1914 PUBLIC WORKS IN LETHBRIDGE, ALTA.

The following figures are from the report for 1914 of Mr. A. M. Grace, Commissioner of Public Works, Lethbridge, Alberta:—

Sanitary Sewers.

	Length in feet			
	8-inch.	10-inch.	12-inch.	Total.
Constructed	928	508	2,124.2	3,560.2
Not yet constructed.	3,428	226	.....	3,654.0

Subway.

This contract was awarded to the city and sublet at the same prices to Lethbridge contractors. This was done to keep the work in the city. The final estimate was paid on:

Grading	8,784	cubic yards
Excavating	1,312	cubic yards
Piling	13,108	lineal feet
Concrete: Class I.	952	cubic yards
" Class II.	320	cubic yards
" Weeping Drains	142.5	lineal feet

High Pressure System.

13th Street North	14-inch steel	1,430 feet
5th Avenue North	12-inch steel	4,638 feet
Total		6,068 feet

Watermain Extensions.

12th Ave. and 13th St. South	8-in. steel	250 ft.
Lane between 13th and 15th Sts. ..	6-in. steel	690 ft.
15th St. between lane and 14th Ave.	6-in. steel	1,150 ft.
Total		2,190 ft.

Storm Sewers.

This work had to be done in connection with the subway, and started from Second Avenue North with 24-inch pipe up to First Avenue South, and a piece forty-eight feet long across 13th Street South at First Avenue.

13th St. from 2nd Ave. N. to 1st Ave. S.	24-inch	770 ft.
1st Avenue South		50 ft.
Total		820 ft.

GYPSUM IN CANADA.

In reviewing to considerable length the Department of Mines report by L. H. Cole on "Occurrence, Exploitation and Technology of Gypsum" Engineering (London) closes with the following remarks:

"The conclusion to which we are rather reluctantly driven from the study of this careful digest of the condition of an important industry is that there is room for the exercise of greater enterprise and, possibly, for the employment of larger capital. In the last six or seven years the increase has been inconsiderable, and by no means uniform. The number of operatives employed is comparatively small, in the largest works usually not more than 100 or 120. In the arts and manufactures gypsum plaster and calcined gypsum are finding many new applications, and the demand for the raw material should steadily increase. The Government are fully alive to the need of assisting development, and this report shows their willingness to foster an industry whose extension would be eminently beneficial to the Dominion."

CANADIAN CANAL TRAFFIC IN 1914.

THE statistics compiled by Mr. J. L. Payne, comptroller of statistics for the Department of Railways and Canals, Ottawa, place the volume of traffic through all the canals of Canada during 1914 at 37,023,237 tons, as against 52,053,913 tons in 1913—a decrease of 15,030,676 tons. The distribution of traffic, together with decreases and increases, was as follows:—

Canal.	Tons.	Increase. Tons.	Decrease. Tons.
Sault Ste. Marie	27,549,184	.....	15,100,140
Welland	3,860,969	290,255	.....
St. Lawrence	4,391,493	89,066	.....
Chambly	436,905	.....	118,697
St. Peters	54,180	.....	17,334
Murray	83,907	.....	96,669
Ottawa	335,132	.....	30,306
Rideau	151,739	.....	19,484
Trent	67,715	11,915	.....
St. Andrews	42,013	.....	39,282
Total	37,023,237	391,236	15,421,912

It will be observed that the unprecedented falling-off in traffic during the year 1914 occurred almost wholly at Sault Ste. Marie. Of the total decrease of 15,030,676 tons, 1,748,669 was in Canadian and 13,282,007 in American waterborne commerce. The decline in American traffic was very largely in the movement of iron ore from the head of Lake Superior to ports on Lake Erie.

The gross traffic through the canals since 1905 has been as follows:—

Year.	Tons.	Year.	Tons.
1905	9,371,744	1910	42,990,608
1906	10,523,185	1911	38,030,353
1907	20,543,639	1912	47,587,245
1908	17,502,820	1913	52,053,913
1909	33,720,748	1914	37,023,237

The stringent nature of lighting regulations now existing in cities and towns of Great Britain is naturally disadvantageous to road users. The Automobile Association and Motor Union have taken the matter up in London and have made the suggestion that the responsible authorities in the Metropolitan area arrange for the curbs at darkened corners and street-refuges to be whitened. As a result a number of authorities have instructed their surveyors to take the necessary steps to whiten the curbs at certain places within their jurisdiction. This will undoubtedly be of considerable assistance in minimizing the possibility of accident, and the hope is expressed that the action which is being taken in London will be followed by the authorities in the various large towns where lights have been considerably reduced under the regulations made by the Home Secretary.

The United States Bureau of Mines has been endeavoring to increase safety in mines and to abolish conditions which tend to impair the health of miners. Much study has been devoted to the kind of explosives used in mining and the conditions under which these explosives can be used with least danger. Several years ago a bulletin was issued on explosives for coal miners. Another is now in press, devoted to explosives for metal miners and quarrymen. It contains chapters on combustion and explosion; blasting and mine explosives; fuse, detonators and electric detonators; firing blasts by electricity; the use of explosives in excavation work; the use of explosives in quarrying; the use of explosives in metal mining and tunnelling; drilling and blasting methods on New York rapid-transit tunnel; magazines and thaw houses; permissible explosives, etc.