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The Canadian Horticulturist.

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FRUIT.

BY A. HOOD, BARRIE, ONT.

Although we cannot in all respects equal more southern climes in the production of this very agreeable article, still in my ignorance of the home fruits of other countries, I have prided myself on what I have believed to be a fact, that however favored these countries may be in commanding greater varieties, they cannot produce anything that is superior, if equal, to a plate of good strawberries duly served up with cream and sugar. This, however, may be a matter of taste, and a good deal depends on the condition of the fruit and the quality of the accessories. I dare say all of my readers have experienced the often disappointing result arising from the impossibility of getting two berries alike, or more than one out of five or six that are really satisfactory, when picking this fruit fresh from the vines and eating it as picked. This depends on the stage of ripeness at which they are gathered, those over-ripe lacking flavor, and those under-ripe being too acid. All berries, therefore, exposed for sale must to a certain extent be defective, because plucked before attaining the state of greatest perfection. To meet this difficulty a certain combination of different flavors would appear desirable.

I remember once reading a suggestion for mingling the different perfumes that could be extracted from flowers in such a way that a whole audience might enjoy the different changes and combinations that could be produced. The plan was to have all the perfumes in separate vessels, so contrived that by the touching of a spring or springs any one or more of them would discharge a portion of their contents in the shape of a fine spray, which a current of air would carry to the olfactory nerves of the audience. This instrument was to be operated similarly to playing an organ, so that a performer had only to touch the keys which were connected with the springs to send

among the audience at pleasure any perfume or any combination of perfumes which his or her taste might suggest, to be succeeded by other combinations in like manner, as the different chords in music follow each other to produce harmony and melody.

I do not at the present time intend to suggest anything quite so complicated for the gratification of our organs of taste; indeed, it would be rather a comical spectacle to see a whole audience with their mouths open, like a nest of young birds, waiting to be filled with some combined extract of the different kinds of berries, but I will tell my readers how they can for themselves pick and eat to their satisfaction, or mix up a dish of strawberries that shall leave nothing to be desired.

In the first place allow five or six berries on each plant to ripen before any are picked, and if you wish to eat them from hand to mouth, take all the ripe berries from one plant and eat them together, and the acidity of the underripe will be corrected and improved by the sweetness of the older berries, and you will be sure of a luscious mouthful. Gather in the same way *ad libitum* for a dish, and you will have one whose delicious qualities it will be hard to beat. It is not expected that you will eat six berries at one mouthful should they attain the size of the Sharpless, as represented in the July number of the HORTICULTURIST. When I made this discovery I was cutting down the weeds from between the rows of a new plantation with a wheel-hoe. These plants had not been picked over for market, and therefore the berries were in all stages of ripeness; and when I learned what a rich treat each plant was capable of affording me, I am afraid the wheel-hoe made more stoppages than was necessary. I found it easy to persuade myself, however, that pushing that implement through those overgrown weeds was too hard work to be continuous, and that nature, as represented in the person of the writer, required rest; and with those delicious clusters waiting to be plucked,

> I could not bear to pass them by with cold, unfeeling stare;
> I could not bear to leave them, for I knew how sweet they were.

But what about the healthfulness of fruit? Here I must say I have hitherto been somewhat undecided, from the fact that I have found some kinds, apples particularly, to disagree with me. I therefore could not enter into a wholesale eulogium of its virtues as others have done, but have contented myself with supposing that my case is an exception to the general rule, and that to the great majority it is

