wonderful yield of strawberries on the "Slip-shod System." There is a somewhat similar case in this village, only with far more astonishing results. I can verify the statement as to yield, and I measured the patch myself.

A man put in a patch in his garden Sharpless strawberries in the spring of 1883, one foot apart every way, kept them as clean as he could, but allowed the runners to cover the ground. Last year he raised 75 baskets, and this year 375 baskets! The piece of ground measures 7 yards by 17. He says he has had very little trouble this year with weeds; and no wonder, when I

saw the piece there was no room for weeds. I need not say the soil is splendid. Hitherto I have planted in matted rows, and kept as clean as I could with a good deal of labor; but in future I think I shall try to grow strawberries as this man does. How is it all one's theories are so upset? It is very discouraging to a beginner like myself. Perhaps some experienced strawberry-grower will explain the reasons for this wonderful yield.

I remain, Sir, yours truly,

A. J. WRIGHT.

Lakefield, Ont., Nov. 5, 1885.

[Will Messrs. Little, Hilborn, and Robinson please to explain?]

AN AMATEUR'S FURTHER EXPERIENCE.

To the Editor of the Canadian Horticulturist.

DEAR SIR,—In the number for November, 1884, I gave my views gathered in a small garden in the suburbs of Toronto. I do not know that I have very much more to add, but possibly the little may be of some use to amateur gardeners.

Mr. Croil took exception to the opinion passed by me upon "Bliss' American Wonder Pea," and kindly sent me some seed raised by himself. I sowed them at the same time and side by side with Carter's Little Gem. The "Wonder" was ready a week or ten days ahead of the "Gem," and was more prolific; so I must withdraw the statement in my former letter. My peas were ready to gather two months after they were sown.

I saw in the seed catalogue mention of a new sweet corn, "Ne Plus Ultra." I planted some, and found it very good. It bears plentifully, and although the grains look small, yet they are deeper set than the other varieties. It looks like popcorn in size, but the depth makes the grain more than double the

size. It is very sweet. I still find the "Tom Thumb" very satisfactory.

Carrots and beets have done well. I tried the Hanson lettuce, and found it very satisfactory. Cabbage and cauliflower have both done well, and I have not been troubled by the worm. Tomatoes have been decidedly unsatisfactory. The crop was plentiful enough, but very few ripened. For the last three years I have found it difficult to raise a satisfactory crop, for the reason that the summers have been so cool.

Raspberries were a very abundant crop. I would still recommend the "Guthbert," particularly to the amateur. Mine came through the winter uninjured.

I have dug up my blackberries (Taylor's Prolific). I find the canes are tender and the crop uncertain. They take up too much room, and become a weed. The "Hopkins" blackcap is hardy and productive. I have a seedling of my own which ripens two or three days earlier and is juicier.

Gooseberries ("Downing" and "Smith's Improved") bore heavily, but were attacked by mildew. Have any of your readers seen the new one, "The Triumph?" Is it mildew proof?

Grapes have been a very plentiful crop, but the season has been a very unsatisfactory one. I haven't tasted a grape thoroughly ripe. I have suffered from mildew more than any previous year. Even the Delaware, which has never before suffered with me, was attacked severely. The "Brighton," I may say, was destroyed. Has any one tried the remedy recommended by an Italian grape grower, viz.: "Sprinkle the foliage with a solution of soda—two kilos of soda in one hectolitre of water, or 4½ lbs. of soda dissolved in 26 gallons of water." The remedy is simple if it is only effective. I gave the "Lady" and "Moore's Early" one more chance, and dug them up this

fall. I gathered from the both, after having cultivated them for five years, twelve bunches, and I came to the conclusion that I could do better than that with some other varieties. I am much pleased with the "Vergennes." Mine bore about fifty bunches, fair size. I have put away the greater part of them for the winter, and shall watch with some interest the result, for if they will keep, then it will be well to cultivate them. They ripened fairly well, and since I gathered them they have appeared to ripen more. The Jessica bore a very good crop, and ripened. I notice that if it is allowed to remain too long on the vine it shrivels. The "Purity" also ripened. The great fault with this variety is that the bunch is small. The berry is very firm, of a bright amber colour, and rich flavour, and the vine is a fair grower and bearer. Any one cultivating a few vines I think would be pleased with this kind. The Burnet I have discarded. The Rogers varieties did not mature very well. I am disappointed with the "Massasoit" (Rogers' 3). The bunches are small, irregularly set, and the vine a poor bearer with me.

