

EIGHTH AGRICULTURAL MEETING AT THE STATE HOUSE, FEB. 27.

From the Boston Cultivator.

Mr. Quincy in the Chair. Subject Fruit Trees.

Mr. Breck of the New England Farmer, opened the discussion. He said that a plentiful supply of good fruit was important for health, pleasure and profit. Delicious fruits, matured, may be freely indulged in with good effects. With a taste for the cultivation of fruits and for ornamental trees and plants, one has a source of pleasure at his command. As a source of profit, fruit is engaging the attention of many, and it will be long before the supply will equal the demand. The apple is among the most important of fruits. The climate of New England is peculiarly adapted to it. Formerly large quantities of apples were raised for cider, now more attention is paid to choice fruit. The Temperance Reformation has produced a great change. In setting an orchard the soil should be well pulverized. It should be stirred deep with the sub-soil plough. No fresh or half decomposed manure should be put into the hole where the trees are set, but old compost manure may be useful. Apple trees should be about two rods apart each way, and plum and peach trees may be planted between them, and these will have their turn and make way for growth of the apple trees. Trees should not be set deep, but nearly on the surface. There are different opinions as to grass growing around trees. He knew two orchards set at the same time in similar soil; one was well cultivated, the other not, though the trees were dug around. The latter now bears but little, though set 18 years ago, the other has borne considerably for seven years, and in good seasons now produces 1000 barrels of fruit.

Some trees require cultivation, manure and the destruction of weeds in order to the production of fair fruit. Such is the case with William's Favorite, an excellent variety, the Porter is much the same. The great enemies to the apple are the borers, cankerworm and caterpillars. Pears are next in importance. Like the apple they do best in a soil rather moist and rich. Our native fruits should be preferred, of which we have some very fine varieties. During the last season, some superior kinds were brought into notice, the Hull, Wilbur, M. Laughlin, Lawrence and another nameless kind. Some kind of pears are improved on quince stocks, others do better on their own stocks. Of the quince there are two distinct kinds, the Orange and Portugal. The first is the handsomest, but some prefer the other. The plum is a most delicious fruit, but the curculio is a difficult enemy to contend with. Large premiums have been offered by the Massachusetts Horticultural Society, for a complete remedy; but none has been discovered. Cherries are easily raised and the fruit is fine. Peach trees are often killed off by our cold winters. The stones may be planted in spring the trees budded the next September, and they will bear in 2 or 3 years.

Mr. French, of Braintree, said that fruit would grow almost any where, even on the sands of Nahant, but much depended on cultivation. If trees are set on orchards, we must manure the more. He has an orchard of Porter, Greenings, &c in grass land, that does well. The ground is in good condition. He digs around the trees, but for the purpose of keeping away the borer. He has an orchard of seven acres of as choice fruit as there is in this or any other country. He broke up the land, harrowed and rolled it, and set out on the sod, and put loam around the roots, and lost but three trees. Does not stake his trees. Sub-

soiling would doubtless have been good, which he has practiced since. Trees do best by walls, the stones furnish potash, which the trees need. Peach trees bear late transplanting, even when in blossom. Keep them low, and let them fruit low. Trees require much attention, prune young, then you will not have to cut large limbs. As nurserymen make so many mistakes, it is best to get trees and set out, and graft from good fruit trees that are bearing. Plums do better on the sea shore than back on light soils. There seems to be no remedy for the curculio. The large caterpillar may be destroyed with Perkins' brush. It requires much attention to guard against insects. But by industry and perseverance we can get good fruit.

Mr. John C. Gray said that he had given attention to fruit growing for 20 years. He preferred transplanting in the spring. The greatest difficulty was the drought. In 1831 it was very dry, and he saved trees by laying moss around them. It is a question whether an orchard shall be broken up. He had one that did well not ploughed; the trees were first dug around 6 feet, afterwards 8 feet as the trees became larger. They were set near the surface. Cankerworms are great nuisance. He had tried many ways to destroy them. Tar put around trees on canvass, that it may not penetrate the bark, is ineffectual. The sun dries and hardens it. It cold, they will walk over it. Leadon troughs are expensive, and not a complete protection. The German method is probably the best. Make a box around the tree; let it set on the ground, and on the top put pieces projecting over the edge, outside, like the eaves of a building; then tar in the angle under the projection, and the tar will be protected from the sun and storms. Swine rooting under trees will destroy the young worm. He set trees 40 feet apart. Mr. Phinney had lately set that distance. No investment near Boston better than that of fruit trees. The pear is neglected. Baking pears sell well in the market, and the tree is long lived; he mentioned one 150 years old. All standard fruit, that is well adapted to the climate is better than that raised against walls. We are just on the line where the peach can be raised. Shall we prune freely or not? The great enemies to the plum are the curculio and warts, and no remedy is known. Caterpillars can be easily destroyed in their nests. The quince is a valuable fruit, and brings a high price.

