

House of Commons Debates

SPEECH

OF

GEO. H. BRADBURY, M.P.

ON

THE POLLUTION OF NAVIGABLE WATERS

OTTAWA, FRIDAY, APRIL 25, 1913.

Mr. G. H. BRADBURY (Selkirk): The Bill that is now before the House is to my mind one of the most important measures that will come before the House this year. In face of the many important measures that are pending consideration, this is perhaps saying a great deal for the Bill, but I submit that anything that affects the health and happiness and the lives of the mass of the people of this country, as this Bill does, must, from its very nature, be of paramount importance to a body constituted as this House of Commons is. Sir, we represent here all classes and shades of people in this great Dominion. Then, what more important duty could devolve upon a chamber of this kind than that of legislating, as far as possible, to protect the health and the lives of our people? I am afraid that this has been sadly neglected in years gone by, and before I resume my seat, I think I shall be able to demonstrate to the House that the health of our people has been injured and impaired, and that the lives of thousands of our people have been sacrificed as the result of our neglect to pass legislation, which should have been passed years ago, to guard against the pollution of our great bodies of fresh water.

During the past forty-five years or more, this Chamber has from time to time voted large sums of money for the purpose of developing this great country. We have

built great transcontinental railways across the continent, binding the Atlantic and the Pacific provinces together at an enormous cost to the people of the country. We have built a network of railroads in every province to link up with those great trunk lines. We have spent nearly \$100,000,000 for the purpose of improving our great waterways to facilitate trade between the East and the West. We have spent large sums of money in inducing settlers to come to our country, and in developing our foreign and interprovincial trade. In a word, we have devoted all our time to the building up of the commercial side of a great nation, and in doing this I feel that we have neglected one other great essential; we have overlooked the fact that the greatness of a nation does not consist alone in great railway systems and monetary institutions, or in a great foreign or interprovincial trade. I submit, Sir, that the greatness of a nation consists largely in the vigour, health, happiness and virility of the people who reside within its bounds; and that we have neglected the protection of the health and lives of our people, is, I think, an established fact. The result of our efforts in nation building is something to be proud of, but the country realizes that we have neglected legislation to promote the health and happiness of the people. Providence

has been lavish in providing great bodies of pure, fresh water in Canada, but we have neglected to protect these great bodies of water. Our great inland lakes and our great rivers have been polluted to such an extent that, instead of being the blessing that the Creator intended they should be, these great bodies of water have proved to be a menace to the lives of the people in the districts adjacent to them or that use the water.

Twenty-five or thirty years ago, the great river which flows at the base of this building, the Ottawa river, was a pure body of water. In my boyhood days I remember we used to boast of the beautiful soft fresh water that we had in the city of Ottawa, but to-day one glass of that water contains misery and death to those who have the temerity to drink it, all because we have not taken proper precautions to protect our rivers. Right here in the city of Ottawa we have had an awful example of what this means. During the two epidemics of 1911 and 1912 we had no less than 2,500 cases of typhoid fever in this city and 170 deaths. That is an awful record for a great city like Ottawa; it is certainly deserving of serious thought and calls for the censure of those who are responsible for the care of the city. This is the terrible price that Ottawa has paid for the criminal neglect of those who are in charge of this city to provide pure water. But if the condition of the city of Ottawa is bad, and every man who realizes what has taken place within the last few years knows that it is, what are we to say about the rest of this great country of ours? Statistics show that in the province of Ontario we have had something like 700 deaths a year from typhoid fever. The great lakes and rivers of Ontario are polluted to such an extent that the water is utterly unsafe for human consumption. If the authorities of Ottawa have neglected their manifest duty and if they are responsible for the awful conditions that prevail here regarding the water supply, how much more is this House responsible not only for the conditions here, but for the terrible conditions that prevail throughout our great Dominion. The pollution of our lakes and rivers has caused and is causing the death of thousands of our citizens, and misery and suffering to thousands more. I would like to place on record a few facts compiled by men who are perhaps better qualified to speak on these matters than I am. I hold in my hand a report by Dr. Charles Hodgetts, medical adviser to the Conservation Commission of

