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 CLEMATIS COCCINEA

THE

# Canadian Horticulturist.

VOL. VI.]

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[No. 2.

## THE CLEMATIS.

This interesting and valuable genus of climbing plants is attracting much attention both in Europe and America. As the result of careful cultivation and the crossing of different species we have now some very beautiful and showy varieties. These plants belong to the natural order Crowfoots (Ranunculaceæ), and are characterized by a valvate coloured calyx, and by having the carpels when ripe terminated by long, feathery styles. In some of the species the flowers are not as attractive as the seed vessels are when plumed with their long feathery styles. In England the most common species is known as the Traveller's Joy, *Clematis vitalba*, which runs over the hedges in some parts of the country, covering them with a profusion of white blossoms, to be succeeded by heaps of silky tufts. Some of the species are fragrant. The one known as *Clematis flammula*, a native of France, is exceedingly rich in perfume. Until within a few years the Clematis were chiefly used to cover unsightly objects, though occasionally *C. viticella*, a purple flowering species introduced into England from Spain, was used as an ornamental climber. In the year 1851 a large flowered vari-

ety, known as *C. lanuginosa* was brought from China, about fifteen years after, some English gardeners, notably Mr. Jackman of the Woking nurseries, conceived the idea of crossing these two last named species. The result of this crossing has been the production of a race of hardy, free flowering Clematis, with large, showy flowers, which make a grand display either as climbers upon pillars or lattice, or trained upon the ground as bedders. These beautiful flowers are mainly of two colours, purple and white, of various degrees of intensity and purity. The only variety approaching a red is of a dirty brick-red hue, by no means satisfactory to the ornamental gardener.

In the variety (*Clematis coccinea*) now presented to the notice of our readers in the beautiful colored plate which adorns this number, and for which we are indebted to the liberality of Messrs. V. H. Hallock, Son & Thorpe, of Queens, N. Y., we have a very different type of flower, quite unlike the broad-petaled, showy blossoms of the Jackman group, but giving us that much-coveted, brilliant, scarlet color so entirely wanting in those hybrids. It is not necessary to give any description

of this new species, the illustration is so true to nature in every particular, that our readers will understand the habit of the plant and the form and color of its flowers from an examination of the plate better than from any description in words. It remains only to say that, in this climate at least, it dies down on the advent of frosty weather to the ground, springing up again on the return of warm weather, and growing very rapidly, comes into flower in July and continues to bloom profusely until stopped by the frosts of autumn. The root has so far proved to be perfectly hardy in the Niagara district, without any protection whatever. Like all climbing plants of this family it requires to be well fed, in order to secure rapid growth and continuous and profuse bloom.

#### RUSSIAN FRUITS.

Mr. Charles Gibb, of Abbotsford, Province of Quebec, writes to the *Journal of Agriculture* from St. Petersburg, Russia, that the hardiness of a variety is not dependent upon the place of its birth, but upon hardy ancestry; hence he finds in England and France, under English and French names, apple trees of that early terminate growth and thick pubescent leaf which show pure Russian or Astrachanican descent. At Reutlingen, in Wurtemberg, he found the perry and cooking pears to be of a different race from those of Western France, and at Vienna a race of apples wholly new to him, with very thick, small, plicate leaves, natives of Transylvania, some of which grow from cuttings like currants.

Many of the fruits of Poland he found to be of native origin and quite

unknown in Western Europe. In the nurseries, and in the gardens of the Pomological Institute at Warsaw he met, for the first, with collections from the Russian steppes. The Antonowka and Titowka seemed the most popular of the coast-section apples. The hardiest good pear is the Sapieganka, of which he saw trees, whose trunks were two feet in diameter, growing in the cold climate of Wilna. At Riga he found that the selections of apples were made mainly from the Russian steppes, and that the trees and shrubs in the nurseries were largely Asiatic.

At St. Petersburg, in latitude 60°, so far north that for nearly two months in the summer the stars at mid-night are not visible, the sun being too short a distance below the horizon, he learned that the trees and shrubs of Central Europe have usually failed, and have been replaced by those from Northern Turkestan, Southern Siberia, Mongolia, Dahuria and the Amoor district. The market was supplied with cherries from the cold region of Vladimir east of Moscow, which variety and the Ostheim cherry he says are better than the Early Richmond and the Kentish, and can be grown in much severer climates.

At Moscow he found himself somewhat north of the limits of successful fruit culture. Five years ago, a week of unprecedented cold had killed or injured most of the trees in their fruit gardens, which in many cases had not been replanted.

In the Vladimir district he found that there are sections where the chief commercial industry is cherry culture, which cherry is usually of large size, and when fully ripe nearly black in color and almost sweet, and in quality very much better than our Kentish. Many proprietors have ten thousand trees, or rather bushes of this cherry, and entire cars, and at times even whole

trains are laden with this cherry for the different markets. The climate here is as cold as that of Moscow, where the thermometer falls to 40° and 44° below zero, Fahrenheit.

On the west bank of the Volga, south of Kazan, but seven hundred miles farther north than the city of Montreal, are, he says, twelve villages where apples are grown in large quantities, sometimes to the amount of fifty thousand dollars in value, for the markets of Nijni, Novgorod and Kazan. He believes this to be the coldest orchard region in the world, where the apple trees are mere bushes grown in clumps of two or three together, and the clumps twelve feet apart each way. He found these orchards heavily laden with fruit, notwithstanding that the thermometer fell last winter to 40° Fahrenheit, below zero; and in the winter of 1877 stood for a day and a half at *fifty-eight below zero*. He remarks that the trees are slow, crooked growers, such as our nurserymen hate to grow, and would hardly be able to sell in Canada after they had grown them, but they begin to bear young, and bear abundant crops of fair sized fruit of really fine quality and that keeps at least until mid-winter. These trees are hardier than Duchess of Oldenburg or Alexander and should succeed on Pembino mountain in Manitoba.

At Simbirsk, further south, in latitude 54°, where the winters are quite as cold as at Quebec, he found the same varieties of apples grown in quantity, and also many thousand pear trees, a large number of which are unfit for eating either raw or cooked, yet several varieties of the Bergamot and other types are sweet, free from astringency, and worthy of introduction.

The plums he found in those northern regions were to him quite a new race, were bushes also, bearing profusely, some red plums, some white, but mostly

blue plums, the best of which he considered to be very nearly if not quite equal to our Lombard plum. Yet he inclines to the opinion that the improved varieties of the wild plum of the north western states are the best for the colder sections of Canada.

At Seratov, in latitude 51½°, he found an orchard of twelve thousand trees, employing three hundred pickers, and eighty-five packers, which had shortly before sent one thousand tons of apples to the Moscow market. He also found at this place a pear orchard of five hundred trees. And yet, he adds, there are times here when the *mercury becomes solid*.

Turning westward into Central Russia he finds new varieties of the apple. Here, at Voronesh, the apple grown on the Volga from Seratov to Kazan, called the Annis, is not known, and the variety called the Antonowka takes its place. He does not give any description of the tree or fruit of this Antonowka variety, nor compare it in any way with the Annis race which he found so abundant on the Volga, but remarks that fortunately the best varieties of the Russian fruits have been included in the collections sent from Moscow to the Iowa Agricultural College.

He speaks frequently of the kindness he experienced during his travels in Russia and the interest taken by the gentlemen he met in the object of his researches and the facilities afforded him for pursuing his inquiries. At our latest advices he was in England, having reached that far on his return home.

GRAPES AT ORILLIA.—Mr. William Gillett, who is a member of the Ontario Fruit Growers' Association, raised over five hundred pounds of fine grapes the past season. Mr. Gillett is thoroughly conversant with the subject of fruit growing, and experiments largely in new varieties.—What we want is more men of this stamp.—*Orillia Packet*.

## CORRESPONDENCE.

## THE MICHIGAN STATE HORTICULTURAL SOCIETY.

TO THE EDITOR OF THE CANADIAN HORTICULTURIST.

