

growth of the parasite. It is thought that the fungus continues its life and completes its development upon the same leaves which it first attacks, after they are fallen to the ground. The spores produced on the old leaves in the spring, serve to propagate the fungus during the new growth of the parts which it infests.

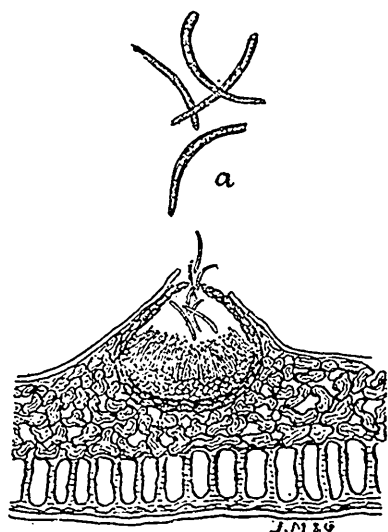


FIG 71.—MAGNIFIED SECTION OF CHERRY LEAF SHOWING FUNGUS CAUSING LEAF-SPOT DISEASE; *a*, FOUR SPORES MORE HIGHLY MAGNIFIED.

All infested leaves are more or less discolored with the purple or brown spots mentioned above, or they may turn before falling to a clear yellow color. In figure 70 is shown a leaf of the cherry attacked by this fungus, exhibiting a spotted appearance, a portion of which has become discolored through the action of the parasite upon the leaf tissue. Figure 71 represents a highly magnified section through the leaf including one of the spore capsules; and at *a*, above, are shown some of the spores still more highly magnified.

We do not know that any direct attempts have been made to prevent the disease here described. The parasite is one which buries itself in the leaf-tissues, and, consequently, whatever treatment is given it must be *preventive*. If the trees are sprayed with the sulphate of copper compounds for the purpose of preventing plum rot on the monilia of fruit, it will be well to observe what effect these applications have upon the development of the leaf-spot fungus.

FRUIT STATISTICS OF THE DOMINION.

MR BUCKLE, says in his History of Civilization, * “Statistics as a branch of knowledge, which, though still in its infancy, has already thrown more light on the study of human nature than all the sciences put together.” Herewith is a diagram of the fruit statistics of the Dominion for the past nine years, showing the exports and imports of apples from 1881 to 1889 inclusive. It will be seen that though our exports fluctuate somewhat, they are steadily on the increase. It is believed when suitable varieties are grown, the export trade is simply unlimited. The causes of fluctuation proceeds principally from the failure of the crop, or

*Page 24, Vol 2.