PEARS AND APPLES.

The discussion given below took place under topic "Pears and Apples," during the morning session of the third day.

[SEE MINUTES ON PAGE 4, ITEM 44.]

SECRETARY MANVILLE:—I should like to hear from Mr. Mellish, of DeFuniak Springs, on the pear prospect in West Florida.

G. W. MELLISH:—Being the only member present from west of River Junction, I have some hesitancy in speaking for this section, which is a very distinctive territory in this State, in soil, climate and fruits grown. Pear trees grow very vigorously over there, and when not too severely attacked by blight are very profitable. Col. S. S. Harvey has made a notable success with pears, but he is in an isolated location, and blight has not injured him. Just now, in the DeFuniak section, we are having to contend with blight in a severe form, and as a result have few pears this season.

W. S. HART:—In regard to apples, I think our President covered the ground when he said, at a previous meeting, there is more profit in growing oranges in Massachusetts than apples in Florida.

G. L. TABER:—I agree with Mr. Hart on the apple question. There is no particular profit in growing apples in Florida. Still the trees grow and we get some fruit, and a good many like to have apples because they are apples. Referring to pear blight. In my orchards I have some fifteen or twenty acres of pears, and let me say, in passing, that I have found pears very profitable, and that we have a good crop this year. Among the trees referred to, about twenty-five have shown blight; five were so badly affected that we had to remove three-fourths of the top; these showed blight first, and it got the start of us; but since then we have kept it cut out, going over the trees every week or ten days during the season when the blight is showing, and the other trees that have been attacked are therefore but slightly affected. I am confident we shall be able to keep it down, unless it gets much worse than it does at present. Of course, we have not suffered as they have in the western portion of the State and in Georgia. But there is no doubt in the world that every man who sets out pear trees will have to contend with blight. Prof. Morton B. Waite, of the U. S. Department of Agriculture, has been carrying on an exhaustive investigation of pear blight for a number of years. He recently made a tour through the pear growing sections of Florida. While at our place, he showed us, with the aid of his microscope, the blight in different stages of development, from blight "cultures," which he had with him, as well as fresh blight from the trees. The pear blight is caused by a parasite, a very small microbe, only discernible by a microscope. It remains under the bark through the winter, and is carried from the exuding sap in the spring by insects, and deposited upon the new growth, and in this way introduced into the tree. It first attacks the new growth and blossom buds.
and blossoms, which die. Sometimes it does not show until the pears are as large as peas. Sometimes it is introduced into the blossoms by bees, and is thus widely distributed and it involves a good deal of work to cut it out.

A Member:—What effect does it have on the leaves of the tree?

Mr. Taber:—The young shoots turn black, also the leaves; but the leaves do not fall.

Mr. Mellish:—In planting pear trees with a view to keeping out blight, they should be headed low, all the main limbs should come out below three feet, the object being to have the tops within reach, so that the blight can be seen and cut out readily. Then, bear in mind that the blight always attacks new growth, never the old growth; and keep the new growth off the main limbs and branches, the attacks will then be confined to the extremities, where it can be cut out. If there are tender shoots on the trunk or large branches, the latter will be attacked, endangering the whole tree.

Secretary Manville:—One word about blight. Pear blight is a local affection. It does not enter into the sap of the tree; it has no effect upon the tree beyond the parts attacked; it never extends through the organs or sap of the tree from the point of attack to other portions of the tree, but develops only by the extension of the local affection; the microbes work in the inner bark only, and they continue to work until sometimes large areas are involved; but they do not pass from one part of the tree to another, except by pushing out through the inner bark from the point of first attack—the damage lies in the destruction of this inner bark. Thus by cutting off a twig that has blight beyond the line of affection, that particular attack of blight is forever gotten rid of. As Mr. Mellish has said, blight can only get into the tree through the new growth and the blossoms. If the new growth is kept off the trunk and main laterals, the attacks will be confined to the terminal branches, and the question of preventing serious injury to the tree is simply a question of the feasibility of keeping the blight cut out as fast as it appears.

W. H. Lawrence:—I represent Middle Florida, where we grow pears, and I thought the members would like to know what is going on in the pear industry. The prospect with us for LeConte, Keiffer, and other pears is decidedly gloomy. After the two blizzards, our trees looked well, and, in fact, showed no perceptible signs of being frozen. When blooming time came along, the trees were perfectly white with bloom, and all growers were in good cheer; some went so far as to commence talking about barrels for shipping. Ere long the fruit commenced to drop and is still dropping. Thousands of limbs are dead at the ends, presenting a black, unsightly appearance. Some call it blight. Others think that it was caused by the hard winter. I know of many old pear trees that I can put all of their crop in a nail keg.