

1899.

NEW ZEALAND.

## TUBERCULOSIS.

REPORT OF ROYAL COMMISSION, DATED 4TH APRIL, 1898, PRESENTED TO THE IMPERIAL PARLIAMENT.

*(From the Politicians' Handbook.)**Presented to both Houses of the General Assembly by Leave.*

THIS Commission was appointed to inquire "what administrative procedures are available and would be desirable for controlling the danger to man through the use as food of the meat and milk of tuberculous animals; and what are the considerations which should govern the action of the responsible authorities in condemning for the purpose of food supplies, animals, carcasses, or meat exhibiting any stage of tuberculosis." They say that nothing has come before them to raise any doubt as to the accuracy of the opinion of the Royal Commission of 1895, that tubercular disease in bovine and other animals is identical with that in the human subject, and that it is communicable from one to the other; and also of opinion that "any person who takes tuberculous matter into the body as food incurs risk of acquiring tuberculous disease." At the same time they think there has been a tendency to exaggerate the extent of the risk arising from meat. Discussing the extent to which the herds of the United Kingdom have become infected with tuberculosis they say: "Overwhelming evidence proved the greater prevalence of tuberculosis among dairy stock than among bullocks or heifers, owing, no doubt, to the close confinement of cows during a great part of the year, sometimes throughout the year, to their greater average age, and to the severe drain on them caused by milking. It is a common practice with cowkeepers to maintain a high temperature in the byres, which is rarely found associated with efficient ventilation. One very serious feature in the distribution of this disease is its prevalence among high-class pedigree stock. This does not appear to arise from any greater predisposition to the disease among highly-bred animals, but partly because that, owing to the high value of certain strains, cows are retained for breeding purposes much longer than would be the case in ordinary stock, and partly because, when young, they are commonly subjected to more artificial treatment than less valuable stock. The result of Sir Thomas Gibson Carmichael's experiments upon pedigree stock, and of those conducted over a period of five years in Denmark under superintendence of Professor Bang, shows how much can be done towards eliminating the disease from any herd kept under good sanitary conditions, by isolating such animals as react to the tuberculin test. Several witnesses (both veterinary surgeons and others) expressed the opinion that some breeds of cattle, such as Shorthorns, Jerseys, and Ayrshires, are more susceptible of tuberculosis than others, such as the Welsh breeds, Herefords, and Highland cattle. No doubt they were speaking accurately from the result of their observations, but a careful comparison of the facts collected during our inquiry, over a very wide and varied field, has convinced us that the chief element in immunity from tuberculosis is to be found in the conditions under which cattle are reared and kept. Shorthorns, Jerseys, and Ayrshires are the principal dairy breeds in this country; dairy cows, as a rule, are kept more in houses than is the case with cattle meant for slaughter; such houses are often ill-ventilated, ill-lighted, ill-drained, and ill-cleaned. It is not surprising, therefore, if tuberculosis prevails to a very large extent among that class of stock." The disease is almost unknown among cows kept in the open air. Examining the legislation and practice for the inspection of meat, they point out that "there is a total absence of uniformity in the special qualifications required of the persons employed as meat inspectors by the sanitary authorities in different places, as may be seen by a return presented to the House of Commons in 1896, showing the previous vocations of those acting in that capacity. In Battersea, for instance, four plumbers and three carpenters discharge the office of meat inspector; in Hackney the duties have been committed to two plumbers, one carpenter, one compositor, one bricklayer, one florist, one builder, one surveyor, and one stonemason. In Portsmouth a solitary butcher has received as colleagues three school teachers, one medical dispenser, one carpenter, and one tram-conductor." As to the amount and distribution of tubercular disease which justifies the seizure and condemnation of a carcass as unfit for human food, the widest discrepancy prevails in opinion and practice. "Chaos is the only word to express the absence of system in the inspection and seizure of tuberculous meat, and it has, in our opinion, become necessary that regulations should be formulated for the guidance of those who are concerned in dealing with this subject. In Belfast the presence of tuberculosis in any degree is

