

sis of the liver. The disease is only found in a district spreading along the northern coast of the peninsula, in a tract of country about forty miles long by from five to twelve miles broad. There apparently it has been noticed for some forty years, now at one end of this area now at another. The disease would seem to be very chronic and not to affect all the cattle on a farm simultaneously, but unless due precautions are taken, in the course of three or four years most of animals upon a farm will, one after the other, be affected. It would seem further that the disease does not spread directly from animal to animal, for there appears to be no special incidence of cases following upon the long winter sojourn of the animals in the byres, which, with rare exceptions, are miserably dark and ill-ventilated, the attempt being to keep these as warm as possible in consequence of the severity of the winter.

One or two cases are on record in which the disease has broken out in a neighborhood after the body of a cow affected with the disease has been washed down by one of the streams and stranded upon the farm lands. The gradual extension from farm to farm, through any given district, seems to be largely brought about by the fact that each farm has at the back of it a belt of woodland into which the cattle roam during the summer. The belts are badly fenced off from each other, and here, if an animal is affected, it attempts to wander off into the woodland and there die in some remote corner. Thus, unless precautions are taken, the carcasses of these animals remain uninterred and appear to act as centres of infection. Under the present Government regulations, notification is given of every suspicious animal, and the Government Inspector, if satisfied that it is a case of the disease, immediately destroys the beast and burns the carcass, or has it buried in quicklime. By this means the number of animals affected is rapidly

being reduced, so that within the last few years the number of cases occurring annually has sunk from 150 to under thirty.

As for the symptoms of the disease, the first symptom which is noticed is that the milk has a somewhat acrid odor upon boiling and acquires a peculiar bitter taste; within a few days the animal becomes dry, it is weak and restless, the coat stares and the limbs are dragged, the bowels loose, the abdomen a little swollen, the eyes are staring, the conjunctivæ subicteroid. The animal becoming weaker and weaker dies apparently in a condition of complete exhaustion. In some few cases death is preceded by a period of intense excitement almost maniacal in character, the animal rushing about charging at obstacles and then falling into a condition of paresis followed rapidly by death.

I killed and made post-mortem examinations upon some thirty animals during two years and found, as Dr. Osler and Dr. Wyatt Johnston previously determined, that the main lesions are an extreme condition of generalized cirrhosis, not only periportal and pericellular, the organ being somewhat enlarged and having a smooth and rarely a finely granular surface. There is evidently an abundant production of thin bile, for with scarce an exception the gall-bladder was found very full and the fæces well stained. The periportal and abdominal lymph glands in general are large and succulent, there is a moderate amount of ascites, the fluid being perfectly clear and limpid, and together with this there is a rather remarkable condition of a gelatinous oedema of the mesenteries and intestinal walls. A further constant lesion is the presence of numerous follicular ulcers in the fourth or true stomach. These, save in the very acute cases, are found in a cicatrized condition, giving strongly the impression that the earliest lesion in the case has been gastric and has been followed by in-