I was glad to read in the Annual Report that you spoke at Barrie so highly of the "Lindley" (Rogers' 9). I have now grown it seven or eight years, and from the first day it fruited have had a high opinion of it. Its fault is that the bunches are irregular. The Pocklington turned out satisfactory. It has a very handsome appearance, and for that reason people like it. The flavour is not high class, but still it is a reasonably good grape. The Iona did not ripen, nor the Elvira. Notwithstanding the "Elvira" did not ripen, I have a high opinion of it, and think our Canadian cultivators should endeavour to raise seedlings from it. It is healthy, hardy, and an immense

bearer, but a little late; but if the summer had been an usual one it would have ripened. We made jam of the fruit and it went to a jelly, the skins being entirely absorbed into the juice. The colour was rather of a greenish hue, but that could be remedied by adding the juice of some black variety. I have this year planted the "Montefiore" and "Black Elvira" (seedlings of the "Elvira"), and the "Golden Gem" and "Bacchus." I don't know whether they will ripen, but they appear to be highly recommended. All but the Golden Gem appear to be wine grapes, and the Gem should be a wine grape too, as it is a cross of the Delaware and Iona.

Our Canadian fruit growers do not appear to go in for raising seedling grapes, except a few, and those which are raised we hear very little of. I have noticed from time to time for several years past that Mr. Mills, of Hamilton, had some valuable seedlings, but they do not appear to have been offered to the public. What we want is a grape which will ripen in the last week in September, and of a quality superior to the Concord, and at the same time as hardy as that variety. Surely perseverance will produce us such a grape.

Notwithstanding I covered my grapes last winter, three or four were frozen to the ground, and several of my neighbours who did not cover lost all their wood. I think it is absolutely necessary in the vicinity of Toronto to cover every winter; for even if the winter is mild the chances are that the spring will injuriously affect them, and besides, it prevents their budding too early, and they thereby escape the spring frosts.

Several of my peach trees were killed last winter, and I have come to the conclusion that the game is not worth the candle.

I had a very fine crop of plums. The heaviest bearer was the St. Lawrence, a seedling raised by Ellwanger & Barry. It is about the same colour as Smith's Orleans, but I think a little smaller. I admire Pond's seedling the most. I used both Paris green and air-slacked lime, but as the crop was universally good I should like another trial of these remedies before expressing an opinion as to their efficacy.

Cherries did not even blossom. I am afraid they are not a very encouraging fruit to grow.

I think I have now gone over a list of my productions. I might add that my soil is a sand.

I paid a visit to Manitoba last summer. The only wild fruit I saw was the black currant. Some berries were larger than the cultivated. The leaves are different, and do not possess the same aroma. On the wild cherry I noticed the black knot. The wild flowers are very abundant, and some of them very fine. The prairie rose is very sweet, and does not grow higher than about a foot. I saw three colours—white, light, and deep rose. I think many of your readers would be delighted to have it in their gardens. The wild vetch is very pretty, and so is the wild coreopsis. A gentleman who was there at the same time told me he had collected and pressed fifty varieties of wild flowers. I was too late for strawberries, but the plants were to be seen everywhere. I saw the cultivated black, red, and white currant and the raspberry growing, and they appeared to be thriving. From what I saw, there is no reason why the smaller fruits should not be grown there, but there will be greater difficulty in raising the larger fruits.

Yours, etc.,

ALFRED HOSKIN.

Toronto, Nov. 5th, 1885.

GRAPES—A REVIEW.

It has seemed to me that a brief statement of experience with several varieties of grapes might not be uninteresting, to the readers of the *Canadian Horticulturist*. My soil is a sandy loam, the sand predominating, naturally cool and moist, and situate in the County of Lincoln, within the limits of the City of St. Catharines. The climate is modified at this place by the proximity of Lake Ontario, which lies not quite three miles to the northward. The winters are often quite open, usually variable weather with sudden changes from cold to warm and warm to cold. The snow can not be depended upon as a covering in winter, a heavy fall of several inches being often quite melted and gone in two or three days. The thermometer rarely falls to 15° below zero, Fahrenheit, and often does not get much lower than zero during the whole winter. The summers are usually warm and frequently with long periods of dry weather, it not being uncommon to be without rain for four to six weeks. A cool summer, with frequent showers, such as the one just passed, is exceptional. This much by way of explanation of the circumstances under which this experience has been gained which is now given.

Adirondac has proved to be a tender variety, unable to endure our changeable winters. Had it been laid down in the fall and slightly protected, it would probably have survived; as it is, there is not a plant left out of some dozen or more.