Canada. I wish to read a few paragraphs and to place a few of the statistics which he has given on record in order to make a comparison between the conditions in Canada and in other countries. Dr. Hodgetts, in his report to the Conservation Commission, makes this statement:

It is quite apparent, even to a most casual student of the question, that while the great tide of industrial development has brought to us wealth, both national and personal, yet that same tide has brought with it sickness, suffering and death, which count for national loss and personal suffering. Man, the manufacturer, in his haste to get rich quick, has transgressed the laws of health; it is safe to say that there is not a river on the continent of North America which is not an open sewer; and our fair lakes are defiled by the overt acts of men and women everywhere.

The stigma which rests upon our so-called western civilization, is the utter indifference to the value of human life which we find in evidence everywhere. We are now in the thralldom of a white slavery, one manifestation of which is the utter disregard we have shown for the health of our people by the indiscriminate pollution of our lakes, rivers and streams. We wantonly defile one of the greatest blessings with which a great Creator has blessed us—for travel anywhere throughout the world and you will not find anything to compare with our great natural reservoirs of once pure and limpid waters, which now are the fountains from which flow disease and death. It is a fact that typhoid fever, which is a water-borne disease, as well as many intestinal ailments, of which the sanitarian has no definite statistical data, are widespread. Certainly typhoid is much more common in America than in the crowded countries of Europe.

Then he goes on to say:

It is generally conceded that a large percentage of all sickness happening in cities and towns is due to impurity of the water supply, sewage contaminated water being an important cause of diarrhea of which at present we cannot speak with certainty.

It has been so far accepted, and is now almost the general rule, to consider that a continued typhoid death rate of over 20 per 100,000 of population is an indication that the public water supply is greatly at fault. With the object of ascertaining how this rule would work out for Canadian cities, information has been obtained as to the deaths from typhoid fever reported in cities of Canada during the decade 1900-1909, and this has been set forth in table 'A'.

I do not intend to trouble the House with the whole of this statement, but I wish to make a few quotations for the purpose of comparison: The number of deaths per 100,000 of population from typhoid fever in the cities named from 1900 to 1909 inclusive, was as follows:

	1900.	1901.	1902.	1903.	1904.	1905	1906.	1907.	1908.	1909.	1910.	1911.	1912.
Edmonton.....		75.4	29.0	32.3	37.5	40.0	254.3	180.8	110.0	76.0			
Nanaimo.....	80.0			40.0				18.1					
New Westminster.....		46.1				25.0	62.6	42.1	76.1	58.8			
Roseland.....							18.1		25.0	25.0			
Vancouver.....							15.3	26.9	10.5	8.8			
Victoria.....	39.1	21.7		18.5	3.4	16.1	18.1	17.1	5.4	10.0			
Winnipeg.....	122.5	118.3	95.0	82.6	248.3	175.0	108.0	49.2	40.5	38.4			
Moncton.....	87.5	58.8	88.8	42.1	10.0	47.6	53.3	34.7	58.3	8.0			
St. John.....	26.1									31.2			
Halifax.....										4.0			
Sydney.....		90.9	8.3	16.2	30.7	15.3	42.8	13.3	31.2	11.7			
Fort William.....				88.6	200.2	132.6	946.9			98.5	94.0		
Hamilton.....	23.2	18.9	13.0	11.1	12.7	13.8	33.5	17.9	14.0				
Kingston.....	16.5	32.8	10.8	87.6	21.6	38.4	37.9	32.2	41.7	31.2			
London.....					67.3	23.9	44.0	6.7	10.4	4.0			
Niagara Falls.....		44.0			14.1		37.7	37.0	74.0	24.3			
Ottawa.....	31.6	19.7	35.9	9.7	11.0	20.0	20.7	51.6	26.1	31.2	50.0	87.0	95.0
Peterborough.....	73.5	36.5	18.0	34.6	49.3	41.7	26.7	25.0	18.1	5.9			
St. Catharines.....	58.6	57.1	47.1	18.7	36.6	44.7	23.5			24.3			
Stratford.....	23.7	46.4		37.2	26.1	24.5	23.3			20.7			
Toronto.....	19.5	11.1	11.8	15.9	18.1	16.7	24.8	19.4	19.8	25.7			
Woodstock.....	137.6	52.9	10.5	21.1	31.7	21.1	43.2	10.8	43.2				
Charlottetown.....							16.6	16.6		8.3			
Montreal.....	42.6	44.4	30.9	31.4	31.8	18.1	37.0	33.2	33.1	53.8			
Quebec.....	7.3	13.0								23.1	5.3		
Sherbrooke.....	476.6	227.0	60.8	60.8	30.7	52.3	21.6	108.0	131.4	78.4			
Saskatoon.....									133.3	66.6			