MY DEAR SIR,—The annual meetings of the above society were held in the city of Flint, Mich., December 4th, 5th and 6th, and as I was permitted to be present for the first time at their meetings, I would like to give you and your readers a few notes regarding it and its work, hoping that it may be of interest to them. The city of Flint is the capital of Genesee County, and is one of those American cities, or rather towns, that to be seen is to be admired. It has a wealthy population of some 10,000 people, and has all the advantages of modern city life. It has two railroads coursing through its limits, crossing each other, viz., the Grand Trunk and Chicago R. R. and the Flint and Pere Marquette R. R., which affords it every accommodation. It is beautifully located on an eminence bordered by the river from which it took its name, which river rises some distance to the east, and after tracing Lapeer, Genesee and Saginaw counties, empties into the Saginaw river. It was formerly a noted lumbering centre, but since the supply is now very much reduced, its principal industries are manufactures in the useful arts, commerce, &c. Here is one of the finest buildings erected in the interests of higher education that is to be found in that State, and is said to have cost one hundred thousand dollars. Here also is the noted Institute for the education and training of deaf mutes, where large numbers of these unfortunates are cared for and qualified for lives of usefulness. The streets of the city are wide and well ventilated, and everywhere made cheerful and beautiful by being liberally planted with shade and ornamental trees, mostly of our choice and popular sugar maple.

The streets are laid out at right angles and the soil is high, dry, and easily drained, having a gentle slope every way to the river.

The Society was holding their meeting in Flint on the invitation of the Genesee County Horticultural Society, who made ample arrangements for the comfortable accommodation of all delegates and members who might favor them with their presence, either free in private houses or at reduced rates at the hotels. The place of the meetings was Convocation Hall, in the High School building, and was very ample for a large attendance, and purposely decorated for the occasion. The room was large and well seated, and the walls were embellished by large and handsome charts illustrative of Prof. Beal's lecture on botany, entitled the "Growth of a tree." The dais contained the President's and other chairs and the desks for the reporters, &c., and was beautifully set off by many pots of ornamental green-house plants, many of which were in bloom. The raised fruit stands along the whole width of the large hall were almost covered in their great extent by the largest and finest display of fruits, vegetables, &c., that ever I saw at a fruit meeting of this kind. In fruit there were apples in large quantities, pears, grapes and oranges, besides dried fruit; jelly and honey, marmalades and amber syrups. In vegetables there were potatoes in enormous quantities, cabbages, cauliflowers, turnips, celery, &c., all of which were very fine indeed, and the interest taken in the display was constant and great. The first sitting was opened at about eight o'clock, in presence of some two or three hundred members, &c., by an address of welcome by the mayor of the city, and was very happy and well received, the President, in the chair, replying, after which Prof. A. J. Cook, of the Agricultural College,

Lansing, introduced the theme of the evening, by reading a masterly paper on Evolution as scientifically understood. It was exceedingly interesting and was received with the most profound attention. After much hand-shaking and familiar congratulation, the first session of the society was brought to a close. The succeeding sessions were very admirably opened by delightful singing by the pupils of the High School, who came into the room *en mass* bringing their organ with them, and under the efficient leadership of Superintendent Gass, M.A., it was really very inspiring to hear those well trained young people sing so finely Longfellow's beautiful but earnest words:

"Life is earnest, life is real,  
And the grave is not its goal;  
Dust thou art, to dust returnest,  
Was not written of the soul."

The reading of the Scriptures and prayer was then done by one of the city clergy. This was really a fine opening for a fruit meeting and worthy of the highest commendation. The various topics brought up for discussion were introduced by a well written paper by a person previously notified and announced. After the readings the discussions were full, free and in the most friendly and agreeable tone, apparently no selfish ends or objects ruling. Indeed I may say, with great satisfaction, that the tone of all the sessions was one of extreme tenderness, and the interest in the meeting was constant and unabating. The presence, at the various sessions, of numerous ladies of apparently high standing in society added much to the interest and beauty of the meeting, and was a source of encouragement by their timely presence and assistance. The interest these seemed to take in the proceedings was earnest and untiring. In the case of one good lady who had duties to perform that required her

immediate and motherly care, but was more than a match for the difficulty by bringing her knitting to the meeting with her, and while her nimble fingers were faithfully plying the shining needles in the stitches, her attentive ear and her ever-watchful eye as carefully and untiringly followed the speakers on the theme of discussion. Oh, Hood! had you lived to see our day, how much would you have to modify the tone of your famous "*Song of the Shirt*." The final closing session on the evening of the third day was very grand indeed, and the like of it I had never before seen at a fruit meeting. I consider it was the finest and fullest exponent of the question, "How to make Horticultural meetings interesting to the public?" One of Steck's grand concert pianos was brought on the dais, and by the instrumentality of cultured and trained fingers was made to do most excellent service. The meeting was publicly announced to be free, and the citizens in great numbers came in and nearly filled the great hall. The programme for the evening was well arranged; short, pithy speeches of not more than five minutes in length by members of the society and distinguished guests who were present, interspersed at frequent intervals by choicest music. The programme was carried out in the happiest manner and with the most cheering results. Secretary Garfield, who is one of those who are ever ready for any work, and who happily always has just the right thing to say in the right time and place, was the very life and soul of the meeting and a large contributor to its success. Altogether these meetings will long be remembered for their friendly associations and for their tender and interesting tone.

The lessons to be learned from this interview are: 1st. How to get the popular interest at Horticultural meet-

ings? By constant and well-directed efforts in educating and elevating the people; by soliciting attention and attendance; by offering benefits to those who attend, and by giving them something they can carry away with them for their encouragement and future guidance in life. 2nd. How to get a fine fruit display at our meetings! By officially requesting contributions, and by offering premiums and distinctions to those who do contribute. 3rd. How to keep up the interest and the attendance to the end! By having a well digested programme of popular and interesting subjects, and by getting out the fullest and freest discussion upon them, and by having an interesting variety every day.

B. GOTT.

Arkona Nurseries, Dec. 12th, 1882.

#### FRUIT IN MUSKOKA.

For a considerable time Muskoka District has been celebrated for producing the very finest potatoes, and only till recently has it been established that most of the hardier sorts of apples, plums and grapes will grow abundantly if only cared for.

At the County show last September we saw some very fine specimens of "Duchess of Oldenburg" apples, grown by Mr. Bowerman, of Bracebridge, on trees two years from planting. Mr. T. M. Robinson, of Muskoka Bay, grew some fine specimens of Tetofsky fully ripe 15th September, and Mr. James McAllister exhibited some exceedingly fine Haas apples. Mr. Hughes, on the Muskoka River, showed several plates of Muskoka seedling apples, all of a fair size, free from defects, and having good keeping qualities. Several other parties had splendid exhibits. I could not learn to whom they belonged, or the varieties, but the whole exhibit was one which plainly demonstrated

that apples can be grown here to perfection.

Settlers in this district need not fear to plant a good orchard with hardy sorts of apples, and let the above three sorts be the prevailing kinds. While here I may say that one of the principal reasons why apples have not been grown so satisfactorily earlier in the history of the district, is that settlers generally have too small a plot of ground assigned for garden and orchard, and this almost invariably includes the door yards; and of course the cattle come to the door in winter, and are not long in browsing the branches, and after a few days limbs and all are gone, leaving only a wretched stub. I think settlers now see the need of more care and cultivation, and if so, it will not be long till Muskoka will be able to produce her own fruit and to spare.

The exhibition of grapes was good. The finest being Rogers' No. 15 (Agawam), grown by Rev. A. Dawson, of Gravenhurst, produced on vines one year from planting. He also showed some Concord, Clinton and Champions. All were grown not more than eighteen inches from the ground on a light soil, moderately enriched with rotted stable manure and lime.

Mr. Pickerell, of Macauley, J. P., had a fine display of Concord, Hartford Prolific, and some other sorts, grown about Bracebridge, where the soil is heavy clay, consequently the fruit did not ripen as early as if grown on lighter soil. I suspect that there had been a good deal of manure used to increase the vigor of the plants, hence the slowness in ripening.

Grapes for Muskoka should be planted on light land and not overlie rich; train low, and the result will be satisfactory. To intending purchasers of vines for Muskoka, I would specially recommend Agawam, Concord, Cham-



pion and Clinton. These can all be depended on to ripen, and are good enough for any family in the land. Vegetation being rapid in this district, the plants grow quickly, consequently the fruit is very fine, large, and absolutely free from insect depredations.

It being an established fact that fruit can be grown successfully and with profit, I would recommend every settler in this new country to make it a point to plant at least a few of the hardy varieties of apples and grapes, as soon as he has enough ground cleared to make a garden (never mind the stumps). Plant the trees, the stumps will be rotting out, while the trees will be growing up.

J. P. COCKBURN.

Gravenhurst.

#### WHAT OUR READERS SAY.

##### A SUGGESTION.

I am well pleased with the *Canadian Horticulturist*, and consider it good value for the one dollar, apart from the plant distribution.

It is certainly a great improvement having the annual reports bound. Trust you will continue to make improvements from year to year, until your paper shall rank first among all similar publications on this continent.