decidedly beneficial. This view has been lately strengthened in my mind, because I have made a little discovery that has swept away even that exception, and made me a recipient of the general benefit. The trouble was that there was too much acidity in my constitution, and as all fruits are acid, it rather aggravated the difficulty, but now I have discovered a counteracting antidote, and am enabled to benefit by the other good qualities it contains, which are as varied as they are valuable. Of course there is a wide difference in the qualities of different fruits, and some of them may be found not to agree with particular constitutions. If the medicinal effects of each kind could be ascertained and clearly set down it would be a useful guide to consumers; but, as a rule, I am inclined to think that the greater the variety indulged in the greater will be the benefit. I have myself followed a strictly fruit and vegetable diet for one or two years at a time, and as a consequence a diarrhœa that had almost become chronic, and piles that were very troublesome entirely disappeared. I cannot say whether it was eating fruit or abstaining from meat that benefited me. My wife has been twice relieved entirely of a bad attack of piles, without knowing at the time to what she could attribue such relief, but now recollects that both cases occurred when we were using strawberries freely every day. When my daughter was about three years of age she was seriously troubled with bowel complaint, and thinking it would do her good she was allowed to go to the strawberry patch and help herself, which she did very freely, and her complaint soon left her. I am satisfied there is virtue in strawberries, whatever there may be in other fruits.

I have had less experience with grapes, but I am inclined to think they possess medicinal properties of a valuable kind. They contain tartaric acid and cream of tartar, both of which are good medicines, and I should expect a liberal use of this fruit to be fully as beneficial as that of strawberries. Constitutions differ materially; some are benefited by acids and some by alkalies. I have chanced upon certain things during my lifetime by which I have been benefited more than by doctors' advice, and have no doubt others have done the same. Take an example from my own experience. I once suffered severely for two months from a complaint affecting the eyes, which was so painful as almost to incapacitate me from business. One of my eyes could not bear the light, and the other was very painful. Eye-water,

sugar of lead and the usual remedies were tried with little benefit, until I happened to take some cream of tartar at the same time that I was taking quinine for the dumb ague, and to my great surprise and relief in two or three days my eyes were well again. It was, I think, the combination of the two medicines that accomplished the happy result; and since that time if I ever find the eye complaint returning a dose or two of cream of tartar is sufficient to set all right again. Now, as all grapes contain cream of tartar, may they not be exceedingly beneficial to constitutions requiring that particular element; and if so, it would appear that it might be better and a great deal cheaper than paying doctors' bills, to spend our contributions to the income of those professions in purchasing ample supplies of health-promoting fruits.

A NEW SEEDLING PLUM.

Through the kindness of Judge Macpherson, of Owen Sound, we have received a sample of a seedling plum which is nearly as large as a Lombard and resembling it in color, but which ripens early. The Judge says that the fruit ripens much earlier than any of the plums in this part of the country known to him. He has now about thirty bearing trees of this variety, all raised from sprouts from the parent tree, which grew from seed in his garden some twenty years ago. It is a thrifty growing variety and a good bearer, and he is of the opinion that it would prove a valuable fruit if disseminated.

Judging from the sample received, which arrived in excellent condition, we would expect it to carry well, the flesh being firm and adhering closely to the stone.

A SINGULAR FREAK OF NATURE.

We received a sample of fruit from Mr. E. Morris, of the Fonthill Nurseries, which grew on an Early Harvest apple tree. It has the form and general appearance of a pear, being most symmetrically pyriform, but having the odor, texture and flavor of an apple. It is gratifying to learn that strange things happen in this way in other places than in the neighborhood of Mr. Charles Arnold, who has hitherto seemed to have enjoyed a monopoly of these wonderful occurrences.

A. M. PURDY'S OPINION OF SOME OF THE NEWER STRAWBERRIES.

In the July number of the *Fruit Recorder* Mr. Purdy gives a list of several varieties of strawberries, to which he appends the results of his experience. We shall not give the whole of his list, but select some of the most prominent, and those most likely to interest cultivators in Canada.

CRESCENT SEEDLING ripens as early as any; average size equal to the Wilson, and like it in shape of berry; color lighter scarlet, and flavor better, *as picked for market*, than the Wilson. It is very productive, holds out to the last, and should take the place of Metcalf, Downer, Nunan, Nicanor, Philadelphia, French, Duchess, Cinderella and Early Adelia.

CAPT. JACK is similar to Wilson, but a richer berry; very productive, but needs rich soil.

PROUTY, one of Mr. Purdy's favorites when grown on rich soil. The berry is long, varying from oblong to conical; ripens with the Capt. Jack; is immensely productive, of good size, and very uniform, and one of the best selling sorts to the last.

