

Technical and Bibliographic Notes / Notes techniques et bibliographiques

Canadiana.org has attempted to obtain the best copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

Canadiana.org a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées. |
| <input type="checkbox"/> | Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | Continuous pagination. |



BROCKWORTH PARK.

The Canadian Horticulturist.

VOL. IV.]

MARCH, 1881.

[No. 3.

OUR WINTER MEETING.

The winter meeting of the Fruit Growers' Association was held in the City Hall, Hamilton, commencing on Tuesday, January 19th, 1881, at ten o'clock a.m.

President Dempsey occupied the chair, and after the reading of the minutes by the Secretary, called for reports from the various committees.

P. E. Bucke, chairman of committee, submitted the following

REPORT ON FENCES:

Your committee on fences having examined into the subject, have the honor to report:—

1st.—That the existing laws regarding fences are unjust to land owner and occupier, because if he has no need for a fence around his farm, society should not compel him to build one.

2nd.—That if a farmer chooses to soil his cattle he should not be required to expend on fences a tax estimated at two dollars per acre per annum to keep his neighbors' or highway cattle out of his property.

3rd.—That no law should compel a land occupier to make a road or division fence to protect himself from the public at large; that the public are just as much interested in the welfare of the state as are the individuals of the public. These last, therefore, should be protected by a public law compelling individuals to inclose their stock.

4th.—That although the public have a right to travel on the roads they have no right to use said roads for a cattle run or pasture ground.

5th.—That every farmer or property owner, either by paying taxes for road construction or repairs, or by the performance of statute labor, has a certain vested right in the roads surrounding his lands, and in

newly settled townships, or townships being less than half cleared, a majority of owners should say whether the public roads may be used for any other purpose than the legitimate travel or driving of stock when required along them.

6th.—That during winter these roads are fenced in such a way that they harbor snow drifts, thus blocking to a considerable extent the travel along them.

7th.—That the maintenance of fences is an excessive burden on the farmer, now that timber is becoming scarce and dear, and it behooves the Legislature to make such provision by law as will assist in doing away with such an oppressive expense.

8th.—That in the early settlement of this country, when cultivated lands were scarce and there were no pasture lands for cattle, it was in the interest of individuals to fence in their crops and allow the cattle to run at large. Now the case is different. The principal part of the country is cultivated, and the pasture and waste places are in the minority; these, therefore, may be fenced, and not the larger tracts of farm lands.

9th.—That the owners of stock are the individuals who reap the benefits of such, and that, therefore, non-stockowners should not be put to the expense of fences in order that stockowners may make a profit out of their cattle.

10th.—Therefore your committee, taking into consideration the above facts, respectfully suggest that in counties where a majority of the acreage of the soil is arable land, all cattle, horses, pigs, sheep and geese be prevented by legislative enactment from running at large. That owners of all kinds of stock should be compelled to keep them inclosed, or pay all damages that may accrue from their depredations. That it may be the duty of any one finding cattle straying along the roads, streets, or any unfenced lot, not accompanied by a suitable attendant, to drive the same to pound. That for every head of cattle so impounded, the individual who owns such stock shall pay to the pound-keeper over and above all other fees or charges, the sum of 50c. per head to be paid to the individual who puts them in pound. That all damages to trees—whether set on the land of the owner or along the roadside fronting his land—done by animals, be assessed at the full value, having in consideration the age of the said trees and the number of years planted; that such damage be paid by owner of said

stock to the owners of said trees. That suitable attendants be employed when cattle are being driven to market, or from one part of the county to the other, so as to keep them from straying off the road. That any one turning off the road into a neighboring field, either on foot, in a vehicle or on horseback, shall be liable to be apprehended as a common trespasser, and as such be amenable to the law in such cases made and provided.

P. E. BUCKE, Chairman.

THOS. BEALL.