It is perhaps pertinent to add that any information you can give us with regard to Mr. Chas. Gibb's gleanings in Northern and Central Europe will be most acceptable to your subscribers residing in the colder portions of our Province.

Could you not have for one of the questions for discussion at your next meeting, "How to protect trees that are not quite hardy enough to withstand the rigour of our climate?"

Yours, &c.,

A. A. WRIGHT.

Renfrew, Ont.

#### THE BURNET GRAPE.

The Burnet grape bore well this season, some very good bunches which ripened fairly, notwithstanding the late spring. The grape also set its fruit better than last year. The vine is strong and vigorous, having much the character of growth of Rogers' hybrids. I am inclined to think that cultivated in localities where it will fully ripen, it will prove to be one of the Canadian wine grapes of the future. The entire freedom from musky flavor and the peculiarly fine acid flavor ought to produce a wine of higher quality than Clinton or Concord.

Yours, respectfully,

GEORGE ELLIOTT.

Guelph, Ont.

I express my surprise on reading an article in your October number by Mr. P. E. Bucke, of Ottawa, relative to the Burnet grape. I have always heard of that gentleman as most reliable, but after perusing the article referred to, my opinion is very much changed when I find him lauding up the Burnet grape to the skies, speaking of it as a *magnificent grape*, and that for flavor and quality of fruit, it is the *Queen of out-door black grapes*.

Now, I do not pretend to be an authority on grapes, but I do pretend to know a good grape when I taste it. I have made the grape especially my hobby for a great many years, and after having fruited the Burnet for several years have thrown it out as *worthless*. I had several varieties of Rogers and Hybrids growing alongside it which are far superior in every respect, as regards size of bunch and berry, flavor and of a far more vigorous growth. Some of my neighbors who were induced as well as myself in consequence of articles appearing in the *Horticulturist* to purchase it, are also of the same

opinion. It is impossible that any difference of climate can ever make it a grape deserving of cultivation. When Mr. Bucke shows me to the contrary I will then believe I may have been mistaken, but until then I shall consider it worthless. Can you tell me whether Mr. Bucke is interested in the propagation of this grape. *It looks very like it.*

I may, perhaps, trouble you sometimes with a few remarks, if you do not consider my strictures too severe, *magna est veritas et prevalebit.* I shall not mince matters. I should not have troubled you, had not Mr. Bucke invited criticism.

Very truly yours,

JAMES TAYLOR.

St. Catharines.

[Mr. P. E. Bucke is in no way interested in the sale or propagation of the Burnet grape vines. He is merely giving his impressions of the quality and character of the grape as grown in his own garden in Ottawa. Be charitable towards fellow-laborers in the field of fruit culture. These records of different experiences are exceedingly valuable. We do not get as many of them as we should. They are all needed to enable us to ascertain the true value of varieties not yet widely tested. We must not be too ready to impute selfish motives to those whose opinions and experiences differ from ours. They may be as honest as our own.—ED. CANADIAN HORTICULTURIST.]

#### TO PROTECT TREES FROM MICE.

SIR,—Seeing in the *Horticulturist* a correspondent enquiring for the best means to prevent mice from girdling fruit trees, as a fruit grower of over a 1,000 trees I give him my experience. One year I lost over 50 trees with mice, with the prospect of ultimately losing the whole of them. I had seen

an account recommending old stove pipes, as well as other unwieldy substances. Only think of a 1,000 old stove pipes. So as a substitute for the stove pipes I bought roofing felt, and spread it on the lawn for a few days to partly dry it. I then cut it into strips the required size to lap round, and high enough to come to the top of the snow, tying it with two strings. This I replaced for two or three years, the same pieces having been taken care of. The consequence was I lost no more trees. Two I found where the felt did not quite meet at the bottom were barked at the opening, but nowhere else. The felt should be inserted a couple of inches in the ground.

J. McL.

Owen Sound, Dec. 4th, 1882.

#### ENGLISH GOOSEBERRIES WITHOUT MILDEW.

On page 124, *Canadian Horticulturist* for 1882, the standard sorts of English gooseberries are condemned as worthless on account of mildew, &c.; but on page 198, one kind is mentioned as being free from this defect.

Now of English standards I have only five bushes left, and for the last ten or twelve years every berry on every bush invariably mildewed, and what were gathered were picked unripe and very small, and not worth the trouble. Thanks however to your ably conducted Magazine, early last spring I saw a hint from one of your correspondents, proving that he had found the use of sulphur beneficial. I adopted the suggestion, and the consequence was that there was not one solitary berry upon which the slightest trace of mildew was to be found. The yield was exactly fifty quarts off the five bushes. The berries were remarkably large and clean, equally so with any I have ever seen in England, and attracted the notice of

our Arkona fruit growers, who thought such berries would command a ready sale at one-third better prices than Houghton or Downing.

The plan I adopted was, when the berries were about the size of a pea and beginning to mildew, to dust them lightly with sulphur, using about half a pound to the five bushes. At the first dusting the grass was growing very rank about the bushes. A few weeks later the operation was repeated with the same quantity, as rain had fallen in the meantime. I then removed the rank grass that there might be a freer circulation of air, but nothing more was done until gathering time.

I may say that Mr. B. Gott, of the Arkona Nurseries, saw the bushes about the time of the first dusting, and subsequently when the berries were about full size, but not ripe, and exclaimed, "We do not want a better berry!" It is at the suggestion of this very enthusiastic and intelligent fruit grower I communicate this, hoping some of your readers may secure for themselves choice, large, clean and fine flavored

STANDARD ENGLISH GOOSEBERRIES.

Yours truly,

MARTIN WATTSON.

#### AMATEUR FRUIT AND VEGETABLE GROWERS.

TO THE EDITOR OF THE CANADIAN HORTICULTURIST.

There are many amateurs here and elsewhere who are continually trying their hand on horticulture. Their success never reaches the public, although much of their labors would greatly benefit the public. Here is one of them. A. S. Greenfield, who never ceases trying all sorts of grapes and vegetables, and often has them in great perfection. This year, one particular feature in his success is growing parsnips. Some of them measured eighteen inches around, two feet long, and weighing

five and one quarter pounds. They are the best I have ever seen. I would like to know if any one can beat him in this. He deserves notice in your *Horticulturist*.

N. ROBERTSON.

Government Grounds, Ottawa.

[We wish that our amateur friends would use the columns of the *Canadian Horticulturist* in telling what succeeds with them and what does not succeed. The information would be of great value to others.—ED.]

#### REPORT OF TREES AND PLANTS RECEIVED.

The Glass Seedling plum tree has borne a few very nice plums this year. They were ripe about the middle of September.

The Burnet grape vine grows very fast. It has not borne much fruit yet.

The Ontario apple tree grows well and was not much injured by blight this summer. It has not borne any fruit yet.

I planted about a peck of the Dempsey potato last spring, and this fall I dug about four bushels of very good potatoes from it.

The Moore's early grape vine has not grown much yet. I think it will live.

SANFORD WHITE.

#### FRUIT TREES IN MANITOBA.

MR. EDITOR,—I have been in the Northwest now for nearly two years, and am firmly in the belief that apples and plums can be raised here. The trees will require particular attention, and the order of planting reversed from the way it is done in Ontario. Here the black earth should be dug out and a poorer and a lighter soil thrown in, and the growth kept well back the first year. Apples and plums raised from seed will, I am sure, succeed. And

why not? Is it not as cold in Russia, Quebec, and the northern part of China, where the finest apples are raised? I shall try a few trees this spring on my farm, Township 7, Range 19 W., south of the Brandon hills, and hope to report success. Where the wild grape and wild hops grow so successfully and abundantly, surely the earlier kinds of cultivated grape will succeed; but it will take a few years, as all that is thought of now is as to who can do the greatest amount of breaking and get in the largest number of acres of crops.

Yours, &c.,  
P. R. JARVIS.

Winnipeg, Nov. 21st, 1882.

#### EXPERIENCES AT CLINTON, ONT.

This has been a very unfruitful season in our quarter. Last winter with us the thermometer went down to 23 below zero, which was more than many of our fruit trees could bear and live. The unfavorable spring also did not make it any better. The white Spitzenburgs are killed out. Some Rhode Island Greenings, Twenty oz. Pippins, Devonshire and other Pearmains are all injured less or more; some are dead. Our *Famense* trees stood it well, but the fruit is badly spotted. Our Cayugas never showed a full leaf, but are living. Some of our Dutch Mignonne bore well, and never with us larger or finer fruit. We had a few White Doyenne, but they were knarly. Bartlett's about the size of the Dearborn's Seedling, and no good. We never had finer Madelines. We had a few Glout Morceaux as good as I ever saw them. Steven's Genesee very good. Oswego Beurre good. Van Mon's Leon Leclerk killed out; not much loss. Louise de Jersey very good.