TRIOMPH DE GAND is too shy a bearer on his grounds to pay, so he discards it from his list of profitable market sorts.

WINDSOR CHIEF, he says, is the most uniform large berry on his grounds. He places it at the head of the list on his grounds, as the best and most profitable market and family berry. The fruit is almost round, averaging from an inch to an inch and a quarter in diameter, and holds out well. The flavor is good, the color orange scarlet, and it carries well to market. Having this he thinks one has no need of Green Prolific, Chas. Downing, Forest Rose, Monarch of the West, Jucunda, Great American, Star of the West or Black Defiance.

KENTUCKY is too soft, and has too much of a greenish appearance to make it a safe market berry, especially for distant markets.

COL. CHENEY is one of his standard sorts for home market, being wonderfully productive, but requiring to be fertilized with pollen from other sorts to run large and fine to the last.

GLENDALE. He says that for uniform size, productiveness, fine color, hardiness, and extreme lateness it has not its equal on his grounds. It will bear carriage to distant markets the best of any strawberry he has.

SHARPLESS, he says, ripens late; is the largest berry on his grounds, of a sweet, delicious, aromatic flavor, dark scarlet, very solid and juicy, splendid for home use and near markets, and very productive.

For profitable market strawberries he gives the preferance to Crescent Seedling, Windsor Chief, Wilson, Col. Cheney, Capt. Jack, Prouty, Sharpless and Glendale, and thinks that any one having these eight sorts may discard all the rest, unless he means to except the

Centennial, of which he seems to be suddenly enamored, notwithstanding the almost black color of the fruit, which is not usually a desirable color in a market strawberry.

THE HUCKLEBERRY.

Horticultural papers are copying an article from the *Weekly Tribune* written by a correspondent living in Maine, who states that he has cultivated the Highbush Huckleberry *(Vaccinium Corymbosum)* for forty years with unvarying success. We believe they are doing a good work in thus calling attention to this fruit. The present sources of supply will give out after a time, and besides, why should we buy fruit that has been bruized almost to a jam and become almost stale when we can have it fresh every day from our own gardens. The "Canadian Fruit, Flower and Kitchen Gardener" sometime ago called attention to this fruit, and urged upon horticulturists the raising of new varieties from seed and establishing them in their gardens, but until the appearance of this letter we were not aware that anyone had done anything in this direction. This gentleman says that he has found it the most profitable and reliable of any berry with which he has experimented. Under culture the bush bears with great profusion, while it is long lived, and too hardy to be injured by the cold of the severest Maine winter. It does not require high culture nor very rich soil, but needs to be planted where it can get the full blaze of the sun. He has grown his plants by transplanting them from wherever he found them growing wild, and has not made any experiments with sowing the seed, yet he says that the seeds produce distinct varieties, varying in size and flavor, and also varying in color from black to almost white.

Will not some of our readers take this matter in hand and experiment with plants in the garden from the wilds, and also in raising new sorts from seed. It is a new and quite untrodden field, and on that account one of much interest. The berries can be crushed, mixed with fine sand, sown on a well pulverized bed, and covered with fine mold, where they will grow, and the plants remain the first year. The next season the young plants should be set out in the open ground where they are to grow and fruit. Doubtless the result would be a decided improvement in the size and quality of this popular fruit.

RASPBERRIES—MOST PROFITABLE SORTS.

As many of our readers are already aware that Mr. A. M. Purdy, of Palmyra, N. Y., is extensively engaged in the growing of raspberries for market and for drying—having put up a large evaporator for the purpose of drying raspberries and other fruit—they will doubtless feel an interest in knowing what has been his experience during the past season. We therefore condense from the August number of the *Fruit Recorder* the remarks which he there makes upon this subject.