This shows the awful death rate from typhoid fever in these cities. The author of this work, Dr. Hodgetts, goes on to say:

In studying the table, one cannot fail to be struck with the fact that during the past decade the inhabitants of each of the cities have been served out 'polluted water' and that, as a consequence, many valuable lives have been lost and many thousands of people have had to endure sickness and suffer loss of time and money, all on account of the indifference and criminal carelessness of individuals and of failure on the part of the legislatures to make adequate statutory provision for requiring—yes, making—the body corporate do just what the individual citizen is required now to do, viz.: to care for his own domestic waste so it will not be a nuisance either to himself or his neighbours. In

other words, a city should care for its own sewage in such a manner that it will not prove a nuisance.

For purposes of comparison of typhoid statistics with some of the cities of the United States a compilation of the mortality figures of twelve cities of the United States located on the chain of great lakes, has been made in table 'B.' These figures are for the corresponding years of table 'A,' with the exception of 1909, for which the figures could not be obtained. The mortality rates given are gathered from the reports of the Washington Census Bureau.

I wish to place a few of these on record just for the sake of comparison. The rate per 100,000 of population by years in the cities named is as follows:

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
Buffalo.....	23.5	27.1	33.7	34.6	24.2	24.4	23.6	29.2	20.7
Cleveland.....	56.8	34.9	35.5	115.0	49.6	14.9	20.2	18.9	12.6
Niagara Falls.....	107.9	143.9	130.4	126.9	139.8	181.6	147.3	126.8	98.0

I do not intend to trouble the House with more of these statistics. I have a lot of them. I just want to place a few on record in order to demonstrate the fact that this country is in a deplorable condition so far as the sanitary care of water is concerned. This article goes on to say:

The people of the United States have not yet learned the lessons of municipal sanitation—the laws of common sense—and as a consequence the typhoid death rate in the United States is 46 per 100,000.

To further emphasize the fact that Canada has lessons to learn in respect to sanitation generally, from the older countries of Europe,

where population is and has been congested for many years, as well as from the nation to the south of us, table C has been prepared. A typhoid index certainly goes far to show what these countries are doing in respect to water supplies and the protection of the same as well as to general measures of sanitation which cannot be dwelt upon here. The figures are the latest obtainable.

Typhoid fever—death rate of nine countries per 100,000 of population.

Year group.	Countries.	Rate.
1901-1905	Scotland..	6.2
	Germany..	7.6
	England and Wales..	11.2
1901-1904	Belgium..	36.8
	Austria..	19.9
	Hungary	28.3
	Italy..	35.2
1901 (census).	Canada..	35.5
1901-1904	United States..	*46.0

*Estimates.