Mr. Beadle said he thought the report was correct, but thought that it was deficient in that it failed to give any argument or statistics to back up the statements made. He would like to see some estimates put in the report, so that when it went out to the public the farmers would see the reasons why these things are so. He would like to have the report referred back to the committee, so that some figures demonstrating the facts stated—which he did not deny—could be incorporated therein. The farms were too much occupied by cross fences, and he did not believe the farmers knew what a large tax they were paying for first cost and maintenance of fence, to say nothing of land taken up. In some counties of New York State the people have taken away nearly all the fences, and the roads are lined with shade trees, and the whole country has the appearance of a garden, and it would be a good thing if such a system could be introduced here.

Mr. Beadle then moved, seconded by A. M. Smith, St. Catharines, that the committee be requested to supplement their valuable report with some arguments and facts going to show why they have come to these conclusions.

NEW VARIETIES OF APPLES.

Mr. Beall, of Lindsay, read a valuable paper entitled "By what standard shall we test new varieties?" which was received with thanks, and ordered to be printed in the Annual Report.

The meeting proceeded to the discussion of the following question:

1.—What new or little known varieties of apples have been introduced, and which of them promise to be of value?

Mr. Beadle said Grimes' Golden Pippin; a new variety, the introduction of which had been helped by this society, was successfully grown in Lindsay, and thought in size and flavor in was superior to the Newtown Pippin for the English market.

Mr. Bucke said he had got Grimes' Golden Pippin from the Association some years since, and it had grown well but had never borne a crop. A graft, however, had borne well.

Mr. Beadle remarked that Mr. Cochrane, of Liverpool, England, had sent him a communication stating that English buyers preferred a small, showy apple to larger fruit.

Mr. Holton referred to the Haas apple, one of high color, handsome, and a hardy grower; more especially fitted for growth in the north.

Mr. Beadle thought the Haas was a rich, good apple; as raised on a clayey loam they were rich flavored and fairly juicy, and would keep well.

Mr. Arnold, of Paris, said that among the new and promising varieties of apples he would place Cox's Orange Pippin first; tree hardy, moderate grower, good bearer, and finest flavored of all desert apples. Second, the Swazie Pomme Grise, tree hardy, fruit good size, crisp, excellent flavor; almost equal to Cox's Pippin. Third, Arnold's Beauty, a first-class grower, superior in appearance to the before mentioned, and a constant heavy bearer. Fourth, the Ontario, a superior apple for general cultivation, large in size, a favorite in the kitchen and orchard, and an annual bearer. The following varieties are superior to the Baldwin, though not equal to the above: Grimes' Golden, Dora, Benoni, Ella, Pomme Royal, Moyle, and Centennial Russet.

Mr. Bucke said the Cox's Orange Pippin was the most liked in England.

The President said it was the best apple he ever tasted.

Mr. Morris, of Fonthill, said, for Canada the Wealthy apple was entitled to the first rank among the new varieties. Another good apple for all sections was the Wallbridge, a fine large red early winter apple. Another good apple was the Stump, similar to and better than the Sherwood's Favorite. He could indorse what had been said about the Haas and other apples.

A. M. Smith said a good variety was the Mann apple, which was a good keeper and bearer, and was well adapted to sections where the Baldwin could not be grown.

Mr. Woodward, of Lockport, New York, spoke strongly in favor of the Mann apple, which was grown extensively in New York State. It was a profitable apple to raise in this section.

Mr. Beadle said there was no beauty in the apple, and it was neither a tart or sweet fruit, but it was a good keeper.

Mr. Woodward replied that he found it tart, and a good cooking apple. It was valuable as a late keeper.

Mr. Holton, of Hamilton, mentioned the Perry Russet, a western fruit, which was a spicy, nice flavored apple, and about the same size as a Greening, although he had found it a shy bearer.

The President said that in 1872 he had procured Russian, German, French and English Apples, and found none to equal a Russian fruit called the Grand Sultan, which matures with our Early Harvest, and produces two bushels to one of that variety. It is as good as the Astrachan, conic in form, medium size; whitish yellow splashed with red, making it very pretty, looking like wax. It produces an over-crop every year. Grand Duke Constantine is a very pretty fruit, but very difficult to grow here. The English apple Cellini is pretty, conic in form; an October fruit; one of the best of kitchen apples, and very prolific. Cox's Orange Pippin was with him an alternate and very even bearer. A good variety was the English Pippin, which it was said would keep two years.

