

**Further Investigations into the Etiology of the Protozoan Disease of Turkeys, known as Black Head.**—The present investigation was a continuation of the work carried on by the author in 1895. Relatively few studies have been made upon this important disease. THEOBALD SMITH (*Jour. Med. Res.*, 1915, xxxii, 243) had previously pointed out that the pathology of the disease was not especially characteristic. The lesions are almost limited to the ceca and the liver. Occasionally too, the liver lesions may be absent. At times, however, pathological lesions are more disseminated in the intestine. The most striking feature is the filling up of the lumen with a tough leathery mould made up of concentric layers. This material may be firmly attached to the mucosa. The disease attacks both old and young, being most fatal in the first two months. The author demonstrated protozoan parasites which, to some extent, resemble and are confused with coccidia. These parasites appear in the mucosa and submucosa in which a chronic inflammation leads to much thickening. The parasites appear in large numbers lying between the cells of the various layers. The material within the bowel consists of inflammatory exudate. Similar protozoan diseases have been reported in wild and domestic birds. Animal experiments in the transmission of the disease have not been uniformly successful. Infected materials fed to healthy animals do not necessarily lead to infection. The rapid course of the disease and the lesions appear to be due as much to the mechanical disturbances accompanying the invasion and distribution of the organism as to the toxic action of the parasites. The invasion of the liver is through the blood, the parasites being transported either freely or in phagocytes. It is not known whether the parasite requires an intermediate host.

**The Sterility of Bile under Normal Conditions.**—TODA (*Arch. f. klin. Chir.*, 1914, ciii, 407) studied the character of the bile to determine the presence of organisms under normal conditions. He obtained samples of bile from 35 humans and 8 dogs. These were all sterile. He then undertook an investigation to determine the bactericidal properties of the bile. He found that *B. coli* could grow in fresh human bile, but were somewhat inhibited by bile from dogs. Likewise bile forms a good medium for the growth of *B. typhi*, which remained living ten weeks in this material. *B. paratyphosus A* reacts in a manner similar to *B. typhi*, while *B. paratyphosus B* and the dysentery bacillus are inhibited by the presence of bile. The *B. cholera* flourishes well in human bile, while *B. pyocyaneus* is rapidly destroyed. The staphylococci and streptococci are not greatly influenced by the bile in the medium, but pneumococci are rapidly killed off. Another interesting finding was that fresh bile appeared to enhance the virulence of *B. coli*.

**Contribution to the Study of Endemic Goitre.**—Much has been written about the endemic character of goitre. MESSERLI (*Centralbl. f. Bakteriol.*, 1914, lxxv, 3) gave water from different sources to white rats. Some were given water from the supply at Lausanne where endemic goitre is unknown, others were given water from Payerne, where goitre is very common. The latter is a surface water with a high bacterial content. The animals which were given the Lausanne water showed no changes in the thyroid, while those rats receiving water from