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AGRICULTURAL COLLEGE AND EXPERIMENTAL FARM.

FOUL BROOD OF BEES.

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HISTORICAL RESUMÉ.

In all probability the first definite reference to foul brood is by Aristotle (1), who mentions an inertness which seizes the bees, and causes a bad smell in the hive. He also suggests that bees are liable to become diseased when the flowers on which they work are attacked by blight. Bee dysentery causes a bad odor as well as foul brood; but in the former disease the spotting and consequent smell are usually outside the hive.

Columella (2) mentions a bee pestilence and an annual distemper which seizes the bees in spring. Pliny (3) writes of a disease of bees, but as he uses the same term as Aristotle he has probably copied it from the latter author.

Schirach (4) in 1769 was the first writer to name the disease "Foul Brood." He says that "it is gangercus and a most destructive disorder to the bees, a genuine plague when the complaint has reached a certain stage. The cause can be attributed to two sources—1. The putrid (or tainted) food with which the bees feed the larvæ for lack of having better. 2. By the mistake of the queen bee, in misplacing the larvæ in their cells, head upside down. In this position the young bee, unable to get out of its prison, dies and rots away." Further, Schirach clearly distinguishes between foul brood and chilled brood, and mentions the fact, that putrefaction follows the death of the brood from frost, but in this case "it is only an accident and not a disease."

The remedy Schirach recommended was to remove all diseased combs from the infected hives and to keep the bees fasting for two days, after which they are furnished with other cakes of wax, and a suitable remedy given, "as a little hot water mixed with honey, nutmeg and saffron, or a syrup composed of equal parts of sugar and wine, seasoned with nutmeg." Thus, as Cowan (5) remarks "we had given us nearly 130 years ago, a method of cure almost identical with what is by some claimed as new to-day."

Tessier (6) about the same time as Schirach, says, that when the larvæ die in their cells it causes an infection in the hive which makes the bees sick. It is then necessary to drive away or sometimes move the bees from the hive, and to take care to fumigate the infected hive if it is going to be used again. It is necessary, in order to avoid the same inconvenience, to take out the parts of the comb that may be moulded by reason of the dampness. Duchet (7), who wrote on bees in 1771, does not mention any disease that can be certified as foul brood, but he describes bee dysentery.

Della Rocca (8), Vicaire-General of Syra, an island in the Levant, relates with much detail the history of an epidemic of foul brood, which caused great destruction in the island during the years 1777 to 1780. Della Rocca describes very minutely the symptoms, destruction and mistakes that were