

It is believed that the influences which have affected typhoid in New Orleans are:—

1. Importation of actual cases.
2. The spread of this infection by means of flies or similar means.

The noticeable increase in typhoid for the 1890 decade, as above the 1880 decade, was in all probability in some degree associated with the introduction in the best sections of the city of water closets which discharged into cess-pools, which in turn often overflowed to open street gutters, being more dangerous, possibly, than the old-time closed vaults which were mostly used until sewers were introduced.

The water supply in those days was unfiltered, from the Mississippi river and very muddy, but only about 8% of the population were connected with it, and only part of those who had connections used it for drinking. The rest of the population depended for their water supply upon wooden cisterns built upon foundations well above the ground surface, which caught and stored rain water from the slate roofs of the houses, and there was little possibility of the contamination of such cisterns generally, if at all, with typhoid, and no evidence that the raw river water was ever so contaminated at New Orleans.

Every agency likes to claim credit for every possible benefit toward which it contributes, but the New Orleans water and sewerage authorities do not believe that filtration of the water supply or its sterilization has been at all a factor in this direction, but rather that the elimination of vaults and especially of cess-pools receiving the flow from water closets and overflowing to open street gutters, through the substitution of sanitary sewers with an abundant water supply for the immediate removal of all contaminated matter and the adequate cleansing of all containers and other possibly contaminated articles, constitute the only factors which they have contributed toward the elimination of typhoid.

Steps in other directions, especially in action by the Board of Health authorities looking to the safeguarding of the milk and raw vegetables or other food supplies, and the prevention of flies, and the more general screening of markets and houses, and finally the searching out and remedying of local causes whenever and wherever typhoid appears, are believed to be in great measure the cause of the reduction in typhoid death rate thus far accomplished, and to constitute the main hope of further reduction.

Those cases which are contracted by people residing outside of the city and brought to the local hospitals, or by residents of the city while on vacation or business trips elsewhere, constitute a very large percentage of the total present typhoid fever death rate of New Orleans, and their chief danger is the establishment of local foci of the disease. It appears, therefore, that the present typhoid death rate of New Orleans, which has averaged about 18 per 100,000 during the last seven years, ranging from 14 to 23 per 100,000, is the result of very broad surrounding conditions and of local conditions not in any way associated with the water supply, and that the general lesson as to the importance of such broad surrounding and local conditions other than water supply, in its bearing on the ultimate eradication of typhoid, is most strongly indicated.

Smelting of tin by electric furnace has been commenced in a Brantford, Ont., plant which has an initial production of two tons of metal a day.

It has been announced that a contract amounting to \$1,000,000, for repairs to 1,500 railway cars, has been awarded to the Canadian Car & Foundry Co., Ltd., Fort William, Ont., and Montreal, Que.

The Department of Mines estimates the production of coal in Canada during 1919 at about 12,500,000 short tons. The production during 1919 of the more important metals is estimated as follows: Gold, \$16,267,000 in value; silver, 13,500,000 ounces; copper, 81,500,000 pounds; nickel, 43,300,000 pounds; lead, 50,000,000 pounds; zinc, 38,000,000 pounds; pig iron, 920,000 short tons; steel ingots and castings, 1,020,000 short tons.

## ANNUAL MEETING OF THE ENGINEERING INSTITUTE OF CANADA, JANUARY 27TH TO 29TH, IN MONTREAL

**A**NNOUNCEMENT has been made that the annual meeting of the Engineering Institute of Canada will be held January 27th to 29th, inclusive, in Montreal. The Montreal branch of the institute has been authorized to hold a professional meeting at the same time.

Following the precedent of the previous professional meetings, the one at Montreal will be devoted particularly to the engineering affairs of the province in which the meeting is held. Topics pertaining to Quebec will be brought prominently before the meeting, including the textile industry, highways (with a discussion regarding federal subsidy), the water power policy of the province, the work of the Quebec Streams Commission, the forests of Quebec, the pulp and paper industry and the Quebec Health Act.

The provincial premier and several members of his cabinet, also the lieutenant-governor, have been invited to take part in the discussions.

The social side of the program will receive more attention than at any previous annual meeting, and the Montreal branch will act as host to the members and guests from other cities.

The meeting will open Tuesday, January 27th with a registration and business session. The retiring president's address and inception of the new president will take place that afternoon. There will be a luncheon for members and ladies, and in the evening a reception and dance, with cards, and supper.

Papers on the above-mentioned topics will be presented Wednesday morning and afternoon. The members will be the guests of the Northern Electric Co. at luncheon, followed by a visit to that concern's new plant. In the evening the annual banquet will be held.

The professional program will be continued throughout Thursday, with a luncheon for members and ladies, at which a popular speaker will give an address. In the evening there will be a smoker and concert, with vaudeville entertainment and refreshments.

While all the above social events have not been definitely arranged, it is understood that the program will be practically as above stated excepting that one or more theatre parties may be provided for the ladies. Special arrangements are being made by a ladies' committee. The whole proceedings will be in special quarters which have been arranged at the Windsor Hotel.

The Montreal branch has more members than any other branch of the institute, and is planning for the coming meeting with enthusiasm. Several committees are hard at work with the intention of making this professional meeting the most enjoyable and successful that has ever been held under the auspices of the institute.

It is stated that the large irrigation project that is being planned for Grand Forks, B.C., will use concrete pipe or "gunite" flumes.

Opposition to participation by the United States in the construction of a water route from the Great Lakes to the sea, was a feature of the recent annual convention of the New York State Waterways Association.

The Marsh Engineering Works, Ltd., Belleville, Ont., call attention to the fact that they manufactured the hoisting drums which operate the large shear-legs at the plant of the Dominion Shipbuilding Co., Toronto. These shear-legs were described in an illustrated article in the December 25th, 1919, issue of *The Canadian Engineer*.

At the annual meeting of the Victoria branch of the Engineering Institute of Canada, the following officers were elected for the ensuing year: Chairman, A. E. Foreman; vice-chairman, Lieut.-Col. A. W. R. Wilby; secretary, Horace M. Bigwood (re-elected); treasurer, E. Davis (re-elected); executive committee, R. A. Bainbridge and W. M. Stokes.