held to be ground for seizure; on the other hand, in Islington the veterinary inspector of the Corporation of the City of London only seizes those carcasses wherein tuberculosis is generalised and the meat in poor condition. In Dublin the medical officer of health used to seize on the slightest evidence of tuberculosis, but he has recently modified his views, and only seizes carcasses which are somewhat extensively affected. In Sheffield seizure is made of a carcass showing the slightest trace of tuberculosis; in Manchester, in cases where the disease is localised, the affected part is removed and destroyed, the remainder is passed. Numerous instances of similar discrepancy will be found in the evidence; the above, taken almost at random, may be sufficient to illustrate the present condition of inspection applied to tuberculous carcasses." They believe that such a stage of experience and knowledge has been attained as to the nature of tuberculosis and the effect of tuberculous meat upon the human consumer as to enable a uniform standard to be prescribed for the guidance of meat inspectors. As regards slaughterhouses, they say that the use of public slaughterhouses in populous places, to the exclusion of all private ones, "is a necessary preliminary to a uniform and equitable system of meat inspection." They cannot, on the merits of the case, recommend compensation to butchers for carcasses seized by the local authorities or their officers on account of tuberculosis. Dealing with the question of milk-supply, they say: "Whatever degree of danger may be incurred by the consumption of the flesh of tuberculous animals (and we have already stated our belief that the tendency in this country has been rather to exaggerate this than to underrate it), there can be little doubt that the corresponding danger in respect of milk-supply is a far greater one." On this point the opinion of the previous Royal Commission on Tuberculosis was emphatic—"No doubt the largest part of the tuberculosis which man obtains through his food is by means of milk containing tuberculous matter." In Great Britain and Ireland meat, as a rule, is cooked before it is eaten to an extent which goes largely to destroy infective matter. Milk, on the other hand, is largely consumed in a raw state, especially by children, and there exists a general distaste for cooked milk as a beverage. Amongst most continental nations the practice is to some extent the opposite of this, and large quantities of meat, especially in the various forms of sausages, are consumed absolutely raw, while the greater proportion of the milk is cooked before consumption. It has been proved over and over again that milk from tuberculous udders, and even milk which has been purposely contaminated with tuberculous matter, can be rendered perfectly harmless by being boiled for one minute—a method of sterilisation which we agree with the former Commission in preferring for general application to any of the other plans which have been employed. We have already explained how unsatisfactory is the system of meat inspection in this country; but as regards milk, in relation to tuberculosis, inspection is still more so; indeed, it may be said not to exist. Even local authorities, who exert themselves to prevent the sale of tuberculous meat, are without sufficient powers to prevent the sale within their districts of milk drawn from diseased cows. It is true that in this respect the City of Glasgow possesses exceptional powers. Nevertheless, during the visit of your Majesty's Commissioners to that city they were shown in the public slaughterhouse the carcass of a well-nourished cow which had been seized for generalised tuberculosis. She had been yielding milk to the day of her slaughter, as shown by the milk flowing freely from her udder, and might have continued to do so had not her owner sold her to the butcher. It has been proved to our satisfaction from the returns of the medical officers of health and meat inspectors, that tuberculosis prevails to a larger extent among dairy stock than in any other class of animal. Considerable difference of opinion exists among experts as to the extent to which a cow may be affected with tuberculosis without rendering her milk dangerous. It was not proved to our satisfaction that tubercle bacilli had ever been detected in milk, unless drawn from a cow with tuberculosis of the mammary gland. In that case the disease generally, but not always, manifests itself by external signs, and the udder is suspected to be tuberculous. It is obvious, we think, that milk drawn from such a source ought to render him who exposes it for sale liable to heavy penalties. But there is no power at present to prevent such milk being sold. Professor McFadyean told us that, in a sample of milk from a diseased udder submitted to him for diagnosis, he had no difficulty in detecting tubercle bacilli, yet the milk from that cow continued to be sent in for sale in a neighbouring city. Unfortunately, tuberculosis of the udder can rarely be differentiated from other forms of udder-disease by the ordinary stock-owner or dairyman, and hence all udder-diseases should be forthwith notified to the local authority." They do not advise the claim for compensation should be entertained, except under special and defined circumstances (when the cow has been slaughtered and found to be free from the disease), and they advocate prohibition in populous places of cowsheds not at present registered. They add: "We desire to say that we have received the impression that public opinion is prepared to indorse measures taken to secure an uncontaminated milk supply. We have examined the establishments of two of the leading dairy firms supplying the metropolis, and have noted with satisfaction a number of systematic precautions taken in them against disease in the cows whence the milk is drawn, and against the presence of impurity in milk supplied to their customers. There is also a growing tendency among the wealthier class of customers to purchase their milk from dairymen who can give some assurance as to the adoption of such precautions. But much remains to be done to protect the poorer classes in populous districts, who cannot afford to pay a higher price for a guaranteed article, and perhaps have not the degree of knowledge necessary to warn them against milk coming from dubious sources." The recommendations of the Commission are as follows: "*A. Slaughter-houses.*—1. We recommend that in all towns and municipal boroughs in England and Wales, and in Ireland, powers be conferred on the authorities similar to those conferred on Scottish corporations and municipalities by 'The Burgh Police (Scotland) Act, 1892,' viz.: (a.) When the local authority in any town or urban district in England and Wales and Ireland have provided a public slaughterhouse, power be conferred on them to declare that no other place within the town or borough shall be used for slaughtering, except that a period of *three* years be allowed to the owners of existing registered private slaughterhouses to apply their premises to

