

engineers would be mainly in the line of estimating cost of construction and maintenance of apparatus. The professor of hygiene would prescribe the results to be attained and the two, working together, would attain the best results.

*By the Chairman:*

Q. Is there any obstacle to combining the two in one man?—A. This is a time of specialization. For instance, doctors are all divided up into surgeons, general practitioners, eye and throat specialists, and some go down to the feet. I think probably the best results would be attained by specialists, each following his own particular line, but working together for the same result.

Q. My conception of a sanitary engineer is that he should combine the knowledge of an engineer with a training in hygiene.—A. I think he could devote his time better to what might be called the engineering department.

Q. Would it not be well to have a Chair in our universities to turn out men with a knowledge of both branches?—A. I would not like to have a conclusive opinion on that. It might be a good idea, but it strikes me, offhand, that it would be better for the two to work together rather than combine the whole knowledge in one man's head.

Q. Of course, you have had experience. You were speaking a moment ago of the practical result of Ottawa dumping its sewage in the river: that they could treat their own water and other people treat their own water. There is this broader question, which is of course a legal one. Is it right that the city of Ottawa should poison the water that I am going to drink two miles further down the river?—A. That is a matter of law. Perhaps it is not right. But is it reasonable, as a practical question, as a question of government administration, that Ottawa should be compelled to go to an enormous expense to do something which one man or a small community might itself do for a fraction of the cost?

The CHAIRMAN.—That is the question.

*By Mr. Northrup:*

Q. Would it not be possible for a central board to apportion the cost between the towns just as the Railway Commission does?—A. Certainly. Such a central board should take the initiative and say to Hawkesbury or any other small town, you must build works thus and so. Another way would be for the municipalities to submit their plans to a board of health and get permission to proceed with construction. Something of that kind is done in Ontario. The board of health does not design the works, but they say whether they are of a kind to be permitted. They have experience in that matter. Somebody, at least, should have authority to go to a city and take the initiative in compelling the proper carrying-out of the necessary works. As I understand it, the Railway Commission does not take the initiative. They wait until somebody makes a complaint.

M. NORTHRUP: I do not suppose it would make very much difference. The Commission will listen to anybody, and if any individual takes enough interest in a question, he can always be heard by the mere writing of a letter to the Commission.

The WITNESS: It should be something of that kind, but I would not like this to be considered as my conclusive opinion.

*By the Chairman:*

Q. You spoke a moment ago about Boards of Health. You have had experience with Boards of Health in cities and municipalities. They are as a rule, I suppose, composed of medical men, whom, no doubt, you have met in connection with these matters. Does their training fit them to take charge of work of this kind without other training?—A. I would hardly like to make a positive pronouncement on that. Some of them, I think, are hardly qualified, but the manner of their appointment should be such as to ensure only competent men.

Mr. JOHN KENNEDY.