Allen's Hybrid is so strongly imbued with the characteristics of the vinifera family that it has proved to be as subject to mildew as any of the European grapes. All of the vines have fallen a prey to mildew.

Aquaticum (Rogers' No. 15) in favorable seasons, and with long pruning, will ripen well; but in such a season as the

past, in which east winds have been prevalent, the leaves are badly injured by mildew, and the fruit is not only affected by it, but exhibits considerable rot.

Antoinette is a white grape, ripening before the Concord, having some of the flavor and aroma of that grape. It has not suffered from mildew or rot, and seems to have a hardy, vigorous constitution.

Brighton will yet be a very popular grape. The vine is hardy, a strong grower, very productive; the bunches are large; berries medium, maroon colored when fully ripe and covered with a thick bloom; the flesh tender, with very little pulp, sweet, juicy, and very agreeable flavour when first ripe. It ripens early, before the Delaware, and sells readily at good prices.

Burnet has not been a success in my hands. The vine has not been vigorous nor productive, and suffers severely from mildew.

Champion is the poorest in quality of any in my grounds, and yet it is the most hardy, the most productive and the first to ripen.

Clinton, in my estimation, is one of the most desirable grapes we have. In hot seasons it develops sufficient sugar to become an excellent table grape; and in nearly every season is the best of them all, so far as my experience goes, for culinary purposes. Where properly canned it is not to be excelled by any other fruit. For hardiness and productiveness it is surpassed by none.

Concord has been more extensively planted for market than any other grape. Its hardiness and productiveness, combined with fair quality, have given it great popularity. There are much better grapes in point of flavour, but whether any of those we now have will equal it as a profitable market variety over as large a territory, is as yet a matter of great doubt.

Crevelling persists in setting its fruit

very imperfectly. Were it not for this defect it would be a valuable variety, on account of its early ripening and its very agreeable flavor.

Delaware needs no commendation. In soils suited to it, and with judicious cultivation it is not surpassed by any. The vine is perfectly hardy and the fruit is entirely free from rot, at least I have not yet seen any rot in it. The vines require a rich, deep and well drained soil, which must be kept rich, to be pruned short, and the crop well thinned out.

Duchess has mildewed so badly with me that I despair of ever obtaining a good sample of fruit.

Early Dawn is also very subject to mildew, and cannot be relied upon.

Early Victor has not proved to be as early in ripening as I had expected, but nevertheless I think it will be a valuable variety. The vine is very hardy and very healthy, not having shown any signs of mildew, and very productive. The bunches and berries are small, which points are against it as a market grape; nor is it as early as the Champion, but the berries do not drop from the bunch, and are far superior in quality to the Hartford Prolific.

Hartford Prolific, to my taste, is not much better than Champion, and I want none of it.

Iona ripens just a little too late, being in perfection about three seasons out of five. It needs rich soil and good cultivation and a warm exposure. When it does ripen the quality is just "best."

Ives does not ripen as early as the Concord, and is decidedly more foxy.

Jessica has fruited in New Jersey and proved to be a very early ripening variety there also. J. T. Lovett says of it, "Very early and of splendid quality. The fruit is all that can be desired for an early white grape, but

the vine mildews very badly." This season, in which mildew nearly ruined my Rogers Hybrids of every name, the Jessica was not affected.

Lady did not ripen this season as early as I supposed it would. This is the first time that my vines have borne. The bunches and berries are larger than those of Martha, and somewhat less foxy, but quite too foxy to suit my taste.

Linden ripens before the Concord, before the Worden, somewhat smaller in both bunch and berry than either, quality about equal to Concord. The berries do not drop from the bunch, which is handsomely shouldered, and will remain on the vine until frost without deteriorating in flavour. To my taste it is not as good as Moore's Early, but will probably be more profitable as a market grape in northern localities.

Martha is too small and too late in ripening and too foxy when ripe to suit me.

Massasoit ripens as early as Hartford Prolific, and is to my taste a much better grape. The bunches are short, berries large, red and sweet.

Merrimack seems to be less subject to mildew and rot than most of the Rogers Hybrids. The bunches are not large, berries large, black, sweet and "good."

Moore's Early has not been ripe quite as early as the Champion, is much better in quality, being about as good as Concord; the berries are not quite as large as Concord, and when dead ripe drop from the bunch; nor is the vine as productive or vigorous.

Pocklington, after several seasons' trial, has proved to ripen after the Concord. The bunches and berries are large, handsome, and when fully ripe have a decided yellow tinge. In quality as good as the Concord.

