deliberations. So frequently their recommendations are so wide of the mark that they are held up to ridicule.

The wreck will cost the C.P.R. about a million dollars, so that for purely business reasons the railway will be anxious to ascertain the cause with a view to prevention.

# CANADIAN CEMENT ASSOCIATION.

In March, 1909, the Canadian Cement and Concrete Association held their first annual exhibition and convention in the city of Toronto. The number of exhibits was large, their character varied, representing many features of cement manufacture and testing, as well as concrete reinforcing. The exhibit of concrete machinery was good and the attendance large. Altogether, it was a successful exhibition.

In March of this year the exhibition and convention will be held at London, Ont. With the experience of last year as a resource we expect that this year's meeting will be even more successful. London is offering a splendid exhibition and assembly hall, the demand for cement during 1910 appears to be increasing, and it is to be expected that this will encourage many new exhibits.

# GUELPH AND HER PUBLIC UTILITIES.

Great interest is taken in Guelph because of the successful operation of their municipal-owned street railway, power and light and waterworks. This year's report shows even better than before. The gas output shows an increase of twelve per cent., and the revenue increased from \$48,779.23 to \$56,556.94 for the year, while the electric light plant shows an increase from \$34,947.45 to \$40,573.47. On the two departments the Light and Heat Commissioners report a gross profit of \$40,319.13, after setting aside \$5,000 for depreciation, interest \$9,241.53, or \$31,077.60 net gain, and a total income of \$98,525.79, including \$4,647 premium on debentures sold.

The Water Commissioners reported gross earnings of \$30,283.28; operating expenses, \$9,108.28, leaving a profit of \$21,175. The total amount expended on the new extension was \$133,132.52, and the capital expenditure for the year \$10,784.70.

# EDITORIAL NOTES.

The January output of the Nova Scotia Steel and Coal Company is as follows:—

	Tons.
Coal	58,236
Ingots	6,684
Pig iron	5,740

The Engineers' Club, Toronto, are holding their annual dinner on Thursday, February 17th. This is always an enjoyable function, and affords a splendid opportunity for engineers to meet old friends. This year a large attendance is expected.

# PRECIPITATION FOR JANUARY.

The amount of precipitation which was recorded during January, exceeded the average in Central and Eastern Ontario, the Lower St. Lawrence Valley, and Eastern parts of the Maritime Provinces; elsewhere in Canada the normal value was not reached, except very locally in the neighbour-

hood of Battleford, Sask., in the Cariboo District, and generally in the lower levels of British Columbia, and also in the extreme southwest counties of Ontario.

#### Depth of Snow.

At the close of the month the ground was snow-covered from Saskatchewan to the Maritime Provinces. In those portions of the Western Provinces where there was snow on the ground, the depth varied from 1 to 12 inches, the same being also the case in the Maritime Provinces. In Ontario, in the vicinity of the Georgian Bay and the Highlands of Muskoka the depth was from 26 to 36 inches, while other parts of the Province were only covered to a depth of from 3 to 15 inches. In the vicinity of Quebec City there were some 33 inches of snow on the ground, while over the remainder of the Province, the depth generally exceeded 14 inches.

### Thickness of Ice,

Thickness of ice is reported as follows:-

Western Provinces.—Edmonton, 25 inches; Battleford, 24 inches; Medicine Hat, 18 inches; Swift Current, 30 inches; Moose Jaw, 30 inches; Minnedosa, 12 inches.

Ontario.—Port Arthur, 7 inches; Bruce Mines, 14 inches; Barrie, 15 inches; Owen Sound, 3 inches; Southampton, 24 inches; Lucknow, 15 inches; Port Stanley, 12 inches; Port Burwell, 18 inches; Georgetown, 15 inches; Toronto, 15 inches; Kingston, 9 inches; Renfrew, 16 inches.

Maritime Provinces.—Chatham, 7 inches; Charlottetown, 3.5 inches.

The table shows for fifteen stations included in the report of the Meteorological Office, Toronto, the total precipitation of these stations for January.

Ten inches of snow is calculated as being the equivalent of one inch of rain.

		Departure
	Depth	from the average
Station.	in inches.	of twenty years.
Calgary, Alta	0.20	-0.26
Edmonton, Alta	0.20	-0.51
Swift Current, Sask	0.10	-o.56
Winnipeg, Man	0.20	-0.77
Port Stanley, Ont	5.10	+1.77
Toronto, Ont	3.51	+0.71
Parry Sound, Ont	5.00	+0.54
Ottawa, Ont	3.30	+0.31
Kingston, Ont	2.50	-0.37
Montreal, Que	3.90	+0.15
Quebec, Que	4.80	+1.60
Chatham, N.B	. 4.40	-0.82
Halifax, N.S.	9.10	+3.25
Victoria, B.C	4.50	-0.04
Kamloops, B.C.	0.20	-0.75
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## SULPHIDES SEPARATION.

### Valuable Discovery.

For many years metallurgical experts have been endeavoring to discover a practical and economical method of separating the sulphide ore into its constituents. The flotation processes have hitherto been confined to the separation of the gangue from the ore, thus obtaining a clear concentrate composed of such sulphides as the ore contained. The difficulty has always been the separation from one another of the sulphides contained in this concentrate. According to advice just received the desired result has been accomplished by Mr. E. J. Horwood, of Broken Hill, New South Wales,