Imagine if you can a population of the European countries which I have just named, including Germany, England, Scotland, Wales, Belgium, Austria and Italy, with a population of 175,000,000 in round numbers crowded into the provinces of Nova Scotia, New Brunswick, Quebec and Ontario, with its density of population and with its poverty, out of both of which one can read death and misery. The typhoid rate in none of them is as great as it is in Canada with its sparsely populated area and with our great lakes and rivers. This is a sad reflection on the civilization of this country with our modern ideas, and this fact ought to make this House take serious thought of the conditions as they exist. In face of statistics that demonstrate that the death rate in Canada from typhoid is much greater than in European cities, with their densely populated areas, who will say that this Bill or some similar Bill should not be placed on the statute-books of this country? Is there anyone within the hearing of my voice who will say that our present legislation is sufficient to cope with existing conditions? I think not. Annually thousands of our citizens are stricken with typhoid fever. Hundreds of them find an early and untimely grave while thousands of our fellow citizens are left to go through this world, to continue the battle of life, with weakened bodies, weakened constitutions and weakened minds. These facts ought to appeal to everyone within the hearing of my voice, and they call for serious action by this House.

Mr. MEIGHEN: Has the hon. gentleman any statistics in respect to cities that do not lie on large rivers and that are therefore not mentioned in this Bill?

Mr. BRADBURY: I have given all the statistics that I have and some of them refer to towns not on rivers. Any that I

have given are either on rivers or lakes. I have no others.

Mr. OLIVER: Sherbrooke is not on a navigable stream.

Mr. BRADBURY: It is on a stream. Surely in view of these facts the time has come for this House to put an end to this abominable practice of dumping sewage and offal in the rivers from which people must use water for domestic purposes. I desire to place on record a few passages from an eminent authority on sanitation, a man who was brought here to examine conditions as they existed in Ottawa. The report is made by Charles N. B. Camac, M. D., from Columbia University, College of Physicians and Surgeons, New York city. I wish to convince the House how serious the condition really is in Canada. This paper is entitled: 'The Epidemics of Typhoid Fever in the city of Ottawa.' It is dated October 30, 1912. It was addressed to the Chairman of the Commission of Conservation, Hon. Clifford Sifton, and commences as follows:

In the city of Ottawa there have occurred two outbreaks of typhoid fever within eighteen months. This is so unusual an occurrence in our present knowledge of hygiene and sanitary engineering that it is no longer of local interest merely, but attracts the attention of physicians and sanitary engineers the world over. Besides sharing with the medical profession this general interest, my attention was specifically directed to the epidemics by being consulted by several citizens of Ottawa regarding the safety of residing in that city during the coming year.

Through the courtesy of some of the government authorities I was enabled to acquaint myself with the conditions leading up to the outbreak. As the whole matter is under investigation, to be reported upon later, I will not attempt here to deal with these conditions in detail, but will state some general facts regarding the dangers, to the community at large, which such epidemics occasion.

Typhoid is a preventable disease—its cause and mode of transmission are among the best known to the science of medicine; where the measures for prevention have been intelligently and conscientiously carried out typhoid fever, in epidemic form, does not appear.

Transmission of Typhoid by Individuals. The germ is carried and transmitted by individuals in the following ways:—

1. By those who have sufficient resistance to entirely neutralize the poisons and who are therefore not ill. Such individuals (immunes), though they discharge the organism in virulent form, show no other sign of the disease.

2. By those who have only enough resistance to partially neutralize the organism, and who are therefore, partially disabled. Such individuals (walking cases) discharge the organism in virulent form and the sequelae of the disease may develop in as severe a degree as in typical cases.

3. By those who have passed through a typical attack and have recovered. These

and the walking cases may harbour the organisms for months or years. Such individuals (typhoid carriers) discharge the germ, in full virulence, from time to time.

Ottawa is outwardly a beautiful city. It is the seat of the Government of Canada, a country rapidly striding into international prominence. Her people, by ever increasing railway and steamship systems, are travelling not only through Canada, but also through the United States and other countries.