Prentiss ripens about with the Con-

cord; bunches and berries of medium size, pale yellow when ripe, with something of the Isabella flavour.

Salem will mildew and rot with me three seasons out of five. When well ripened it is a good keeper.

Vergennes does not ripen any earlier than Concord, or my vine is not true to name. It is not of high quality, but it is agreeable; the flesh is somewhat tough or pulpy. It will keep well.

Wilder is a grape of magnificent appearance, very large in bunch and berry, ripening about with Concord, and of "good" quality. Like all of Rogers' Hybrids it is subject to mildew and rot.

Worden is steadily gaining in favour as a grape for general cultivation in Ontario. The vine is healthy, hardy, productive; bunch and berry about the same in size as Concord, less pulpy, but otherwise having much the same flavor, and ripening about ten days earlier; this difference in time of ripening being more marked in northern Ontario than in the southern portion. The fruit is covered with a rich bloom which gives it a very attractive appearance.

PRUNING ROSES.

I should like to say a few words about pruning roses, bringing out an important principle in regard to it that I have not seen elsewhere mentioned, except in a most incidental manner; and which, experience has taught me, is the very key-note of success in this respect. Every article on the subject that I have read is always emphatic in recommending pruning, and severe pruning. In fact, they say you can hardly prune too much (with a few cautions) and the English *Rosarians' Year Book* (which is, perhaps, the best authority for everything regarding rose culture) gives an article by one of the noted English rosarians, in which he says that he never had as fine flowers

as one year when a donkey accidentally got into his garden, and cropped his rose bushes almost even with the ground. So, full of this idea, I pruned my own accordingly one summer, and the result was, that, on the vigorous canes, the few eyes left burst with such vigor that it took them all summer to finish growing the long shoots, induced by throwing all the vigor of the bush into so few eyes; and on some I had no flowers, on others but a few. I have since learned that this one maxim is without exception: "the stouter the wood, the larger the flower, and *vice versa*." So that it is best to cut off to the ground the canes which are thinnest and weakest, and cut away all wood that has bloomed, leaving only the stoutest canes of the present season's growth. Do this in the autumn early, so that the sun and air may have free access to ripen all the wood you intend to keep, and in the fall bend down and cover these strong branches. When you uncover them in the spring take off only short pieces from the tops of each stalk, the most stout and vigorous should be shortened very little, and see what roses you will have, both for quality and quantity. The hybrid Noisettes—which are perfectly hardy, if bent down and covered—need this caution particularly, for, although they produce no very vigorous canes, like Jacqueminot, still they send up such a number, and each cane produces such a multitude of buds, that often the plant will not open a single one of them; and they decay and drop off in the unopened bud. The remedy for this is to cut out all two year old wood, and all the weakest shoots; and on the varieties given to producing more buds than they can open, it is better not to prune the remaining shoots at all. I have tried this plan with perfect success on some bushes that were very bad cases of this kind of rose trouble. In hybrid

Noisette roses, where the habit is thoroughly remontant, that is, where new shoots are freely produced from the roots, I never leave more than the four best on each bush. In fact, I treat all remontant roses exactly as I treat raspberries, and I am sure that, for this country, if not for every country, it is by far the best plan.

H. S. L.

Vine Lynne, Oct. 21st, 1885.

THE LUCRETIA DEWBERRY.

By referring to the list of subscribers' premiums it will be seen that one of the plants offered is the *Lucretia Dewberry*. It is said that it was found growing in West Virginia. In the *Rural New-Yorker* we find the following testimony in regard to this fruit.

The *Rural New-Yorker* says:—Hitherto we are not aware that the Dewberry (*Rubus Canadensis*) has held any recognized place among cultivated small fruits. Several varieties have been talked of from time to time, but have soon been forgotten.

A few specimens of the *Lucretia Dewberry* were ordered from Mr. J. T. Lovett, of New Jersey, last May, one of which fruited during the summer. It ripened with Early Harvest, the earliest of all the kinds growing at the Rural Grounds. The berries and drupes are large, and though of good quality when fully ripe, they are rather sour if picked sooner. This may be said of all blackberries; but more especially of this, if judged from its first season of fruiting. The vines are thus far hardy. As, if left to themselves, they would cover too much land, it is a question for others to decide whether it would pay to give them support by trellises or otherwise.

FROM R. G. CHASE & CO.

We have fruited the *Lucretia Dewberry* this year, and found the fruit to be of good size, perhaps we should

properly say, of large size and good quality. The vine is with us a free grower. For home use we deem it a desirable thing, but it is too soft to ship. It did not suffer any from the severity of the past winter, although it received no special care.

