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The Canadian Horticulturist.

VOL. IV.]

JUNE, 1881.

[No. 6.

CHAMPION, *alias* BEACONSFIELD GRAPE.

The following remarks are copied from the Report of the Fruit Growers' Association of Abbotsford, Province of Quebec, and shows in what esteem the Champion grape is held amongst them. It also proves beyond question that the Champion and Beaconsfield are one and the same grape.

"CHAMPION.—This variety was also upon the tables at Abbotsford, and on account of its special earliness attracted special attention. It was also exhibited in 1877 by L. W. Decker, of Montreal, who had bought it in 1871 from Messrs. Shanley & Gallagher. Since then it has been largely imported by them, and by Messrs. Menzies & Gallagher, as the Champion, and sold as such; and more recently imported as the Champion and sold as the Beaconsfield. It combines the main characteristics of a market fruit. It is essentially a pioneer grape. It was in flavor the poorest, with one exception, of the thirty-three varieties exhibited. It is, however, quite good enough to sell. The market does not demand quality in a grape any more than it does in a pear or in an apple. The Champion has the earliness, size and color necessary for a commercial grape, and as such, and a forerunner of finer fruits, it must prove of great service to our northern country. As a commercial grape, however, it has a weak point in its shortness of season. The Champion drops from the bunch somewhat—less so we think than the Hartford; but our knowledge on this point is limited. It is short in its season, though nothing like as short as a Peach apple; but in a general way it is like the Peach and Astrachan apples, early and perishable, yet profitable. The money aspect of this Champion grape, the proprietors of the vineyard at Beaconsfield must surely have carefully weighed, and their firm belief in it they have proved by the fact that they have planted out seventeen acres, or 12,100 vines."

THE CODLIN MOTH. (*Carpocapsa pomonella*.)

BY WM. SAUNDERS, LONDON, ONT.

The Editor has kindly sent me some correspondence lately received containing enquiries relating to this insect, from which it appears that erroneous ideas have been circulated of late by the press in reference to the habits of the codlin moth. The statements made, although somewhat contradictory, are all claimed to come from reliable men, who do not however attach their names to the communications. It is asserted, in the first place, that the female codlin moth has no wings, but crawls up the apple trees to deposit its eggs on the fruit. Second, that it has wings, and is attracted by sweets, and that hundreds of them may be readily caught by hanging jars of sweetened water at night among the branches of the apple trees. A third statement is that the larvae, when full grown, descend to the ground and enter the earth to change to chrysalids.

It is evident that the first conclusion as to the wingless character of the females has been arrived at by the writer confounding the canker worm moth or the tussock moth with the codlin moth. In both the former species the females are wingless, but the female codlin moth is furnished with ample wings, with which she flies as actively as her male companion.

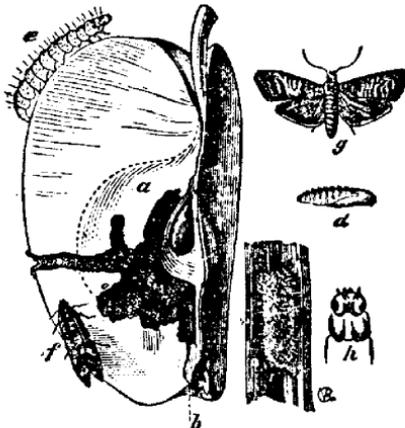
With regard to the trapping of codlin moths by means of sweet liquids, I may say that it is contrary to the experience of all entomologists. Many years ago this remedy was recommended, and I then gave it what I considered a fair test. At the time when the codlin moths were plentiful and on the wing, I hung bottles of sugar and water, others with the same sweet liquid mixed with a little Jamaica rum, and another series mixed with other flavoring materials which were supposed to be particularly attractive to insects. Hundreds of moths were captured, but the most careful examination failed to reveal the presence of a single codlin moth among them. Other entomologists have tried this remedy with similar results.