From the modes of harbouring the organisms given above, it will be seen that during and after such epidemics as Ottawa has had, every individual from the seat of outbreak may be a menace, not only to his own community and country, but to any which he may visit. The typhoid epidemic to-day is an unpardonable crime against the world. It is scientifically punishable under the sixth commandment. By scientifically is meant that science has proven that typhoid epidemics are preventable by well known and thoroughly tested methods, which, if not adopted, render the authorities guilty of murder. The command to adopt such measures should be coupled with the charge, 'Thou shalt not kill.'

To prevent typhoid, on the other hand, two things only are necessary—two things long recognized as essential to the health of any community—pure water and proper drainage. The official report shows that the Ottawa epidemics, claiming their hundred and fifty-six deaths, were due to the failure to supply these requirements. To this list of the dead must be added those who will suffer from the many sequels now known to be directly due to the typhoid organisms, some being incapacitated for years with consequent poverty and suffering, the full story of which will never be known.

I do not intend to weary the House by referring to this matter at great length, but I have placed the report of that eminent sanitarian on record for the purpose of demonstrating just how serious the epidemics in the city of Ottawa were. The conditions that brought about this epidemic prevail to-day, and up to the present time nothing has been done by the city to alter the conditions that prevailed two or three years ago. The conditions described by Dr. Camac, sanitary engineer, are, I submit, a serious charge, to be made by such an eminent sanitarian as Dr. Camac, in fact, a terrible indictment of everybody responsible for the disgraceful condition of the water supplied to the people of this great city. The officials responsible have left an awful record: 170 precious lives sacrificed, 2,000 cases of suffering and misery hundreds left with impaired constitutions, for the rest of their lives—a record, Mr. Speaker, of ignorance, indifference or criminal neglect. The facts, I think, are startling, and surely call for some drastic action on the part of this House. This Parliament is the only body that can legislate to prevent the pollution of the streams of Canada. The local legislatures have authority as within their own

provinces, but nearly all our great rivers are inter-provincial, and this Parliament is the only body that can intelligently and effectively legislate in regard to this matter. In view of what has taken place in Ottawa it is time that some practical and drastic action was taken by this House. I desire to present to the House a few figures which will demonstrate the great financial loss sustained by this country by reason of these epidemics. Irving Fisher, one of the best known authorities on such matters, has estimated the value of a human life at \$3,000. Professor Wylie, who is, I think, the most eminent statistician in the United States, says that the human life is worth \$50,000; but taking the lesser amount, \$3,000, I think the figures based on this estimate will be found to be startling. In the province of Ontario during the periods from 1902 to 1912, there were 5,796 deaths from typhoid fever, and, at \$3,000 each, the loss to the state would be \$17,388,000. During that period of time there were 50,000 cases of typhoid fever in the province of Ontario, and, computing the loss of time occasioned by this illness at the moderate figure of \$1.50 a day for ninety days—which I think every medical man in the House will say is a reasonable estimate of the length of time lost in such cases—the loss in wages to these people would amount to \$6,500,000. If you add to this the sum of \$5,000,000 for nursing and medical attention and attendance it will be found that the loss to the province of Ontario by reason of the prevalence of typhoid fever during that period of ten years was \$28,888,000. One would not have the temerity to make a computation of this kind as being the net value of the loss to this country; I contend that human life is too precious to be measured by dollars and cents. But taking this as a basis, we find that the province of Ontario lost, during that period of time, as I have said, \$28,000,000, or an amount equal to five per cent on over \$500,000,000. This amount—from the loss of life in Ontario alone—would have provided proper sewage equipment for every great city in Canada. During the two epidemics in the city of Ottawa there were 170 deaths, which, following out the same computation, would be valued at \$510,000. There were 2,500 cases of typhoid fever, which means another \$200,000 in loss of time; 2,000 cases of medical attendance and nursing, amounting to \$270,000—a total of nearly \$1,000,000, which is equal to five per cent on about \$20,000,000. This shows that in this city alone enough money was lost to have protected half a dozen cities as large as Ottawa. The city of Winnipeg is in much the same position, having lost over \$5,000,000 in ten years, or five per cent on \$100,000,000.

