

be raked from under and round them and burned. The ground round the bushes should be dug or hoed deeply to bury the "perithecia," and when the bushes are cut in the winter, every piece of cutting should be raked up and burnt. Any dead leaves remaining on infected trees should be, as far as possible, picked off and burned.

GOOSEBERRY BLIGHT.

Microsphaeria grossularia.

Perithecium with branching filaments; highly magnified.

Where there is a sign of infection the leaves should be dusted thoroughly above and below with very finely powdered sulphur put carefully on with a knapsack powder-distributor on a still, hot, sunny day.

Sulphide of potassium diluted with water in the proportion of 1 1-2 lbs. of sulphide to 50 gallons of water, and sprayed over and under the leaves in a fine spray, has been found to be efficacious. This dressing should be applied very early when the leaves are small and young, and should be repeated in about sixteen days.

The Bordeaux mixture, as used for potato-disease, may be used with advantage—sprayed on by means of a knapsack sprayer in a very fine spray when the leaves are fully formed. The mixture should be made of 4 lbs. of sulphate of copper and 4 lbs. of lime to 50 gallons of water. If used later in the season, when the foliage is strong and fully developed, 6 lbs. of sulphate of copper and 6 lbs. of lime may be employed with 50 gallons of water. But care must be taken in the use of these applications when the leaves are young, also when the gooseberries are large and intended for early picking.

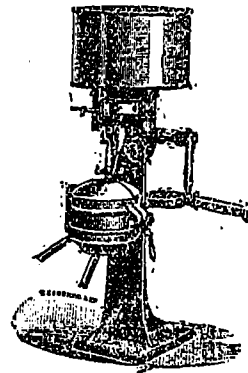
Note.—The word "asci" is also derived

from the Greek for a bladder (1). Asci are small membranous bladders in which the seed like, reproducing particles or spoules of microscopic cryptogamous, (flowerless) plants are contained. The provisions of nature to prevent loss or destruction of these minute particles are very interesting and wonderful.

The Bairy.

THE "MELOTTE" SEPARATOR.

The "Melotte" Separator recently introduced into this country is unique in construction, inasmuch as the turbine or separating bowl hangs loosely from a spindle, instead of being fixed or mounted on top of the spindle, as is usual in many other machines. The bowl is self-balancing and is encased in a cast-iron chamber, thickly enamelled to facilitate cleaning. The gearing is entirely enclosed,



and the arrangements for lubrication prevent waste and dirt, there are few wearing parts, and these are easily and cheaply renewed. The speed of the "Melotte" is claimed to be 30 per cent less than any other Separator, and consequently takes less power to drive and has little or no vibration. The makers state that a dairy-maid can easily work an 85-gallon machine, and that the slower speed, combined with the arrangement of zig-zag discs in the bowl, produces separation with a lesser agitation of the cream globules, so