

# The Canadian Engineer

Established 1893

A Weekly Paper for Civil Engineers and Contractors

Terms of Subscription, postpaid to any address:

One Year	Six Months	Three Months	Single Copies
\$3.00	\$1.75	\$1.00	10c.

Published every Thursday by

The Monetary Times Printing Co. of Canada, Limited

President and General Manager  
JAMES J. SALMOND

Assistant General Manager  
ALBERT E. JENNINGS

HEAD OFFICE: 62 CHURCH STREET, TORONTO, ONT.

Telephone, Main 7404. Cable Address, "Engineer, Toronto."

Western Canada Office: 1206 McArthur Bldg., Winnipeg. G. W. Goodall, Mgr.

## PRINCIPAL CONTENTS

	PAGE
Engineering Battalions: Their Work in the War, by Gen. Sir Arthur W. Currie.....	203
Joint Commission to Study St. Lawrence Schemes .....	211
Construction Industries Conference at Ottawa	212
Engineering Institute Elections .....	216
Annual Conference on Road Construction....	216
Canadian Good Roads Convention .....	216
Personals and Obituaries .....	218
Construction News Section .....	43
Tenders Called For .....	45, 50, 52
Condensed Advertisements .....	54
Where-to-Buy, An Engineering Trades Directory .....	64
Index to Advertisements .....	70

## SERVICE TO THE PUBLIC

**D**URING the strike of the employees of the Montreal water works, the members of the Montreal branch of the Engineering Institute of Canada have again demonstrated the service that such a body of engineers can render to the public in times of emergency.

With the exception of the men at the filtration plant, every employee of the Montreal water works, to the number of several hundred, quit work without warning at midnight, December 31st, 1919. They had made demands upon the civic administrative commission for higher wages and had been informed that the commission would like to receive evidence that wages such as they demanded were being paid by private firms. The men submitted a certain amount of evidence which was not entirely satisfactory to the commission, and the latter asked for more evidence and understood that the men intended to obtain same and that they would return for another appointment.

Instead of making any further effort to satisfy the commission as to the reasonableness of their demands, the men went on strike, leaving the city of Montreal without water on New Year's Day. The situation was critical,—so critical that fires had to be drawn in one of the largest hospitals in the city. Not only did heating systems suffer, but there was a great shortage of water for all domestic purposes, and had there been a conflagration, the city would have been at its mercy.

But the Montreal branch of the Engineering Institute of Canada came to the rescue of the citizens without delay. Invitations were telephoned on New Year's Day to 54 members of the branch to attend a meeting to discuss the situation, and 50 of them assembled within a few hours. It is understood that at least two of the other four were out of town. These 50 men went to the pumping plant, took off their coats

and started work. It is rumored that they found the plant in very bad condition, that the boilers had not been cleaned for a considerable period, that the pumps had been allowed to run for some time without lubricant, and that the whole plant was in a very difficult condition to start.

The following day these engineers returned to the plant and brought with them approximately 150 skilled mechanics, pump-runners, firemen, draftsmen and engineering and mechanical assistants of all kinds, selected from their own staffs of employees. By noon some of the pumps were running, and within two days the water supply was normal. With a few exceptions it was not necessary for the 50 members of the branch to remain at work any longer, but the men whom they loaned are still running the water works, as the strike is not yet settled.

At the request of R. A. Ross, who is a member of the administrative commission of the city, and who has just been elected president of the Engineering Institute for the coming twelve months, a few of the members of the branch who are particularly skilled in water works pumping problems, have devoted a great deal of attention during the past six weeks to the operation of the plant, and it is said that under Mr. Ross' able leadership, they have brought it to a state of efficiency far excelling anything previously attained.

The Montreal engineers have been very modest regarding their performance, and the public of Montreal do not realize to what extent the city was indebted to them in this emergency, but when the history of that strike has been finally written, the fine public spirit and unselfish desire to serve which characterizes the entire body of Montreal engineers, will be the outstanding feature of the story.

## ENGINEERING INSTITUTE OF CANADA

**T**HAT the announced "rejuvenation" of the Engineering Institute of Canada has been entirely successful, was quite evident at the thirty-third annual meeting held a fortnight ago in Montreal. The attendance broke all previous records; fully 500 members and guests from Montreal and vicinity registered, and the out-of-town attendance was quite equal to that of previous years, bringing the total registration to over 650.

The meeting was well worthy of the large attendance. The technical papers were of high order of merit and covered a multitude of interests. The discussion on engineering education was especially brilliant; those who took part in it are among the leaders in technical education in Canada.

The report of the council, reviewing the past year's activities, met with general approbation and the members evinced a lively interest in the prospects for the future growth of the institute, both in numbers and prestige. The only item in the annual report that met with any adverse criticism, was the fact that there was a deficit of \$6,440. Unfortunately, there was also a deficit (\$2,085) for the year 1918. Prior to 1918, however, there had not been a deficit for more than a decade, excepting in 1914, in which year the Montreal printing prices became so high that the work of producing the transactions was transferred to Toronto for the following two years, with the result that 1915 showed a surplus of \$2,304 and 1916 a surplus of \$3,642, despite war conditions and remitted fees.

The chief causes of the 1919 deficit were: (a) An unusual expenditure of \$1,727 in connection with the work of the legislation committee; (b) a net loss of \$5,022 on the publication of the institute's journal, of which \$2,003 was made up, however, by voluntary subscriptions from members; (c) an increase of about \$7,000 in salaries and wages, as compared with 1917, of which increase the council attributes about \$4,000 to the publication of the journal; and (d) an increase of about \$2,500 in general expenses of administration, as compared with 1917. On the other hand, the expenditure for "printing and stationery" was only \$1,700 more than in 1917 and was \$4,000 less than in 1918, despite the increasing costs of printing, this being due to the transfer to "journal expenditure" of some expenses that would other-