out effect. "Half a syringeful of a spore-bearing cultivation injected into the dorsal subcutaneous tissue of each of two mice resulted in the death of one of them in 23 hours, while the other seemed unaffected. In the case of the mouse which died, the seat of injection and the neighbouring cellular tissue was found to be very œdematous; but no microscopic changes were apparent in the internal organs. Numerous bacilli were found in the the œdematous liquid, as also a number of spores which had sprouted; and there were likewise a few bacilli in the blood taken from the heart. This was proved by cultivation as well as by microscopic examination. On examining sections of various organs no morbid changes were found, and only a few bacilli were seen in the blood vessels. A syringeful of the same culture was injected into a guinea pig; and the animal died 6 days later, with extensive necrosis of the muscular tissue and skin; and cheesy looking patches were distributed through it, but there was no true pus. On making sections of the necrosed tissue, numerous bacilli, apparently *B. alvei*, were seen; but there were also other bacilli and micrococci. No micro-organisms were seen in the internal organs. It thus remains questionable whether the necrosis was due to *B. alvei* or not, more especially as I have since injected three guinea pigs subcutaneously with spore bearing cultivation, but without effect.

"The effect of feeding flies with material containing spores results in death of the flies, and bacilli were found in its juices as shewn by the microscopic examination and cultivation. Cockroaches were not killed" (28).

Fly blow larvae fed for three days on spores were not killed. With regard to the prevalence of the disease amongst wild bees, very little can be found on this subject in bee literature, but a correspondent of the *British Bee Journal* (43) found the disease among wild bee larvae in a tree, recognising it by the smell from the entrance and also from the appearance of the brood in the combs. The correspondent remarks that this tree had probably in former years been the cause of a great deal of trouble to neighbouring bee keepers. In all probability the disease is present among the various varieties of wild bees and wasps. Knight (54) mentions an epedemic among wasps in 1807; Kirby & Spence (55) another in 1815; and Bevan (13) one in 1824; but in none of these cases was any positive evidence given to show the epidemic was foul brood.

Economic Aspects.

Losses. Della Rocca (loc. cit.) in 1790 stated that the whole of the bees in the Island of Syra were carried away during 1777 to 1780 by the disease. Dzierzon (46) relates his losses from the disease. In 1868 he lost his entire apairy of 500 colonies from it. In Switzerland, the disease, at times, is extremely bad. Bertrand's apiaries have suffered severely, and the German papers make constant reference to its devastation. In England, Cowan (4) thinks that the "only visible hindrance to the rapid expansion of the bee industry is the prevalence of this pestilential disease which is so rapidly spreading over the country as to make bee-keeping a hazardous occupation"; and again, (47) "So rapidly has foul brood spread by contagion that in one season, unless precautions are taken, a whole neighborhood may become seriously infected, and the chances of successful beekeeping seriously imperilled, if not utterly destroyed.

The committee on the Beekeeping Industry and Foul Brood in the United Kingdom, report that the destruction of stock by foul brood and the