and they slaughtered in the case of pleuro-pneumonia all the animals that had been in contact with them for the previous six months. But it is different with tuberculosis—you can, of course, test the animals, yet you cannot test all of them—you can only test the cows and bulls: you cannot test the bullocks running wild, which might be as liable to spread the disease as any others. That is where the difficulty of stamping out this particular disease comes in. In Massachusetts they attempted to stamp it out by killing all infected animals, but somehow found that it did not work out, and they gave it up. Whether it was the fault of administration or not I cannot say.

49. But you can imagine the germs so abundant in various situations that constant fresh infection may take place?—Not after a short time, except in the sheds. It has been proved experimentally that the tubercle germ dies after exposure for three hours to direct sunlight. The reason of some germs being kept alive is because the expectoration of the animal or individual, being of a slimy nature, dries on the surface, and some protection is given to the germs underneath from the direct action of the sun's rays. Once the germs are dry also, they resist destruction for a much longer period than when wet. But under ordinary circumstances I think the danger would be, after a week or so, absolutely nil.

50. Am I right in gathering your opinion to be that experience so far would give little hope of eradicating this disease, no matter what may be done?—Yes; but the most favourable course to adopt is to destroy animals that are badly diseased, and to isolate the others where it can be done. The difficulty in the country in the way of isolation is that the value of an animal is so small that an owner will not take the trouble to isolate.

51. Have you found many cases of actinomycosis in the colony?—Not so many lately as we used to find; they are getting fewer every year, because they are more easily recognised.

52. Is there any danger to human health in using meat so affected for food?—No; very little, at all events.

53. You would place it in a different category altogether from tuberculosis?—I would.

54. Is there any difficulty in distinguishing between the two diseases?—Yes, frequently there is. They are both contagious. It is really for practical purposes not worth while to distinguish.

55. A Royal Commission was appointed in Victoria in 1885, and issued a very voluminous report. Have you had an opportunity of looking through it?—No, I have not seen it.

56. One of the points that struck me most was the statement that in the case of a cow suffering from tuberculosis breeding a heifer calf—that that calf almost invariably took the disease after having its first calf, the conclusion being that the lowering of the vital forces through having a calf left the heifer a prey to the germs of the disease?—I am afraid that idea is not borne out by scientific experiment. I have seen nothing that would support it. Provided that you have the animals kept away from all contagion, they will not take it at all.

57. Supposing the case of two animals, one in high condition, the other in low condition, subjected to the same amount of infection, would not the animal in low condition be more likely to become diseased?—It would. From that point of view it is quite feasible. There is no doubt the animal in poor condition is less able to withstand the infection.

58. So that, with regard to this, as with regard to other diseases, it is very much a matter of condition and feeding?—Well, not absolutely; but one often finds that half-starved animals are more liable.

59. When you were at Home, did it come under your notice that disease among stock had decreased in amount where rigid inspection had been carried out for a considerable time?—They had not had rigid inspection at all until recently—only for the last year or two. The only inspection hitherto had been as to fitness for human food; and everywhere on the Continent of Europe during the last ten years they found that tuberculosis had increased. That is why they are so anxious about it to-day.

60. In the freezing-works a considerable percentage of the sheep are found to have adhesions in the lungs, liver, &c.: has that come under your notice?—Yes, I have seen it; but only in the chronic state—not in the acute stage. The condition is the result of a slight attack of pleurisy or other inflammation, which becomes organized, leading to adhesions. I am inclined to think that the practice of clipping young lambs which obtains here has something to do with it. I have heard no complaints about it in the South Island.

61. Why would it be the effect of early shearing?—Because it renders the lambs liable to catch cold.

62. The general opinion among experts here is that these adhesions are the result of lungworm and infection of the lungs in winter-time with pneumonia?—Yes, it may be; but not as the result of lungworm itself. The lungworm never gets to the pleura—it stays in the bronchial tubes.

63. It is the practice of the freezing companies to reject these. Would you consider them in any way dangerous as food?—Certainly not. I think that at the present time the freezing companies reject too much under the term "diseased." I remember in one of the freezing-works in the South Island seeing an animal cut up, and asked what was the matter with it. The grader showed me a small tumour about the size of a marble. I said that I would examine it, as I did not think there was much wrong with it, but that it seemed to me to be a small abscess which had formed in the groin after the operation of castration. It turned out on microscopical examination as I thought. Here was an animal cut up as useless which was quite fit for human food.

64. *Mr. Mills.*] Which disease do you consider more prevalent in the colony—tuberculosis or cancer?—Tuberculosis, without a doubt.

65. Do you think it attacks either sex more than the other?—No; I have not found it so. Of course, at present we have no opportunity of knowing exactly to what extent it attacks bullocks. We cannot examine them so readily; and also, they do not live so long. They are killed sooner than cows; but I think that under the same conditions we should get the same results.