Hon. Mr. Dodge, of Hamilton, said that there was no subject more interesting. It is said the rail-roads are using up our farmers, and we must enter into new branches, or apply more skill to old ones. This is an argument for attending to the Silk business. Fruit is a great subject, and our market is not yet glutted with it. Farmers are much indebted to the Horticultural Society for disseminating much valuable information on this subject. He had been attending to a Nursery. He sowed apple pomace in the fall, and used ashes to destroy the acid. When he got a good growth the first year he budded the second year. The same with pear trees, but peach trees should be budded the first year. Budding is more simple than grafting; he does not take out the wood, the bud lives as well with the wood, and in taking it out it is liable to destroy the eye. Budding is easily learned by seeing an other perform the operation. In transplanting, all the roots and fibres should be carefully preserved. He preferred the spring for this operation. Shallow planting is preferable. It is according to nature. It appears evident from the trees that are turned up by the winds. In preparing the land for an orchard the stones should not be removed, for some of the best orchards are on stony land. It is a question with some whether the stock affects the fruit, but it does not.

We find a difference in the same variety of fruit owing to different soils and other causes. The sap passing up the stock is all the same and the effect is produced by the scion as in the leaves, the sap is elaborated into the juices that form fruit, and this gives its peculiar character.

Mr. Cole, of the Cultivator, said that a general opinion prevailed that apple and pear seeds must be frozen or else they will not vegetate. This is the opinion of some nurserymen, but it is not correct. On sowing a lot of apple seeds in the fall, he saved some for experiment. Divided them into two parcels, wet one lot in winter, put them in sand and buried them in the cellar. They did not freeze. Next spring planted them and the other lot dry, in adjacent rows. Those that were kept moist grew, the others did not. Next season had 22 quarts of apple seed after the ground was frozen. In the winter wet them, put them in sand, and set one half out door to freeze, the others were put in the cellar and did not freeze, the next spring being wet and backward, the seeds all began to sprout about alike, and some of the sprouts were an inch long before the ground was dry enough to plant. Experiments show that the seed should be kept moist through the winter, and that freezing is not necessary. He buries peach stones in the fall or winter, before dry or after, in layers with the earth, about a foot deep, that they may not crack and sprout too early in spring. When the ground is dry enough for planting in spring, crack the stones and plant the meats as you would corn, and they are about as sure to come. As to budding most nurserymen reject the wood, as it is considered the better way. No eyes will be lost in removing the wood if a sharp thin knife be used to cut off the eye of the bud. Transplanting may be done, in spring or fall, if it be well done. The objection to fall transplanting, arises mostly from the operation being performed late. The proper time is from the 20th of Sept. to the 10th of Oct. Then the earth gets settled around the roots and the trees will grow well the next season. He prefers the fall if it be done early. He had for some years contended that the stock affects the fruit. The scion governs mostly, but the stock produces a slight effect, and the higher the scion is set on the tree, the greater will be the effect of the stock. What makes the great difference in the same variety of fruit, the Baldwin for instance, when set in different fruit stocks? Some say the soil. Well then, if planting trees in different soils produces a difference in fruit, will not the planting scions on different stocks produce a difference? Is not the stock nearer the scion than the soil. He stated a case of an apple tree that bore fruit with water cores. Some of the apples were like a ball of water; a variety that was free from this defect was grafted high in the limbs, and the fruit was all water core. As Mr. Breck said, some soft breaking pears are improved on a quince stocks, which give them firmness, while other hard varieties are injured in this way; a plain proof that the stock affects the fruit in a small degree.

Hon. Mr. Gardner of Seekonk, said there were different opinions. Some would set trees in the spring, others in the fall. Some would plough an orchard, others would not. He had an orchard of 4 or 5 acres, set out in the fall and only three trees died. It flourished well without ploughing, but in consequence of what he heard in the Agricultural Meeting last winter in favor of ploughing, he had ploughed it, and he had done wrong, if the opinion of gentlemen be correct who consider that the trees will do well without this process. He had another orchard of four or five acres that had not been ploughed for 15 or 20 years, and he got a large amount of excellent fruit. His neighbors ploughed their orchards, and the same ran in them, but they did not succeed.