other purposes. The term of *three* years to date, in those places where adequate public slaughterhouses already exist, from the public announcement by the local authority that the use of such public slaughterhouse is obligatory, or, in those places where public slaughterhouses have not been erected, from the public announcement by the local authority that tenders for their erection have been accepted. (b.) That local authorities be empowered to require all meat slaughtered elsewhere than in a public slaughterhouse, and brought into the district for sale, to be taken to a place or places where such meat may be inspected; and that local authorities be empowered to make a charge to cover the reasonable expenses attendant on such inspection. (c.) That when a public slaughterhouse has been established inspectors shall be engaged to inspect all animals immediately after slaughter, and stamp the joints of all carcasses passed as sound. 2. It appears desirable that in London the provision of public in substitution for private slaughterhouses should be considered in respect to the needs of London as a whole, and in determining their positions regard must be had for the convenient conveyance of animals by railways from the markets beyond the limits of London, as well as from the Islington market, to the public slaughterhouses which should be provided. At the present time no administrative authority has statutory power authorizing it to provide public slaughterhouses other than for the slaughter of foreign cattle at the port of debarkation. 3. With regard to slaughterhouses in rural districts, the case is not so easy to deal with. But the difficulty is one that must be faced, otherwise there will be a dangerous tendency to send unwholesome animals to be slaughtered and sold in small villages where they will escape inspection. We recommend, therefore, that in Great Britain the inspection of meat in rural districts be administered by County Councils. In Ireland the duty of carrying out inspection ought to devolve upon authorities corresponding as nearly as possible to those charged with that duty in England and Scotland. In view of the announced intention of the Government to introduce a new scheme of local government into Ireland we refrain from specifying the exact machinery which should be employed. 4. We recommend further that it shall not be lawful to offer for sale the meat of any animal which has not been killed in a duly licensed slaughterhouse. *B. Qualifications of Meat Inspectors.*—5. We recommend that in future no person be permitted to act as a meat inspector until he has passed a qualifying examination, before such authority as may be prescribed by the Local Government Board (or Board of Agriculture), on the following subjects:—(a.) The law of meat inspection, and such by-laws, regulations, &c., as may be in force at the time he presents himself for examination. (b.) The names and situations of the organs of the body. (c.) Signs of health and disease in animals destined for food, both when alive and after slaughter, (d.) The appearance and character of fresh meat, organs, fat, and blood, and the conditions rendering them, or preparations from them, fit or unfit for human food. *C. Tuberculosis in Animals Intended for Food.*—6. We recommend that the Local Government Board be empowered to issue instructions from time to time for the guidance of meat inspectors, describing the degree of tubercular disease which, in the opinion of the Board, should cause a carcass, or part thereof, to be seized. . . . In view of the greater tendency to generalisation of tuberculosis in the pig, we consider that the presence of tubercular deposit in any degree should involve the seizure of the whole carcass and of the organs. In respect of foreign dead meat, seizure shall ensue in every case where the pleura have been 'stripped.' *MILK.—D. Diseases in the Udders of Cows.*—7. We recommend that notification of every disease in the udder shall be made compulsory, under penalty, on the owners of all cows; whether in private dairies, or those of which the milk is offered for sale. 8. We recommend that for the purpose of excluding from their districts the milk affected with tuberculosis of the udder, or exhibiting clinical symptoms of the disease, local authorities should be given powers somewhat similar to those of sections 24–27 of the Glasgow Police (Amendment) Act, with power to slaughter such cows, subject to compensation under the conditions named in the Report. 9. We also recommend that powers shall be given to local authorities to take samples and make analyses from time to time of the milk produced or sold in their districts, and that milk-vendors shall be required to supply sufficient information as to the sources from which their milk is derived. At ports where milk and milk products are received from foreign countries, any costs that may be thus incurred in their examination shall be borne by the importers. *E. Cowsheds, Byres, &c.*—10. We recommend that the Local Government Board be empowered to require local authorities to adopt regulations as to dairies, cowsheds, &c., where that shall be found not to have been done already. 11. That in future no cowshed, byre, or shippin, other than those already registered, shall be permitted or registered in urban districts within 100 ft. of any dwelling-house; and that the discontinuance of any one already existing shall be ordered on the certificate, either of the medical officer of health that it is injurious to the health of human beings residing near it, or of the veterinary inspector that it is not a place wherein cows ought to be kept for the purpose of milk-supply, and that it is incapable of being made so. 12. That the conditions of the attached cowsheds that shall warrant the registering of a dairy in a populous place, whether technically urban or rural, in the future shall include the following:—(1) An impervious floor; (2) a sufficient water-supply for flushing; (3) proper drainage; (4) a depot for the manure at a sufficient distance from the byres; (5) a minimum cubic contents as regards such districts of from 600 ft. to 800 ft. for each adult beast, varying according to the average weight of the animals; (6) a minimum floor-space of 50 ft. to each adult beast; (7) sufficient light and ventilation. While we have prescribed a minimum cubic contents and floor-space without mentioning definite dimensions affecting ventilation and lighting, we are distinctly of opinion that these are by far the most important, and that requirements as to cubic and floor space are mainly of value as tending to facilitate adequate movement of air. Existing cowsheds should be obliged to conform to the prescribed regulations within a period of twelve months from the time of the regulations coming into force. 13. The same conditions as those recommended for populous places should apply to cowsheds in sparsely-populated places, except in so far as cubic contents per cow are concerned; as regards these cubic contents, such space per cow should be provided as