THOS. WIGGINGTON.

#### INTERNATIONAL EXHIBITION.

There is to be an international exhibition of animals connected with Agriculture, as horses, cattle, sheep, swine, bees, fish, poultry, and appliances, implements and machinery connected with the keeping, breeding, culture or employment of them, to be held in Hamburg in the German Empire, from the third to the eleventh of July, 1883. Articles for exhibition must be on the ground by ten o'clock of the second of July.

#### THE BIDWELL STRAWBERRY.

Mr. Roe writes to the *Rural New Yorker* that this strawberry has again surpassed everything on his place, and



BIDWELL.

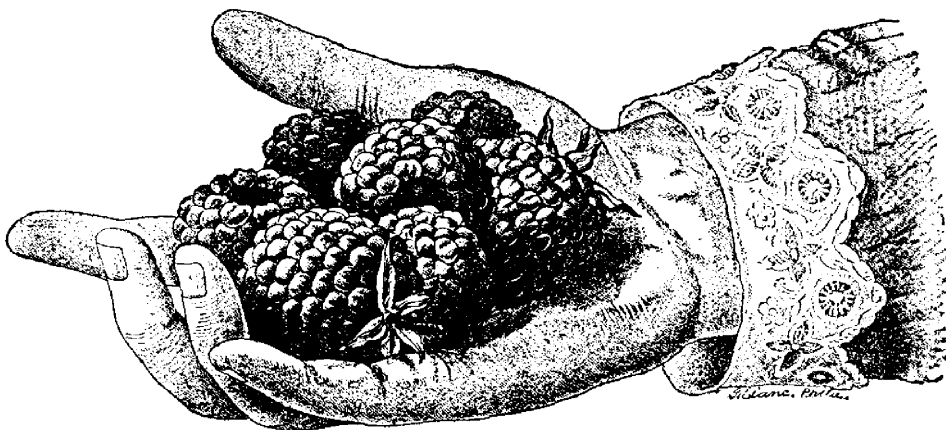
took the lead at other places he had visited. He is receiving enthusiastic accounts of it from many parts of the country. A Maryland man writes to him that he is carrying to market fruit from his Bidwell plants, the berries being some of the finest that it has been his pleasure to see, and that he intends to plant it largely this season, as he finds the fruit bears transportation "splendidly," while the flavor and color are all that can be desired. Another writes that the Bidwell excelled all the varieties on his place, not only

in bearing, but the fruit was larger than that of any other variety except the Sharpless, and the carrying qualities are equal to those of any other sort. Mr. Roe expects the Bidwell will prove one of the leading varieties for the country at large.

#### CRIMSON BEAUTY RASPBERRY.

This new red raspberry is brought to the notice of the public by Mr. A. M.

Mr. Purdy says it is not a whit behind the Marlboro' in productiveness, tize, flavor, color, earliness and hardiness; that every red raspberry that has yet originated in the west has proved a success, and that he is confident he now has in the Crimson Beauty a red raspberry as large, productive and hardy as the Turner, but earlier and firmer. Surely if we keep on improving at this rate we shall soon have a perfect



CRIMSON BEAUTY.

Purdy, of Palmyra, N. Y., to whom we are indebted for the above cut. He procured it from Dr. Stayman, of Kansas, who writes to the *Fruit Recorder* that he has a "new red raspberry, better in quality than any other I know of, large size, bright scarlet, as hardy as the Turner, and better every way than that sort. It certainly is ahead of the Cuthbert and Superb, for I have fruited both of these and neither are of as good quality or color. It is earlier than the Turner, of a more pleasant, sprightly flavor, equally as hardy, more productive, and of much larger size and a bright scarlet color, and firmer. It is superior to any red raspberry I have ever seen or grown—not excepting the Superb, Lost Rubies, Reliance, Turner, or Cuthbert."

raspberry. It will be interesting to grow the Hansell and Scarlet Queen side by side and note the peculiarities of these two aspirants for public favor.

#### THE FORESTRY ASSOCIATION OF THE PROVINCE OF QUEBEC, CANADA.

This association was formed on the 30th of September, 1882, with the Hon. Mr. Joly, President; Messrs. J. K. Ward and Massue, Vice-Presidents; Mr. Jos. Perrault, Recording Secretary; Mr. E. Barnard, Corresponding Secretary, and Mr. G. L. Marler, Treasurer, and a Council of sixteen. In Ontario, the Fruit Growers' Association of the Province is also its Forestry Association, this being also one of the subjects discussed at its meetings and which it is designed to promote.

## THE FRUIT CROP OF 1882.

According to precedents the apple crop in Western New York, this year, ought to have been the largest ever grown. There were more apple trees of bearing age, it was the biennial bearing year, and more blossoms expanded upon the trees than were ever before known. Yet we do not hesitate to say that the crop of apples harvested, west of Cayuga Lake, was the smallest in proportion to the area of orchards ever known in this territory. We have heretofore discussed the probable cause, or causes of the failure, and will not now dwell upon that point. No other kind of fruit has resulted in such a complete failure, unless peaches did, and we think there was a larger yield of peaches in proportion to the area covered with trees, than of apples.

The strawberry crop was below an average. The diminution in yield may be attributed to several causes: The severe drouth of last year prevented that growth of plant last season, necessary to a maximum crop. The winter was so open and freezings and thawings so frequent, as to heave out and destroy a portion of the plants. Then the spring was so cold and backward that plants grew slowly and failed to form that basis of a crop of fruit which is indispensable. With all these drawbacks there was one favorable condition, viz.: moist weather during the fruiting season, thus making the most of the berries started. There was a plenty of berries for family supply, but the scarcity kept them too high for extensive canning by the factories. Those who were so fortunate as to have good crops must have made well by them.

Cherries were good in some localities, poor in others. They blossomed well, but in many localities the germs fell to the ground soon after the blossoms. Certain varieties of cherries, notably the Napoleon Bigarreau, are much

sought after for canning. A larger proportion of the crop than usual was saved, as, owing to the cool, dry weather they rotted less than usual. We allowed ours to retain their full growth and maturity, and we are confident the yield was a third more than if picked, as they usually are, when green.

Raspberries were a pretty good crop, but were reduced somewhat by the drouth. They were all taken at good prices, the evaporators preventing their running too low. Currants were nearly an average crop, but their value for canning and jelly is too well appreciated to allow much depreciation in prices.

The blackberry crop was one of the best ever raised, and met with the most ready sale at good prices. The mildness of last winter saved the canes of all varieties, and the scarcity of peaches made the demand for blackberries good.

Grapes, though late, have turned out a pretty good crop, the warm Oct. weather, and the postponement of frost bringing nearly all to maturity. We think more than double the number of pounds of grapes have been retailed, by Rochester grocers and confectioners, and consumed by our citizens than ever before, and we are glad to know that growers have received better prices. Retailers' margins have been smaller.

Plums have probably been the best crop of any tree fruit grown, and they have been largely canned. Quinces have also been a fair crop, and we have heard nothing of the prevalence of that fungus which alarmed so many quince orchardists last year. Pears were not an average crop, but in some localities the yield was fair. It was hardly the bearing year for pears, in this vicinity. Upon the whole, with the exception of apples and peaches, the fruit crop of Western New York has been but little below the average, but we can better afford to be short in all other fruits than apples.—*Rural Home.*

## CUTTING SEED POTATOES.

*Dr. Stuartman's Address at Utica.*

The third Evening Meeting at the State Fair was devoted to hearing and discussing an address by Director Stuartman of the State Experiment Station, on the proper manner of cutting seed potatoes and planting them—substantially as below :

The speaker began by calling attention to the following points :—

1. A potato is covered with eyes, which form the origins of the shoots. When the whole potato is planted in its natural condition, only two, three, or very rarely four of these eyes vegetate. But rub and injure the eyes, or scald them slightly, and the number of the shoots is greatly increased; 15 to 30 will start from each eye, and often one eye will give as many sprouts as the whole potato would naturally have done. Nature seems to work at a great waste in potatoes, as she does in corn-pollen.

2. The common opinion is that if the whole potato be planted, the strongest eyes will develop, the others remaining dormant. But who can tell which are the "strongest" eyes? The fact is that if you plant a whole potato, and two or three shoots start, and you then rub off some of them, a great many more will appear to take their place.

