

PEACHES.

O. M. LORD, MINNESOTA CITY.

In the spring of 1853, I wanted to plant some fruit trees where I now live. I had occasion to go to Galena and visited the fruit farm of Mr. Soulard, a very genial and intelligent man. He advised me to try apple, cherry, pear and plum trees, "but," said he, "peach trees will not live up there. Whenever the mercury falls to 14° or 15° below zero Fah., they will be killed."

Remembering his advice, I considered it useless to try, as we are liable to much more severe cold. However, peach seed was frequently planted in this vicinity, and sometimes the trees made a fine growth, to be killed back every winter, and, of course, no fruit. The first one to meet with success, I believe, was Mr. P. M. Gideon, and his method has been published and illustrated till it is generally known to all who care to inquire.

In the spring of 1884, the Jewell Nursery Company sent me two Hale's Early peach trees, which I set out, and both grew but winter killed. In cutting back I saved some scions and crown-grafted into plum roots. These grew readily and finely, and the third year blossomed and produced some fruit. These trees were accidentally killed.

The next venture was with one dozen trees from Savannah, Mo., Hale's Early, Old Mixon and Waterloo. Mr. Frazee furnished me with a description of his method, which was to place a board or flat stone under the roots and place the roots in such a shape as to make them grow over one edge of the board, so that by removing some of the dirt the trees could be bent over and covered for the winter. I did as directed but covered the trees with dirt and killed them, as they never exhibited any signs of life. Had I protected the roots with dirt and tops with straw or hay, I presume they would have lived, as since then I have sometimes thrown a little dirt on the tops of the trees, which it invariably kills wherever it comes in immediate contact. Attempts have been made in this vicinity to protect the trees by binding with straw or hay or by placing cornstalks about them, but without much success. As I knew but little about peach culture except by reading, I was under the impression that our seasons were not long enough for them to ripen. I therefore wrote Mr. Kerr, of Denton, Maryland, to send me a few trees of the earliest peaches. He sent three varieties one year from the bud, Early Rivers, John Haas and Elberta. The third year after setting, they bore finely, though we were visited by some frosts late in May. The Early Rivers were ripe the first week in August, the John Haas about the middle of August and the Elberta the first week in September. These trees were planted rather deeply on a sandy soil, with care to place the longer roots lengthwise of the row with the intention of bending them over crosswise to cover for the winter.

In setting trees in the future, I would set further apart in the row and place the longer roots crosswise, so as to bend the trees lengthwise of the row. To lay them down, I first put sufficient straw in a small pile to keep the tops from the ground, and dig down beside the stem, cutting any roots that may be in the way, and, if necessary,

taking a little dirt from under the longer roots, bend the tree toward the hole. Some will be laid down easily and others quite hard, depending on the shape of the roots which are in the ground. It is not necessary to lay them flat, but only so far as to be easily covered with straw or refuse hay, which must also be fastened so as not blow off.

I would not try to set them up in the spring till frost is out of the ground and the weather settled. Take off all the covering, remove some of the dirt near the roots and set up stright and pack the earth firmly around the roots. A rigid cutting back is now necessary; take off from one-half to two-thirds of the last year's growth and any large limbs that are not wanted. It is desirable to keep the tree in rather a bushy form, as it is more easily handled and protected.

This ground has not been highly manured but was occupied with red raspberries for several years. The trees all appear to be healthy and remarkably vigorous, and while I do not care to discuss commercial peach growing in Minnesota, I shall plant enough to furnish an abundant supply for the family with as much confidence and assurance as I would plant blackberries, which are considered a sure crop here, though subject to the same conditions of winter care.

Mr. J. S. Harris: I think the gentleman is here who raised the peaches which are on exhibition. I would like to have him give us a history of how he raised them.

Mr. G. F. Flatin: I have prepared no paper on the subject, but I will try to answer any question that I can.

Mr. G. J. Kellogg, (Wisconsin): How do you plant?

Mr. Flatin: The plants were all raised here; they were raised from the seed.

Mr. C. Wedge: How old are your trees?

Mr. Flatin: Seven years old.

Mr. Wedge: When did they come into bearing?

Mr. Flatin: They were four years old when they came into bearing.

Mr. M. C. Bunnell: What kind of peaches are they?

Mr. Flatin: Those I got the seed from were Michigan peaches.

Mr. Wedge: How do you protect them?

Mr. Flatin: I lay them down in the winter.

Mr. A. H. Brackett: How many peaches did you raise?

Mr. Flatin: I raised about five bushels this year.

Mr. Brackett: On how many trees was that?

Mr. Flatin: On six trees.

Mr. Kellogg: How do you lay them down?

Mr. Flatin: I lay them down the same way this paper told you.

Mr. F. W. Kimball: What do you cover them with?

Mr. Flatin: I put straw over.

Mr. Brackett: Do you cover them all over with straw?

Mr. Flatin: I don't suppose so much would be necessary, but too little might do them harm.

Mr. Brackett: Are those six trees all of the variety of which you show those samples?

Mr. Flatin: I have two yellow varieties and two red ones.

Pres. Underwood: Do the tops take any harm during the winter?

Mr. Flatin: No, they are kept off the ground.

Mrs. J. W. Ray: How tall are the trees?

Mr. Flatin: About twelve to fifteen feet high.

Mrs. Ray: Do you lay straw on the tree?

Mr. Flatin: A little.

Mr. Harris: What time in the spring do you take them up?

