10. *The Chairman.*] Is there any difficulty in the mechanical transmission of the sawdust out of the road of the sawmiller, without putting it in any stream at all?—That can be done, but there is no greater danger to a sawmill than sawdust, if it is stacked and gets alight. Every sawmiller has not an open paddock in which to burn it, and the great danger to most bush sawmills is fire. When the sawdust is put into the creek that danger of fire is overcome.

11. Do you know that stock strongly object to drinking sawdust water, especially if it is matai and other timbers strongly impregnated with acid?—That is so.

12. *Mr. Baldwin.*] You heard the clauses I read out to Mr. Nathan: are they satisfactory to you?—Yes, I think so.

THURSDAY, 10TH OCTOBER, 1912.

J. M. MASON examined. (No. 17.)

1. *Mr. Buick.*] What is your opinion about the flax-milling and the dairying industries: do you consider that the effluent they are putting into the rivers is doing any particular harm?—I think so, if the untreated effluent is put directly into any stream.

2. *Mr. Bollard.*] Do you know of any cases where human beings have suffered through drinking the water?—I may save time perhaps by saying that it is quite impossible for any one to contract typhoid from drinking water into which the refuse from a flax-mill has gone. You can no more produce typhoid organisms from flax than you can produce sheep from a paddock. At the same time, it is a well-known fact that cattle have suffered from drinking water into which the refuse from a flax-mill has been put—that is to say, if they have the courage to drink it, which they very often have not.

3. How do you account for their being fond of it, then?—They are not all fond of it. I have seen it produce diarrhœa, both in the human and the lower animal, if there is much of it drunk. But I would take my stand generally on the contention that where some treatment of the by-product can be effected that should always be insisted upon. No trade refuse should be allowed to go straight into a river if it be possible to treat it in any way at all.

4. *The Chairman.*] Will you first recite instances of injury, and prove that the injury arose from drinking flax-water, and then we can talk of the remedy?—But there is no doubt at all; you do not want an actual instance. In the case of the human animal you have only got to drink it. You will find it is loaded with vegetable matter and will produce diarrhœa. As a matter of fact, the old Maoris used flax-root as a laxative.

5. Did they subject it to any preparation by boiling the roots?—They burnt the root, very much the same as they do rhubarb-root now. They made a decoction of it, in many instances.

6. Are you able to tell the Committee that drinking the water running away from a mill in the usual way would have the same effect as the burnt root?—It would depend on the degree of dilution. If there was any considerable quantity it would produce diarrhœa. It produces it in animals and human beings.

7. Have you known of any case of illness on the part of human beings?—I have known cases of diarrhœa occurring in consequence of drinking water that has been polluted with the juice from flax.

8. Have you known of injury to the health of stock?—I have had reports put before me on that matter by men who were in a position to make reliable statements, and they assured me that the stock did suffer from diarrhœa. *A priori*, it is quite evident that if the human animal can be purged with it the other animal can too.

9. Have you known or heard of any death among stock through drinking this water?—No.

10. Have you any suggestion to make as to avoidance of this trouble?—Yes. I think that wherever possible the refuse from the flax-mill should be put upon land and the land subirrigated. The effluent should be allowed to leach through the land, which would practically act as a filter. The effluent would then get back into the river, and would be incapable of doing harm to any animal. By the way, does the word "animal" include "fish" in this Bill?

Mr. Baldwin: I should say it does not.

Witness: That would be the general interpretation, would it not?

11. *The Chairman.*] Do you know the Oroua River?—Yes; I have been up and down its banks several times.

12. Have you any idea of the general conditions—that is, the quantity of water, and the power of that volume of water to take away any quantity of flax-refuse that might be put into it?—I think a considerable amount of data was collected before the Feilding drainage scheme was started. You will probably find it in the old Health departmental files, because the question arose then of the effluent from the septic tank going into the river. I know that calculations were made.

13. Evidence was given by a witness here that in the case of his flax-mill the washing-water from the stripper went along a trough a few feet in length, which had at the end of it two wire traps, one of a larger mesh and another of a smaller mesh, through which the water had to pass, and these were for the purpose of arresting the flax fibre and pulp carried by the water. From this grating the water passed direct into the Oroua River. Knowing the Oroua River, would you think that such a method would be sufficient to prevent pollution of the river to such an extent as would injure the water for drinking purposes by human beings or stock?—The whole thing would turn on the question of proportion. If you allow one to do that, you have only got to multiply the number of instances, and you get a concentrated effluent. As a general rule, I should say that every effluent should be treated more exhaustively than that. That is a wise and a good thing; but if that effluent was made to travel over a bit of ground, by the time it got a few chains it would be almost innocuous.