Entomologists everywhere are in the habit of trapping moths by alluring them to sweetened fluids by night. The liquor generally used is West India molasses mixed with ale, or diluted with water flavored with Jamaica rum. This is brushed on the smooth bark of trees, or on pieces of shingle tacked to them; or pieces of cloth or flannel are

saturated with the sweet liquid and fastened to the trunks of the trees. If this is done during the periods when insect life is most abundant, moths visit the baits by scores and sometimes hundreds, when by the use of a dark lantern and suitable collecting bottles, the most desirable specimens are secured. I have followed this practice myself for many years, and have thus caught thousands of moths, and have seen tens of thousands come to sip the attractive sweets, but never once saw a codlin moth among them. Many entomologists have pursued this method of collecting more enthusiastically than I have, and within the past eight or ten years some of them have published long lists of their captures, but no one to my knowledge has ever mentioned an instance where a codlin moth had been attracted by sugar. It would be well if the parties who have been so successful in this way would send specimens of their captures to some entomologist, who could determine them with certainty. In the absence of such evidence it is highly probable that some other small moths have been mistaken for codlin moths.

As to the statement of their going under ground to change to chrysalids, this is certainly erroneous, as it is contrary to universal experience. Hundreds and thousands of the worms are yearly caught hiding and changing to chrysalids under bands tied around the trunks and lower limbs of apple trees, which clearly proves that their habit is not to burrow under the earth when about to undergo this change.

In as few words as possible I will endeavor to give a sketch of the



life history of this insect, with the best known remedies for its destruction. In the accompanying figure the moth is represented at *f* with its wings closed, at *g* with its wings expanded; *e* shows the worm, *b* indicates the point where it usually enters the fruit, *c*, the chrysalis, while the elongated silky case attached to a small piece of bark is the cocoon, in which the chrysalis lies snugly encased.

Soon after the mature worm leaves the fruit in the autumn, or during the early winter in fruit

cellars, it seeks some sheltered nook in which to change to a chrysalis; if out of doors, under the loose bark of trees, or other convenient hiding place; if in the fruit cellar, it may often be found about the barrels or bins in which the fruit has been stored. Having selected a suitable spot, the larva spins a tough papery-looking cocoon firmly fastened to the place of attachment, and within this enclosure remains in the larval state until early in spring, when it changes to a brown chrysalis, which shortly produces the perfect moth.

The early brood of moths appear about the time of the opening of the apple blossoms, and the female deposits her eggs singly in the calyx or eye just as the young apple is forming. In about a week a tiny worm is hatched from the egg, which at once commences to burrow into the fruit, eating its way to the core. The occupied apple generally falls prematurely to the ground, excepting in the case of early fruit, which often approaches maturity before it falls. When the fruit drops, sometimes the worm is found in it, but more commonly it leaves the apple before this occurs, and crawls down the tree seeking a sheltered spot in which to change to a chrysalis. From these chrysalids the second brood of moths make their appearance during July, before the end of which month the eggs for the later brood of moths are usually deposited, the larvæ maturing, as already stated, late in the fall or early in the winter.

REMEDIES.—These consist of either picking the wormy apples from the trees, or gathering them up promptly as they fall to the ground and feeding them to pigs or sheep, or of entrapping the worms in bands or other contrivances. The bands used are of different materials—strips of old carpet, cloth, canvas, or cotton, or even strips of strong paper cut about six inches wide and wound around the tree and fastened with a string or tack. Within such enclosures the worms hide and transform, and by examining them once a week or ten days from the early part of June until the last of August, and once after the crop is secured, and destroying each time the larvæ and chrysalids found there, a very efficient check will be placed on their increase, and if generally practiced in any section of country, care being taken also to destroy the worms in the fallen fruit, the apple crop would shortly be wholly or comparatively free from attack. These remedies can be relied on, and may be adopted by every apple grower with comparatively little labor, and the saving of fruit will amply repay for his trouble.

IRRIGATION.

BY THOMAS BEALL, LINDSAY.

