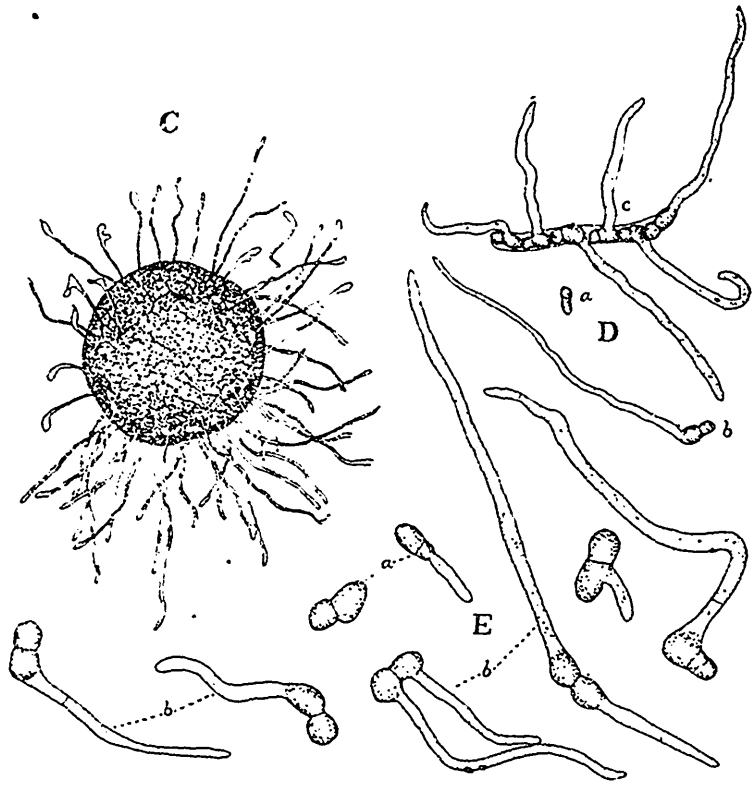

FIG. 229S.

C. Perethecium of apple scab with germinating spores.
D. (*a*) Spore not swollen, (*b*) Swollen germinating spore.
E. Germination of spores, after 15 hours in apple leaf broth. (*a*) spore, (*b*) a germ thread.

partially escaped from a ruptured ascos, and (*b*) loose spores.

When we consider how highly these drawings are magnified and that these spores are microscopic in size and float like particles of dust in the air, it is easy to understand the rapidity with which scab will spread throughout an orchard, especially in moist weather, for moisture is necessary to the growth of the penetrative threads of the spores.

So far, a coating of Bordeaux has been found the only safe-guard against these scab spores fastening themselves on the leaves and fruit, but this is an expensive as well as a disagreeable operation, and we are encouraged to hope that a coating of the lime, salt and sulphur spray may be equally effective, and certainly much less expensive, because one application may suffice.

The Cow Pea.—Formerly it was said that "this pea is to the South what red clover is to the North, and alfalfa to the West," but of late it has been found that the Cow Pea is of great value in all of these sections, and, during the last year or two, it has been sown in some parts of Ontario for the improvement of orchard land. It is sown in spring about the same time with beans, in drills about 2½ or 3 feet apart, and constantly cultivated until August 1st, when the peas will occupy the ground, though in some cases Crimson Clover is sown among the Cow Peas at the last cultivation. In