

at the point where the ice was taken, that 90 per cent. of the germs had disappeared—that is to say, 10 per cent. of the germs persisted, a sufficient quantity to give points in development in the ordinary culture methods, thus proving that freezing is by no means sufficient to render water pure; also found that of the 10 per cent. of germs that persisted as many lived on until May or June as were to be detected in January, so that the mere fact of their having been found in a frozen condition did not appear to destroy their vitality at all. I do not know very much about the ice supply of Toronto, but I should say if ice is taken from any place where there is any danger of contamination from typhoid germs, that it is a very serious matter, because typhoid bacilli are known to be among the most resistant. Dr. Prudden, of New York, found that he could keep typhoid germs in existence for 103 days. Of course, there is no danger in using impure ice in refrigerators, so long as it does not come into contact with food; but so much ice is used in drinking water that we cannot be too careful about its character and the source from which it comes. Dr. Prudden found that the ice of the Hudson River, which is supplied to the city of New York, contained a number of pathogenic bacilli, which apparently came from the numerous towns and villages along the banks of the river.

The Italian gentleman whose investigations I have referred to, suggested that ice intended for drinking purposes should be made artificially, and that the so-called natural ice might be used for general cooling purposes. I think, sir, these are most of the remarks it has occurred to me to make.

REPORT OF COMMITTEE NO. 1 ON HOUSE AND LAND DRAINAGE, AND DISPOSAL OF SEWAGE.

PRESENTED BY C. S. ELLIOTT, M. D., CHAIRMAN, AND MEMBERS OF COMMITTEE TO THE ASSOCIATION OF EXECUTIVE HEALTH OFFICERS OF ONTARIO.

Mr. President, and Members of the Association:

IN accordance with the suggestions of Dr. I Coventry, President of this Association, made at the last annual meeting, committees representing the ten Health Districts previously formed in this Province, were appointed by the executive committee, and a series of questions bearing on nine of the most important subjects connected with sanitary science, were, in November last,

addressed to the several members of said committees. The executive committee did me the honor of appointing me chairman of committee No. 1, composed of eighteen members, to which was assigned the task of reporting on House and Land Drainage and the Disposal of Sewage, which, though not an inviting subject, is perhaps the most important and at the same time the most difficult that has engaged the attention of sanitarians in modern times. I regret that the selection was not made of one more able than myself to do the subject ample justice. On accepting the position of chairman, however, I had hoped that my own deficiencies would, in some measure, at least, be compensated for by the assistance I should receive from the members of the committee, but alas, in this I have been disappointed. Four only, out of eighteen have made returns, though reminders have been addressed to them, with an earnest request that they should report as early as possible, and of the four reports made, with one exception, the answers to the several questions were so meagre and indefinite it would be very difficult, if not impossible to base anything like an intelligent or instructive report thereon. The apathy and indifference usually manifested by the general public in matters sanitary, is a subject which those interested in sanitary reform, ever have to deplore, but I am sure it cannot be with other than feelings of shame that the members of this Association will unite with me in deploring the fact that so many Medical Health Officers and others interested with the important duty of carrying out the requirements of the Public Health Act, should manifest so little interest in the work of this Association; the objects of which are to popularize and extend a knowledge of these facts in sanitary science, which would, if acted upon, prove a priceless boon to our fellow countrymen.

In presenting this report it is perhaps needless for me to say that I have nothing new to advance upon this important subject. All I shall attempt or hope to do is to say a few words, which, though already familiar in substance to the members of this Association may provoke discussion and perhaps arouse some little interest in the minds of the general public on a subject which should be of vital importance to every one as an introduction to what I shall presently say in regard to defective drains and sewers. I shall then dwell for a few