While looking over some of the Annual Reports of the Fruit Growers' Association lately, my attention was arrested by Mr. Bucke's paper on irrigation, in the Report for 1877. I had never read this paper before, and some of the statements therein surprised me not a little. The second paragraph commences thus: "The average rainfall of the last thirty-five years in Canada has been $28\frac{1}{2}$ inches per annum, and the principal part of this falls in the months of May, September and October. It will thus be seen that in the greater part of the hot growing season, when water is most required to assist vegetation, it is in a great measure wanting. This sentence contains three separate statements: first, that the average annual rain fall is $28\frac{1}{2}$ inches; second, that the *principal part* of this (the italics are mine) falls in May, September and October; and third, that during the growing season water is in a great measure wanting." By referring to the Meteorological Reports, giving the average annual rainfall for the past forty years, I find the first statement to be sufficiently correct, but the average rainfall for the months named in the second statement is 8.994 inches, or less than one-third of the annual rainfall, and for the three months referred to as "the hot growing season," June, July and August, when there is said to be but little rain, the average rainfall is 8.869 inches, or one-eighth of an inch less than during the period mentioned in the second statement, and described as the period of the principal part of the rainfall of the year.

A few lines further on the writer says: "The beneficial heat of June and July is quite thrown away, . . . because there is no water to moisten the ground." The past forty years the average rainfall for the two months mentioned was 5.98 inches, or .475 inches greater than any two consecutive months except August and September, and only .464 inches less than these. Arguments in favor of irrigation in Ontario based upon such premises can have but little weight.

On page 14 Mr. Bucke says: "One would scarcely think it necessary to show that irrigation is required in a dry, hot country with only 28 inches of rainfall, when England, with a comparative cool temperature and a rainfall of 40 inches, can double its grass crop by

an additional supply of water." Quite true, provided the statement is correct, but is it correct? From a hydrotopographical map of England, prepared by Mr. G. J. Symons, for the "Rivers Pollution Commission," I find that that portion of England having an average annual rainfall of less than 30 inches is about four-fifths of its entire extent, and embraces nearly all the agricultural area of England; and the portion marked as having *less* than 25 inches takes in nearly the whole of the eastern half. It is quite true, however, that some portions of the map show a much greater rainfall. Perhaps it might be difficult to find another spot of equal extent on mother earth's surface where the rainfall is so unequal, for while it is only from 22 to 25 inches throughout nearly all the agricultural eastern counties, it exceeds 40 inches in the west of Cornwall, and in Seathwaite, in Cumberland, 165 inches is recorded as the average yearly rainfall. But merely the small spots indicated as having a rainfall of 40 inches or over cannot be classed as agricultural districts.

If Mr. Bucke was desirous of showing the beneficial results of irrigation to agriculture in England, it would have been well for him to have named some farms where irrigation had been applied on a large scale, giving the cost of the same, so that some idea might be obtained as to its practicability in this country, for no one will deny that a more plentiful supply of water at certain times would greatly increase the crop.

I am quite aware that large sums of money have been expended in various places in England and Wales in attempts to utilize successfully the sewerage of large towns and cities on farms contiguous thereto, but I have yet to learn that many of these experiments have resulted in financial success, notwithstanding that the enormous expenses attending the delivery of the sewerage on to the farms is mainly defrayed by the great and wealthy corporations desirous of effectually disposing of the sewerage in an innocuous manner. Yet on these terms there seem to be much doubt as to its practical advantages to the farmer, for by a report lately adopted by the Mansion Home Committee and the Royal Agricultural Society, acting jointly, they say in effect that given an ordinary farm and a sewerage farm *at the same rent*, the sewerage farm will do no more than hold its own in a wet year like 1879, but in dry periods the sewerage farm has many advantages.

THE SNOW APPLE OR FAMEUSE.

R. S. Shepherd, Jr., of Montreal, writes to the *Country Gentleman* concerning this apple, as follows:—

“The Fameuse is by far the most popular apple grown in this Province. In proof of this assertion the report of the Montreal Horticultural Society for 1876 contains the information that *fourteen* out of *sixteen* large orchardists on the island of Montreal, give the Fameuse as the most profitable; and of the country orchardists, *thirteen* out of *fourteen* place it first on list for profit. Although the tree is not so hardy as Duchess of Oldenburgh, Alexander, &c., yet it has no rival for first place. It is our heaviest cropper, and seems to adapt itself to various soils.

“As a dessert fruit the Fameuse brings the highest price in this market, and within the last few years it has been profitably exported to England from this port. It is the favorite apple when parties desire to send presents of fruit to friends in England. Last fall I sold all my selected Fameuse apples at \$4 per barrel to a grocer, who had received orders for private exportations of this kind. This was a high price for last season's crop, and I presume the grocer got his profit on the transaction. I merely mention this fact as an example of the high esteem we have in Canada for this most delicious apple.”