While I quote these figures, I would not have the temerity to measure human life

against dollars and cents. The greatest asset we have in Canada is a strong, robust, virile people, and the health and lives of our people have been neglected too long. We seem to forget that one of the greatest privileges as well as duties we have in this House is to legislate to enhance the happiness of the people and protect their lives and health, and I think the time has come when the Canadian Parliament should take drastic measures towards that end. In the city of Winnipeg in my own province much the same conditions prevail. The Red river and the Assiniboine join at the city of Winnipeg; the Assiniboine comes from the west, carrying all the sewage from Brandon, Portage la Prairie, and the various municipalities on its banks, into the Red river which flows north to lake Winnipeg, where it pours all that contamination into the lake. Four or five years ago the federal Government built a dam at St. Andrew's rapids some twelve miles below the city of Winnipeg, and in building that dam they raised the water twenty-one feet at the dam. Previous to the building of that dam there was a fairly swift current running all the time in the Red river which carried the sewage into the lake and although the river was seriously contaminated the nuisance was carried away. But to-day we have a large basin twelve miles long and about a hundred yards wide where all this sewage from the cities of Brandon, Portage la Prairie, and the great city of Winnipeg with its abattoirs and stockyards and manufactories, is deposited. That river is in a terrible condition to-day. Flowing past my own town, Selkirk, twenty miles below, the water is unfit even to give to animals to drink and the farmers have stopped taking their cattle to it to water. This contamination flows down the river into lake Winnipeg which is contaminated for a distance of from eight to ten miles out, and every year we have had serious outbreaks of typhoid fever among the men working on the dredges. If I am right in saying that the authorities of the city of Ottawa and the authorities of other great cities have neglected their duty to protect the lives of their people and purify the water supply, what am I going to say about the neglect of the Parliament of Canada? We have been legislating here to develop this great country, but we have neglected to place legislation on the statute-books to protect the health of the people living along the rivers and lakes and to prevent the pollution of our waterways. This neglect of ours has resulted in serious loss of life, and in suffering to hundreds of thousands of our people. This is a serious condition of affairs and calls for immediate action. I have one or two letters here which I wish to place on record. Dr. McCullough, the chief medical health officer of Ontario, writes:

Toronto, November 26th, 1912.

Sir,—I note with satisfaction that you have introduced a Bill in the House of Commons with a view of preventing pollution of the waters of the Dominion.

I am sending you under separate cover copy of the Public Health Act of Ontario passed during the present year, which will indicate (section 91) the attitude of the legislature of this province upon the question. I have asked Dr. Charles A. Hodgetts, medical adviser to the Commission of Conservation, to hand you copies of evidence upon this subject given at a recent meeting of the International Joint High Commission.

I can only add that the pollution of the waters in this province is becoming a very serious problem. For some weeks I have had the engineer of this board making a sanitary survey of the St. Clair river and lake and the Detroit river. In a word, he says of these waters that they are totally unfit for human consumption, and the typhoid rates in all the towns on the Canadian side and upon the boats is extremely high.

When we recollect that the tonnage of the boats passing upon these two streams is larger than that of the Suez canal, and that at least ten million people pass up and down this route every year, it becomes a very important matter that the purity of these waters should be preserved.

We have certain evidence that the water of lake Ontario at Toronto is polluted to the distance of fifteen miles from that city, and it is quite reasonable to assume that the sewage of Buffalo and other communities along the Niagara river may be carried to an equal distance.

If you succeed in having this Bill passed by the federal authorities, you will have accomplished a very valuable service in the interest of public health.

Very truly yours,

John W. McCullough,
Chief Officer of Health.

George Bradbury, Esq., M.P.,
House of Commons,
Ottawa.

The following is a letter from the department of health, written by Charles J. Hastings, the president of the International Pure Water Association, and vice-president of the Canadian Public Health Association. These letters indicate how these authorities feel regarding this question:

Department of Health,
City Municipal Buildings,
Toronto, April 5, 1913.

