22. You could not suggest any method of reducing the huge bulk of 30 tons, or 20 tons, or whatever it might be, that would be requisite to produce the same effect as, say, 4 cwt. or 5 cwt. of concentrated manure? You could not suggest any method by which that difficulty could be got over?—No, no more than you can concentrate stable manure. There might be a combination. You might possibly put it into a hydraulic press and squeeze the pulp so as to get an almost dry product, and then the effluent would be liquid, and you could let that flow away to a septic tank and get rid of it in that way, without its going into the river at all.

23. Are you not aware that the scanty application made by farmers generally of stable or other manure of a similar character is because of the heavy cost of labour, and that it does not pay to shift these bulky manures?—I think it is due more to the difficulty of getting the bulky

manures.

24. Are you not aware that on farm after farm you will see the ordinary stable and other manures that are carefully looked after in the Old Country comparatively neglected here, and from the cause I have stated—the cost of applying them?—I take that to be more from ignorance

of the beneficial results that would follow from applying them.

- 25. Could you suggest any means by which it could be conclusively tested what the result is of stagnant flax-water fermenting and producing poisons injurious to the health of stock and human beings?—You wish to find out what takes place when the effluent from the mills is allowed to remain in water and to ferment: that could be worked out. Such a research would be expensive, and it would take a long time. It would require considerable thought to work out different methods.
  - 26. You have no data available of any experiments that would be of information to us?—No.

27. It has been suggested to us that poisons similar in character to ptomaines are produced in the process of fermentation?—That is quite possible, but ptomaines are usually the product

of decomposition of animal matter.

- 28. The dairy factories are supposed to be in danger of having an injunction taken out against them because of the foul drainage from these factories. The washings of milk-cans and so forth containing milk and other solids go into the drains and cause a nuisance. Could you help the Committee by suggesting any plan by which the application of chemicals would reduce this fat to something innocuous?—Surely the amount of milk-fat going into a river is very small. The curd and the milk-sugar could be got rid of by a small septic tank.
- 29. We have it in evidence that septic tanks have been tried under several sets of circumstances, supervised by the Health Department, and that these septic tanks failed to act?—That is the only remedy that I can suggest.

## W. H. Field, Barrister and Solicitor, Wellington, examined. (No. 38.)

1. The Chairman.] Do you wish to make a statement?—Yes, sir. I own a farm property at Waikanae of about 2,000 acres. It is out near the beach, and has about two miles and a half of sea frontage. The main water-supply of my farm consists of a stream running from one end to the other, and finally emptying out into the sea on my property. I should think it intersects my property for something like three miles and a half, and in two places it widens out into lakes. This stream originally is a mountain-stream of pure water coming from the hills. Just after it reaches the flat a flax-mill has been built upon it, close to the bank, and it is the effect of the refuse from that flax-mill on the water of which we complain. I am a grower of flax. I not only preserve it, but I actually plant it, because as long as I can get 7s. 6d. a ton for it, it is more profitable for me to grow it than to fatten stock; and as I have been accustomed to get something like 7s. 6d. for it, I have been in the habit of growing flax. I also breed dairy stock, and I am in addition the largest owner in a sawmill; so I cannot be said to be "up against" any of the industries dealt with by this Bill—in fact, it is particularly to my interest that the flax industry should be encouraged and should flourish in my district. I have had for a number of years past to put up with the effluent from this particular mill running through the stream; and as questions were asked yesterday of farmers who also farm land on this particular stream as to whether any protest had been made, I have in the meantime had copies made of letters appearing in my letter-book that have from time to time been addressed by myself to the flax-miller, and with the consent of the Committee I will read one or two of those letters. On the 20th March, 1910, I wrote to the flax-miller: "For weeks past Watson"—that is my farm-manager—"has been vainly endeavouring to get you to abate the serious nuisance caused by allowing your flax-refuse to drain into Mile Drain and then into Diagonal Drain and the Ngarara Stream. I pointed out to you the results to me when you allowed the same nuisance some years ago, and I am much surprised at your repeating it, to say nothing of your continuing it week after week with a full knowledge of the injury you were doing me. If you do not put an end to the annoyance at once you will compel me most reluctantly to take action against you." On the 7th November, 1910, I wrote: "Be assured that you do not let any more of that vile flax-refuse get into the drains. It is a serious matter, polluting as it does practically the whole of my water-supply system. Looking at the mill from the train the other day it looked to me that your precautions at that time were not nearly sufficient." Then, a few days later, on the 10th November, 1910: "I was very much relieved to have your assurance that the steps taken by you to prevent pollution of watercourses were proving so effective. You will, I am sure, understand my anxiety in the matter." Then, on the 5th December, 1910, I wrote: "A fortnight or so ago Watson told me that he thought there was still some flax-refuse coming down the drain, and from the appearance of the water it seemed to be so. Possibly it was the balance of an earlier accumulation. I just write to remind you to watch it very carefully, as it is, of course, in the summer months that the great damage can be done." Then on the 8th December, 1910: "I have to thank you for your letter of yesterday enclosing cheque for £31 13s, 9d, for 84½ tons of green