THE ROSE OF SHARON.

Not much like our ideal of the queen of flowers is this Rose of Sharon, or *Althea*. It is neither sweet-scented, graceful or particularly exquisite in color of flower, yet it asserts and proves its value very thoroughly in its own way. If not graceful, it is straight, sturdy and vigorous, demanding for itself a prominent position on the lawn, somewhat away from other shrubs, with which its pronounced individuality does not readily blend. The flowers, if somewhat coarse, are bright and cheerful, and very welcome in August, when the lawn is specially destitute of bloom. To me the most attractive althea flowers are the single ones. The purity of outline, simplicity and breadth of color of such altheas are very attractive, particularly in an entirely white variety, which is still quite rare. Altheas seldom receive intelligent pruning. One generally meets monstrosities in this genus, for the very good reason that pruning, as applied to altheas is seldom pruning, but merely trimming or clipping. Instead of removing only a few inches of young wood year by year, the pruning knife should boldly cut back into the old wood, within a foot to three feet of the ground, according to the size and age of the specimen operated on. This should be done systematically, in winter or early spring, and not in June, as in the case of early flowering shrubs, for the reason that altheas bear their flowers on the wood produced during the current year of blooming. The result of such management will simply be a bush well clothed with leaves and flowers from base to crown, instead of comparatively naked stems, with leaves and flowers chiefly on the summit.—S. PARSONS, JR., in *Country Gentleman*.

ACTION OF FROST ON PLANTS.

BY G. F. NEEDHAM, WASHINGTON.

At the January meeting of the D. C. Horticultural Society, Mr. Wm. Saunders, Superintendent of the Agricultural Grounds, had a paper (as per title) from which I give your readers some of its points:

"You cannot tell beforehand what plants or trees are hardy. The wood of the orange is in appearance as hard as the oak. Nor will trees, etc., brought from corresponding degrees of latitude grow equally as well in another country that has a similar temperature. Australian plants which will endure cold of 15° below zero in their native habitat are destroyed here when the thermometer reaches the freezing point. The arid climate of Australia thoroughly ripens the wood, which is thus rendered capable of enduring the severe cold.

"The temperature and physical condition of the soil have also an important controlling influence on the cold-resisting power of plants. Unless a proper degree of moisture is furnished by the roots the more succulent branches will become dry and shriveled under the influence of cold, dry currents of air, although the thermometer be above the freezing point; and when the temperature of the soil is low the activity of the roots is correspondingly decreased, and they are unable to replace the losses caused by evaporation from the external surfaces of the branches and stems of the plant.

"Seeing that the temperature of the soil in which plants are growing has so potent an influence on their cold-resisting powers, we realize the value of the application of leaves, strawy manures and similar materials over the roots of plants during winter.

"From what has been stated it is evident that so far as concerns soil and culture, the greatest safeguard against injury to plants from cold is that of having properly ripened or matured growths. How much of the disappointment in fruit culture is the result of immatured growths it would be difficult to determine. I have long considered this to be the cause of the disease known as "yellows" in the peach tree. This disease is most prevalent in localities where growth is prolonged until it is suddenly arrested by a killing frost; and I am not aware of its existence in climates where the tree becomes deciduous in the absence of frost. It is within the province of the cultivator to assist nature in the requisites for perfect maturation of growth. The

fruit grower will be careful to avoid setting his trees in wet soil, or in low, rich lands. He will also prudently abstain from the application of stimulating manures, which would have a tendency to encourage late growth in autumn; he will abstain from all cultural operations on the soil when growth should be checked rather than encouraged, and use every available means to secure an early cessation of wood growth.

“When a fundamental principle is once determined and fairly understood, operative details based upon this knowledge are readily deduced and applied. As an example, I may allude to the well known fact that many of our beautiful evergreen trees from the northwestern and California coasts, as also various Asiatic conifers, have a great tendency to commence a second active growth during the moist, genial weather, which frequently occurs here during the early fall months. This growth never ripens, and in consequence is destroyed by the first frost, greatly to the injury of the plant. The mammoth tree of California and the Japan cedar may be cited as typical trees of this class. These fall growths may be checked by pruning the roots of the trees during September, which will insure matured wood; the young branches will become solid and firm, instead of being unripe and filled with watery fluid, and are thus prepared to stand the winter.