Mr. Morris, Fonthill, said the American Pippin, or two year apple, was an apple which had first been grown in his section. It was a good bearer, brought a high price in the market, and was a good shipper.

NEW VARIETIES OF PEARS.

What new or little known varieties of pears have been introduced, and do any give promise of being valuable in our Province?

Mr. Arnold, of Paris, said that in his opinion the Goodale was one of the best, being very hardy, producing an excellent crop, besides being a better fruit than the Bartlett. The next variety was the Negley, a beautiful pear, and in his opinion the best grown. It was new, and little known; had not been shown in Canada over two years.

A. M. Smith, St. Catharines, had grown and fruited the Goodale this year and it was an excellent variety.

Mr. Biggar had been greatly disappointed in the size of the Brockworth Park variety, though it was very sweet, juicy and nice.

Mr. Bucke, of Ottawa, said that he believed it to be a good pear, but his tree had never borne, and owing to the severity of the climate at Ottawa he thought never would.

Mr. Morris, Fonthill, particularly recommended the President Drouard on account of its freedom from blight. It was less subject to this than any other variety he had grown.

Mr. Beall had tried several new varieties, but all had failed except the Flemish Beauty, which had proved successful.

Mr. Gilchrist did not know much about new varieties. He had grown twenty-two different kinds of the old sort. He gave the preference to the Flemish Beauty, as it was free from blight.

The President had attempted to fruit more than he had ever succeeded in doing. He had imported two hundred different sorts, but had only met with success with about ten of the French varieties. Some Belgian pears were very good, more especially the General Todleben. It was a fine fruit with an enormous stem, with a suture like stone fruit, and was as highly flavored as the Josephine de Malines. He could hardly recommend any of the new varieties. For marketing purposes he placed Clapp's Favorite, Josephine de Malines and the Bartlett at the head of the list.

The Secretary had fruited the Broekworth pear, but thought it was only an old variety with a new name. The Souvenir du Congress was a large, handsome pear, not unlike the Bartlett in appearance, ripening about the same time. He did not think much of its quality; it was not as good as the Bartlett. The Goodale, though an old variety in the States, was not much known in Canada. It was a juicy, sprightly fruit, ripening in October, not particularly attractive in appearance, but of excellent flavor. The Josephine de Malines was a good winter pear, but he considered most winter pears as little better than turnips. The Josephine de Malines, however, could not be classed among these.

The President hoped that the remarks made would not discourage anyone from attempting the growing of winter fruit. He knew it could be done, and he wished to see it tried. He stated that the lowest figure he had been offered for the Josephine was \$6 per bushel, and he could grow them as easily as any other variety.

PACKING FRUIT.

3—The best methods of putting up the different fruits for market.

Mr. A. M. Smith read the following paper on this subject:

One would be inclined to think that the Association had already discussed this subject till it was exhausted when we remember the

number of times it has been before us. But should we visit most any of our markets in fruit time and see the way fruits are brought in; strawberries and other small fruits, for instance, in pails and pans (ready for jam, with the extraction of a little dirt and the addition of a little sugar), peaches and plums in boxes and barrels, apples and pears in meal bags—not particularly well shaken (the bags I mean, no such imputation would apply to the fruit, as the numerous bruises would testify), we should come to the conclusion that there was a necessity for a little more discussion or missionary work, or something of the kind, in this direction. If men are so blind that they can't see the difference between getting forty cents a bag for their apples, shook from the trees and carried to market in bags, and fifty to seventy-five cents per half bushel for good hand picked fruit, in good, clean baskets, or \$2 to \$3 per barrel, I think it the duty of the society to send out a missionary to enlighten them. But, to come to the question, the best way of putting up fruits for the market. This depends upon the object you have in view, whether it is to make the most you can out of your present crop, without regard to satisfaction to your customers or your reputation for the future, or to give satisfaction to your customers and your own conscience, and establish a reputation that will be of use to you hereafter. If the former object is your aim, in the first place get the cheapest packages you can, as near like ordinary ones as you can, and have them hold as much less as possible and look like them. This you can do by giving special orders to the manufacturers. Then put in all your fruit, good, bad and indifferent—don't lose any of it—but be sure you get the good fruit on top of the packages, put the best side up and make it look beautiful—buyers will think it alike all the way through, especially if they have been dealing with honest men. In putting into barrels have good fruit in both ends, as some folks look at both ends when buying—you can put all the poor stuff in the middle of the barrel. If you are not likely to have fruit enough, put in a pumpkin or two or a few turnips to fill up, they will be useful to the buyer, and he will never know who did it, and it will be likely to go to the old country. Don't put your name on and you are safe. This course carefully pursued may insure you the most money for your first crop, providing you don't happen to sell to the same party twice. In that case you could go to some other market where you were not known. But if your object is to satisfy

