

as will render it innocuous before it is returned to the stream, and to compel all people in their districts to connect with their sewage system, and they assume that the effluent from their septic tank will always be clean and pure. If all this were properly done or satisfactorily arranged it would to a considerable extent be sufficient. The fact, however, is that even now they do not appear to take any steps whatever to compel these factory-owners to purify the water before it is returned to the stream. It is very probable that they have not sufficient power to do so; at any rate they have not done so hitherto, although the nuisance has been pronounced for a considerable time. In any case, whether they have power or not, there is no power at present for any of the districts lower down the stream to compel the local authorities of those districts that are higher up to see that the effluent from the factories and septic tanks in their districts is kept clean and innocuous. The result would probably be, if the proposal of the three hill boroughs were approved, that, so long as the effluent from the septic tank or factories was no nuisance to themselves, none of these three boroughs would care very much or take any more interest in improving matters than they do at present, no matter how much the people lower down suffered therefrom—and it is the people lowest down who suffer most.

To allow, therefore, a septic-tank system to be established by the Boroughs of Maori Hill, Mornington, and Roslyn, without any power being constituted to see that all premises are properly connected with drains leading to the septic tank, and that the effluent from the tank and factories in these districts is properly treated and is rendered entirely innocuous before it is returned to the stream, would in my opinion be most unwise.

A good deal of evidence was given in support of the septic-tank system, both for household and for factory sewage, and it appears that if this system is adopted in connection with proper precautions and with filter-beds, and if the filtrate is then allowed to flow over suitable land, the effluent therefrom is thus rendered, comparatively speaking, harmless; but Dr. Ogston stated that it was doubtful if the septic-tank and filter-bed system alone was capable of altogether eliminating colon and typhoid bacilli, if such were present in the sewage, and that the effluent ought to be made to flow on to land specially prepared to receive it (see Exhibit 22). He admitted, however, that the effluent from a properly constituted system was generally harmless. There seems, however, from the evidence to be some difference of opinion as to whether factory-sewage can always be dealt with satisfactorily on this system. Dr. Ogston said that this system had been abandoned in Germany for purifying factory-sewage.

These three hill boroughs made a great point of the fact that several boroughs in New Zealand had adopted the septic-tank system, and that, as the Government had allowed them to do so, there was no reason to suppose that any objection whatever would be made to the proposal to construct one in the Borough of Roslyn. I do not, however, believe that the conditions in those cases are at all like those that exist in the present case, and unless some power is constituted to see that the system is properly and efficiently carried out I do not think it could be adopted here without very great risk and danger to the interests of people lower down the stream.

At present the drainage from these three hill boroughs is evidently much contaminated; but it is at present only directly contaminated to a small extent by human excreta, as these are now removed by the pan system or buried or placed in pits in the ground; but when the districts are reticulated with proper drains, as they will be shortly, all the excreta will be brought directly to the vicinity of this stream, and if the effluent from the septic tank is to be discharged therein it ought only to be so allowed after the most careful and thorough treatment, and the question as to whether this treatment is careful and thorough enough ought not to be left solely to the *ipse dixit* of the body or bodies who wish to make use of the stream to dispose of such effluent.

All this goes to show that it would be much better to run the sewage from these three boroughs directly into a main sewer, as proposed in Hay's scheme, than to attempt to purify it by the septic system; and in so far as this may be