“Then, again, as to protection and the best means of preserving plants from injury by freezing, we are guided by the knowledge of the action of the frost on vegetation. Evaporation of the sap being the result of exposure to currents of frosty air, our efforts at protection will be in a direction to antagonize this result. Practically, taking such plants as roses, grape vines and raspberries as examples, the best method is to lay them on the surface of the ground and cover them with an inch thickness of sand or soil, or indeed any material that will protect them from direct contact with the air and the rays of the sun.

“With regard to the general subject of protecting the plants, some persons contend that a fruit tree or plant to be valuable or fitted for general culture must be able to take care of itself. This should be looked upon as a lame excuse for indolence and neglect. It is the province of man to assist nature in producing such results as he finds most desirable for his purposes; and if he removes plants from their natural conditions and then abandons them, so to speak, he must expect to realize the usual consequences of neglect.

FRUIT GROWING AT TEMPLETON, PROVINCE OF QUEBEC.

BY HUGH H. McLATCHIE.

The Burnet vine did not thrive well with me, and on examination I found the roots were covered with the phylloxera; this is the first I have seen of the pest here. Some vines which were started from cuttings of the Burnet are doing well, but have not yet borne. The Janesville grape is of poor quality, but better I think than Champion. They ripen with me the first week in September.

I have examined the different kinds of apple trees by cutting the ends from the branches of last years growth. Those that are frost proof are green and fresh to the very ends, and the pith light colored. In this class, the Duchess stands at the head of the list, then the Montreal Peach, Irish Peach, Brunswicker and Tetofsky. The latter was injured in the spring of 1875 by the sun scalding the bark.

A second class, headed with the Alexander, followed by White Astrachan, Pewaukee, Fameuse, Red Astrachan, and Walbridge. In these the pith turns brown, and the wood turns white and soft, and the sap oozes out from wounds made by pruning or other cause and turns the bark black.

Out of a dozen or two varieties of winter apples tried, the English Russet makes the best attempt at wintering of all I have tried.

Among the crabs, the Transcendent, Red and Yellow Siberian, Montreal Beauty, Marengo, Chicago, Lady Elgin and Winter Gem are quite hardy. Elliott's Beauty, Dartmouth, Hislop, and the newer sorts, Lake Winter, Whitney's No. 20, Brier's Sweet, and Van Wyck's Sweet grow well, but have not the fresh, healthy look that the Siberians have. Some of these I have had but a short time and never seen fruited.

In closely observing the causes of failure and their prevention, perhaps the soil may be one of the greatest obstacles to fruit growing here. I have noticed that rich manuring and strong growth are sure failures, and that young seedlings left unpruned will stand well, but the same grafted and growing strong will freeze to the ground. After trees begin to bear they do not grow so rank and soft, but stand the cold better.

Windbreaks may be useful, but if close and dense enough to stop the circulation of air, they would be bad for late and early frosts;

and the sun, by starting the sap early, might be injurious. Perhaps a forest or a mountain at a distance would be the best protection. Evergreens planted singly or in groups all through the orchard might do good. Some years ago I saw in some paper a novel idea. Instead of belts around the orchard, the writer planted them in this way among his trees. He claimed that they stored up heat during the day, and drew heat from the soil. Now it may be possible to change or effect the climate greatly by the destruction of large forests, but how a few spruce trees would keep an orchard warm is not so plain; but the shade may have caused the results which he accounted to storage. Every one who has had house or garden plants frozen knows the effect of a hot sun on them. If two plants are equally frozen, and one of them be left in the sun, while the other is placed in the shade and well watered, the former will be found to be ruined, while the latter will be but little injured. A friend of mine planted half a dozen trees of the Fameuse, and they all failed but one. That tree was planted near the west end of the house, and partly shaded with trees; the sun's rays do not reach it till near noon. He has never pruned it, so that it is a mass of brush, but is beginning to bear. It is the only Fameuse that I have seen here that looked like living.