your customers by giving them a good article, and establish a reputation for fair dealing and good fruit, I would recommend the following course: Get the very best packages of the different kinds wanted, and if you get quart baskets for berries and small fruits have them hold as near two pints as possible. If you get an order for half a bushel of plums or peaches don't try to put them up in a twelve quart basket; if you are ordering barrels to be made for apples don't tell the cooper to cut the staves a little shorter than for flour barrels, or to draw in the bilge a little. When you put in your fruit don't put it in unsorted, just as it comes from the tree; some of the gnarled and wormy specimens won't hurt the pigs, and if you make two classes after you pick them out they will sell for more than enough more to pay for the trouble of sorting. When you put them in your packages don't put all the best on top, but have it uniform throughout, and then you need not be afraid to put your name on it, or offer it to a man the second time. Pursue this course from year to year, and you will never fail to find customers for your fruit at a fair price.

Mr. Woodward, of Lockport, N.Y., thought the best way of packing apples was to lay them stem downward, three deep, and then fill up gradually, and shake them down as they were put in. The trouble with people was that they were not too honest. They endeavored to cram too much into the barrels, and just cheated the hogs.

Mr. Beadle wished to know if it was advantageous to wrap each apple separately in paper. He thought it was, as it evinced care on the part of the shipper, and buyers would place confidence in fruit thus packed.

Mr. Pettit thought apples were overpressed in barrels, and thought that something might be gained by shaking them down after each basketful was put into the barrel without pressing.

FRUIT DRYING.

The best method of preserving fruit and vegetables by drying?

Mr. Beadle opened the subject, and spoke of the old fashion of drying apples on strings, and said the market quotations showed a difference of 100 per cent. in favor of the evaporated apple of the factory. There were several patent dryers which gave good satisfaction in preparing apples for the market. This evaporating process opens up a way of disposing of fruit which could not be marketed in barrels,

Mr. Morris, of Fonthill, said that Williams' dryer gave good satisfaction. He thought the use of these dryers should be encouraged all over the country.

Mr. Woodward, of Lockport, said the apple-drying business was a profitable one, and growers would do well not to work in apples which are only fit for hogs. Again, they put unripe apples in the market. This was a bad policy, and they would lose money by it in the end. The Russets gave the largest product of dried apples. Again, dryers were now marking the name of the apple on the packages, so that buyers would know what they were buying, as all kinds of apples did not make equally good pies. Drying peaches was also found to be a very profitable business.

Mr. Bucke, said that he thought it would be a profitable business for Canadians to dry fruit for the West Indian market.

Mr. Beadle said a friend of his in California had received an order from England for thirty tons of canned apricots, showing that a large trade could be built up in fruits.

Mr. Bucke said there was a large vegetable drying establishment in St. Marys.

Mr. Smith said, in reply to a question, that the process of drying vegetables was similar to that of drying fruit. Black raspberries were a very profitable fruit for drying purposes.

SOIL FOR FRUIT TREES.

"What soil and what condition of surface soil is most conducive to the growth of apple and other fruit trees?"

The Secretary stated that soil which was adapted to some trees was wholly unsuited for others. For apple trees he should recommend a firm soil, abounding with lime. The soil made a great difference in the flavor and quality of the fruit grown on it. He could tell by the flavor of some apples what soil they were grown on. The sub-soil he preferred should be light and porous; but if he had to choose between a very light soil and a stiff clay he would take the clay for apple growing.