He states that many planters make the mistake of planting too many of *one* sort, thereby having a larger quantity of berries to handle at once, instead of planting several sorts having different periods of ripening, and so keeping up a steady business continuously during the season. For this reason he plants Davidson's Thornless, Tyler, Doolittle, Seneca, Mammoth Cluster and Gregg. In a plantation of thirty acres he would set ten acres with the Davidson's Thornless, Tyler and Doolittle, and the remaining twenty acres with Seneca, Mammoth Cluster and Gregg. He finds the Tyler about as early as Davidson's Thornless and larger and more productive. These two are the earliest black raspberries, and are all gone by the time the Mammoth Clusters ripen, which in turn are nearly finished by the time the Gregg berries come in.

When black raspberries sell readily at seven to eight cents per quart he prefers to sell them, but when they fall below six to seven he prefers to dry them. During the present season we learn that some of the improved evaporators for drying fruit have been erected in the Niagara District, and that growers of fruit in that part of the Province may now be able to count upon a certain market for their fruit. Heretofore when the market for fresh berries was glutted there was no sale for the surplus, and the experiment of shipping to distant markets usually resulted, after paying express charges and commissions, in nothing for the grower.

Of the red raspberries, Mr. Purdy gives the preference for an early sort to the Highland Hardy, which ripens up promptly and sells readily at good prices. The Thwack and Brandywine he finds to be excellent for shipping, the fruit of good size, and the plants prolific, giving the preference to the Thwack as the best red raspberry for market, on account of the bright color of the fruit and the firmness of

their texture. He pronounces the Turner to be as hardy as a burr-oak and wonderfully productive, while the fruit, though of good size, is too soft for long shipments. The Cuthbert he thinks to be too dark in color, but otherwise good. His largest reds are the Delaware and Clarke, selling for the highest prices in home market. He says, however, that he would not exchange the Philadelphia raspberry for most of the new sorts, its yield being immense, far beyond that of any red sort, and selling quick for ten cents per quart for making into raspberry jam.

On the subject of cultivation, he recommends liberal manuring and good cultivation for the black raspberries, and planting them in continuous rows, but prefers to grow the red raspberries in hills, so that the cultivator can be run both ways, and the suckers kept down by the knife attachment which runs just below the surface, and not to manure them as abundantly as the black varieties.

THE ENGLISH CARROT.

MR. EDITOR:—Can you or some of your readers tell me if the English Carrot ever becomes a weed in any part of the Dominion. I ask because we must add its name to the long list of imported plants which are running wild and becoming a nuisance in this neighborhood. Two years ago it was completely unknown, but I have had four or five enquiries during the past few weeks for the name of this new pest. This alone will show how great a stranger it is. I am told that it was introduced from Toledo with timothy seed. Be this as it may, there is one district south-east of this town where not a head could be seen two years ago, but where the carrot now is as common as the yarrow, also imported. I am the more confident on this point because it is on the road that I most frequently travelled on my way to the stone quarries to obtain geological specimens. This year not only is it in the fields but in the adjacent fence corners and roadside, probably blown there during the sowing of the timothy seed. As it is a biennial plant these seeds must have fallen there in 1878. One advantage to the farmer is that it seeds late, so that it will be cut and taken off with the crop; but against this must be set the other fact, that when cut down it will spring up and flower again later in the season, if fertile. I say "if fertile," because the Canada Thistle, which was introduced here in packing-straw about ten years ago, is sterile, and never produces any seed, consequently it is fettered by being confined to the comparatively slow process of multiplication by root, and as a result the patch is not now, after ten years tenancy, more than thirty or forty feet in extent, bounded on the east and south by two roadways which it has been totally unable to pass. Would that some other imported plants, the Purslane, Burdock and Mayweed were equally imperfect. E. W. CLAYPOLE, Yellow Springs, Ohio.

Will our readers have the kindness to reply to Mr. Claypole's inquiry. We have never seen any land infested with this carrot, nor have we before heard any complaint.

EXPERIMENTS IN THE GROWING OF TIMBER TREES.

