

THE SANITARY REVIEW

PURE WATER SUPPLY AND FEDERAL ACTION.

Only a few months have passed since Dr. Hodgetts, late chief medical health officer for Ontario, was appointed adviser to the Conservation Commission.

At the time of his appointment we emphatically stated our opinion that the Government had got the right man, and that the whole Dominion would benefit by his translation.

Dr. Hodgetts has not only the faculty of directing organization, but he is capable of obtaining results by the application of common sense and practical methods. The result of the conference now being held at Ottawa between the Federal and Provincial Health Departments is certain to be attended with some legislative measure protecting Canadian waters from pollution. Everything appears to point to the necessity of appointing a Federal Council of Health with powers to make interprovincial and international arrangements and regulations for water pollution prevention.

Dr. Hodgetts, in his address to the Conference, states: "Certain it is we are not doing it by our present methods and laws. It can, however, be done by efficient laws that we have not as yet seen fit to enact, the enforcement of which should, in the main, rest with some central, well-organized and wisely administered Federal department co-operating with each of the various Provincial Departments of Health."

The doctor also pointed out that the Province of Saskatchewan was the only one in Canada which possessed obligatory laws relative to the prevention of the pollution of streams by sewage. Throughout the rest of the Dominion the laws were of such a weak character that they were of little practical value. In the single Province referred to it is illegal to raise debentures until schemes for water supply and sewerage have been sanctioned by the Government; elsewhere even the submitting of plans to the Provincial Boards of Health amounts to merely a matter of courtesy.

The laws in one Province may be as strict as it is possible to make them in prevention of water pollution, while in the neighboring Province there may be either no regulations whatever, or regulations of such a character as to cause them to be ineffective.

The neighboring Provinces of Saskatchewan and Alberta present a good example. In Saskatchewan most strenuous efforts are being made by Dr. Seymour (the Commissioner of Health) to maintain the purity of water supply. Regina, Moose Jaw, Saskatoon, Prince Albert, and a number of the towns are at present heartily and most willingly engaged in supporting his efforts by installing up-to-date sewage purification works. In Alberta nothing is doing, apart from some proposal to put down an experimental plant in connection with the Government buildings at Edmonton, the product of a Government official.

The folly of this separate action, or action on the part of one Province and no action on the part of another, is at once apparent when we state that most of the sewage from the Province of Alberta is conveyed by the North and South Saskatchewan Rivers into and through the Province of Saskatchewan. No matter, then, how strict the laws of prevention may be in Saskatchewan, Dr. Seymour, in spite of his efforts, will continue to be up against a condition of things which he cannot control until such time as Alberta decides to prevent the

pollution of the two great rivers, or until such time as Dr. Hodgetts can obtain Federal legislation, creating a Federal controlling centre.

The old, worn-out ideas and opinions of streams automatically eliminating disease infection by length of travel have reached a period undeserving of serious discussion.

While organic matter may become stable and oxidized by admixture with clear water, bacteria are not so readily affected. The Niagara River chemically purifies itself by the rush over the falls and rapids; pathogenically, or practically, no purification takes place. We know, also, that sewage can be conveyed any distance in cold storage, and that when the ice breaks, the raw, unchanged sewage of Edmonton is delivered by ice-carriers to Prince Albert, and the B. Coli content shows positive every time.

These questions are more than Provincial—they are interprovincial, and Dr. Hodgetts appears to have got the right grasp of the whole matter.

As a practical example of the necessity of immediate Federal legislation, and a central advising authority operating with Provincial Boards of Health, we may take the position of the city of Lethbridge, Alta. Lethbridge pours the whole of its sewage, untreated, into the Belly River. On this river, just below Lethbridge, several coal mining villages are located, dependent on the river for water supply. Typhoid fever is endemic in these villages, and cases are constantly being brought into the Lethbridge hospital. Lethbridge is willing and anxious to install some method of preventing the pollution of the river, and has been patiently awaiting some leading advice from the Provincial Board of Health. None, however, has been forthcoming, apart from a letter recently published from the Provincial Board of Health, advising that nothing be done at present, as sewage disposal methods are said to be in a state of transition, and the Government are about to experiment on some new idea invented by one of its officials. Lethbridge, losing all patience, has, however, done something itself. It has called in an expert sanitary engineer, not to make engineering plans, but to report as to the best method of dealing with the sewage problem.

Now, what Lethbridge really feels the want of is an independent authority on which it can rely for leading advice, and to which it can submit any proposed scheme for impartial judgment.

The establishment of an authority, either Provincial or Federal, must be based upon absolute independence as affecting advice. The engineering department of the authority **must have no interest whatever in private consulting work within the area of operation.** It must have no axe to grind or special method or scheme to push. Otherwise, municipalities can have no confidence in submitting any scheme for consideration or in asking advice. This is the view which Dr. Seymour has taken in administering the Bureau of Public Health in Saskatchewan, which has met with entire success. He insists that all connected with his department shall not act in a private capacity within the Province.

Dr. Hodgetts' idea of a Federal Council appears to be based upon the English system of the central authority as constituted in the Local Government Board, the president of which is a Cabinet Minister. In England, a municipality desirous of installing sewerage or waterworks has, in the first instance, plans prepared by an engineer,