THE

Sanitary Review

SEWERAGE, SEWAGE DISPOSAL, WATER SUPPLY AND WATER PURIFICATION

THE STATE BOARD OF HEALTH IN ITS OFFICIAL RELATIONS TO SANITARY ENGINEERS.

The above forms the title of a contribution by Dr. C. O. Probst to the Quarterly Bulletin, Ohio State Board of Health. Matter is dealt with which should be of great value to those who wish to see the Canadian Provincial Boards of Health become more effective machines in advising and controlling matters of water supply, sewerage, sewage disposal and water purification.

Not until the year 1892 did the Ohio State Board of Health add an engineering department to its constitution; since that date the department has passed upon 655 plans, providing for the construction of sewers, waterworks, sewage and water purification plants.

It is interesting to note that the engineering department was the practical result of the cholera epidemic in Hamburg in 1892, the epidemic being transmitted to the port of New York, causing alarm throughout the whole country. In a revised public health Act the following paragraph at the suggestion of Dr. Probst was adopted:—

"No city, village, corporation or person shall introduce a public water supply or system of sewerage, or change or extend any public water supply or outlet of any system of sewerage now in use unless the proposed source of such water supply or outlet for such sewerage system shall have been submitted to and received the approval of the State Board of Health.

Before this date the Board had often found itself in the position of a consultant; the adoption of the above paragraph, however, made it absolutely imperative that an engineering staff be established to advise the Board with reference to any plans submitted in order to make its administration effective.

The first engineer secured was the late Mr. Flynn, and gradually the work of the Board has extended to a present engineering staff of seven men, all specially trained as sanitary engineers, who may properly be classified as experts.

With the building up of the engineering department and its daily consideration of plans there has been accumulated information and experience of very great value to the designing or constructing engineer. This information finds annual publication in the State Board of Health reports.

The system adopted in passing upon plans for engineering work is as follows:—

Application is made for approval of plans for water or sewerage, or for the purification of one or the other. An engineering blank is usually sent for further information. An engineer then visits the locality and looks over the ground. Plans are finally submitted, which are referred to the engineering department. These come back to the secretary's office with recommendations, which are then discussed. They are then transmitted to the members of the Board, with recommendations approved by the secretary and chief engineer. After consideration by the Board they are adopted, by a majority vote, either as recommended or with such modifications as the majority agree upon.

This final disposition of the plans is not usually reached without correspondence or consultation with the engineer who made the plans.

The engineering department in reviewing the plans frequently find changes or additions desirable. What are deemed essentials are held to, and made a condition of approval.

At times the Board of Health is consulted by municipal authorities before they engage an engineer. It may send an engineer in such cases to look over the ground and give general advice. It insists, however, that an engineer must be finally engaged to prepare definite plans.

From the above it will be at once seen that the State stands in the position of consulting and advising engineer to the many municipalities under its jurisdiction.

Dr. Probst claims that municipalities have been saved great cost by the avoidance of errors, while the system has worked without friction and, in fact, in perfect harmony with the engineering profession.

We must ask the question, Has the time not come when our Provincial Boards of Health must adopt some such sanitary engineering department, which can give useful advice in the first instance to municipalities and form a check upon work, designed perhaps by engineers who may never have seen a sewerage and water supply scheme before.

This class of work is coming more and more into prominence in Canada, and it is somewhat remarkable that the Western Provinces are ahead of the Eastern in recognizing the necessity of governmental engineering advice.

For some time back Dr. Seymour, the Chief Medical Officer of Health for Saskatchewan, has been anxious to put in force the example of the American State Boards of Health, and recently, backed by a strong and progressive Government, with the Hon. W. Scott as Premier, an engineering department on sanitary matters has been formed. Municipalities in Saskatchewan are now in the position to obtain general expert advice from the Government. It is further anticipated that the Government are about to legislate on advanced lines on the whole question of stream pollution and pure water supply in a revised public health Act.

Why an engineering department should not be added, say, to the Provincial Board of Health of Ontario, it is difficult to say. This Board, composed solely of medical men from different parts of the Province, meet regularly to adjudicate and pass upon engineering plans for sewerage and water supply, and are totally