Geneva, N. Y.

FROM WILLIAM PARRY.

The Lucretia Dewberry has been cultivated here two or three years. It is a strong, vigorous grower and hardy. Fruit large, early and of good quality. Its trailing habit renders support of some kind necessary to hold up the vines. The plan we have adopted is to lift the vines occasionally over wire extended along the whole length of the row, supported by stakes driven into the ground about one rod apart. To increase the number of vines, in the latter part of summer and early fall with a trowel set the tips in the ground pointing downward. They send up no suckers. We have planted some hills in the rows of Wilson Junior and other high-bush blackberries, over which they trail nicely, for the purpose of hybridizing or cross fertilizing the blossoms.

Parry, N. J.

FROM PRES. T. T. LYON.

I have now fruited the Lucretia Dewberry three years. Aside from the trailing habit of the class, and the consequent liability of the fruit to become soiled or injured from contact with the earth, I regard it as very desirable, since the fruit is very large—quite as large as that of the Kittatinny Blackberry—and of very good flavor. Besides, it ripens before the early blackberries, nearly or quite as early as the earliest black-caps. With me it has so far been very productive, yielding a fair crop this year, when nearly all the blackberries fail to fruit in consequence of injury from the severe cold of last winter.

South Haven, Mich.

FROM J. S. COLLINS.

The Lucretia Dewberry produces large berries, of good quality and early; but owing to its trailing habit, I do not value it as much as several sorts of blackberries we have; perhaps I do not know how it should be treated to secure the best results.

Moorestown, N. J.

FROM J. T. LOVETT.

I have fruited many Dewberries, such as the Mammoth, Bartles, etc. All bloomed freely but shed their blossoms, proving unproductive and worthless. For this reason the Lucretia Dewberry is a pleasing surprise. I have now fruited it two years, and find it both hardy and productive, and of "mammoth" size in very truth. All who do not plant it will make a mistake. I am yet unable to recommend it for market growing, having fruited it only in my trial grounds.

Little Silver, N. J.

FROM SEC. GEO. W. CAMPBELL.

So far as I have knowledge of the Lucretia Dewberry, my impressions are favourable. I have not fruited it sufficiently to give any personal experience; but I have seen it in bearing and found it enormously productive, and ripening early—July 20th. When fully ripe, I think it is as good as the best blackberry I ever tasted; but as it colors some little time before it is ripe, and while it is still too sour to be good, that might be an objection. In size I thought it averaged larger than any blackberry I had ever seen. Its trailing habit might or might not be an objection in cultivation. It runs along nearly recumbent, the weight of its fruit causing much of it to lie upon the ground, and requiring some kind of mulch upon the surface to keep it clean. As grown in Miami County in this State, it seems to be very successful, and is certainly very large, very pro-

ductive and very good. I can see no reason why it should not be a good and profitable fruit for general use, unless its trailing habit of growth should be objectionable.

Delaware, Ohio.

FROM J. H. HALE.

The common wild Dewberry has always been to me the most delicious of all the blackberry family, and in the hopes of finding one worth cultivation, I have bought, for testing, every new sort that has been offered for some years past; but the Lucretia is the first and only one that has ever given promise of being valuable, not only as a delicious family berry, but also for market, especially here in New England where the valuable early market varieties are not hardy enough to stand our winters. The trailing habit of the Lucretia renders it a very easy plant to protect through the winter, as it is not quite hardy here. It is wonderfully prolific of extremely large berries, of jet black color, rather soft for a blackberry and in quality far superior to any other cultivated blackberry or dewberry I have ever tested. I have lots of faith in it, but it has not been tested long enough here in the East to warrant any one planting it very extensively till we know more about it. Two or three other sorts having been sent out as Lucretia for a year or two past, I fear that the opinions in regard to it will be likely to be rather mixed for a few years to come.

South Glastonbury, Conn.

KEEPING GRAPES.

A lady who has for several years kept a considerable quantity of grapes through the winter, makes the following note in reference to it:—

Grapes should be picked and allowed to stand three or four days, then sorted and put into small-sized or eight-quat

baskets, and hung up in a cool, dry cellar. Thin-skinned varieties, such as Brighton, Concord, and Rogers' 44, or Herbert, should be eaten before Christmas. Rogers' 4, 9, and 15, respectively Wilder, Lindley, and Agawam, and also Salem, are all good keepers. Wilder, Agawam, and Salem we ate the last of May, in 1884.—*Vick's Magazine.*

SLANTING GRAPE TRELLIS.