It seems to be the fortune of some men to live in advance of their times. They look out into the future and see events approaching for which they would themselves prepare, and strive to impress upon others the importance of making provision beforehand to meet the coming need. But their words seem to their contemporaries as idle tales, and they fall unheeded as an autumn leaf. Among these men may be ranked Prof. J. Beal, of the Michigan Agricultural College, who has planted on the college grounds a small arboretum of something over two acres, for the purpose of experimenting upon the growth of timber trees, that he may ascertain the time required by each variety to attain such size as will make it valuable for economic uses. Doubtless this will seem to many a useless expenditure of his time and of the people's money. Michigan still abounds in forests, and the question of future supply is scarcely even thought of, even by those most interested in such supply. But Prof. Beal with a wise forethought has begun a series of experiments, the value of which will be appreciated in coming years, and whatever men may now say, future generations will honor his wisdom, and gratefully admit that these investigations were not begun at all too soon.

The arboretum of the Michigan Agricultural College contains about two hundred and seventy-five species of trees and shrubs, all of which are properly labeled and recorded in a book of the plat. The soil is a sandy loam, naturally well drained. A portion of the surface soil had been taken off in grading an old road which at one time ran across the arboretum, and the trees growing on this part exhibit a marked inferiority, showing that even forest trees are sensitive to bad treatment. Prof. Beal gives as an illustration of this, that some Butternuts which had grown for three years on this denuded strip averaged only twenty, two inches in height and an inch and five-eighths in circumference-while those on each side of them, growing in good soil, averaged about five and a half feet in height and four inches in circumference.

He states that the seeds were planted as soon as ripe, in rows running four feet apart, in most cases where the trees are wanted to remain, and kept well cultivated until autumn. In this statement the height is given, also the circumference at six inches from the ground, and the weight of good specimens cut off at the surface of the ground. By weighing them he ascertains to an approximate degree the bulk of the wood. The following varieties are given, with the results in each case:

BURR OAK, (*Quercus macrocarpa.*) These when examined had been growing for three years. The seeds grew only a few rods from where they were planted. These trees had attained to thirty-six inches in height and a girth of one inch and three quarters, and weighed three and a half ounces, having never been transplanted.

WHITE ASH, (*Fraxinus Americana.*) These are growing by the side of the Oaks, and also were never transplanted. The seeds came up evenly and quickly and grew well. At the end of the first two years they were straight, clean and without a branch. When three years old their height was from ninety to ninety-six inches, girth from three to four and a half inches, and they weighed from sixteen to twenty-two ounces. By the side of these are two rows which were transplanted at the end of the first year, and these seem to be about a year behind those not moved. At three years old these attained the height of seventy-two inches, a girth of two inches and a quarter, and weighed eight ounces.

LINDEN OR BASSWOOD, (*Tilia Americana.*) These are fully as large as the Ashes, and were not transplanted. Their height is ninety-six inches, girth from three and three-quarters to four and five-eighths inches. The weight is not given.

SUGAR MAPLE, (*Acer saccharinum.*) Next to the Basswood are three rows of Maples also three years old. These are uneven in size, many being quite small. One tree was much larger than the rest, it was seventy-two inches in height, girth two inches and five-eighths. The average of the next size was thirty inches in height, with a girth of one inch and one-eighth, and weighed eight ounces, while many were only eighteen inches high, but having the same girth of one inch and one-eighth.

BUTTERNUT, (*Juglans cinerea.*) These are next to the Sugar Maples, and are three years old. The largest of these is seventy-eight inches

in height and five inches in circumference, the others growing in good soil are sixty-six inches in height, four inches in circumference, and weigh forty-four ounces; while those growing in the old road, where the surface soil had been graded off, weighed only two ounces.

BLACK WALNUT, (*Juglans nigra.*) These were measured at two years old; those not transplanted attained from twenty-eight to forty-three inches in height, with a girth of from two and one-eight to three and one-eighth inches, and weighed eleven ounces, while those that had been transplanted weighed only two ounces.

CHESTNUT, (*Castanea vesca.*) These are uneven. Some seedlings grew a foot or more in height and blasted and died in August or September, though the most of them lived. Some were transplanted when one year old. Those not transplanted attained when three years old a height of forty-three inches, and a girth of two inches and a quarter to two and five-eighths.