Another thing that has a good effect is summer pruning, and topping back all the young shoots late in summer, and if they sprout nip them off again, but this plan would only do for the amateur.

PEAR BLIGHT AND PLUM CURCULIO.

A correspondent of the *Country Gentleman* asks:—

"Is there a blight proof pear tree, and a plum that the curculio will not sting? I have a thrifty apricot tree that blossoms, but bears nothing."

To which Mr. J. J. Thomas replies,

"There is no pear that is absolutely blight-proof, although a few varieties are nearly so and are rarely attacked by the disease. Of these, Duchess d'Angouleme stands at the head; then Winter Niels, Seckle, Clairgeau and Beurre d'Anjou. The new Kieffer's Hybrid is thought by some to be perfectly blight-proof, and it is doubtless nearly so; but we have seen it slightly affected. There is no plum proof against the curculio, but these insects are easily destroyed if the work is properly performed. The loss of your apricots is doubtless from the sting of this insect, which you may easily determine by examining for the small crescent marks in the young fruit when as large as peas. The jarring process will save them if vigorously applied, which very few persons have the industry to do."

THE FRUIT CANNING BUSINESS.

Mr. J. J. Thomas, horticultural Editor of the *Country Gentleman*, says in that paper:—

“We visited the canning establishment of the Niagara Preserving Company, and obtained from F. Gebbie, one of the proprietors who gives constant and efficient attention to the work, the following figures showing the quantity of some of the fruits and vegetables canned the last and present season. About two million cans are required for one year's work. In 1879 30,000 cases (two dozen per case) of tomatoes were canned, 15,000 cases of green corn, 7,000 of beans, and 7,000 bushels of apples. The present season 2,500 cases of cherries have been canned, 2,800 of Blackberries, 130,000 quarts of strawberries, and 1,000 bushels of plums. The work requires 400 hands. Several machines were in operation for removing the corn from the cob at the rate of one a second, or a bushel in a minute and a half; and another machine enabled the attendants to fill 40 cans per minute. The company engages of farmers a large portion of their supplies, 350 acres of corn being raised this year and 160 acres of tomatoes. About 200 acres of tomatoes are required each year, yielding about ten tons per acre.

How many fruit canning establishments have we in Ontario that do a like business? And yet this is but one of the canning establishments of Niagara County situate at Lockport, N. Y.

PERPETUAL BLOOMING PELARGONIUMS.

Who has not wished that these lovely flowers, the Pelargoniums, could be had all the year round? If they could only be persuaded to bloom at all seasons, as do their sisters the scarlet Geraniums, what treasures they would be. They are gorgeous indeed while they last, but it is only for two or three months in the early spring, and then their beauty is gone for the year. It is therefore with great pleasure that we now chronicle the arrival of a variety of Pelargonium that blooms as freely and continuously as any scarlet Geranium.

Mr. John G. Heintz, Florist, of Terre Haute, Indiana, has introduced a new strain of Pelargoniums which bloom almost constantly the year round, and is especially fine during the winter and spring months. He says they are of easy culture, delighting in a dry atmosphere, which at once will make them one of the most suitable and charming window plants. As bedding plants, he claims, they are equal to anything in use for that purpose; if the plants are kept at rest during winter and bedded out after the frosts are gone, they will remain in constant bloom all summer, enduring without injury the hottest sun.

This Pelargonium originated with Mr. Fredrick Dorner, of Lafayette, Indiana, who obtained some Pelargonium seed from Ernest Benary of Erfurt. He noticed that one of the seedlings commenced to bloom about mid-winter, and continued to bloom for some ten months, during all which time it was never destitute of flowers. The plant grew vigorously and at one time he counted forty seven good sized trusses. It thrives remarkably well as a house plant, being very easily kept, and blooming without intermission for nine months in the year.

We regret that we are not able to give our readers a colored illustration of this Pelargonium, but such of them as are familiar with those known as the Spotted Pelargoniums will readily form some idea of its general appearance and beauty.

AUSTRALIAN COMMISSION.

BY P. E. BUCKE, OTTAWA.