Mr. White found a gravelly soil some 8 or 10 feet deep produce a very abundant crop in his part of the country. Mr. Young's experience was that a clay loam, that is a clay sub-soil and sandy surface, was excellent. The trees, however, did not hold out so well as those in a stronger soil.

Mr. Geo. Leslie, of Toronto, thought a fine sandy loam was the most desirable.

Mr. Arnold endorsed Mr. Beadle's sentiments. He was certain that lime in the soil was a necessity, and, if it was not there naturally, it must be put there.

Mr. Woodward preferred clay and sand mixed.

GRAPES.

6.—What desirable varieties of grapes do well in Ontario?

The attention of the Secretary had been called to the Janesville variety. He thought its great point was that it ripened very early. The Hartford Prolific had many faults. It dropped soon, but sold because it was an early grape. The Champion was also very early, and he thought it had but one fault—it was good for nothing when it was ripened. He would eat it if he could get no better. Moore's Early grape ripened as early. It was as good as the Concord. The Massasoit ripened early and was a nice red grape, the clusters not very large, and the berries of fair size. It is best when just ripe. The Iona was *the* grape, in his opinion, for flavor and every good quality. He considered it the *ne plus ultra*, but it was late, and would not ripen in all parts of the country.

The President had never in his experience grown a good bunch of Concord at his home, in Prince Edward County.

Mr. Bucke said that the Burnet was one of the strongest growing grapes in the country, and was a great acquisition. He claimed that it ripened as early as the Concord, and was far ahead of it in flavor. Care should be taken that too many bunches were not allowed upon it.

The President thought very highly of the Brighton. Thought it lacked sprightliness, still it was a very nice fruit. The Burnet was the best grape he had ever grown on his place; it had beaten everything.

HOW TO KEEP GRAPES.

Mrs. J. C. H., of Yarmouth Centre, Elgin Co., writes to the *Fruit Recorder* :—

"There is a lady in this vicinity who is very successful in keeping grapes fresh for a long time. As I have not noticed any thing like it in the *Recorder* I thought I would tell you. It is the same as spoken of in the *Recorder*, only substituting white, dry, granulated sugar for sawdust. If a little sugar should stick to the grapes it will not spoil the taste of them, besides the sugar is not injured."

SUGAR MAKING IN ONTARIO.

In the *Canadian Farmer* of December 29th, 1880, is a very interesting account of the manufacture of syrup and sugar from the Amber cane, at Tilsonburg, County of Oxford, by the Ontario Cane Sugar Company, S. Joy, M. D., President.

It appears that this company has erected at Tilsonburg a suitable building, fitted up with the necessary apparatus for the manufacture of sixty tons of the cane every twenty-four hours, by employing two gangs of workmen. Last winter the company purchased a quantity of pure Amber cane seed, part of which was planted on thirty-seven acres of land, and the remainder sold to those who desired to give it a trial. The cane raised from this seed yielded about fourteen tons to the acre, and after being crushed and the juice made into syrup and purified, produced twelve gallons of syrup to the ton of cane, which sells at wholesale at 55c. per gallon, thus making the product of an acre in cane syrup worth \$92.40. Besides the syrup, the cane yielded thirty bushels of seed to the acre, which is worth as much as the same number of bushels of shelled corn for feed, while the leaves and threshed tops of the cane make excellent fodder. Farmers were paid three dollars per ton for the cane delivered at the factory which made the yield in cane and seed alone to the farmer equal to \$57 per acre, estimating the seed at 50c. per bushel, without putting any estimate on the value of the fodder.

The company have ascertained by experiment that if the cane is carefully housed it can be kept for months without losing any of its saccharine matter, the frost not hurting it in the least. This has induced the company to contemplate the establishment of branch factories for crushing the cane along the line of the railways running through Tilsonburg, and shipping the juice to headquarters to be manufactured into syrup and sugar.