FROM PETER FULLER, MANAGER MOLSONS' BANK,
NEWFORD.

We had most beautiful grapes this fall, Rogers' 3 and 4, the best I have ever grown, but only good and thoroughly ripe on my low trellises.

Where the land can be spared for it, I am sure this is the best plan: Drive some cedar stakes along the back of the vines, and nail on a scantling; set some posts, three feet high, about eleven feet back to the north, and board it up; nail some strips from the scantling to top of the boarding, on which train your wood. I never have to lay my vines down at all, and they never suffer in the winter.

Have any other of our readers tried this inclined trellis?

SEED POTATOES.

Shall we plant our potatoes whole or cut them into pieces as our fathers did? That's the question. Doctor Sturtevant has been trying some experiments at the New York Agricultural Experiment Station and sums up the results as follows:—It would seem from these data that even on very fertile soil, the stored nutriment in the potato tuber furnishes a more congenial food for the growing plant than fertilizing elements contained in the soil; and that upon poor soils at least, an advantage may be gained by planting whole tubers or large sections.

A writer in the *Farm and Garden* says:—Even experienced potato growers would hardly recognize the Early Ohio potato in our patch. The plants of this very dwarf sort, which were grown from whole potatoes, are so unusually large and dark-colored that they might be mistaken for a late, tall-growing variety. The patch promises a very large yield.

The difference in color of plants grown from whole tubers and from less seed, even from as much as one-half of whole tubers, was very marked, particularly in the early stages of growth. The plants from smaller seeding appeared decidedly yellow, compared with the rich dark-green of the whole potato plantings.

CAUSE OF FAILURE OF AGRICULTURAL COLLEGES.

As we gain experience by the lapse of years, problems apparently insoluble at one time slowly and gradually solve themselves at a later period. Thus in the matter of the success of some and the failure of other agricultural colleges both appeared at the first quite inexplicable. But the truth is gradually becoming apparent that no institution will succeed as an agricultural school of which the president and chief is not something more than a mere successful teacher; he must be an enthusiastic agriculturist. There have been regents and presidents at the head of some of our leading agricultural colleges, who were and are all eminent as teachers, great as pedagogues, with wide literary reputations and renowned in history, theology, politics, and law; but not one of these has succeeded, even in a moderate measure, in making these schools agricultural colleges indeed. In fact several have so erred in their management as to have practically driven agriculture out of the schools where they were chiefs, of which we need not

go far for an example. The lesson taught by these facts then is, that any who, in appointing chiefs of agricultural schools hereafter, choose any but practical and scientific agriculturists, will be sinning against light and knowledge.—*Rural New-Yorker*.

DECIDUOUS SHRUBS AND VINES.

The *Imperial Cut-leaved Alder* is hardy. The thinness of its top gives the plant an appearance of poverty, however, and the persistent old cones are unsightly.

The wild climbing bittersweet or wax-work, *Celastrus scandens*, is desirable for a rear building or rough object. A very pretty covering for a tree-trunk is a mixed festoon of bittersweet and Virginia Creeper. The contrasts in autumn coloring of foliage and berries are striking. The *Virginia Creeper* is still our popular climber. Some individuals do not climb well. Dr. Beall propagated two plants from one parent, but they are quite dissimilar in habits of clinging to a building. The *Japanese Ampelopsis* will probably prove hardy when once established. The *Chinese Wistaria* is not hardy.

The ordinary choke cherry, *Prunus Virginiana*, is one of our most beautiful shrubs; so also is the common flowering dogwood, *Cornus florida*. The flower buds of the dogwood were killed last winter, however.

The smoke tree, *Rhus cotinus*, both the white and purple sorts, are always desirable.

The common wild dwarf sumach, *Rhus copallina*, is one of the very best small shrubs for autumn coloring.

The wild crab, *Pyrus coronaria*, is very attractive when in flower. It should find a place in the shrubbery.

The fringe, *Chionanthus Virginica*, is hardy. The English hawthorn, *Crataegus oxyacantha*, has not been hardy.

Our three lilacs, the common, *Syringa vulgaris*; Persian, *S. Persica*, and the Josikea, *S. Josikaea*, are hardy and satisfactory. The latter is to be recommended because it blossoms three or four weeks later than the other sorts.

Tamarix gallica, Tamarisk, was injured last winter. Hitherto it had stood well.

The chaste little *Deutzia gracilis*, with some protection of leaves, is very desirable.

From *Spiraea triloba* we get our most profuse white flowers.

Attempts at *Rhododendron* culture have so far proved unsatisfactory.

