

Editorial

REPORTS FROM MUNICIPAL ENGINEERS.

Many municipal engineers will during the next few weeks be busy preparing their reports of work done during the year which has just closed. It is to be hoped that the practice of preparing written reports whenever possible will be more general in the future than has been the case in the past. There has been a tendency on the part of too many municipal engineers to evade written reports.

The value to one municipality of how work is progressing in others, what methods are being employed to advantage is obvious. To the municipal engineer falls the duty of supplying his corporation with exact and complete data, in order that such data may be of use not only to himself and the community which he serves at the time, but also to other municipalities.

It is, however, to himself that the preparation and presentation of such reports will be most valuable. Access to such records as these will have a direct bearing on his future success, if only for the purpose of having an exact record of all his reports of progress, proposals, opinions, etc., as furnished to works committees and council, so that when an emergency arises it will be possible for him to make immediate and exact repetitions of statements made perhaps months before. In this way the engineer who has fortified himself against the freaks of memory will find in it a safeguard to his professional standing.

The municipal engineer of to-day is called upon to express opinions upon so many different phases of civil engineering work that it is incumbent upon him, perhaps more than any other class, to take this exhortation (not to trust too much to memory but make written reports) especially to heart.

The municipal engineer must have a very diversified knowledge of engineering. He is called upon to deal with problems in which a knowledge of hydraulics, sanitation, surveying, railways, roads and pavements, etc., etc., are called for, all of which makes it important not to be hampered by a failure of memory.

Finally, a report emanating from a municipal engineer should be complete in itself, making oral explanations unnecessary.

IRON AND STEEL INDUSTRY DURING 1916.

The growth of Canada's iron and steel industry has of late years been phenomenal. While in 1914 the industry was at a low ebb, it is gratifying to note that to-day Canada ranks eighth among the steel-producing countries of the world.

In the report on the production of iron and steel during 1916, just made by Mr. John McLeish, B.A.F.S.S., who is in charge of the division of mineral resources and statistics, the following highly interesting facts are given covering the activity in this field of effort during 1916:—

The records received from the producers show that the production of pig iron and of steel ingots and castings during the first eleven months of the year which together with estimates for December show a probable production of pig iron in Canada during the twelve months ending December 31, 1916, of 1,171,727 short tons (1,046,185 gross tons) and a probable production of steel ingots and

direct steel castings of 1,454,124 short tons (1,298,325 gross tons), of which 1,423,485 short tons were steel ingots and 30,639 short tons were direct castings.

The production in 1916 during the first six months and monthly during the last six months was as follows, in gross tons:—

	Pig iron, gross tons.	Steel ingots, gross tons.	Direct castings, gross tons.	Total, gross tons.
Six months ending June ...	501,872	577,999	11,715	589,714
July	82,154	101,178	2,284	103,462
August	78,450	108,889	2,299	111,188
September ...	91,736	116,828	2,524	119,352
October	101,436	126,577	2,924	129,601
*November ..	95,237	119,468	2,745	122,213
†December ...	95,300	119,930	2,865	122,795
Six months ending December	544,313	692,970	15,641	708,611
Twelve months ending Dec..	1,046,185	1,270,969	27,356	1,298,325

*Partly estimated. †Estimated.

The production of pig iron in 1915 was 913,775 short tons and of steel ingots and castings 1,020,896 short tons, showing, as noted above, an increase in the production of pig iron in 1916 of about 28 per cent. and an increase in production of steel ingots and castings of over 42 per cent.

The 1916 production was greater than that of any previous year, the second largest production of pig iron having been 1,128,967 short tons in 1913 and of steel ingots and castings 1,168,993 short tons also in 1913.

Of the total production of steel ingots and castings in 1916, about 43,790 short tons (39,098 gross tons) were made in electric furnaces. In 1915 only 61 short tons were reported as having been made in electric furnaces.

BITUMINOUS SAND-GROUT PAVEMENT.

Under the above head an article appears on page 17 of this issue, descriptive of bituminous sand-grout pavements laid in Liverpool, Eng., and near Boston, Mass.

While the Boston roads are purely experimental and are not old enough to be particularly significant, it is understood that some of the Liverpool roads have been down as long as fourteen years, and are still in good condition. So far as *The Canadian Engineer* is aware, no roads of this type have been built in Canada, but the success of these roads in England will undoubtedly lead to their trial in this country.

The suggestion is made, therefore, that it would be of distinct interest to highway engineers and road contractors in Canada, if the Canadian & International Good Roads Congress, which is to meet this winter in Winnipeg, could induce Mr. J. A. Brodie, city engineer of Liverpool, to attend the convention and deliver a thorough paper upon this subject. Mr. Brodie is generally admitted to be one of the leading road authorities in England, and his visit to Canada at this time would be most opportune in view of the large number of roads that will be built after the war is over.

The city engineers throughout Canada would warmly welcome a visit from Mr. Brodie, and the members of the Canadian Society of Civil Engineers would, no doubt, co-operate in his entertainment.