It is gratifying to learn that these sugar manufactories are being set in operation in different parts of Ontario. There is no reason why we should not be able to make our own syrup and sugar, and thus afford to our farmers, operatives and capitalists another and most remunerative field of labor. This company show that the results of this season's operations will yield a dividend of thirty per cent. on the capital employed, and therefore propose to enlarge their capital to

\$25,000, and to add to their business the manufacture of glucose or grape sugar. Our readers will find some hints as to the profitableness of this branch of the business on page 5 of the January number of this year.

Why should not other establishments of this kind be started in other parts of Ontario? It will require a large number of them to supply this Province with the sugar that is consumed by its inhabitants every year.

PROTECTING GRAPES.

A paper addressed to the Kentucky Horticultural Society by Col. Bennett H. Young, of Louisville, Ky.

The question of protecting grapes from the ravages of insects and birds, and injury from heat and rain, has excited great interest for the past few years. Having experimented fully with two of the most prominent plans, I trust that I will not be considered out of place for laying before your honorable society the results attained. I learned from Mr. Thomas S. Kennedy the idea of using mosquito-net bags, and, in most instances, I have found them an excellent preventive against curculio. There are two difficulties with these where black grapes are concerned. First—The dust or dirt settling on the netting, which adheres close to the grape, destroys the bloom on the berry, and consequently affects the beauty of the fruit. Second—Birds can pick the grapes through the netting, and an injury to two or three grapes on the bunch, where the juice runs along the netting, mars the whole bunch. This last objection does not apply to the use of the netting with light colored grapes. The introduction of white grapes has proven a great blow to grape-loving birds, for I have never yet observed one that was good enough for their eating. My plan in using the netting has been to tear off a piece, say twelve inches wide, double it over and sew it on the open side with a sewing-machine, and then run a seam across one end. My little girl last year made 1,600 of these bags, and did not complain of the amount of the work. Thus made they will last three years or more when put away. My boys, nine and eleven years of age, put them on the bunches and gather them at the top, and tie a cotton string around the ends at the top of the bunch. The boys could bag 300 bunches in a morning without feeling over-worked. Oftentimes I found it real fascinating work myself, and first-rate recreation for a June morning. The bags were put on when the grapes were about one third grown. The second method is that of inclosing in paper bags. When Mr. Bateman of Ohio, first suggested this novel plan, I considered it an absurdity. I could not imagine how a bunch of grapes, shut off from sunlight and air, could properly mature with a good color and flavor. I resolved to give it a fair trial. One fact is worth a great deal more than many theories; and starting out with prejudice against Mr. Bateman's plan, after a first trial I must confess myself a

convert and its advocate. In 1879 I put on 2,000, paper bags—in many places, on the same spur, alternating with the netting and bags. The results were most satisfactory. The grapes ripened evenly with the best of coloring, fully as early as when not inclosed, and with a flavor equal to any grown without the bags. More than this, the bunches came out of the bags with a splendid bloom and as perfect every way as it is possible for a grape to be. The paper bagging prolonged the season for nearly a month. They are very cheap, and are more easily put on than the netting, and the grapes cannot be touched by the birds. The bag is slipped over the bunch when the grapes are about one-third grown, folded together around the stem, and a pin stuck through the folds. This is all the fastening necessary. Care must be taken, however, to make a small slit in the bottom of the bag, for, unless this is done, when a heavy rain falls, half a pint of water will get into the bag, and, standing around the grapes, will injure them, or by its weight tear the bag off. Merely pierce the bottom with the blade of a knife. Grape growers are greatly indebted to Mr. Bateman for this simple but wonderful protection to the fruit. In this part of Kentucky, between curculio and birds, there is little left to the grape grower. These bags are absolute protection from both. I also found grapes so inclosed in the netting and bags less liable to mildew. Those in paper bags were more favored in this respect than those in the netting. Those who have not tried either of these plans can not imagine the difference in the perfection of fruit secured with their use. Large bunches can be taken out of the bag without a single imperfect berry, and with a bloom upon them that is simply magnificent. Fifty cents' worth of paper bags will be sufficient for an experiment. Putting them on will require only a very short time, and, once tried, they will never be neglected.

CARBOLIC ACID FOR INSECTS.

