

4. Admittedly the practice of the Maoris was to boil the root and use it as we might use salts?—But this water was from the flax itself, not the root. As I say, flax has certain tonic properties, but they would be very slight in diluted water.

5. You came to your conclusion from the analysis you made, did you?—Only as to the amount of organic matter in this water.

6. Not as to any medicinal effect?—No; it would be impossible to do that from the water.

7. *Mr. Buick.*] We had it stated that you had given evidence in the case in Palmerston that the water below the last mill was absolutely unfit for consumption—

*Mr. Baldwin:* Unsuitable for human use, I said.

*Witness:* Yes. The oxygen absorbed in that water was 0·71. In the first it was 0·24—nearly three times as much. I had water from Marton the other day giving nearly 0·5 oxygen absorbed. That is not a good water, but still it is used. The Karori Reservoir here gave 0·34, but that was some time ago, when the water was rather bad. One could not say that that water (below the last mill) would actually do harm to stock; there is not sufficient organic matter in it.

8. *Mr. Sykes.*] What effect would this flax effluent have on fish?—If there was sufficient of it it would no doubt kill fish, because of removing the oxygen, and not, I take it, from any poisonous principle in the flax itself. If there is a very large amount of decaying organic matter in water it removes the oxygen, and consequently the fish cannot live. The amount of organic matter shown in these analyses would not be nearly enough to kill fish.

9. It would have to be very strongly impregnated with this discoloured matter before it would be injurious to fish?—Yes, I think so.

10. *Mr. Forbes.*] Did you take these samples yourself?—No, they were sent to me.

11. You do not know what the state of the river was when they were taken?—No.

12. *The Chairman.*] Did you have any information as to who sent them?—They were sent by the defence—by the flax-millers.

*Mr. Baldwin:* They were taken by the flax-millers and sent by the flax-millers.

13. *Mr. Forbes.*] The quantity of water flowing would make a tremendous difference to the quality?—Yes.

*Mr. Baldwin:* Evidence was given by Mr. Armstrong, the engineer, that the river was very high that day. He was present with Mr. Broad when they took the samples.

14. *Mr. Nathan.*] Have you had any connection at all with the sewage from creameries, butter-factories, or cheese-factories?—I had some experience some years ago of the effluents.

15. If the factories put in grease-sumps of sufficient capacity and then run the effluent through coke filters, the resultant fluid would be fairly clean, would it not?—Yes, I should think so.

16. There should be nothing harmful in it for stock?—No, unless you were running it into a very small stream. It depends on the volume of the stream.

17. It naturally depends, too, on the size of the filter: I mean, if we have these things of a reasonable size?—Yes.

18. You have always found, I take it, that the factories are quite willing to work with the Department to carry out any suggested improvements?—I have had no experience on that side of the question.

19. *Mr. Baldwin.*] I will read you, to see if they correctly report what you said, the Judge's notes in this case: "The ferments set up when that water is decomposing"—that is, water containing organic matter—"are harmful to a human subject. If water like No. 5 were decomposing"—that was the water taken below the mill—"it would not be a safe water to use for cleaning dairy utensils"?—None of that river-water up there is.

20. Do you confirm the evidence that you gave?—Yes.

21. "The smell would not do milk any harm." Do you still say that?—Yes.

22. "It would probably turn it if it were sufficiently bad, but would not make it injurious"?—Yes—that is, from pure organic matter.

23. "Milk absorbs a certain amount of taint from decomposition. If some of the germs got into milk it would set up decomposition. I have never heard of the milk of cows drinking water tainted by decomposition of vegetable matter taking on the taint before it left the cow. The water does not directly go into the milk inside a cow. There is a considerable difference of purity between 0·24 and 0·71 water, so far as human consumption is concerned. It"—the 0·71 water—"would be unsuitable water for human use"?—Yes.

24. *Mr. Sykes.*] In reference to sample No. 1, in your opinion, would this water be suitable water to wash milk-cans in?—No, certainly not.

25. *Mr. Forbes.*] You say in the evidence there that the quality of the water a milking-cow has to drink does not affect the quality of the milk supplied: is that what you say?—I said I had no evidence that it did.

26. I thought it went without saying that one of the first requirements for a dairy herd was good water?—Of course, it is an advantage.

27. But it would not affect the quality of the milk if they did not have it?—I should not think so.

28. *The Chairman.*] Seeing that the milk of cows fed on turnips and mangels is well known to be affected as to its flavour, would any such result as that arise from a cow having to drink this tainted water, no other water being available for the cow?—I do not think it necessarily would. Take ensilage, for instance. That is in a sense tainted. It does not affect the milk. There may be some specific taste in flax which may be carried through to the milk. I cannot say.

29. I suppose the truth is that turnips and flax have a subtle flavour that fails to be arrested in passing through the cow?—I assume that that must be so.

30. *Mr. Nathan.*] In your experience do mangels taint the milk?—I cannot say.