

RAILWAYS—STEAM AND ELECTRIC.

Ontario.

KINGSTON.—The T. & N. O. Railway expect to add six powerful ten-wheelers to their locomotive stock next month. The engines are being turned out by the Kingston Locomotive Works.

BROCKVILLE.—The G.T.R. shops here will be moved to Manitoba yards. This change will not take place for another year at least.

British Columbia.

NEW WESTMINSTER.—The B. C. Electric Company has issued orders that the work on the construction of the Eburne-Westminster tram line is to be resumed. It is expected by the company that the grading will be completed by April 1st, and also that track laying will be commenced within the next month.

GREENWOOD.—C. S. Moss, resident engineer of the C.P.R., in company with J. A. Macdonald and C. S. Gzowski, contractors of Vancouver, have gone over the proposed grading on the Mother Lode branch of the C.P.R. where a new grade will be made about three-quarters of a mile in length, so as to eliminate the two lower trestles. Mr. Moss stated that he expected work would be started on the grade within two or three weeks. About forty men will be required on the work, which will mean an expenditure of from \$25,000 to \$30,000.

China.

CANTON.—Four more Canadian engineers have just reached Canton, China, for the construction of the Canton and Hankow Railway. The construction is carried on by coolies, with baskets, no horses are employed. Each engineering party has an armed native escort of 20 men.

SEWERAGE AND WATERWORKS.

Ontario.

GANANOQUE.—It is proposed by the council to install a new pump in the pump house here.

Quebec.

MONTREAL.—At the meeting of the Water Committee held recently, Mr. George Janin, superintendent, pointed out the great need of laying a large water main from Atwater Avenue as far as Delorimier Avenue. The total cost would be \$180,000.

MISCELLANEOUS.

Ontario.

TORONTO.—A by-law for the construction of a bridge across the Don at Wilton Avenue, voted down several years ago, will be again submitted to the people. The cost is placed at \$185,000. It was also decided to have the Polson in-tead of the Glasgow boilers for the high-pressure system.

TORONTO.—Alterations and additions to Customs Department of the Post-Office in Toronto are being proceeded with. Structural steel, cast-iron and brick are the main materials. The steel is fire-proofed by cement, the floors of wood. Building, two stories in height, 56 feet by 90, to replace the building west of the Post-Office, and facing on Lombard Street, thus far occupied for postal purposes. George Henry & Son, of Rusholme Road, Toronto, are the general contractors; Reid & Brown, of the Esplanade Foundry, do the steel and iron work.

BRANTFORD.—City Engineer Jones, of this city, has presented a report calling for the laying of a number of concrete walks during the coming summer.

Alberta.

RED DEER.—Alberta Government will build a telephone line to Pine Lake almost at once as all requirements with regard to numbers have been compiled with for the construction of such a line.

British Columbia.

VANCOUVER.—The Provincial Government in response to the request of the Hastings Townsite Property Owners' Association will expend about \$15,000 in road improvements in that townsite this year. The announcement was made at a recent meeting of the Association.

GRAND FORKS.—It is stated that a great deal of new machinery is being installed just now at the Granby smelter, and this spring will witness modern appliances on the works which will revolutionize the work in several departments at the big reduction works. It is also announced that a portion of the new machinery will be for handling the slag, and that the familiar "donkey engines" will be entirely done away with.

Saskatchewan.

REGINA.—Competition for the construction of the new Albert Street bridge and dam was very keen, no less than ten bids being received. The lowest tenderer, and consequently the successful one, was the Parsons Construction Company, of this city.

PERSONAL.

MR. MCARTHUR has been appointed city engineer of Guelph.

CITY ENGINEER LINDSAY, of Guelph, Ont., is going to Belleville to take up a similar position in that city. Many applications for the post were received from all parts of Canada and Mr. Lindsay is to be congratulated.

THE REPORT OF THE QUEBEC BRIDGE COMMISSION.

(Continued from Page 191.)

the erection, and by the Phoenix Iron Company in fabricating the material was good and the steel used was of good quality. The serious defects were fundamental errors in design.

(m) No one connected with the general designing fully appreciated the magnitude of the work nor the insufficiency of the data upon which they were depending. The special experimental studies and investigations that were required to confirm the judgment of the designers were not made.

Design Too Advanced.

(n) The professional knowledge of the present day concerning the action of steel columns under load is not sufficient to enable engineers to economically design such structures as the Quebec Bridge. A bridge of the adopted span that will unquestionably be safe can be built, but in the present state of professional knowledge a considerably larger amount of metal would have to be used than might be required if our knowledge were more exact.

(o) The professional record of Mr. Cooper was such that this selection for the authoritative position that he occupied was warranted, and the complete confidence that was placed in his judgment by the officials of the Dominion Government, the Quebec Bridge and Railway Company, and the Phoenix Bridge Company was deserved.

FINANCIAL POSITION OF THE C.P.R.

The Canadian Pacific Railway has \$38,000,000 in its treasury or in sight to spend upon betterments and extensions, a sum greater than any other railway in the world has on hand. Of the total, \$24,000,000 is being secured from the issue of new common stock, \$10,000,000 from the sale of debenture stock, and there remains from the last issue of common stock \$4,000,000.