

think, in spite of what was said. At a mill like Smith and Seifert's, on the Oroua River, it will pay to take the tow out on the trucks. But there is a tow "waste" at every mill, which comes from the scutching, and it is unfortunately a practice at a great number of mills to allow that to accumulate in large heaps on the river-bank, until it assumes somewhat large dimensions; and if it is not toppled into the river in the meantime, at any rate the first flood that comes along usually takes it there. And that is a very bad cause of pollution. One may see it, on the Manawatu River particularly, in very large heaps, and I think that that is a form of pollution which is entirely preventable with some care. As to the question of paddock-room making the tow unpayable, I do not think it can, because the tow is produced after the fibre is bleached and is produced in the scutching. With regard to stripper-slips, of course, there has been evidence from the mills to the effect that the stripper-slips are valuable, and that prevents this going to waste. At the same time there are the short leaves—they get away in the wash; and if specific means are not taken to prevent this refuse getting into the river, and very efficient means, there is no doubt that there is a great deal of this that will go to the river. I cannot speak authoritatively with regard to the effect of this flax-refuse upon fish, or on stock drinking the water. But there is this about it at any rate, that at many mills—putting aside this question of typhoid which is occupying a great deal of attention at present here—where men drink the water even where it is comparatively pure, having just the green vegetation in it, among these men diarrhoea is very, very frequent, and they ascribe it to that fact. And I should say if it has that effect on human beings it must have the same detrimental effect upon stock. I do not think there is any more information I can give you. It was principally in regard to the quantities of flax waste which goes into the Manawatu and Oroua Rivers that I wished to address the Committee.

2. You say that you can state without question that diarrhoea is bad, and has resulted in some cases from drinking the water straight from the mill?—Yes, the water with the green pulp in it. All I can say is that the men are subject to this diarrhoea frequently, and that they ascribe it to that cause. I cannot speak as a medical expert, but this is so.

3. You have, of course, read the Bill?—Yes.

4. Taking the present state of the law as you know it to be, and taking what you know of the circumstances of these industries which are brought in question by the Bill, are you of opinion that a Bill such as this is required at the present moment?—Well, I do not think this question would have arisen had proper care been exercised by those who are responsible for the pollution of the river. I believe if they had taken reasonable care the matter would not have been brought up. In the case of streams such as that we have had mentioned at Waikanae, with a particularly small water-volume, there, of course, it may always be serious; but, so far as rivers are concerned, if care had been exercised I do not think my friend Mr. Pearce would ever have raised this question and brought this about. Looking at the Bill I think there is a great danger in it. A Bill like this, where the means of relief is by damages, is not at all satisfactory. There is the difficulty of proving damage, or who to prove it against, and this makes it a very, very difficult proposition for the farmer; and I am inclined to think that any relaxation of the present restrictions in regard to pollution may have the effect of causing a miller, or whoever is concerned, dairy-factory proprietor, or any one of that sort, to still further pollute the rivers. They may be enabled to go on polluting the water when by reasonable precautions it could be prevented. Such a relaxation as is suggested in this Bill may have the effect of making the state of affairs worse than they are now. My experience is that while a certain amount of pollution goes on people will put up with a certain amount of it within reason when an industry is involved, but by a relaxation to this extent it may become more damaging to those who suffer from it than otherwise it would be.

5. Would you, as a member of Parliament, feel called upon to go very closely into the special causes that would be put forward for a Bill of this sort, modifying or altering provisions which have lasted for a very long period in regard to this question?—I should think that before Parliament would pass a Bill of this kind they would have to be satisfied in the fullest possible manner that this pollution was absolutely unpreventable; and if it was unpreventable it would then have to face the position of either sacrificing the industry or allowing the pollution of the water. But before raising that question I think Parliament should be quite satisfied that this pollution is unavoidable and unpreventable. If it is preventable by any reasonable means I think that Parliament should say that this should be done. I should say that I know from my own personal experience in the Old Country the state of many of the streams there, and I think it would be a bad thing for this country if the same state of affairs was allowed here.

6. Are any of the flax-millers conducting their mills in such a way as the farmers would approve? Have they any way of filtration, for instance? Does not the Miranui Mill do something in this direction?—That is the big mill at Shannon. I know the mill. There was evidence given in regard to that mill. Their evidence was to this effect, that they had put in some sort of a filtration-bed, whatever that means, but that the water that flows from that is really much more polluted. They say that the water is more polluted after it flows from that filtration-bed. By keeping vegetation there, of course, it rots.

7. Then there is not a proper filtration-bed at any of the mills?—No; at the best the green pulp comes down, but nothing but the pulp, and where you have a large volume of water that is not so serious.

Mr. C. J. REAKES, D.V.Sc., M.R.C.V.S., Director, Live-stock and Meat Division, Department of Agriculture, examined. (No. 34.)

1. *The Chairman.*] Will you give us a statement, Mr. Reakes?—Whatever you think best.

2. You no doubt have a good acquaintance with the subject-matter that is before the Committee, and you have heard some of the evidence. You might give us a short statement on the points we have to decide upon. In the case of flax the trouble is the pollution of water and