

districts by the local authorities of such districts, as is provided for in section 45 of "The Christchurch District Drainage Act, 1907." That, however, is a matter of detail, as it depends upon whether or not it would be cheaper to collect the rates itself or to get them collected by the other local authorities.

CONCLUSION.

In conclusion, it will be seen that this case is surrounded with difficulty. It is manifest that the best thing to do would be at once to provide a main sewer to take the sewage and drainage from all the districts and from the factories, as is provided in Hay's scheme. This will have to be done sooner or later, but I have shown that it cannot be done at present, except for household sewage, unless an adequate water-supply is first of all provided to make up for the water of the Kaikorai Stream which is now fouled by the factories, and which would be diverted to the sewer. Such a water scheme is beyond the financial power and ability of the districts to undertake at the present time, and it would not, moreover, improve matters very much so long as the manufacturers are still allowed to foul the stream, and the cost of constructing a main drain for household sewage alone would be a very heavy one.

The next best thing to do in lieu of a main sewer is to try to devise some means whereby the effluent from the proposed septic tanks could be purified and rendered innocuous and at least fit for manufacturing purposes, and this can probably be done at moderate cost, but it requires that the process should be carefully watched by some competent and independent authority. The other thing to do is to endeavour to compel the factories which use the water to purify the same and return it after use to the stream in as pure a state as it is when it reaches them. It is probably possible to do these things, but it may be a difficult matter, and there is some difference of opinion as to whether it can be thoroughly done, but there is no doubt that the stream can be made much less dangerous to health than at present. Consequently it is recommended that a special River and Drainage Board should be created, and that the wide powers already indicated should be given to this Board which would enable it to compel all parties (including the manufacturers and the local bodies) who use the stream for any purpose whatever to do their share in seeing that the water placed in it or returned to it by them or from their districts is made as pure as possible. This alone would very greatly improve the condition of things, and nothing further will, it is hoped, be required until the district is better able to finance a large loan for the necessary works. If, however, after fair trial it be found impossible to keep the effluent from the septic tank sufficiently pure to be innocuous, then I have suggested that the Board should by Your Excellency's direction or on its own motion have power to raise a special loan and construct the sewer, pumping-works, and sewage-farm as in Hay's scheme. These works would keep the household sewage out of the stream and still leave the stream to be used by the factories, and it would not preclude the factories from sending their foul liquid down the sewer when and so soon as they can be supplied with more water to take the place of that which they now take from the stream. It is also suggested that the Board should have power, with the approval of the ratepayers, to raise a special loan or loans for a proper water-supply, or even for one or more local supplies, to assist the industries in the district when and so soon as that is necessary and the ratepayers so choose, and when a proper water-supply has at last been obtained it may then perhaps be found to be possible to carry all foul water, whether for sewage or otherwise, right out of the district by means of the sewer, thus leaving the stream clean and pure from end to end.

What I have endeavoured to suggest is the creation of a representative Board with power at very little present cost to the ratepayers to commence by greatly improving the condition of things as they exist now and to increase the present water-supply from local sources, and with power later on to carry out a progressive policy and proper scheme of drainage with an abundant water-supply from some distant source as further factories start in the district and as the value of the district increases and the ratepayers are better able to bear the expense of such schemes.