Double-flowering Almond was injured last winter.

The Mock Orange, *Philadelphus coronarius*, is always hardy.

The Rose Acacia, *Robinia hispida*, is hardy and very attractive.

The Missouri or Buffalo Currant, *Ribes aureum*, is hardy and popular. It is often sold by nurserymen under the name of *Ribes fragrans*.

The *Japanese Quince* is not hardy.

[We take the above from a bulletin of the Agricultural College of Michigan, dated October, 1885.]

PLANTS FOR LIVING ROOMS.

Many people, both in city and country, keep plants in their rooms, and not a few grow them there from one year's end to the other. Of course, plants do not thrive as well in dwelling-rooms as in green-houses, and a common impression exists that gas is particularly obnoxious to them—that is, gas light. The heat-drying effect of the gas flame no doubt affects plants, but not to the extent that it is supposed to; anyhow not much more than a lamp or stove would. This evil effect may be remedied, to a very great extent, by setting the plants on saucers inverted into others of larger size, and keeping these

large saucers constantly full of water. This will gradually evaporate and keep the air around the plants in a moist condition, sufficient to counteract the evil effects of gas or stove heat. The inverted saucers should be large enough so that the base of the pot in which the plants are growing does not actually stand in the water, although occasionally this is beneficial to the plant, especially when much drainage has been used. Maiden Hair Ferns, Acacias, and Primulas do first rate under these circumstances. Also the beautiful-leaved Marantas, if kept warm enough during winter. What really destroys room plants is mismanagement and want of light and air. Few plants will thrive long unless they have both. But where there is plenty of both, almost anything may be made to grow and blossom beautifully. Geraniums, Fuchsias, Begonias, Gloxinias, and Abutilons will all give an abundance of flowers, and what is more, these will not be infested by insects, as Roses and Chrysanthemums would be. If flowers are not an object, we would suggest *Aspidistra lurida variegata*, Marantas, Ferns, the beautiful *Sanseveria metallica*, *Ficus elastica*, *Areca lutescens*, or almost any palm. Even small Agaves look nice, and if kept in rather small pots they will not outgrow your window-sill very soon. Mentioning Agaves reminds us of Cacti. These are the plants just suitable for room-culture; neither gas light nor fire heat will hurt them. In fact, they will not require any heat at all during winter, providing frost is excluded. If flowers are expected from them in spring, they should have plenty of sun during winter, but they will not want any water except once in two weeks. Of course you do not expect these to grow during winter, as this is their season of rest, excepting, however, the Crab Cactus or *Epiphyllums*, which, with good man-

agement, may be had in bloom from October to March. Many persons try to grow Crotons, Azaleas, and Camellias in rooms, but as a general thing the result is failure and destruction of the plants, as these require an abundance of syringing and moisture.—*Farm and Garden.*

HISTORICAL ITEM.

In the last century a vessel came into London docks with yellow fever, and the captain was suffering severely from it, and no one would go near the sufferers. Dr. Fothergill, however, went on board, partly out of compassion and partly from his desire to study a disease which was new to him, and he removed the captain to his own house, and finally succeeded in getting him through the fever. When the captain recovered he inquired from the doctor what he was in his debt, but Fothergill refused to receive any payment. The captain then wished to know how he could compensate him for such kindness, upon which the doctor replied that there was one thing he could do for him if he were making a voyage to the East, and would pass through the Straits of Macassar by Borneo, he should be glad if he would bring him back two barrels full of the earth of Borneo, which the captain promised to do. However, when he reached the spot on his voyage out, he thought of the ridicule he must experience from his crew in so strange an undertaking, and his heart failed him, and he sailed through the Straits without fulfilling his intention. On his return by the same route the same thing happened again through his fear of the scoffs of his crew. However, after he had left the Straits two hundred or possibly three hundred miles behind him, his conscience smote him with his ingratitude and the non-fulfilment of his promise, and he put the ship's head

about, returned to the spot, and filled the barrels with the earth. On his return he sent it to Dr. Fothergill, who had the surface of a piece of ground thoroughly burned, and he then sprinkled the Borneo earth on it, when it is a known fact that there came up all kinds of new and curious plants, said to be one hundred different sorts, some geraniums, and new flowers which have subsequently spread throughout the gardens of England.

AN EVERBEARING BLACK-CAP RASPBERRY—THE EARHART EVERBEARER.