would, in view of the surrounding circumstances, secure reasonable ventilation without draught. But the physical circumstances prevailing in different localities being so various, we do not find it practicable to prescribe uniform minimum requirements in this respect. 14. We recommend that where cows housed in one district supply milk to another district, the local authority of the district in which the cows are housed shall be bound, when required, to supply to the local authority of the district in which the milk is sold or consumed full information and veterinary reports regarding the condition of the cows, byres, &c., whence the milk is drawn. Where the local authority of one district are dissatisfied with the reports so obtained, they may apply to the Local Government Board, with a view to an independent inspection and report being made. *F. Elimination of Bovine Tuberculosis.*—15. We recommend that funds be placed at the disposal of the Board of Agriculture in England and Scotland, and of the Veterinary Department of the Privy Council in Ireland, for the preparation of commercial tuberculin, and that stockowners be encouraged to test their animals by the offer of a gratuitous supply of tuberculin and the gratuitous services of a veterinary surgeon on certain conditions. These conditions shall be—(a) That the test be applied by a veterinary surgeon; (b) that tuberculin be supplied only to such owners as will undertake to isolate reacting animals from healthy ones; (c) that the stock to be tested shall be kept under satisfactory sanitary conditions, and more especially that sufficient air-space, ventilation, and light be provided in the buildings occupied by the animals. 16. We recommend that the Board of Agriculture in England and Scotland and the Veterinary Department of the Privy Council in Ireland undertake the circulation among agricultural societies of instructions for the proper use of the tuberculin test, with explanation of the significance of reaction, and directions for effective isolation of reacting animals." Three of the Commissioners—Sir Herbert Maxwell (Chairman), Mr. Harcourt Clare, and Mr. Cook-Trench—dissociate themselves from the finding in respect to the claim for compensation by butchers for carcasses seized and condemned for tuberculosis. In a separate report they state their reasons, and make the subjoined recommendations: "We recommend that the owner of a carcass confiscated and destroyed, wholly or in part, by order of a Magistrate on account of tuberculosis shall receive full compensation and repayment of the amount paid by him for the animal, provided—(a) That the Magistrate ordering confiscation shall satisfy himself that the animal had a good appearance before slaughter, was well nourished, and exhibited no visible signs of tuberculosis; (b) that no compensation be paid for any animal for which there has been paid less than a minimum price, to be fixed from time to time by the Board of Agriculture, according to the market values current, nor in excess of a maximum price to be fixed in the same manner; (c) that no sum shall be paid in compensation except on the order of the Magistrate ordering the confiscation of the carcass; (d) that all compensation so ordered shall be charged against and paid by the Council of the administrative county, which shall be entitled to repayment of one-half the amount from Imperial funds."

*Approximate Cost of Paper.*—Preparation, not given; printing (1,375 copies), £2 9s. 6d.

By Authority: JOHN MACKAY, Government Printer, Wellington.—1899.

Price 3d.]