The time has almost come again when "the little busy bugs" will open up their summer campaign, and dispute with the "lords of creation" for the "fruits of the earth." Allow me thus early to call attention to an article, the merits of which everybody knows, but which many dare not use—I refer to carbolic acid. Prepared as indicated, it cannot, I think, hurt the most delicate house plant, and it is sure to kill insect life.

My plan of preparing is as follows:—I obtain crude carbolic acid; I use it in this form because it is stronger and better for the purpose, and costs but very little (about 25 cents per gallon, I think). I pour a quantity of this dark crude acid into a quantity of good strong domestic soft soap; stir well together, and allow to stand for a few hours. I then test the compound by mixing a little of it in soft water. If too much acid has been added, oily particles of carbolic acid will be observed floating on the surface. This shows that more acid has been put in than the soap will incorporate or "cut," and more soap should be added to balance the excess of acid. No more definite rule can be given, as so much depends on the strength of the soap. Two or three teaspoonsful of the acid to a quart of soap may be first tried. I prefer to make as strong with acid as the soap will perfectly cut. A very little practice will enable any one to compound it correctly. The

refined acid may be used when the crude is not at hand. When prepared as above, make a moderately strong suds, and apply with syringe or sponge. In using on very delicate plants, should any fear be felt for the plants, they can be rinsed off after a few minutes. My first and eminently successful use of this compound was some years since, on a block of young cherry trees, some fifty thousand in number. The black aphid "came down like the wolf on the fold," only "they came not as single spies, but in whole battalions." It soon became an interesting question as to who was the proprietor of this particular block of trees—myself or the "bug Ethiopian." A disinterested observer of judicial turn of mind, judging from the general appearance of things and the very "at home" air assumed by the bugs, would have said that they had the best case. He would, at least, have been compelled to admit they had "nine points of the law" (possession) in their favor. I never saw the like before—the trees were alive with aphid. The only scarce things on the trees were leaves, there being hardly enough to afford "standing room" for all the dusky guests. However, not being a convert to the doctrine of "squatter sovereignty," I declared war, and failing to decrease the number by ordinary means, I compounded soft soap and carbolic acid, and with a single application exterminated the enemy.

—T. T. S., in *Gardner's Monthly*.

THE GROWING OF PEAS.

On the 7th of April last I planted 17 varieties of peas in rows of same length, adjoining each other, on a good black, sandy soil, which in former years had been well manured and which was in good condition the past season. The following table will give the date of first picking as nearly as may be, and the height of vine. Notes below will tell of their quality and productiveness:

<i>Varieties.</i>	<i>Height in inches.</i>	<i>Date of first picking.</i>
Landreth's Extra Early, - - - -	30	May 26.
Miggett's Extra Early, - - - -	30	May 26.
Philadelphia Extra Early, - - - -	30	May 26.
Carter's First Crop, - - - -	30	May 27.
Tom Thumb, - - - -	30	May 29.
Alpha, - - - -	30	May 29.
American Wonder, - - - -	8	May 30.
Blue Peter, - - - -	10	June 2.
Advancer, - - - -	30	June 5.
Premium Gem, - - - -	16	June 5.
Little Jem, - - - -	16	June 6.
Dwarf Marrowfat, - - - -	48	June 16.
Telephone, - - - -	54	June 16.
Champion of England, - - - -	54	June 19.
Forty Fold, - - - -	54	June 19.
Challenger, - - - -	36	June 20.
Yorkshire Hero, - - - -	30	June --

The height of all is probably greater than they would average on most soils. The time of first picking is quite accurate with early and dwarf kinds, but less so with the tall and late ones, as they ripen more slowly and fewer at a time.

Landreth's Extra Early, Miggett's Extra Early and Philadelphia Extra Early are different stock of the same pea. The two former are not distinguishable, being nearly pure, differing in this respect from the latter. The quality is excellent; productive, and best early pea for the market gardener.

Carter's First Crop is much like the former, but has smaller pods.

Alpha and Advancer being wrinkled peas are among the finest in quality, to my taste far excelling the smooth varieties, particularly the Marrowfats, which are rank and strong. For a pea to stick, I should choose the Advancer before all others.