This is a new black-cap raspberry. It differs from all other raspberries by its fruiting qualities. It continues to bear till frost. The old canes commence ripening their berries by the 15th of June; by the 4th of July they are all ripe; then the young canes commence ripening their berries. They bear in clusters from 6 to 18 inches long, which all ripen at one time. It bears as many berries on the old canes as any other berry, and ripens as many berries in July as any other in twelve months. It ripens more berries in August than any other in twelve months, and as many in September as July, August being the best month. They will bear the same season they are set. Hard winters have no effect on the July, August and September crop, because the canes are not there. Dry weather has no effect on them, because they are on the young, sappy cane. New canes continue to come from the ground for a new supply of berries. We have picked as high as 200 ripe berries off one cluster at one time, which made about a pint. This wonderful berry was discovered by Mrs. J. Earhart, in Mason County, Illinois.

[We received the above description from Mr. J. Earhart.—Ed.]

ORIGINAL.

The East may boast of orange bloom,
Of cypress and of laurel,
And we will boast of yellow broom,
And of orchards rich and floral.
Eastern blooms and foliage fair,
Arc of the rainbow's dapple,
In England blossom everywhere
The pear, the plum, the apple.
Then boast who will
Of trees in spring array
We still
Have Lossoms fair as they.

The East may boast of citron tree,
That yields so fair a flower,
Of lilac's sweet scent on the lea,
When freshened by a shower.
They boast of lemons and of pine,
We of our mellow cherry,
They of their spice and juicy wine,
And we our delicious berry.
Then boast who will
Of trees and fruit so gay,
We still
Have fruits as sweet as they.

RECENT PUBLICATIONS.

The American Florist is published semi-monthly at Chicago, terms \$1 a year, 16 pages. Devoted to the interests of florists of North America.

The Orchard and Garden, an illustrated monthly journal of horticulture, 16 pages, 50 cents a year, devoted exclusively to the interests of the American orchardist, grape-grower, and gardener. Little Silver, Monmouth Co. New Jersey.

A Treatise on the Evaporation of domestic and foreign fruits, vegetables, &c., by the American Manufacturing Company, Waynesboro, Franklin Co., Pennsylvania.

Popular Gardening for Town and Country. Published monthly, by Ransom, Long & Co., 202 Main Street, Buffalo, N. Y., at 60 cents a year, 16 pages, conducted by Elias A Long, author of *Oranamental Gardening for Americans*.

Lovett's Guide to Fruit Culture, a descriptive catalogue of small fruit plants and fruit trees, handsomely illustrated. J. S. Lovett, Little Silver, New Jersey.

The Kindergarten, a monthly devoted

to elementary education, published by Selby & Co., Toronto, Ont., at 50 cents a year.

H. S. Anderson's semi-annual catalogue and price list of small fruit plants, fruit trees, &c., for the fall of 1885, Union Springs, Cayuga Co., N. Y.

Transactions of the Massachusetts Horticultural Society for the year 1885, Part I. Robert Manning, Secretary, Boston, Mass.

Address by the Hon. M. P. Wilder, President of the American Pomological Society, at its twentieth session, held at Grand Rapids, Michigan.

Dreer's autumn catalogue of bulbs, plants, &c., for sale by Henry A. Dreer, 714 Chestnut street, Philadelphia, Penn.

Michigan Horticulturist, published monthly by W. H. Burr Publishing Company, Detroit, Michigan, at \$1 a year. Edited by Charles W. Garfield. It is quite enough to mention the name of the editor, every one will know that whatever he does will be done as near perfection as man can do. We congratulate the State of Michigan.

Tenth Annual Report of the Montreal Horticultural Society, 1884. We have been favored with several copies for distribution in Ontario to any who may desire a copy.

Proceedings of the Western New York Horticultural Society, 1885.

Transactions of the Fruit Growers' Association of Nova Scotia, 1885, C. R. H. Starr, Port Williams, Secretary.

The following subscriptions have been received during the month of October:—Paul G. Wickson, Peter Fox, Mensing & Stecher, Herbert W. Buell, Wm. Greig, Norman McLeod, J. H. Stanton, Alex. Gubb, Michael Brown, Thos. Treicaven, J. M. Remington, Robt. Orr, Mrs. Baxter, Geo. Mason, Dr. Macdonald, Dr. Tamlyn, Dr. Towler, Wm. Robertson, E. R. Talbot, G. L. Whitney, Thos. Jenkins, Hy. Deacon, Robert McIndoo, James McGuire, John Carr, Geo. S. Wason, John C. Gilman, Geo. E. Eby, Jas. Barnum, Ed. Macklin, E. W. Nix, A. Dawson, Revd. Towell, J. A. Watson.

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