OHIO SHAGBARK HICKORY, (*Carya sulcata.*) These are all small and spindling, and the best of them only about eight inches high.

ASH-LEAF MAPLE, (*Negundo aceroides.*) These were transplanted when three years old. We understand the Professor to say that this tree grows along the river bottoms in that neighborhood, and that those growing there are small, short and crooked, and the largest does not exceed one foot in diameter. This is very different from the variety which has been planted as an ornamental tree in this part of Ontario, which is a very rapid, upright, symmetrical grower. The seedlings transplanted by the Professor at three years of age were found two years after to measure about one hundred and two inches in height, and eight inches in circumference.

CATALPA. Of this the Professor says, "The seeds of these came from the Department of Agriculture at Washington. Since writing my report the trees have twice borne fruit, and prove to be the hardy species or variety. Since they came up and have made their present growth they have passed through two of the severest winters, when the mercury went 32° and 33° below zero. They were once killed back a little, but at present they seem healthy. They have made a rapid growth, although transplanted when they were three years old. I am much pleased with these trees, which have exceeded my expectation. Since making my report I have started more of them." Three years after being transplanted, that is when six years old, they

were from twelve to fifteen feet high, and from eight and a half to twelve inches in circumference.

RED ELM, (*Ulmus fulva.*) "I set a few small trees, which have grown three years since that time. We generally think this tree grows slowly, but these have done well. One of them the past year made a growth with one of its best branches of eight and a half feet."

SILVER MAPLES, (*Acer dasycarpum.*) "These beat all the above in their rate of growth." Transplanted when one year old, these trees when four years old were eighteen feet in height, and measured from eleven to eleven and a half inches in circumference.

The Professor adds: "I am growing young trees of the Beech, European Larch, White Pine, White Oak, Rock Elm, American Elm, and many other kinds of prominent trees. These are all yet quite young."

BRUNTON'S EARLY BLACKBERRY.

We see by the August number of the *Fruit Recorder* that Mr. Purdy has changed his opinion of this blackberry, and now speaks well of its size and quality. His earlier impressions were made by fruit borne upon young plants that had suffered considerably from the cold of the previous winter, and he then spoke of it as small and unpromising. Now that he has fruited it upon well established plants, he says the berries are from medium to large, very uniform in size, and most delicious. It ripens very early, this season by the month of July, about with the Mammoth Cluster Raspberry, and before the Dorchester Blackberry, which has heretofore been the earliest sort, has begun to turn red. The plants too are very prolific, being bent to the ground with their load of fruit; but they are no more hardy than the New Rochelle or Lawton Blackberry. He found the berries sold readily at fifteen cts. per quart when black raspberries are bringing only eight cts.

A SWEET CRAB APPLE.

We have received from the Fonthill Nurseries a specimen of a sweet variety of Siberian Crab, cultivated under the name of "Orange Crab." It is about the same size as the Hyslop Crab, of a rich yellow color, and quite sweet. It may be a valuable addition to the list of crab apples.

SOME BASE SLANDERS REFUTED.

(FROM AN EXCHANGE.)

The tomato is an excellent article of food, notwithstanding the assertion of many who claim that it is not healthy, produces cancers, etc., etc. Now, I believe it to be one of the healthiest of vegetables. Note its ruddy hue, its fine smooth skin, and its plump, well-rounded form; surely there is nothing to indicate disease, and there is every reason to believe that its general health is equal to, if not better, than that of any other vegetable that exists. Take, for instance, the beet; mark the fatality that attends their growth! Dead beets can be counted by thousands in every community and in every climate, who have been nurtured under the most favorable circumstances—as regards sanitary measures—for their healthful growth. Even the potato has its almost yearly epidemic which carries off countless numbers, causing bitter sorrow, and leaving scarcely a dry eye in the whole Murphy community. They have other troubles also; 'tis the early potato that catches the worm—or, rather, that is caught by it—and no vermifuge, however powerful, has yet been discovered that covers the ground sufficiently to protect it from the fell destroyer.

