

sold just now are for the purpose of supplying the needs of the family.

To succeed, then, in the fruit business is as difficult as it is in almost any other business. Any person entering upon it must have just such preparation as is required to enter upon any other vocation. If a man have thorough knowledge of the business, and some experience in the same; if he has energy and perseverance, backed up with some capital, he may count upon ultimate success, but otherwise failure is almost certain.

All this, however, is no hinderance in the way of an abundant supply of fruits of every kind for home use. Every farmer and every citizen who has a garden may have the luxury of fresh fruit of his own growing for use every month in the year, and no fruit bought in the markets can equal that gathered in the time of its greatest perfection of beauty and ripeness from one's own trees and vines.

And here there can be no question about profit. The express charges, the commission for sales, the baskets, etc., which eat up so large a share of the profits of fruit growing for markets, have no place in the house keeping account, and I venture to say that no acre on the farm will yield the farmer greater satisfaction and profit than that which is devoted to the fruit garden.

#### Improve Our Native Grape.

Capt Moore, at a meeting of farmers held in Boston, and reported by the Massachusetts Ploughman, said with reference to the above subject:

Now, instead of crossing the foreign vines upon the natives, it seems to me that the true way is to improve these native varieties. You understand that there has been no attempt to improve our native grapes till within the last fifty years. The native grape was wild, as wild, perhaps, as the European varieties fifteen hundred or two thousand years ago. It has been subjected to a course of improvement with success. With only fifty years, you must remember, in which the improvement has been made, you have got up to the Concord, and many other seedlings are now following, which are as good, or better, in quality, than the foreign grapes. Now, it seems to me that the true way to improve these varieties is by crossing the best seedlings from our native stock. You can cross the best variety on the native, if you choose, and it is possible for you to get as good a grape as the Concord, which was the result of this process. Its mother was a rather ordinary variety. One good variety sporting in a year to any extent does not give assurance that it will continue to sport, but you will find a great many improvements in the course of time, and, perhaps, one in a thousand will be a success. But in the course of time our native stock can, without deteriorating in its quality, withstand our temperature, and be brought up to a point as good as the foreign varieties and still retain its hardiness.

Now, to do that, you must select the best berries, those which are well ripened. The berries which are used must be kept from drying in the winter, because they will vegetate better. It is the best way to take out the seeds and put them in a box of dry sand, or it would be better still if they should be put out doors where they will freeze, because freezing adapts them

better to the out-door life, and in course of time, from that process, you will get more or less improvement. But many of the grapes will not be good. You will find, as I have found, that many which you will get will be strong growers, but these strong varieties will prove to be deficient in the female organ in the blossom and will not bear any fruit.

I have had thrifty vines with abundance of blossoms, and imagined I was going to get such grapes as we read about in the Scripture, where it took two men to carry a bunch between them on a pole. But in a few days I found that the blossoms were aborted. I had not looked to see if the blossom was perfect or not. The next year I found that these blossoms had no female organ and could not bear any fruit. I wondered afterward whether such varieties as that in a vineyard, growing only the pollen, would not be desirable to start the fruit of varieties that are deficient in pollen. But I had become disgusted and destroyed the vines and could not experiment with them.

#### Business Men as Fruit-Growers.

It may seem an exaggerated assertion, but it is nevertheless true, that many business men and mechanics have better and more profitable gardens than professional gardeners. We have often observed this fact. We know mechanics laboring for their daily bread, who understand more about the principles of gardening than farmers or market-gardeners, and the same is true with reference to some professional and business men. They take a special fancy to fruit and vegetable growing, delight in the literature of the subject, and they make greater progress than many who have been brought up in the garden. It is an undeniable fact that many who have been tillers of the soil all their days study the least, and are apt to be convinced there is nothing to learn beyond what they already know. The same remarks are applicable to far too many farmers in our country.

While in Lindsay a few weeks ago, we visited the garden and orchard of Mr. Thos. Beall, who has been a leading business man in Lindsay for many years. About 20 years ago he purchased five acres of land in the suburbs, and as it was a bill of expense in its uncultivated state, he resolved upon making the land pay for itself, which object he has completely accomplished. Having a natural taste for fruit-growing, he laid out an orchard, and planted a large number of small fruit bushes, retaining a small plot for a vegetable garden. To-day he is one of our leading authorities on fruits, and is an active member of our Fruit-Growers' Association, amongst whose members he is held in high esteem. He undertook the work as a pastime and a pleasure, and without neglecting his regular business, he has made fruit-growing a financial success.

Specially worthy of mention are the black walnut trees which he planted on north and west sides of his orchard as wind-breaks about 16 years ago. He planted the nuts at that time, and although some of them did not germinate for two or three years after planting, the smallest trees are now about 9 inches in diameter at the base and about 25 feet high. Some of the trees are 12 to 14 inches through, and all are in a flourishing condition. They were planted 16 feet apart, and the limbs of the trees are now

beginning to embrace those of their neighbors. They bear fruit regularly and he sells the nuts for \$3.00 per bushel. He has also basswood, pine, cedar, and butternut trees, but his favorite is the walnut. He says it grows nearly as fast as the basswood, and we made some measurements in order to be fully convinced of his assertion. For ornament and profit combined, his next favorite is the basswood where bees are kept—and he has several colonies in the shade of his magnificent basswoods. He does not recommend the planting of maples, as there is little profit in them, and a basswood or a walnut will grow as large in ten years as a hard maple in twenty or twenty-five.

In the shade of his wind-breaks, and between the rows of apple trees, he grows a large number of gooseberries, raspberries, strawberries, and grapes, where they seem to flourish as well as in locations more fully exposed to the sun, but he manures his orchard thoroughly. He gets a splendid quality of strawberries where the plants are grown in the shade, but they ripen about a week later than the same varieties grown in the sunshine. His English gooseberries (Whitesmith variety) have mildewed badly, and he intended to dig all the bushes up, although, by the application of 50 lbs. of sulphur he has succeeded in checking the mildew to some extent. His American varieties have not suffered from mildew. From 300 bushes he obtained 27 bushels, which he sold for 12½ cents per quart delivered at his house, thereby realizing \$108 in all, being an income of about \$1,000 per acre.

He regards his section as excellent for grape growing, especially for the earlier varieties. He has 35 varieties of grapes, amongst which are 200 plants of the Niagara variety, which are in a flourishing condition. He has all the leading varieties of small fruits, but does not believe there is any profit in experimenting with many new varieties. Unleached ashes are his favorite fertilizer.

#### Various Notes on Forestry.

(Concluded.)

Having referred to the terrible desolation of several other countries, he closes with the following statements: 1. That the forest areas exercise a positive climatic influence upon the surrounding country. They modify the extremes of heat and cold, and render the temperature more equable throughout the year. 2. That the deforesting of large areas of hilly and mountainous country affects to a very large extent the quantity of water that comes from springs and flows into rivers. The more apparent is this when the deforesting occurs in the headwaters of important streams. Then the water-power is destroyed or greatly impaired, navigation impeded, commerce interfered with, and droughts and floods are more frequent and more severe. 3. That the interests of agriculture and horticulture are greatly subserved by the proper distribution of forest areas through their climatic and hydrographic influence. 4. That a country embracing within its border the headwaters of all the streams and rivers that interlace it, when stripped of its forest covering, becomes a barren waste, incapable of supporting man or beast.

With reference to the profits of tree-planting, he cites cases of some towns in Kansas and