3. If you injure the eyes a little more deeply than is necessary to multiply the number of shoots, by pouring on boiling water, just avoiding killing the eye, then a mass of little tubers (15 to 25) will form instead of the shoot—illustrating the fact that a single eye has the capacity of originating all the potatoes that a whole plant ought to be expected to bear.

4. The new tuber is always borne above the seed. Sometimes the latter (all but the skin) is completely absorbed by the growing plant; sometimes you find it apparently almost unchanged.

Now the first absorption takes place *within definite lines* in the potato—which lines may be traced and studied by splitting the potato and soaking it in carmine water. It will be seen that

a line of vital tissue, resembling cambium, runs through the centre of the tuber, with a branch running to each eye, which fact is of the highest importance. Tubers may form anywhere on one of these vital lines; the life of the potato is not confined to the eyes. This is strikingly shown by planting a whole potato with the eyes all destroyed, which will sometimes result in the formation of a new potato inside the old one, *without any vegetation whatever*, the old tuber shrinking as the new one grows. The practical lesson is: cut each eye deep to the centre, and at a certain definite angle to be ascertained by experiment, and you will get the maximum possible yield—best in quality also—from that eye.

Trials of this plan in the field this year at the Station resulted as follows: A hundred hills were planted in rows a foot apart. Where whole potatoes, or halves, or quarters, were planted, there was no sort of uniformity in the yield; the crop of adjoining hills varied as much as three to one. But where single eyes were planted, cut as above described so as to preserve the axis of the eye, the product was surprisingly uniform in all the rows. In every case, the piece cut deep, however small, gave a much better yield and quality than a large piece cut shallow.

In regard to the planting of potatoes, Dr. S. early this spring started a number of eyes in sand in-doors, and grew them to three feet in height, but they formed no tubers. When, however, they were transferred to the soil, they began immediately to form tubers. He judges that it is necessary that the temperature of the earth should be lower than that of the air in order that a crop may be produced. He has tried high hilling—four to five feet. The result was few and very small tubers, because the plant had to do so much growing and digging.

Yet deep planting is sometimes advantageous, for the tubers need a certain degree of protection, and sometimes in light soil the potato inclines to come a little towards the surface. Perhaps it seeks warmth and dryness. In one experiment, the addition of six inches of sand to an extremely heavy clay soil, utterly unfit for potato-growing, produced an extraordinarily large and fine yield.

Essential conditions of success, then, seem to be: 1. A single eye cut down to the central line; 2. Warmth and dryness for the growing tuber, but coolness and moisture for the roots. Proper cutting is the great point, everywhere and always. By this means the crop may be increased at least 25 per cent. over what it would be if the potatoes were cut in any other manner whatever; and there is great saving of seed besides.—*Country Gentleman.*

### THE LILY OF THE VALLEY.

*Convallaria majalis.*

Since fashion has decreed that this long neglected, charming little spring flower, with its snowy, fragrance-spreading bells—"May-bells," as the Germans call them—shall be fashionable, an enormous impetus has been given to its cultivation. But this perfect emblem of purity and modesty of the floral world did not require the dictates of fashion to be held as a treasure by all true lovers of flowers since time immemorial, although to many a florist it may have brought, according to the language of flowers, a true "retour du bonheur."

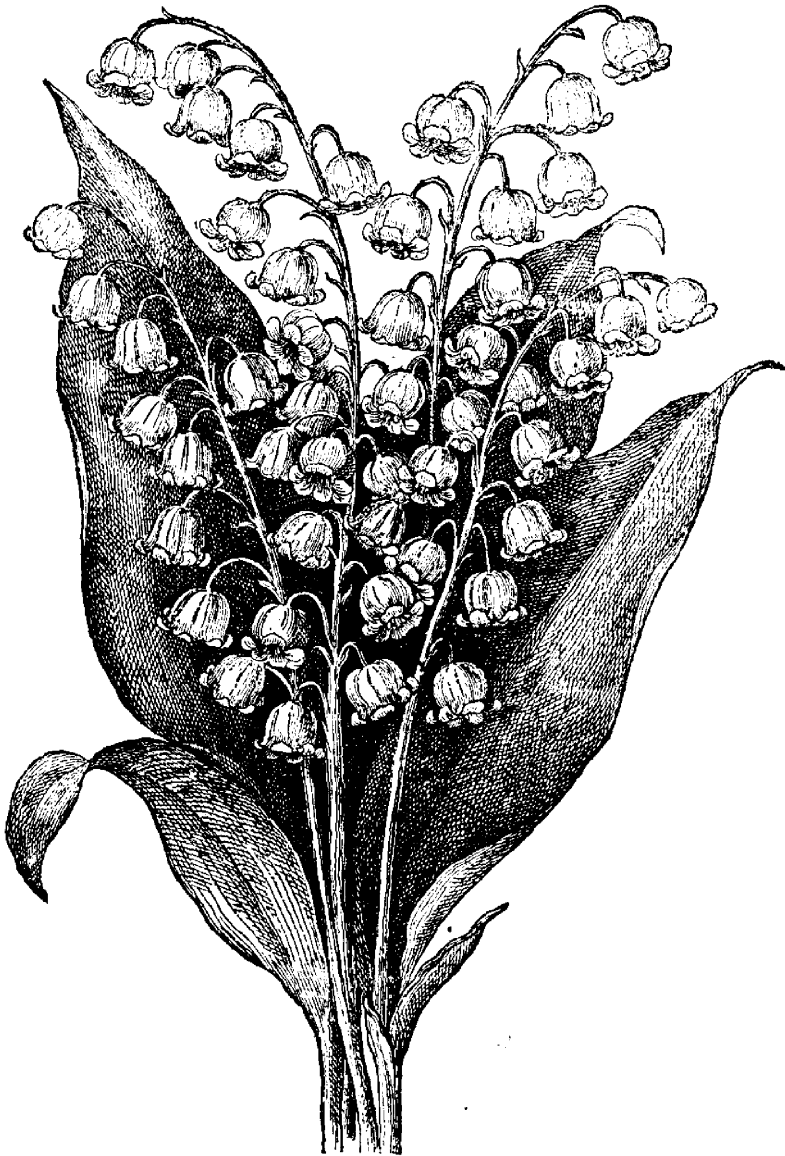
The Lily of the Valley grows wild throughout Europe, in rich, damp woods, under the shade of deciduous trees. It succeeds splendidly in cultivation, if conditions similar to those under which it grows naturally are

provided, and its roots are not disturbed for several years.

In making new beds a partly-shaded situation should be selected, where the ground is not traversed by the roots of growing trees. Unless the soil is naturally rich and deep, it should be dug thoroughly to a depth of at least twelve inches, working in at the same time a good quantity of decomposed manure, and, if very heavy, some sand and leaf mould should be added. If old clumps are at hand, these should be divided before replanting; the roots sold in seed stores are generally already divided into single crowns or "pips," which is the technical name for them. These are usually set out in rows, about twelve inches apart and six inches in the rows. The crowns should be about two inches below the surface of the ground. They may be planted in the fall or spring, but most growers are in favor of fall planting, as at this season better plants may be obtained. When the ground freezes, a light coat of decayed manure and some mulching material should be scattered over the bed. During the first summer the rows should be hoed and kept free from weeds; afterward the plants will take possession of the entire ground.

Forcing Lilies of the Valley forms an important branch of floriculture near our large cities, and this art has reached so high a state of perfection that flower-spikes are now seen in florists' windows throughout the entire year. The roots used for forcing are nearly all imported from Germany, where immense quantities are grown at small cost. As soon as the "pips" arrive, which is during the month of November, they are placed closely together in shallow boxes, which are kept in cold frames, where they can be protected against severe freezing. After about four weeks those wanted for earliest blooming are removed to a





LILY OF THE VALLEY.

forcing-house with a temperature of about fifty degrees, which is gradually increased to eighty degrees.

For window and parlor culture Lilies

of the Valley may be forced as easily as any plants. The "pips" should be planted in pots at any time during November, six to eight to a five or six

inch pot. Ordinary potting soil should be used, and pressed firmly around the crowns, which should stand slightly above the surface. The pots have to be kept out-doors for a month or more, plunged in sand, and sufficiently protected to prevent their breaking by frost, although the plants themselves are rather benefited by being exposed to freezing weather, provided their crowns are covered with moss. About a month before they are expected to bloom they should be brought to a warm room, and gradually watered more copiously, as they grow.—*American Garden.*

#### THE MARLBORO' RASPBERRY.

This new raspberry is now causing so much excitement among fruit growers in the Southern Ulster fruit section, by reason of its unusual promise, that I have been led to make a careful examination as to its origin, habits, and meritorious claims to public favor.