Mr. Flatin: In April sometime.

Mr. Harris: Were they covered during the freeze in the spring?

Mr. Flatin: They did not freeze. The frost did not hurt my peaches.

Mr. Harris: I think you told me the peaches were quite a little size when the frost came.

Mr. Flatin: Yes.

Mr. Kimball: You are on a high elevation?

Mr. Flatin: Yes, about the highest elevation in Houston county; I don't know how high it is.

Pres. Underwood: Is it level ground?

Mr. Flatin: Yes, nearly level ground; on a north slope.

Mr. Brackett: If a person can raise five bushels on six trees, I don't see why peach culture would not pay.

Mr. Bunnell: I understand these peaches are raised near Spring Grove?

Mr. Flatin: About one and a half miles from Spring Grove.

Mr. Bunnell: What is the nature of the country?

Mr. Flatin: It is rolling prairie.

Mrs. Stager: Do they always get ripe?

Mr. Flatin: I never had any trouble; they always get ripe. They got ripe last year.

Mr. Harris: Some of those peaches are not as large as last year?

Mr. Flatin: I guess there were too many on the trees. I did not thin them out.

Mr. Harris: Some of those peaches he raised measured nine inches in circumference.

Mr. Flatin: These I have on exhibition here are not as large as when I shipped them here.

Mr. Harris: Do you think peaches can be grown so the culture could be made profitable?

Mr. Flatin: Yes, I guess they could, if straw was cheap enough.

Mr. Brackett: How many hundred weight would it take to cover those six trees?

Mr. Flatin: Usually all I can put on the hayrack.

Mr. Busse: Did you ever try covering with leaves?

Mr. Flatin: No, I never tried it.

Mr. Pearce: Peaches! peaches! There is no fruit that grows that I am so carried away with as peaches.

Mr. Philips, (Wisconsin): How many did you raise this year?

Mr. Pearce: I had thirty trees, and they were just loaded with fruit. There came that terrible hard frost, and as a matter of course I thought the peaches were all gone, and yet some of the trees had thirty, forty to a hundred on, with all that freezing. I think I would have had thirty bushels if it had not been for that freeze. Now, peach trees will stand much more cold than you have any idea of. The idea is to get them down before the ground freezes, and let them remain in that position, let this ground freeze, and then it is the easiest matter in the world to throw a little marsh hay over them. A ton of hay will cover fifty trees. We just threw a light covering of hay over those peach trees, and it was just as good a thing as we could do. On the strength of it I bought 150 trees, and I have also planted a lot of peach pits and plum pits, and I have been more than well pleased with my success.

Mr. Brackett: How much fruit did you get last year?

Mr. Pearce: I got a good deal of fruit. I have taken every precaution to protect the fruit trees.

Mr. Kellogg, (Wisconsin): How tall are your trees?

Mr. Pearce: Some eight to ten feet high.

Mrs. J. Stager: I live in a colder part of the country. We have had peaches year after year in St. Cloud, This lady who is here with me has had some of my peaches, I bought Canadian Iron Clad, and that tree lived sixteen years and for nine years was almost every season loaded with peaches. I planted it as any greenhorn would, setting it up straight instead of

slanting. I laid it down with a board over it, and had to take a 2x12 to lay it down with; I had to bend it over slowly and then work it down with chains, and I kept it covered with straw.

Mrs. A. A. Kennedy: One of our neighbors had a peach tree growing eight to ten feet high, and they wrapped it with straw and bound it round with blankets, but last winter it froze to death.

Mrs. J. Stager: I thought they needed a little air?

GROWING STRAWBERRIES WITHOUT IRRIGATION.

M. PEARCE, CHOWEN.

Those who have been engaged in agriculture or horticulture in Minnesota during the past thirty-five or forty years know all about the climate, its long and cold winters, and short, hot and dry summers. Cold and drouth are two great obstacles in the way of fruit growing, both of which can be bridged over to some extent by covering, mulching and irrigation. Irrigation is of two kinds, one by direct application of water, the other to plant intelligently and by proper cultivation draw moisture from below.

In the brief paper that follows, we shall confine ourselves to growing the strawberry without the application of water. Close observation of your own work and that of your neighbors who are in the same line of business is of the utmost importance to all progressive fruit growing. Watch the results where different treatment has been given. It is often the case that where one fails another will make a great success by correcting a few errors. A failure, in the place of discouragement, should be a means of future success. We are in the habit of inviting progressive fruit growers to visit our grounds in September. Those gatherings are of unusual interest, and each one returns home with new ideas to put in practice. We also make it a special business to visit the fruit farms in our neighborhood at the close of the growing season. At that time a correct conclusion can be arrived at what the future crop will be. When we visit a plantation at the stated time and find the plants well grown, heavily rooted and evenly distributed over the ground and not hilled up, we say in our mind, "If the season is favorable, here will be a heavy crop of fine strawberries, and even if the season is very dry there will still be a good paying crop. A failure will be almost impossible." The reverse of this, if the runners are thick, small and matted together, leaves and plants small, poorly rooted or matted rows badly hilled up. Our verdict in a case like this is, "little fruit and that inferior, let the season be the best." So much from observation, from which we draw valuable information. On our own ground, we are using our best judgment and that of others in preparing the ground, setting out the plants, their cultivation and mulching, that we may be able to avoid the heavy losses in time, labor and money which have greatly discouraged strawberry growing for years in the North-