

# The Canadian Engineer

WEEKLY

ESTABLISHED 1893

VOL. 15. TORONTO, MONTREAL, WINNIPEG, VANCOUVER, APRIL 24th, 1908. No. 17

## The Canadian Engineer

ESTABLISHED 1893

Issued Weekly in the Interests of the

CIVIL, MECHANICAL STRUCTURAL, ELECTRICAL, MARINE AND MINING ENGINEER, THE SURVEYOR, THE MANUFACTURER AND THE CONTRACTOR.

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Present Terms of Subscription, payable in advance:

Canada and Great Britain:		United States and other Countries:	
One Year	\$2.00	One Year	\$2.50
Six Months	1.25	Six Months	1.50
Three Months	0.75	Three Months	1.00

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Winnipeg Office: 330 Smith Street. Amalgamated Press of Canada, Limited  
Phone 5758

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Everything affecting the editorial department should be directed to the Editor.

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Changes of advertisement copy should reach the Head Office by 10 a.m. Monday preceding the date of publication, except the first issue of the month for which changes of copy should be received at least two weeks prior to publication date

Printed at the office of THE MONETARY TIMES PRINTING CO., Limited,  
TORONTO, CANADA.

TORONTO, CANADA, APRIL 24th, 1908.

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### SPECIAL NOTICE.

Mr. Oswald Barratt no longer represents The Canadian Engineer at Vancouver. Subscribers and advertisers in British Columbia will please deal, for the time being, direct with the head office at Toronto.

### BUILD NOW.

During the past winter everyone was hoping that with the approach of spring heavy construction work would commence, and with the opening up of large works business would brighten, money would circulate more freely, and the activity, prosperity and commercial progress of the last few years continue. But spring has not brought the hoped-for change. Private individuals and many corporations cannot secure money and credit necessary for the carrying on of new works.

With the decline in the volume of business and the dropping off in the number and size of orders the price of materials necessary for the carrying on of construction work has perceptibly lowered, and a large number of skilled workmen are without employment.

It is at such a time as this that Governments and large municipal corporations, who can secure money at a favorable rate, even in periods of depression, should commence the construction of necessary public works. For years all these public bodies have been contemplating harbor improvements, the construction of seawalls and wharves, the laying of trunk sewers and larger water mains, and the erection of bridges and the building of new highways. Labor and Material will be cheaper, and thus there will be a great saving to the State, but the State will gain in other ways. Works that will add to the comfort and health of the community will be built, people who, otherwise might be charges on charity, receive employment, and channels of trade would flow more regularly, much to the advantage of our country.

Now is the time to construct those works that a year or so ago people thought of as election schemes and visionary improvements.

### VENTILATION OF SEWERS.

The ventilation of sewers is a subject that has engaged the attention of sanitary engineers for many years, but as yet no very satisfactory method suitable for general use has been devised.

Recently the city of Winnipeg has been conducting experiments with sewer lamps, but the city engineer does not appear to be impressed with the desirability of this system for that city.

Sewer gas is constantly forming in the sewers, and it is necessary that this gas be mixed with large volumes of air and not allowed to penetrate into the houses. This gas gathers in the higher reaches of the sewers, and in districts where the manholes are provided with airtight coverings forces its way through defective plumbing into the houses. In districts where the manhole covers are perforated the gas escapes at the street level, and in the summer season is very objectionable, entering the open doors and windows, and carrying with it disease.

Ventilation in sewers that vary in the volume of discharge, caused either by the inrush of storm water or the uneven flow from factory districts, require ventilation more than do those sewers in which the flow is regular. The sudden reduction of the space occupied by the gas forces it through the traps, and generally interferes with the natural ventilation of the sewer.

High, vertical iron pipes have been used for inducing ventilation, but these have not proved to be altogether satisfactory. The sewer gas soon corrodes and rusts the pipe, and the gas is not always carried clear of the houses. The subject is one that will stand further investigation.