Late last week I attended a raspberry exhibition in the little village of Highland, on the Hudson, which is now one of the great small fruit centres of the Hudson River Valley. I there found a fair show of the leading varieties of this fruit which has netted so many thousands of dollars to Ulster County fruit-growers in years past. Here was the new "Marlboro'," not only a full supply of the fruit, but also the large canes of a growing hill in full fruitage, which had been cut from the ground and transported eight miles to the fair. The fruit was certainly the finest I ever saw—fine flavored, very large, firm, bright scarlet in color, and beautiful. The immense canes were loaded to the very tips. Three of the berries weighed half an ounce in the scales of an apothecary below the hall. Mr. A. J. Caywood, the originator, who exhibited the fruit was, of course, very enthusiastic in its praise, and freely invited parties to

visit him at Marlboro', and see the raspberry growing. Such an invitation I accepted, preferring to satisfy myself in that way.

ORIGIN OF THE MARLBORO'.—Mr. Caywood says he has been experimenting with the view of improving the red raspberry for over 20 years. He has labored to produce first of all an entirely hardy variety: then large size, fine appearance, and earliness of ripening. During these years he has obtained six generations of the raspberry. His first cross was that of the Hudson River Antwerp on the old English Globe variety. He confined his efforts to the stock so obtained with the exception of admitting in the line, on one cross, the Button Raspberry. From his sixth and last cross, which was the Highland Hardy, the Marlboro' was produced.

POINTS CLAIMED FOR IT.—First he claims perfect hardiness. The canes have never been protected in his ground, and he says not a bud has ever been injured, but the fruit is produced at the very tip. It is also the earliest and latest red raspberry they have, he says, commencing early and continuing long in fruit; it ripened last year on June 15th, and was in fruit for two months. This year by reason of the backwardness of the season, it ripened June 20th. The valuable feature of holding the fruit two or three days after ripening, is also claimed. Unusual vigor of canes, great productiveness, large size and superior market qualities are other important features set forth by the originator.

WHAT I SAW OF THE MARLBORO'.—It was growing in the hills in what seemed to be good clay loam. The canes were immense, measuring from seven to eleven feet in height. Each hill was a perfect pyramid of luxuriant dark green foliage, heavily laden with fruit in all stages of growth, from the

large scarlet berries to the expanded blossoms. The fruit arms were over two feet long, and fruited all along, some having eight clusters of fruit each. The canes were fruited to the terminal bud. I confess it was a most attractive sight to any fruit grower, and the visitors were most enthusiastic in its praise. Mr. Nathaniel Hallock who first began the raspberry business on the Hudson nearly forty years ago, and who is now over eighty years of age, said this show of fruit exceeded anything he had ever seen of the Hudson River Antwerp in its best days. He said if the berries would grow like that an acre of them would produce about \$2,000 in a single year. Another gentleman who was present, was afterwards seen in earnest conversation aside with the originator; and Mr. Caywood afterward informed me that he had been persuaded to put his price upon his stock of the Marlboro Raspberry, and had given the gentleman the first refusal. Of course, it has never yet been disseminated.—H. HENDRICKS, in *Rural New Yorker*.

The Editor adds:—From what we have seen and known of this splendid variety, we freely subscribe to the above. But it must be borne in mind, that it has not been tested away from the favorable place of its origin.

#### PARSNIPS.

One of the greatest pleasures the proprietor of a garden has, is the satisfaction of knowing that he has at his command an abundant and varied supply of vegetables at all seasons of the year. In the summer he has an extensive list to choose from, but in the winter and early spring months his choice is confined to a limited number of varieties, and on this account these crops should be of the very first quality. To obtain this desired object it is absolutely necessary

to give the crops, during their season of growth, every essential attention.

The Parsnip is one of the most desirable, as well as most wholesome, of winter and spring vegetables, and should be cultivated in all gardens, however small. It flourishes best, and produces the largest, longest and smoothest roots when grown quickly, in a very rich, deep soil, for, if fresh manure is given, the roots will become forked; or, if the seeds are sown in a shallow or poor soil, the roots will be of small size, tough, forked, and almost worthless.

The best and easiest method of obtaining a satisfactory crop is to prepare the ground thoroughly the previous season. This should be done by plowing or digging the ground very deep, and at the same time working-in an abundance of well decomposed stable manure in which a quantity of bone-dust has been mixed. If at all possible, let the ground be thrown up in ridges throughout the winter, and as soon as the ground is in working condition in the spring, a good sprinkling of guano, or hen manure should be given, the ground neatly leveled, and the seed sown in drills from eighteen inches to two feet apart. The seed should be covered to the depth of three-quarters of an inch, and as soon as the young plants are from three to four inches in height they should be thinned out to a distance of six or eight inches apart. All the care and attention they require after this is to be well cultivated and kept free from weeds at all times.

The roots are perfectly hardy, and are very much improved by leaving them in the ground during the winter, care being taken to bring enough in the cellar to last during the cold weather. The roots require to be covered with sand when placed in the cellar, thus preventing them from becoming dry. One ounce of seed will sow

about one hundred and fifty feet of row, and, as the seed is thin and scale-like, it will not retain its vitality for over a year. The most desirable varieties are:

*Early Short Round French*, a very early variety, of small size, round shape, and delicate flavor.

*Long Smooth*, or *Hollow Crown*, has long, smooth roots, both tender and sugary; the tops are small, and tinged with red at the crown, which rises from the centre with a slight depression.

*The Student* is a new variety, of delicious flavour, the roots being of very regular form with white, smooth skin. This is the best variety for general cultivation.

In attempting the cultivation of Parsnips it is well to remember the fact that the seeds vegetate slowly, and on this account they should be sown as early in the spring as possible.—CHAS. E. PARNELL, in *American Garden*.

#### VIOLETS.

There is no more popular flower than the Violet, and as it is one that can be enjoyed by all with very little labor, while the expense is not to be thought of, we are often surprised at its absence in many households. It is one of the earliest to bloom; in fact, it can be enjoyed almost throughout the entire year; and is so hardy that it requires very little protection. At most a cold frame, covered in winter with straw matting, which a bundle of straw will supply, will be sufficient to give us flowers in the latter part of March, when the plants, which have been increasing, should be partly removed and set in the open ground. A portion of these may be let remain out all winter, well covered with manure, to be uncovered early in March. It is also one of the prettiest and most welcome house-flowers, being planted in a suitable wooden box and

placed in a cool part of a room, and aired occasionally by being set in the sun at a window in the room in which there is no fire, and allow the sash to be raised for an hour at mid-day when the weather is not too severe. There was very little intermission the last fall, winter and spring, in which we could not gather a little bouquet of Violets for our parlor.—*Germantown Telegraph*.

#### THE TYLER BLACK-CAP.

Among all the new candidates for public favor this raspberry is, I think, one of the most valuable that has yet been introduced. It is a Black-Cap, originating in this State, and has been quietly planted and grown here for a number of years past. One large fruit grower near has several acres of it in bearing, claiming that it is by far the most profitable sort he can raise, and several others have planted it almost exclusively the past year or two. One of its chief points of value lies in its earliness, it being as early or earlier than either Doolittle or Davidson's Thornless. It will average as large or larger than Mammoth Cluster, in fact, I have seen many of its berries as large as the largest Gregg I ever saw. It is the handsomest jet black berry I have ever seen, there being scarcely a trace of bloom on them, while the seeds are remarkably small and few in number. Although exceedingly firm the berry is not dry or hard, but juicy and of very fine quality. It is a strong, vigorous, healthy plant, and enormously productive. In a test of six rows each of Davidson's Thornless and Tyler, planted at the same time and each receiving exactly the same treatment, there were picked from the former six rows, one bushel and two quarts, and from the Tyler exactly six bushels, or one bushel to the row. This was on the ground of a neighboring fruit grower who, in his



TYLER RASPBERRY.

enthusiasm, is about to uproot a fine young plantation of other varieties and replant with Tyler. In the Auburn markets it commands an average of three cents per quart more than other varieties on account of its quality and handsome appearance. I think it is by far the best berry of its season and effectually displaces the Doolittle and Thornless, thus supplying a long felt want, and I have no doubt that as soon as it becomes better known it will be planted more extensively than any other, and I see no reason why its merits should not be made known, as were those of many inferior sorts that are now being puffed and lauded through the country. The Gregg, our best late sort, commences to ripen at about the last picking of Tyler, and thus by planting these two varieties the season may be greatly prolonged, while I believe that two more profitable sorts can not be

grown.—J. E. BURR, in the *Indiana Farmer*.

