

summer are the *Stylospores*, oval in outline and borne on very small stalks attached to the walls of certain cavities, (*pycnidia*.) As soon as mature they separate from the stalks and pass out of an opening on the top of a pimple. (See fig. 3.) Other cavities (*spermagonia*) give rise to still smaller and more elongated spores (*spermata*) which mature and also pass out through an opening.

Ascospores, oval in outline, are not developed till the "rot" has been fully matured, and may be seen upon diseased berries in the spring. They are winter spores and are concerned in the perpetuation of the fungus from season to season. On this account it is very important to destroy them as far as possible. The cavities (*perithecia*) containing these are largely occupied by flask-shaped organs (*Asci*), (See fig. 4) in each of which are eight of these oval spores; these on reaching maturity escape from the cavities to find a new starting point on the plant.

Conidia, a fourth form of spore, are not so common as the others and are more usually found growing upon the surface of the pimples, than in cavities inside; they are oval and appear at the ends of stalks, showing well-marked divisions, from which they drop off, when mature. The *Stylospores* and *Ascospores* are the most important in the propagation of "Black Rot."

REMEDIES. 1. Some have succeeded in preserving the fruit from attack by enclosing the bunches in paper bags, as soon as the flowers are fertilized. 2. Spraying with Bordeaux Mixture (see conclusions) is a very successful fungicide against "Black Rot."

POWDERY MILDEW. (*Uncinula spiralis*.)

This fungus is quite different from either of the preceding in its form and habit; it prefers a dry atmosphere and confines its attack largely

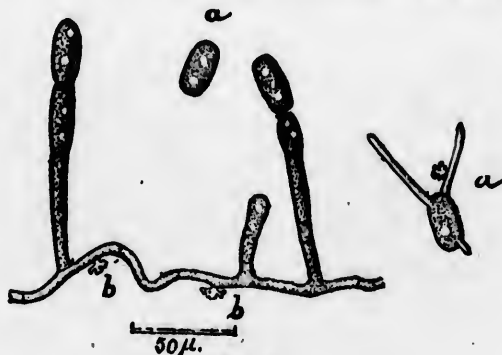


Fig. 5.