

Metropolitan Amalgamated Railway Carriage Company, of Birmingham.

South Africa and New Zealand had large orders for locomotives with the Maffic Company, of Munich. The Hanover company were also building thirty-four passenger carriages for the Union of South Africa railways.

Kersckel of Casel had orders for eighteen heavy main line engines for South Indian and some Argentine railways.

The Hanover Machine factory was building locomotives for the Bengal railway and Taff Vale railway, and the Hohenzollern works at Dusseldorf were building six powerful shunting locomotives for the Port of London authorities.

All these contracts now have been cancelled and shortly will be divided amongst British and American engineers.

### AMERICAN ROAD BUILDERS' CONVENTION, CHICAGO.

The programme committee of the American Road Builders' Association reports that plans for the 11th Annual Convention to be held in Chicago, Dec. 14-18, are near completion. The general features of the programme have been decided upon, practically all of the subjects have been chosen and the assignment of speakers is now being made.

Registration will be carried on throughout Monday afternoon and evening. The forenoon of Tuesday, Dec. 15, will be devoted to the reception of delegates and visitors and to committee meetings, other preliminary business and the inspection of exhibits. At 2.30 p.m. the Congress will be formally called to order by President W. A. McLean, Provincial Highway Engineer of Ontario, and addresses of welcome will be given by officials of the city of Chicago, the state of Illinois, the Illinois Highway Commission, the University of Illinois, the Illinois Society of Civil Engineers and Surveyors, and the Illinois Highway Improvement Association.

The technical sessions will commence on Wednesday, and will be held each morning and afternoon until the close of the convention. On Wednesday evening, the Association will hold its annual dinner.

Essentially the same plan for the programme as that adopted at recent conventions of the Association will be followed. The various subjects to be treated have been so chosen as to cover the important phases of the three general divisions of the subject of highway work: Organization, Construction and Maintenance. Each topic will be introduced by a short paper presented by an authority especially selected for his knowledge of the subject on which he will speak. The discussion on that topic will then be opened by an especially selected speaker, who will be followed by other speakers, also selected because of their familiarity with the subject. The discussion will then be open for anyone who chooses to take part.

Among the topics to be treated are the following:—"Road and Pavement Dimensions—Widths, Depths and Crown;" "Road Foundations—Concrete, Telford, Gravel, etc.;" "Organization;" "Traffic—Present Tendencies, Probable Development and Regulation;" "Machinery for Construction and Maintenance;" "Brick Roads and Streets;" "Surface or Floors for Bridges;" "Bituminous Construction and Maintenance—Recent Practice;" "Concrete Roads;" "Recent Practice in the Construction of Wood and Granite Block Pavements;" "Earth and Gravel Road Construction;" "Street Paving in Small Cities;" "Convict Labor in Road Construction," and "Dust Prevention and Street Cleaning."

### STEEL PRODUCTION IN CANADA, 1913.

**P**RODUCTION of all kinds of steel ingots and castings in Canada in 1913 amounted to 1,042,503 gross tons, an increase of 189,472 tons above 1912, according to the report issued by the American Iron and Steel Institute. Of the 1913 production, 1,006,149 tons were ingots and 36,354 tons were direct steel castings, being respective increases above 1912 of 185,357 and 4,115 tons.

The total productions of steel ingots and castings has increased rapidly in recent years, and the 1913 output was by far the largest in the history of Canada.

A table covering the production by both classes in gross tons, during the last ten years, follows:

Years.	Ingots.	Castings.
1913 .....	1,006,149	36,354
1912 .....	820,792	32,239
1911 .....	768,559	22,312
1910 .....	723,002	18,922
1909 .....	664,789	13,962
1908 .....	500,300	9,657
1907 .....	629,026	17,728
1906 .....	555,913	14,976
1905 .....	394,055	9,394
1904 .....	142,279	6,505

**Plants Involved.**—In 1913 there were sixteen steel works engaged in the manufacture of ingots or castings, compared with fourteen in 1912. There were four idle works in 1913, compared with three in 1912. In regard to processes, the production of Bessemer steel ingots and castings in 1913 was 273,391 tons, an increase of 65,822 above 1912. The output of open-hearth steel ingots and castings in 1913 amounted to 768,663 tons, which was 123,601 above 1912. Nearly all Bessemer steel made in the last two years was in the form of ingots. Of the 1913 open-hearth production, 736,562 tons was in ingots and 32,101 in castings.

The production of all kinds of finished rolled iron and steel in 1913 amounted to 967,097 tons, an increase of 105,873 tons, and also was the largest in the Dominion's history. Of last year's output about 95,881 tons were iron and 871,216 steel.

**Finished Iron and Steel.**—The production of all kinds of finished rolled iron and steel, in gross tons, by provinces, during a two-year period, follows:

Provinces.	1913.	1912.
Nova Scotia .....	380,488	337,466
Quebec .....	72,439	88,172
Ontario .....	504,900	418,346
New Brunswick, Alberta, Manitoba..	9,270	17,240
Total .....	967,097	861,224

In 1913 there were twenty-one works engaged in rolling finished forms of iron and steel, and also the same number in the previous year. There were five idle rolling mills and steel works in 1913, compared with four in 1912. Three new steel plants were built in 1913, all equipped to make steel castings but not rolled iron or steel products. At the close of 1913 three additional similar plants were in course of being constructed.

Assurance comes from New York city that Tramways Limited, the company which proposes to build the inter-urban line in the Edmonton district, announces that it is prepared to proceed with the project as soon as arrangements can be finally completed by the Edmonton city council for that construction.