Mr. Tyler, speaks of his child thus:—

“It was larger than Davison’s Thornless, averaging about the size of Mammoth Cluster, and that he had raised specimens of it that were larger than any Mammoth Cluster he had ever seen; it is the most regular in shape and uniform in size of any berry he had ever seen; jet black in color with very little bloom; in quality pronounced by all who have tasted them to be far superior to either Doolittle, Davison’s Thornless, Seneca, or Mammoth Cluster; ripens fully as early or earlier than Davison’s Thornless, and continues in bearing till two or three weeks after Mammoth Cluster is all gone and gives to the last not a few scattering berries, but good picking. In a comparative test of the same number of plants each of Davison’s Thornless, and Tyler, all growing side by side, of same age, under the same cultivation, and all having an equal chance, he picked 34 baskets of Davison’s Thornless, and 198 baskets of the Tyler.”

## EXPORT TRADE IN APPLES.

It is noticeable that the export shipments of apples from New York have been larger of late than from Boston, which is the reverse of what they have been in former seasons. The total export shipments from New York for the season were 51,248 barrels; from Boston the total exports thus far this season have been 35,562 barrels. The total exports from Boston and New York this season have been 86,811 barrels. Baldwins and Hubbardstons averaged twenty shillings and sixpence; actual net to shippers, \$3.30 per barrel. The freight on apples from Boston to Liverpool has declined to seventy-five cents per barrel. Apples can be shipped to London via Liverpool at about thirty-seven cents per barrel extra. In the Glasgow market there have been no sales of Boston apples.

A cable despatch from Liverpool on Monday last announces the sale of 4000 barrels of American apples at advanced prices, as follows: Kings, 22 to 25 shillings per barrel (the English shilling being about 25 cents our currency); Baldwins, 17 to 20 shillings; Northern Spy, 15 to 20 shillings; Roxbury Russets, 16 to 18 shillings; Greenings, 14 to 16 shillings. A very active demand is reported in Liverpool at these prices. Up to the present time the European market for American apples has been mainly confined to Great Britain, but if the opinion of our Minister to Sweden, Mr. J. L. Stevens, is correct, there seems to be an opening for them in northern Europe, where no good apples can be grown, as is the case in Denmark, Sweden and Norway. The few that find their way to these countries are mostly from France, and are to be found only in the larger cities, where they are sold for an average of six cents each. Mr. Stevens thinks that the keeping qualities of some American apples, and their adaptation for trans-

portation, as well as the fact that they are of better flavor than any now found there, make them admirably adapted for the markets of northern Europe. The journey is longer than to England, but the prospective price is greater.—*American Cultivator.*

## CARE OF HONEY LOCUST HEDGES.

In the northern sections, where the Osage Orange is more or less injured by the winter, the Honey Locust is undoubtedly the most valuable plant for hedging purposes. There is no special culture necessary for it more than is required for other species, but it needs attention for the first two or three years to form a thick base. The young hedge should be frequently cultivated, and kept clear of grass and weeds all summer, otherwise mice will harbor therein and bark the young plants. In trimming, cut well back for the first two or three years, bearing in mind there is no difficulty in quickly obtaining the desired height, but it is far more troublesome to induce it to become dense and twiggy.

The best results are obtained from running one strand, or, better still, two strands, of barbed wire along the middle of the hedge, thus preventing the inroads of unruly animals and that bane of the honest orchardist, boys with thieving propensities.

To start at the commencement, Honey Locust seeds should be collected in the pods as they fall from the trees in autumn, and placed in a cold, exposed position until hard, freezing weather, when they can readily be threshed like beans. After cleaning the seeds from the fragments of pods, etc., place in bags and preserve dry until spring. At planting-time soak the seeds in warm water until they show signs of germination, when they should be sown in drills like peas, in good, thoroughly pulverized soil.

Like the larger portion of our native trees, this species forms more root than top the first year, consequently one-year seedlings are usually rather small for planting in the hedge-row; but they should not remain longer than two years, else they will be on the other extreme.—JOSIAH HOOPES, in *N. Y. Tribune*.

#### BOOK NOTICES.

VICK'S FLORAL GUIDE for 1883 is an elegant annual, most tastefully got up, and profusely and beautifully illustrated, not only with engravings without number, but also with three colored plates, which are just perfect gems. It is not merely a catalogue of seeds and articles which the publishers have for sale, but is also a guide to the cultivation of them as well. You can obtain a copy of this most instructive work for ten cents by addressing James Vick, Rochester, N.Y.

THE AMERICAN AGRICULTURIST celebrates its forty-second year with new dress, new artists, new writers, and radical improvements generally. During the year 1883, every number of this leading Agricultural Journal will contain nearly one hundred columns of original reading matter, and from fifty to eighty original illustrations and engravings. Notwithstanding this great amount of reading matter, it is supplied at the low rate of \$1.50 a year. 200,000 copies of the October issue were published. See advertisement elsewhere. Send for a sample copy.

THE TWENTY-FIFTH EDITION of the Descriptive Catalogue of Ornamental Trees, Shrubs, &c., of Ellwanger & Barry, Rochester, N.Y., is handsomely illustrated with a finely executed Chromo-lithograph of the *Weigela candida*, and with numerous engravings, shewing the peculiarities of form of leaf, tree and flower of a great number

of our most interesting trees and shrubs and perennial plants. It is a valuable work of reference, giving accurate descriptions of a great variety of deciduous and evergreen trees and shrubs, most of which are hardy in our Canadian climate, bringing to our notice those of recent introduction and those possessing any marked peculiarity in form or color of foliage or habit of growth.

THE CANADIAN ENTOMOLOGIST is closing its Fifteenth Volume under the supervision of the President of the Entomological Society of Canada, Prof. Wm. Saunders, of London, Ont., who has so ably edited it during all these years of its history. This monthly organ, in connection with the annual report of the society, has done a great deal in the way of disseminating information concerning the life history of insects injurious or beneficial to the tiller of the soil, and concerning the methods of preventing the attacks of injurious insects, or of destroying them in the early stages of their existence, and thereby preventing their ravages. The December number for 1882 has not yet come to hand, possibly the hibernating habits of many of the creatures of which it treats has an effect upon the development of the winter numbers.

THE MARYLAND FARMER, at the commencement of the new year, presents its readers with a portrait of the Hon. Oden Bowie, one time Governor of Maryland, known as an extensive farmer, planter and stock-breeder, whose homestead farm contains nearly a thousand acres, in each field of which he has left from six to ten acres of woodland. The Farmer is published monthly, under the care of Ezra Whitman, Baltimore, Maryland, and now enters upon its twentieth volume, the oldest agricultural journal in the State. It is,

we regret to say, not very full of information relating to fruit growing in that State, and judging from some of the communications published, its constituents are not as well informed on these matters as they might be. For example, in the January number for 1883, now before us, page 10, the writer speaks of the Delaware as "an excellent *white* grape, but not at all *hardy*." Now the Delaware is a red grape, and perfectly hardy in our Canadian climate where the thermometer falls below zero. Such blunders throw an uncertainty over the whole communication, and one doubts whether the writer is correct in the names of the other fruits he mentions. Again, on the same page, the Cherry Currant is spoken of as a new berry, developed in the Mount Hope Nurseries. Now the truth is that this currant was introduced from France, and has been in cultivation in America somewhere about a quarter of a century. If this be a new fruit in Maryland, surely horticulture must be in a very backward condition. Friend Whitman must pay a little more attention to these matters in his excellent journal, and not leave horticulture so far in the back ground.

HIRAM SIBLEY & Co.'s SEED CATALOGUE, for 1883, Rochester, N.Y., and Chicago, Ill., is copiously illustrated with admirable engravings, and five plates, each containing twelve colored pictures of vegetables, plants or flowers. It is full of information respecting the culture of the different plants and their several qualities. This firm are very extensive growers of seeds, the most extensive in America, and probably in the world, and have a reputation for great painstaking in the quality of their seeds.

THE AMERICAN JOURNAL OF FORESTRY is a new venture under the editorial care of Dr. F. B. Hough,

chief of the forestry division of the United States department of Agriculture. It is devoted to the interests of forest tree planting, the formation and care of woodlands and ornamental plantations, and the various economics concerned therein, and published by Robert Clarke & Co., Cincinnati, Ohio, at *three dollars per annum*. There is much for us to learn upon these subjects. We cannot blindly follow the practices of the old world, our climate and circumstances and the genius of the people are so very different, that what is wise there might be very unwise here or even quite impracticable. It is certain, however, that in some parts of the country we have cleared up too large a proportion of the land for the best interests of the population, from both a sanitary and an economical point of view; and in other parts we are thoughtlessly cutting down our forests in a manner very detrimental to the future welfare and prosperity of the country, and every effort to disseminate information upon these subjects deserves to be encouraged.

