

being seen constantly drinking, and oftentimes allowing the water to run again from the mouth. Lameness is very often present, accompanied in many cases by local swellings of the joints or on the skin, especially about the feet and legs. The affection known as "bumble-foot" is often tubercular in origin, and birds so affected should not be kept with other fowls, but killed and burnt. The disease is usually of a protracted nature, ending in paralysis and death.

Tuberculosis is caused by a bacillus or germ, and the parts of the body usually first attacked are the intestines, liver, and spleen, the germs being taken in with food which has been contaminated by contact with the droppings of affected fowls. The bacteria are very numerous in the diseased tissue, much more so than in human or bovine tuberculosis. They leave the body almost entirely through the discharges, and enter with the food almost exclusively. The feeding habits of chickens tend to rapidly spread the disease, and failure to keep pens constantly clean and disinfected increases the chances of infection. Cases have been known of the disease having been conveyed from one yard to another by means of infected manure carried on the shoes. Examination of the body after death reveals small whitish patches, or tubercles, in the liver, spleen, and on the lining of the intestines, but these may be found in other parts of the body also.

PREVENTION AND TREATMENT.

It is almost impossible to treat this disease successfully, and attention should, therefore, be directed to methods of prevention.

Where an outbreak occurs it is safer to clear off the entire stock; then to apply freshly burned lime to the ground and rear fresh stock in new houses on new ground. It is a great mistake to retain for breeding, birds which become sickly, or which, when isolated and carefully treated for a few days, do not respond to treatment. All such birds should be killed and burnt. If it is desired to utilize the buildings in which tuberculous stock has been housed, they should be thoroughly disinfected with some reliable disinfectant, or carbolic acid, and allowed to remain unoccupied for at least six months. In the meantime, several whitewashings should be administered. The losses from the poultry "white plague" would be appreciably reduced if such precautions were adopted.

Where poultry are kept in confinement, overcrowding of the runs should be avoided; a change to fresh ground should be frequently arranged, if possible; and lime should be used as a top dressing for the runs. Cropping with wheat, rye, oats, rape, or kale will also sweeten the land, and at the same time provide green food. Hen-houses should be roomy, dry, bright, well ventilated, and kept scrupulously clean. They should be whitewashed at least once yearly. The disease develops rapidly in an atmosphere of dirt, damp, and darkness. Wet mash should be given in troughs, and should not be thrown on ground likely to be contaminated with the droppings of other fowl, because, as already stated, infection is received with the food.