Cucumbers and onions are very far from being immaculate. The former are cut down—or, rather, cut up—in the heydey of their youth, as it were, and seldom live to a green—*i. e.*, a yellow old age. Even in their infancy they are continually getting in a pickle, and are no comfort to themselves nor anybody else. The onion is a confirmed invalid, and if it leaves its bed it is sure to get in a stew. It prides itself somewhat upon its rank in society, but it is in bad odor among its fellows. But I digress. It was not the intention to write up the entire vegetable kingdom, but merely to defend our friend, the tomato, from its traducers. Lettuce return, then, to our subject.

Find a greater delicacy to preserve—who among you can? Hope you all can—can all you raise, and raise all you can of this healthy esculent. Then, again, how essential is the tomato for fixing catsup—not to fix cats up by throwing tomatoes at them, though even as missiles they would doubtless prove efficacious. The refuse tomato cans could be used with equal effect to fix dogs up, if—in the language of the genial Erratic Enrique—you wish to curtail your house rubbish. What could better "pointer moral or adorn a tail?"

Finally, it is claimed that the consumption of the tomato produces cancer and the like. It has been fully demonstrated that the tomato is a perfectly healthy vegetable, therefore its consumption is a mere fallacy. It never has the consumption. As was recently remarked to a prominent physician: "We defy you to prove it, or to prove that tomatoes produce cancers—we don't believe you cancer, in fact we know you can't sir!"

Enough of the tomato—though we never—*i. e.*, hardly——!!! (I was going to say that we seldom got enough of them, when something struck me.) To conclude, let me hope all reasonable-thinking persons will see the force of our plea for the tomato, and enjoy them while the season is yet upon us.

TETOFSKY APPLE.

BY A. BRIDGE, WEST BROOK, ONT.

I am acquainted with a man in this Township who is the owner of a fine young orchard, in which he has quite a number of the Tetofsky apple trees planted, and he regrets very much that he planted any of that variety. He has condemned it on the ground that the fruit is poor, and the tree is a slow grower. I think this cannot be said of the Tetofsky on all soils. His soil is a sandy loam, and most of his trees are doing remarkably well, but the Tetofsky refuses to grow to his liking. I know the Tetofsky is a slow grower on some soils, and I also know that it will grow as fast as the general run of apple trees if it is planted on a soil that suits it. I consider the fruit superior to the Red Astrachan.

In 1876 I planted four two year old Tetofsky trees, two and a half feet high, without a limb on one of them. I planted one of these trees on a hard clay knoll, with a hard clay subsoil. I planted it very shallow, and did not loosen the subsoil as is generally done, but set the tree on the hard ground, and put fine earth about the roots. The tree commenced to grow at once, and formed a good head the first season, and has made a good growth every season since. The tree is now a beauty to look upon, being a little over nine feet in height. It has made sixteen inches of new wood this season, making an average yearly growth of sixteen inches, and does not get any manure except a few wood ashes scattered on the surface once a year. This piece of clay ground was of no value to me until I planted it with apple trees. I formerly planted it yearly with potatoes, but it was so hard I never got a crop from it.

I planted a few other varieties on this clay knoll at the time the Tetofsky was planted, and it would do a person good to see them. They are the finest trees of their age I have ever seen, and were all planted on the surface soil, hilling up a little to get the roots covered, and the subsoil was not loosened. I dig up the ground with a fork once a year, and keep the weeds down with a hoe. There is no other crop raised on this piece of land. The trees are planted ten feet apart. The Tetofsky came into bearing in 1878, and in 1879 it bore half a bushel very fine apples. The apples grew all around the limbs, and

looked like rows of onions braided up; and though it was so heavily loaded the limbs did not bend down. The limbs are all growing upwards, taking up but very little space. So much for the Tetofsky on clay soil.