It is understood a Commissioner is coming to Canada during the ensuing summer, for the purpose of enquiring into and procuring for that country any economic trees or plants found here suitable for cultivation, and worthy of a place in the field or garden of the antipodes. In turning up Pugh's almanac for 1880, page 53, it is found that they have already procured from the continent some of our native grapes. The writer of the article in question says, "It would be far better for us to turn our attention more to the cultivation of the fine varieties of the American species of vines which are not affected with blight, or only very slightly so, as the well known Isabella and others which have been introduced into the colony. The following are a few of the best kinds, and cannot be too highly recommended: Adirondac, black; Ascot, a good white grape; Carter, black; Clara, yellow; Catawba, red; Cassady, white; Clinton, black; Creveling, black; Cunningham, a good white grape; Delaware, red; Diana, red; Elizabeth, white; Scuppernong, Ontario, Norton's Virginia, Lindley, &c."

It will be noticed in the list quoted that almost all the varieties named were introduced previous to 1866, and many of them are entirely superseded in Canada by much finer varieties. In the whole list only one of Rogers' (Lindley No. 9) is mentioned. It is observable that one of Charles Arnold's grapes (Ontario) is amongst those specified.

Whoever is appointed to receive the Commissioner should see that he does not return without a full list of either plants or cuttings of our best standard varieties of this luscious fruit, which Australia is able to raise in such profusion, and with so little trouble. The semi-tropical climate of those colonies where the orange and lime, the mulberry, fig and peach, the shaddock and citron, the loquats, pineapple and banana make ones teeth water to read about, would develop quantities of such varieties as Burnet and many of the Rogers, and such grapes as Rickett's Lady Washington, as have never been dreamed of in this country.

It would be well too if some of Mr. Arnold's new varieties of strawberries could be tested in these far off regions, where, though separated by space, all fruit growers feel the kindred of brotherhood. Our climate is so much colder than that of our fellow colonists that the exchange of plants will all be on one side, but they may have some new serials or annuals that would be suitable to our hot summers, and would mature before autumn closes in. If the new conservatories were ready at the Model Farm, on receipt we might be able to see what kind of looking things in the shape of plants and flowers their wild perennials would turn out.

TWO DELICIOUS PEARS.

Fine samples of the Dr. Reeder pear, just brought in from our orchard, gives me an opportunity to taste one of the finest varieties known to cultivators. It is much to be regretted that the best fruits are usually the least known. Coarse kinds are introduced in great abundance, and are to be found everywhere, but how rarely do we see the really choice sorts. But this is easily explained. Almost invariably fine quality is secured at the expense of vigorous habit, and generally the high flavored fruits are such indifferent growers that nurserymen cannot propagate them to advantage, and usually the fruits are not sufficiently attractive in size and color to take well in the markets; hence the reason that they do not become disseminated. Dr. Reeder is no exception to the rule. It is a moderate, slender grower, either on the pear or quince, and to produce good trees it costs three times as much as it does of strong growing sorts. The fruit is only of medium size, but so juicy, melting, highly perfumed—in fact, so perfect in every respect—that no amateur should be without it. This season it ripened nearly two weeks earlier than usual. It is generally in perfection in November.

Another high flavored pear, meriting perhaps the first place on account of quality is Bonne du Puits Ansault, one of Mr. Leroy's introductions, which is destined to do him credit for all time to come. It too, is a

moderate grower, and to obtain good trees, either standard or dwarf, it must be double worked. But such a delicious fruit well repays any extra expense that may be required to secure it. Of medium size, with skin of a light russet color, and flesh white, juicy, vinous, rich—superior in my estimation to Sheldon or Seckel. It certainly possesses qualities which entitle it to be ranked among the best pears known. It ripens early in September. While neither of these varieties is suitable for extensive orchard culture, I strongly recommend them to cultivators who desire choice fruits for their own table.—W. C. BARRY, in *Country Gentleman*.

CORRESPONDENCE.

REPORT OF THE FRUIT TREES AND PLANTS RECEIVED.

