

that, as an almost invariable rule, the low percentages given are those for herds fed in the open air most of the year, the high death-rates being among dairy cattle confined in sheds." In Dublin, among slaughtered animals, 4.9 per cent.; in Edinburgh, 0.2 per cent of all slaughtered; in Glasgow, 1 in 180; in Germany, 15 to 20 per cent.; according to district; in Paris, abattoirs, 0.6 per cent.; average of all France, 0.5 per cent.; in Berlin, in 1887-88, where inspection is very strict, 249 men being engaged in it, 4,300 out of 130,733 (high average). The disease occurs with severity among fowls, generally in a fatally epidemic form, every bird in the farmyard being swept off.

The disease in all animals may be "local," that is, apparently affecting for a time one particular spot; or it may be "generalised," that is, manifestly affecting various parts of the body. The local variety is more common in man than in animals; in cattle it is the exception. In cattle, the lungs, pleura, and serous membranes and glands are the favorite seats, any and each of the other organs, including the udder being occasionally affected.

The bacilli have been proved to enter the body in the following ways: 1. By inhalation. This has been proved by causing animals to inhale tuberculous matter dried into dust, or a fine spray containing tuberculous juice. 2. By ingestion. Tuberculous material produces the disease when swallowed by animals. 3. By inoculation. Inoculation with tuberculous material nearly invariably causes the disease. It has been supposed to be conveyed directly by (4) heredity.

ON THE REGULATION OF SALE OF THE FLESH.

The Jews have always had a very strict code of inspection, carried out by specially qualified men, and every animal, (cow, sheep or poultry) whose viscera presented any sign of tuberculosis is entirely rejected by them. In the United Kingdom, the general practice appears to be to condemn the animal if the disease is far advanced and the body wasted; if the disease

is local and the body in fair condition, to remove and condemn the diseased viscera, and allow the rest to be sold as sound flesh. But this is not the uniform custom. There is evidence of a regular trade being done in "wasters," "mincers," that is, animals far spent with the disease, which are sold for about 30s. to £3, whose flesh is combined with that of healthy animals for making sausages. There is also evidence of dairy cows being used for their milk as long as they will give a fair quantity, and, when failing, being fattened as far as possible and sent to the butcher. In Germany the flesh is classified into such as may be sold on the butcher's stall, and such as can only be sold at a public stall and by a city employé. In France from a decree dated July 28th, 1888: "The flesh of tuberculous animals shall be excluded from consumption (1) if the lesions are generalised, that is to say, not confined exclusively to the visceral organs and their lymphatic glands; (2) if the lesions, although localised, have invaded the greater part of an organ, or are manifested by an eruption, or the walls of the chest, or of the abdominal cavity."

In Austria, when the tuberculosis is limited to a local process, the flesh of good appearance, and the lymphatic glands of the chest and intestines unaffected, the meat is passed as healthy, the intestines alone being rejected. In Berlin, a very limited tuberculosis is considered as having no noxious influence on health, especially if the animals have been well nourished for a long time. In Edinburgh, Greenock (since 1874), Paisley, and Glasgow, tubercular meat is practically refused in all its degrees. An international veterinary congress at Brussels in 1883 declared by a majority of one for complete seizure in every case. The Congress for the Study of Tuberculosis in Man and Animal in 1889, at Paris, voted with only three dissentients, for complete seizure. The test case in Glasgow in May, 1889, resulted in a verdict for destruction of both animals, although probably both, certainly one, would have been passed elsewhere.