qualified. The idea of that was to give him practical experience at the same time as he was getting his training there. The young man in question spent three years at the Institute of Technology taking that course and acting with the American Engineer during the summer, and now he has taken the latter's position himself. We have done that because there is not given in any University in Canada such a complete course as some two or three Institutions in the United States give.

Q. That would emphasize in your mind the necessity of something more being done

in Canada?—A. Yes.

Q. To broaden out the course.—A. Yes. If we had a course of that kind here we could begin immediately to train men in this country and they could be employed in subordinate positions during the summer months while taking their university course.

Q. How long would it take to train men for positions of that kind?—A. Not very long. It would be very useful if the student should combine the practical and theoretical courses in the manner suggested. Of course we would not necessarily expect a man trained only in this exclusive line to be an engineer in the sense that he would be fully qualified to design plants in detail, but he would know from an engineering as well as from a sanitary point of view what is wanted.

## By Mr. Northrup:

Q. And he would be in a very much better position to learn than a man who had

not had that exeperience?—A. Very much better.

Q. Are there any Canadian universities which grant D.P.H.—the Diploma of Public Health?—A. Yes, to medical students. The young man I spoke of is a graduate of Laval and had taken the civil engineering course as given in that university, before he went to the Institute of Technology.

Dr. Hodgetts.—And he has turned out as excellent man.

The Charman.—Well, Mr. Lea, you have given the committee most valuable information, for which, on their behalf, I desire to thank you.

Witness discharged.

Mr. John Kennedy, Montreal, sworn and examined.

## By the Chairman:

Q. You are a civil engineer?—A. Yes.

Q. You have given a good deal of thought, I suppose, to the question of sanitation?—A. Yes, I have, that is in its broad general lines.

Q. Are you connected in any way with the municipality of Montreal?—A. Not at

present. I have been connected with it.

Q. Will you tell us what your engineering experience has been?—A. I was at one time Deputy City Engineer of Montreal, and my particular work was the building of sewers and looking after the sewage of the city. That was a good while ago. Since then I have reported on matters in connections with the city sewage for the municipality, as an engineer of the harbour commissioners. More recently I have been associated with the preparation of Canada's case in connection with the Chicago drainage scheme, and, with my friend, Mr. Lea. made a report to the Canadian section of the International Waterways Commission.

Q. Perhaps you might give us your ideas on the subject we are investigating, and then if the members of the committee desire to put any questions they may do so.—
A. I fully agree with Mr. Lea in all that he has said. I would like, however, to make perhaps a little more clear distinction than there seems to be as to the difficulties between what may be called a state of nuisance in a river, and having that river in a condition for domestic use as a matter of hygiene. I look upon it—and Mr. Lea has