15-

in-

on

ed

he

tabe

On

his

m-

re-

ons

ally

m-

and

der

and

the

his

but

ion

rin-

alu-

and

ion

that

ple-

heir

oca

uge and aish assi-

fes of

ces. of are for the

em has

oper nan ser rade ertigin ons. K.'s trick

eave e to

nta

to

## The Canadian Engineer

Established 1893

A Weekly Paper for Canadian Civil Engineers and Contractors

Terms of Subscription, postpaid to any address:

One Year Six Months Three Months Single Copies

\$3.00 \$1.75 \$1.00 10c.

Published every Thursday by
The Monetary Times Printing Co. of Canada, Limited

JAMES J. SALMOND
President and General Manager

HEAD OFFICE: 62 CHURCH STREET, TORONTO, ONT.
Telephone, Main 7404. Cable Address, "Engineer, Toronto."
Western Canada Office: 1208 McArthur Bldg., Winnipeg. G. W. Goodall, Mgr.

## Principal Contents of this Issue Results of Test on Robert Simpson Building, by W. W. Pearse and Peter Gillespie, B.A.Sc. 263 Waterworks Department, City of Edmonton 268 The Gas Industry and Canada's Fuel Problem, by Arthur Hewitt 269 Concrete Paved Bank Revetment, by G. C. Haydon 271 Book Reviews 275 The Effect of Covering a Service Reservoir, by John Gaub Possibilities of the Relief of Fuel Consumption in Canadian Industry by the Increased Use of Hydro-Electric Energy, by J. M. Robertson 280 Readjustment of Industry 283 Editorial 283 Personals 284 Construction News 48

## RAILROAD RATES

THE increase of 15 per cent. in railway rates authorized by the Railway Comission has been approved by the Governor-in-Council, and became operative from March 15th until one year after the end of the war. There was no other decision, consistent with the facts, open to the government. While the cost of all factors of railroad operation has rapidly increased, the companies were not allowed to charge any more for the commodity, transportation, they sell. The result has been clearly reflected in earnings in which the government is now vitally interested.

The Canadian Pacific Railway with the other roads, will charge the increased rates but it has to contribute to the public revenue one-half of its net earnings from railway operation in excess of 7 per cent. on its common stock. This is the present rate of dividend paid from this source. Upon the revenue derived other than from railway operations, such as lands, steamships, hotels, and telegraphs, the company must pay income tax, which under the legislation of last session of Parliament amounts to 25 per cent. on incomes over \$100,000. The wording of the provisions of the order-in-council apparently means that the payment to be made by the company to the public revenue shall be up to \$7,000,000 annually, and a larger sum if the increase in net earnings from the 15 per cent. higher transportation rates exceeds net earnings in 1917 by more than \$7,000,000. Thus, whatever additional revenue the Canadian Pacific Railway derives from the new tariff of rates will accrue to the government. The special taxes imposed are obviously aimed at this company, which is tantamount to an admission that in the case of the other railways, such as the Canadian Northern, the Grand Trunk and the Grand Trunk Pacific, the higher rates will not produce net earnings in excess of charges

on capital. The Canadian Pacific is actually to be penalized for its prosperity, built chiefly on efficiency and good management. A Montreal dispatch quotes a high official of the company to the effect that the corporation does not regard the new law as confiscatory. The dispatch concluded: "The Canadian Pacific Railway is not complaining." That has always been the spirit of this well-managed Canadian enterprise which has helped in innumerable ways and continues to do so to perfect the war organization of Canada and the British Empire.

Our railroad problem is not yet solved but the exigencies of war have brought a temporary measure. The outstanding features are the willing diversion of a large part of the company's profits to the conduct of the war, the maintenance of the company's and Canadian credit generally by the allowance of 10 per cent. dividends to the shareholders, and the recognition of the inadvisability of the nationalization of the Canadian Pacific Railway.

## TRADE AND INDUSTRY AFTER THE WAR

DISCUSSING in a clear and able paper last summer, the industrial situation and outlook, G. Frank Beer, of Toronto, pointed out that Canadian factories were for the most part like young robins with open mouths into which the Munitions Board dropped orders averaging \$1,000,000 a day. How can we prepare for the time when these activities cease? That question remains unanswered. There may be unforeseen factors, favorable and adverse, which will affect the situation after the war, but no good reason exists for postponing intelligent preparation for these post-bellum problems. Mr. Beer recalled that an organization of each separate American industry for export trade is the object of a trade commission now sitting permanently at Washington. "The form which such an organization should take," he said, "to meet Canadian requirements can not be decided upon without a most careful and thorough enquiry, and such an enquiry should be engaged in at once by the federal labor department, the department of trade and commerce, or other government authority in co-operation with a carefully selected committee of industrial leaders and labor representatives." He also referred to the important functions which a competent board of industry might exercise in connection with national production, adding: "Service of equal value should be provided for in connection with the problems of marketing. An effort has been made to show that only by the consideration of production and marketing, as constituting one problem, can the problems of each be adequately dealt with. The experience of the past two years has demonstrated the desirability, and indeed the necessity, of enlisting the services of successful and practical business men to control and administer work of this nature. A nucleus for the board of industry proposed lies within the personnel of the present Imperial Munitions Board. To a board of this character might with safety be assigned the task of co-ordinating and strengthening the work of all government departments now having to do with export trade."

Col. Carnegie, a member and ordnance advisor of the Imperial Munitions Board, apparently having read Mr. Beer's exposition of the subject, has now advanced a detailed scheme to solve two problems, namely, how to secure remunerative trade without unrestricted competition and how to maintain efficient production with competitive cooperation. An abstract of his address appears on another page of this issue. His plan to combine the activities of