Geo. Bradbury, Esq., M.P.,
House Post Office,
House of Commons, Ottawa.

Dear Mr. Bradbury,—I have just received a communication from Mr. Geo. H. Matland, associate editor of the Star, enclosing a copy of your Bill re the Pollution of Navigable Waters.

It is quite beyond my conception how anyone in Ottawa, even though there for a short time, in view of the past and present history, could raise any objection to a Bill for the Non-pollution of Navigable Waters, or of Waters Flowing into the Navigable Waters.

I most heartily endorse any movement to prevent the pollution of the waters from

which any municipality is drawing, or may in the future draw, their water supply.

If I may make a suggestion, I would say in addition to what you have already said, that you also forbid in your Bill the depositing of any of the aforesaid refuse on the shores or banks of any water supply.

If there are any questions that you would like to ask in this connection, if I can be of any assistance to you I shall be only delighted to do so.

I want to congratulate you for taking this decided stand on what I consider one of the most important public health matters with which we have to deal. In my opinion the permitting of the pollution of navigable waters is one of the most unpardonable offences against public health tolerated by civilized man to-day.

Very sincerely yours,

Chas. J. Hastings,
Medical Health Officer.

I have other letters which I shall not delay the House to read, but I might refer to a letter from the superintendent of dredges on the Red river and at the mouth of the Red river in which he points out that every year he has from one to six cases of typhoid fever amongst his men and that last year there were two deaths. He says it is becoming a problem now to get men to work on the dredges on account of the awful condition of the water going down the river. I hold that any city or any municipality has no more right to contaminate the water in the river that flows by it and thus poison the people lower down the stream, than a man would have to poison his neighbour's well. If a man would place poison deliberately in his neighbour's well and cause death by so doing, he would be prosecuted for murder and would suffer the extreme penalty of the law. But under our present system the city of Ottawa can pour its sewage into the Ottawa river and poison the people living further down the stream with impunity. Dr. McCullough states, in a letter written to a friend in the city, that a recent typhoid epidemic at Hawkesbury on the Ottawa river, forty or fifty miles below Ottawa, was caused by the sewage that was put into the water at Ottawa. The city of Montreal is in much the same condition, as it draws its water from the Ottawa river, and Montreal has not escaped typhoid epi-

demics. And if something is not done to prevent the pollution of our rivers, our great cities and districts will suffer far more than they have done in the past. In the name of the hundreds of families who have been bereaved of dear ones, snatched away to untimely graves; in the interest of the people who have suffered through typhoid outbreaks in this city and other parts of Canada from the effect of the polluted condition of our lakes and rivers, from which the masses of our people draw their water supply; in the name of thousands of our people who have suffered from the effects of polluted water, and are left wrecks of their old selves, to continue life's battle; and in the interest of a strong, vigorous, virile manhood and womanhood for Canada; and in the name of a pure water-starved people; I say to this House, do not delay action on this all-important matter. The greatest asset Canada has to-day is in serious danger, the health and lives of her people are too precious to be neglected one day longer. Canada will hail with delight a measure that will stop the pollution of our great lakes and rivers, and that will eventually restore these great bodies of fresh water to their natural state of purity. We spend annually millions of dollars, this year we are asked for \$10,500,000, for the upkeep of our military establishment, millions for the upkeep and training of an army to fight some enemy in the dim and misty future, that may never appear; not one dollar for the creation and training of a staff, let alone an army, of sanitary engineers to fight an enemy that is now entrenched in our midst, slaying our fellow citizens by the thousand and causing suffering and misery to tens of thousands of our people; an enemy that is sapping the vitality and vigour of our people by the slow, insidious method of polluted water, doing its deadly work more thoroughly than an invading army could do. And this, Sir, in the face of the scientific fact that with a proper law on the Statute Book of this country and a thoroughly trained and equipped staff of sanitary engineers to enforce it, the enemy, Typhoid, can be defeated and driven from our land.