Little Gem and Premium Gem are almost if not quite identical, the advantage in earliness and productiveness, inclining towards the latter. They do not usually grow more than twelve inches high, and for a pea not requiring sticking, on account of its early maturing, productiveness, quality and size of pea, I would choose one of these two. A little sticking however will do them good.

Of Blue Peter almost the same can be said as of the former, and some gardeners take it in preference, but I think it does not fill into its pods so well and is therefore not so productive to the consumer, but it is three days earlier.

Telephone is a new English pea and grows extraordinarily large pods of fine quality. My tests of this and other late tall kinds were not satisfactory, on account of their growing much higher than their sticks and being thrown over by the winds and rains. It should not fail to be tried by all who have an interest in the subject.

Challenger did not strike me as presenting any gain over the other better known varieties.

Champion of England still holds its own as one of the very best late tall peas. Productiveness and quality entitle it to this high rank.

Forty Fold is very similar to the Champion; it probably produces larger peas, but as remarked before, an exact comparison of these late peas could not be made.

American Wonder, which I have left to the last, is a little wonder. It was loaded with pods, so much so that they were more conspicuous than the vines, they being the dwarfest of all. As might be expected it ripens up all at once—all its pods could be picked in four or five days, certainly in less than a week. It can, of course, be planted very close, and will please those who want a very dwarf pea. The quality like all wrinkled peas is fine. I notice an Eastern seed establishment advertising this to the trade and speaking of it as growing twelve to eighteen inches high. The true American Wonder in a moderate soil will not grow over six to eight inches. There is a pea of English origin called the Little Wonder, growing taller, which will, I fear, be sold for the American Wonder.—*Indiana Farmer.*

THE VAN WYCK SWEET CRAB.

The best of all crabs is Van Wyck Sweet Crab. It is a seeding that originated from some old crab trees growing upon the estate of Van Wyck, which had dropped their fruit; the seeds of some germinated, and young trees were carefully transplanted and cultivated. Among the number was one which was very much admired for its beauty, size, and the sweetness of its flavor. It was as handsome as a finely colored pear, with a delicate bloom upon it which resembled a plum. It had the appearance of a crab, and yet it was sweet as honey. Its general appearance and characteristics gave rise to a discussion among pomologists as to whether it was a crab or an apple. In fact, the idea generally prevailed that the crab, being in the first instance a hybrid from the apple, had gone back to its origin. Among the number who claimed it as a crab, was Mr. Fuller, and Mr. Chas. Downing, both deciding it to be a crab. But Van Wyck's crab-apple would be just the same fruit if the word crab was omitted and it was called an apple. It lacks the acid flavor which we have always considered essential to the crab, although it retains the long slender stem.--*American Cultivator.*

CORRESPONDENCE.

MONEY WELL SPENT.

Noting your kindly reminder in the HORTICULTURIST, I hasten to comply, and therefore enclose you the usual fee of one dollar, which to me I can truly say is one of the pleasures of the season, and further, is an investment the interest upon which is beyond computation, when taking into consideration the important work in which the Association is engaged. With regard to the plants already received, being comparatively a new member I have very little to report. The Burnet grape with me appears to be very close jointed, and consequently a slow grower. It did not fruit the past season. The Ontario apple is doing well, having made a fine growth the past season, as did also the raspberry plant received last spring. I wish the Fruit Growers' Association continued and increased success.

GEO. A. AUSTIN, *Simcoe.*

THE SORGUM QUESTION AGAIN.

I am satisfied that sorgum culture if properly managed will pay. I made fifteen gallons of first class syrup. There is a ready sale at 80 cents per gallon. I planted on the 23rd of May, and it was ready for the mill the 20th September; stalks from nine to eleven feet high. The ripest seed made the best syrup, but not so much in quantity. Now the next thing is to find out how to make the sugar. The longer it stood in the stalk the better the syrup. The only question is how to make sugar. When the plant attained about two feet in height it was attacked with a green plant louse that stayed in the centre until the seed stalk pushed them out. Now I hope to hear from some of the members more experienced in sorgum culture, and especially in the manufacture of the sugar.

JONAS NEFF, *Port Colborne.*