

and not unfrequently in the subcutaneous tissues in various parts of the body, in the meninges of the brain and spinal cord, and in the human subject frequently in the intestinal tract, and in many cases in animals it affects the articulations. The following statistics taken from the Report of the Bureau of Animal Industries, 1892, is interesting as showing the relative frequency of invasion of the different organs in cattle :

Bavaria—Tuberculosis of the lungs and serous membranes, 41 per cent.; tuberculosis of the lungs alone, 33 per cent.; tuberculosis of the serous membranes alone, pearl disease, 17 per cent.; tuberculosis of the other organs, 8 per cent.

Baden—Tuberculosis of lungs alone, 21 per cent.; tuberculosis of serous membranes alone, 28 per cent.; tuberculosis of both combined, 39 per cent.; generalized tuberculosis, 9 per cent.; tubercle of sexual organs alone, 3 per cent.

SEC. III.—*Tuberculosis in Cattle*.—I know of no country where cattle are domesticated in which tuberculosis does not exist. Statistics go clearly to show that it is on the increase.

In Germany, from October, 1888, to October, 1889, out of 1,270,604 animals killed for beef in public abattoirs, 26,352 were tuberculous, about 2 per cent.; in France 5 animals in every 1,000.

In the various cities in France figures obtained from inspection of abattoirs vary from 1.43 to 14.5 per 1,000. In Belgium, 4 per cent.; in Holland, 4 to 19.6 per 1,000; in England, 1 to 26 per cent. according to locality. In Copenhagen during 1888 it was 6 per cent., for cows alone it rose to 16 per cent. In the Argentine Republic it attacked imported stock 10 to 15 per cent. In the United States  $2\frac{1}{2}$  to  $3\frac{1}{2}$  per cent. In Massachusetts this disease has long been prevalent. In 1888 Dr. J. F. Winchester made a report, his investigations covering 34 suspected farms, whereon were 886 cattle; of these 243 or 28 per cent. were killed, and 189, or over 28 per cent. of the remainder suspected. On 15 other farms, with 244 animals, he found 28, or over 11 per cent., tuberculous and 24 suspicious. Of the 213 suspicious in the latter class some were doubtless affected and were sold into other herds where the disease may not have existed before