I will now tell you a little about the other three trees. They were planted on a deep rich, loamy soil, with the subsoil loosened up; a soil that will raise corn and potatoes to perfection. These trees did not grow the first and second years; they leafed out and looked healthy enough, but did not make any new wood until the third year. They are growing quite nicely now, but the whole three trees put together would not make a tree as large as the one in the clay. I took more pains in planting these trees than I did the one in the clay, expecting they would make double the growth in a given time in such fine rich soil. The soil in both cases is very dry, being naturally drained.

My Glass' Seedling Plum is growing close to these three Tetofsky trees, in the same soil. It grows from four to five feet in one season, so that I am obliged to cut back half its growth to keep it in good shape. I also raise the finest vegetables from this piece of ground, which is sufficient proof that the soil is rich. It is a mystery to me what could make the tree in the clay grow so much faster than the same kind of trees planted in richer and better soil. Perhaps you or some of the readers of the HORTICULTURIST can explain the mystery.

CRANBERRY CULTURE.

We have received numerous enquiries from correspondents relative to the cultivation of the cranberry, in reply to which we submit the following from the *Massachusetts Ploughman*:—

Among the fruits that grow in New England, there are few if any that will grow on so great a variety of soils as the cranberry. The most profitable and the best location seems to be a meadow that has a peat bottom that can be flowed with at least two feet of water during the winter and spring, and be thoroughly drained in the summer. In such location the cranberry can be grown with as much profit as any other fruit.

If one has a pond that flows up several feet higher in the winter than in the summer, by filling in the borders with sand a good crop of cranberries can be grown for many years, without any expense after the first two or three years except that of harvesting the fruit. In such locations good crops will grow on four feet of sand, and to our knowledge will continue for more than twenty-five years without resetting.

In such locations the water protects the vines in the winter, and where it does not leave the vines until the last of May or the first of June, it protects the blossom buds against the spring frosts, checks the growth of grass, and at the same time gives to the vines just the fertilizing material they require.

He who desires to enter largely into the cultivation of cranberries should not be satisfied with the borders of a pond, but should look around until he finds a piece of land naturally fitted for the cranberry, and thus avoid heavy and constant expenses. When such location is found it will be a meadow with a peat bottom or never-failing stream of water flowing through it; the land so situated that it can be covered with water in a few hours at any season of the year, and kept covered at least two feet deep from December to May; also within a short distance of a sand hill.

When a piece of land of this description can be found it is cheap at any price under five hundred dollars per acre, and even at five hundred dollars per acre it will pay a very large profit if set with cranberries. In preparing the land it is best to remove the sod down to the peat, which in most locations will be worth more for manure than the cost of removal. The land should then be covered with at least four inches of sand; this can be done best and cheapest in the winter when the ground is frozen and the work of the men and teams is not so pressing. The vines should be set in May, as soon as the weather begins to be warm. If the water can be brought to within an inch of the top of the sand the vines can be set with greater ease and will be much more likely to live. Whatever may be said to the contrary, we believe it is always best to set vines that have roots. We have seen plantations set with vines that had been run through a hay cutter, under the direction of one who believed the tops were as good as the roots, but the result was a complete failure. The vines do best to set them in single roots, being first entirely freed from grass. The distance apart should not be over six inches each way. If the water is just the right height, the vines can be scattered over the sand and the roots pressed in with the fingers. Never set in rows two or three feet apart, for by so doing the vines will always be uneven, because by the time the ground is covered between the rows, the vines in the rows become old, with many dead vines; but if the vines are set all over the ground, by the second or third year the ground will be well and evenly covered with young vigorous vines.

There is a worm similar to the plum curculio which sometimes attacks the young fruit that grows upon land that cannot be kept covered with water during the winter. As the perfect insect winters near the surface of the ground the water probably destroys it.

It is very important to keep the weeds and grass out the first two or three years; after that if the land is well adapted to the fruit but little attention will be required, except to keep the land flowed at the proper time. As the weeds and grass must all be picked out by hand; the first year requires considerable time, and the second year will require more time than the crop will be worth, but it pays in the end to keep the vines entirely free from both weeds and grass.