THE GARDENER'S MONTHLY, now in its twenty-fifth volume, is still under the able editorship of Mr. Thomas Meehan, and is published by C. H. Marot, 814 Chestnut St., Philadelphia, at \$2.10 per annum, postage paid. It is not needful that we say anything of the reliable character of this magazine to those who have been in the habit of reading it, and to those who are not acquainted with it we unhesitatingly say that, if you are interested in horticultural matters, the best thing you can do is to subscribe for it and read it with care.

REPORT OF THE STATE HORTICULTURAL ASSOCIATION OF PENNSYLVANIA, for 1882. It is illustrated with engravings of Pennsylvanian seedling fruits, as Pyle's Red Winter Apple, a chance



seedling which is thought to be of great value as a market variety, being large, showy, and keeping until March; York Stripe Apple, a popular variety in southern Pennsylvania; Triumph of Cumberland Cherry, which originated in Cumberland County, and said to be of fine delicious flavor, a prolific bearer and to rank with the best. It contains an essay on "The management of an orchard," on "Horticulture for pleasure," on "Raising seedling fruits," on "Our winged friends," on "Horticultural fertilizers," "Fruits and vegetables," &c. Mr. E. B. Engle, Chambersburg, Penn., is the obliging Secretary, to whom those interested can apply for a copy if they wish, enclosing stamps to pay postage.

THE YOUNG SCIENTIST enters upon its sixth volume. It is published at 49 Maiden Lane, New York, at one dollar per year, and is a praiseworthy effort to interest young people in something more profitable than the flashy and sensational stories with which our young people are now so abundantly supplied. It is very gratifying to see it enter upon its sixth year with such hopeful courage, materially enlarged in size, more than doubled, and well illustrated. It is also a hopeful sign of the times that such a journal, without any "stories" whatever, is sufficiently appreciated to warrant increased expenditure of time and money in its monthly preparation.

OTTAWA FIELD NATURALIST'S CLUB. We are indebted to Lt.-Col. Wm. White for a copy of the second issue of the transactions of this Club. It contains valuable papers on subjects connected with the researches of the naturalist, among these we notice an interesting one on "Meteors and Meteorites," by Mr. H. B. Small; one on "Some Coleoptera injurious to our pines," by Mr. W. Hague Harrington; another

on the "Liliaceæ," by Lt.-Col. Wm. White; a synopsis of a lecture by Prof. J. Macoun, F.L.S., on "the capabilities of the Prairie Lands of the great Northwest, as shewn by their Fauna and Flora." The concluding paper, illustrated by a well executed plate, is a "description of a new species of Porocrinus," by James Grant, M.D., which was taken from the Trenton limestone at Belleville.

VICK'S ILLUSTRATED MONTHLY magazine continues to illumine our table with its bright pictures and interesting articles on flowers and their culture. The initial number of the sixth volume is as delightful as any that have gone before, and we particularly commend the article on "Flowers for the Schools" to the consideration of our Boards of Public School Trustees, especially in our rural school districts. If there be one place more than another that should wear a bright and cheerful aspect, it is the school grounds; and yet, so far as the writer's observation extends, the school yards in Ontario are the most dreary, forsaken and cheerless enclosures to be found anywhere. We almost forgot to say that the magazine is published by James Vick, Rochester, N.Y., at \$1.25 per year.

THE FARMER'S ANNUAL HAND-BOOK, for 1883, published by D. Appleton & Co., 5 Bond Street, New York, is a most convenient and useful little diary for the year, containing also many things useful to the farmer, such as tables of the cubic contents of round sticks, rules for finding the number of tons of hay in a mow, the number of bushels of corn in a crib, &c.; the average purity and vitality of some seeds as found in market, valuation of commercial fertilizers, average composition of fertilizing materials, feeding of cattle, composition of feeding stuffs, and the digestibility of feeding stuffs, &c.

## A LEAF FROM THE CALENDAR.

BY WILLIAM M. BRIGGS.

Where Wood-Violets love to grow  
Thickly lies the winter's snow;  
Where the streamlet sung and danced,  
And the summer sunbeam glanced  
Thro' the meadow, down the dale,  
All is lusked, and chill, and pale!

Where the Crow-foot's tender green  
Earliest in the spring is seen;  
Where the Checkerberries hide  
By the pale Arbutus' side,  
And the Cowslips, tipped with gold,  
Over hill and dale unfold;

Where the ferret, soft and brown,  
Stores his nest with pilfered down;  
And the field-mouse in the heather  
Sleeps for weeks and months together;  
And the squirrel, wise and dumb,  
Waits for better days to come;

Lies the winter—bitter, strong—  
Heaped thro' freezing nights and long;  
While the tempest comes and goes,  
Sliding swift o'er drifted snows;  
Clouds above and gloom below;  
Tell me—when will winter go?

When the buds begin to swell;  
When the streams leap thro' the dell  
When the swallows dip and fly,  
Wheeling, circling, thro' the sky;  
When the Violet bids the Rose  
Waken from its long repose;

When the gnats in sunshine dance;  
When the long, bright hours advance;  
When the robin by the door  
Sings as ne'er he sang before;  
Then, when heart, and flower, and wing  
Leap and laugh—then comes the spring!

Scribner's.

**BEST TIME FOR CUTTING SORGHUM CANE.**—Peter Collier, chemist to the Department of Agriculture, writes a letter to the *Husbandman*, to show that the advice to farmers to cut sorghum cane when the seed is in the dough and several days ahead of grinding, is very bad advice indeed.

**WATERLOO PEACH.**—This is the *largest very early* peach we have grown or seen. The first specimen ripened July 14th, and measured 10 inches in circumference. All the fruit was gathered, and mostly over-ripe, on the 19th of the same month. It ripened about three days in advance of the Alexander. It is a remarkable keeper, ripe specimens having been kept in perfect condition nearly a week after being picked. It will therefore be valuable for shipping.—*Fruit Recorder*.

**PROTECTING BELTS IN ORCHARDS.**—The *Rural Home* in describing a visit to the orchards of T. G. Yeomans, of Walworth N. Y. (widely known as a very successful fruit raiser), states that he has protecting belts of

Norway spruce running north and south every thirty or forty rods. These belts break the force of the winds, and save the ripening fruit. A furious wind storm once swept over one of his orchards (of forty acres) and he sent a number of men to pick up the wind-falls for evaporating. They soon returned with very little fruit, the evergreen screens having afforded ample protection.

**THE BARK LOUSE.**—Herbert Osborn, of the Iowa Agricultural College, recommends as remedies for the scurvy bark louse and the oyster shell louse, kerosene and soap. The kerosene may be used pure where it can be done with safety, but ordinarily it must be diluted with water. This may be accomplished by forming an emulsion of kerosene and milk (skimmed milk answers well) and then diluting with about an equal quantity of water, or by shaking up a mixture of milk kerosene and water in equal parts, and then adding more water, taking care not to add so much as to cause the mixture to separate. Sprinkle or spray it upon the infested twigs and branches. Soap is an excellent remedy. Make a solution of whale oil soap, one-fourth of a pound of soap to a gallon of water, and apply to the infested parts of the tree, repeating the application after a few days. Lye is said to have been used with good success, but is considered unequal to soap.—*Michigan Farmer*.

**THE DUNLAP AND GENESEE—TWO NEW SEEDLING PEACHES.**—Through the courtesy of our horticultural friend, Mr. Charles A. Green, we had the pleasure of testing two new seedling peaches. The Dunlap is one of those yellow peaches, like the yellow Alberge, Hill's Chili, Wager and others which reproduce themselves, or very nearly do, from pits. It is a very handsome, round, bright yellow peach, of medium size, deep yellow flesh, and of a sweet, juicy, delicious flavor. The pit is very small, and perfectly free. We cannot recall another peach ripening so late as this of such good quality. The Genesee came from the grounds of Mr. H. E. Hooker, nurseryman, of this city. It originated on a city lot belonging to the late brother of Mr. Green, and the tree from which the specimen was obtained was heavily loaded with fruit. It is a large, oblong peach, in form and color resembling the Early Crawford; a shade lighter color; and resembling it very much, we thought, in quality. Judging from a single specimen of each, they seem to be promising varieties, worthy of farther trial.—*American Rural Home*.