Glass' Seedling plum was killed by mice last winter, but I have some splendid small trees budded from it. They appear very hardy; subsoil red clay. Diadem raspberry and No. 20 strawberry are dead. The Burnet grape gives good satisfaction so far. It had two bunches of grapes, well set in the cluster; fruit very good, no mildew, soil rocky. The Goodale pear holds its reputation as a fine grower, but it has one serious fault in bearing Beurre Clairgeau pears this year. It looks like a fraud; soil light, subsoil clay. The Ontario apple neither grows nor dies. The Saunders raspberry grows well, and takes root from the end of the cane as readily as Mammoth Cluster. I had forgotten the Grime's Golden Pippin. The tree was dead when I received it, but I had one bushel of first-class fruit from a graft I saved.

JONAS NEFF, *Port Colborne*.

NOTE.—Mr. Neff has forgotten that the Association being unable to get trees of the Goodale at that time sent the B. Clairgeau instead.

REPORT ON PLANTS RECEIVED.

I have been very neglectful in writing to you concerning the trees and plants received from the Fruit Growers' Association. I have been a member for a good many years, and have had very few losses. I have had three varieties of grapes, the Salem, Burnet and Othello. The Salem grape has done very well; it bears excellent fruit. The Burnet has not commenced bearing, but looks rather funny. The Othello is subject to mildew. Of pears I have had two varieties. Beurre Clairgeau has not done very well, but Clapp's Favorite is a healthy looking tree, but has not yet commenced bearing. The small fruits have done very well. Fruit of most every kind grows well in the County of Huron. Apples have been very abundant here the past few years. First-class apples for exportation have been selling at from 75 cts. to 90 cts. per barrel. An establishment for drying apples by evaporation is commenced in Seaforth, but the price paid is only 20 cts. per bushel for good fruit, so you will perceive that apple growing is not very remunerative in this locality.

ROBT. LANDBOROUGH, *Clinton*.

 SENASQUA GRAPE—BURNET GRAPE.

We would have taken the Senasqua grape selected for this year's distribution, but it is considered later than the Concord in ripening, and so very liable to crack and defective generally that the original proprietor of it, Mr. Underhill, now recommends it for amateur culture only. How is it that the Association has made choice of such an inferior grape, instead of selecting from the seedlings of W. H. Mills or W. H. Reid? Several of them have been highly praised for their many good qualities in our Annual Reports. I fear that the Burnet, sent out in 1878, will not prove a success, at least my experience of it has been very unfavorable. I have found it very liable to mildew both in leaf and fruit, and too late in ripening. I received it from the Association and planted it in the spring of 1878, when it made a fine growth. In 1879 it also grew well, but the leaves mildewed badly, though I applied sulphur, &c., in a careful manner. In 1880 it bore 12 or 15 medium sized bunches, and not compact. Berries medium size, oval and sweet, and of fair quality, but with large seeds and thick tough skin. I speak of two or three of the best bunches which escaped the mildew and ripened. The others were not ripe when the frost came, which destroyed all the remainder. My Isabella's were ripe before the Burnet. I consider the Burnet, even if it were to ripen early and come to its best, very inferior in quality to the Salem, Brighton or Worden. Excuse me for writing so plainly on the above matter, having been induced to do so from the fact that I would have had more success in procuring subscribers if I could have offered them a grape that I could have recommended.

F. K. GORDON.

 REPORT ON EUMELAN GRAPE, &c.

All the plants I ever got from the Association grew except a peach, and the only one that did not stand the climate was the Early Wilson blackberry. The Eumelan was very prolific until this year, when it blighted or rusted badly. Some of the other vines blighted some, but that brought no fruit to perfection. The vines that did best with me this year were the Concord and Delaware. The Isabella did not rust much, but the fruit did not ripen properly. The Salem is the strongest growing vine, and Martha the weakest. The Clapp's Favorite pear was best patronized by the young people, and Beurre d'Anjou about the handsomest late pear. Both are hardy with us, so are the Clairgeau, Easter Beurre and Oswego Beurre. We have found Grime's Golden Pippin hardy, healthy, compact growing and long keeping, but no more exempt from the codling moth than other apples.

DAVID NISBET, *Mandaumin*.

ENQUIRIES ABOUT WINE MAKING.—I made wine last fall from mixed grapes, including Rogers' No. 3, 4, 15, Salem, Delaware, and Hartford Prolific. The wine is good flavored, but is not as clear as I would like it. Can you tell me how to make it clearer?—JAMES HINCHLIFF, *Hamilton*.