

amending the act of incorporation. (Feb., 1903, pg. 47.)

Temiskaming and Northern Ontario Ry.—In the speech of the Lieutenant-Governor of Ontario at the opening of the Legislature reference was made to the satisfactory progress that had been made with the construction of the line, and to the great value of the undertaking, which had been fully demonstrated by the advantages which had already resulted to the Province. The surveys made during the past year, it was added, showed that the railway may be profitably prolonged at moderate cost through the centre of the rich agricultural district northwest of Lake Temiskaming, at least as far as the proposed line of the Grand Trunk Pacific Ry.

The second annual report of the Commissioners having charge of the construction of the line was presented to the Legislature Feb. 8. The total expended during the year was \$1,842,451, making a total expended to Dec. 31, 1903, of \$2,020,092, which includes \$5,841 expended on explorations north of New Liskeard. The principal items of expenditure during the year were: engineers' construction, \$1,156,527; rails and fastenings, \$326,103; rolling stock, \$73,789; ties, \$65,425; ballasting, \$37,599; pay rolls, \$4,098; telegraph line, \$9,489; tracklaying, \$20,579. The Commissioners also gave an estimate of the cost of the 112 miles of line from North Bay to New Liskeard completed and equipped ready for traffic. This shows a total cost of \$3,332,560, made up as follows: grading, including trestle work, bridging, etc., \$18,000 a mile; rails and fittings, ties, ballasting, telegraph line, tracklaying, etc., \$7,000 a mile; terminals, sidings, stations, water-tanks, etc., \$1,755 a mile; rolling stock, \$3,000 a mile; total, \$29,755 a mile. The line being constructed is of the highest class, equal to the trunk line standard.

The report of the engineer, W. B. Russel, shows what has been done, and states that it is intended to have the line to New Liskeard completed and in operation by the end of 1904. During 1903 the grade was completed on 76 miles, track was laid on 57 miles, and the telegraph line completed for the same distance. The maximum gradient which it was necessary to use on the first 32 miles of 1.25% rising north and 1% rising south was reduced on the balance of 80 miles to 1% rising north and 0.75% rising south, the maximum curve being 6° and easement on all curves over a 3°. The located part of the line between the 50th and 72nd miles presented considerable difficulties and was abandoned, a new line being run some miles inland from Rabbit lake with good results and the saving of one mile. The surveys north of New Liskeard show that a line can be located on the entire route to the Abitibi river with a maximum gradient of ½% of 1% and a maximum curve of 4°. A location working to this standard is now in progress and will be ready for construction in the early spring. While the grading will be comparatively light, the crossing of streams in deep ravines will be somewhat expensive. The proposed extension passes through a clay loam and comparatively flat country from 12 to 20 miles wide. There is an almost unlimited quantity of pulpwood, and the prospects of mining development are great.

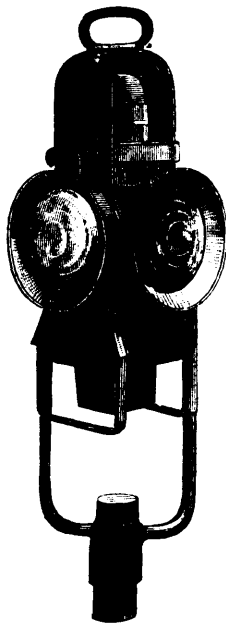
The Government is asking for power to extend the line from New Liskeard to the Abitibi river, to increase the bonding powers from \$25,000 to \$30,000 a mile; to permit the transfer to the Commissioners by order-in-council of townsites along the line of railway, such townsites not to be part of the security for bondholders, but to be sold and the proceeds applied towards the maintenance of the line; and further authorizing the transfer to the Commissioners, by order-in-council, of not exceeding \$2,000,000 by way of loan at 3½%, the bonds of the railway to be deposited as security. (Jan., pg. 9).

Terrebonne Electric Ry.—Application has been made at Quebec for a charter for the

The HIRAM L. PIPER CO'Y

12 St. Peter St. - MONTREAL. LIMITED

PIPER Switch Lamps



Require no
Chimney

Consumption
of Oil reduced
by half

Wick regulat-
ed from
outside

Made of
annealed iron,
galvanized

Fittings
copper and
brass

Brass Oil Tank
never leaks

A post card will bring to you our No. 30 Catalogue of Railway Signals and Supplies.

STORRS' "NEVER BREAK" Mica Headlight Chimneys

Save
50 per cent.
in cost of
Chimneys
alone.

Save
Cleaning
and
Replating
Reflectors



CANADIAN NORTHERN RAILWAY

THE NEW CANADIAN HIGHWAY FROM PORT ARTHUR, THE
HEAD OF LAKE SUPERIOR, TO—

**FORT FRANCOES
WINNIPEG
PORTAGE LA PRAIRIE
BRANDON**

**MORRIS
EMERSON
CARMAN
HARTNEY**

**GLADSTONE
NEEPAWA
DAUPHIN
SWAN RIVER**

Line surveyed and now under construction to:—

PRINCE ALBERT

BATTLEFORD

EDMONTON

FREIGHT:—Shipments are handled from points in Eastern Canada, either Grand Trunk or Canadian Pacific Railways, via North Bay to Port Arthur, thence Canadian Northern Railway.

PASSENGER:—Passengers destined to points on the Canadian Northern Railway north, south and west of Winnipeg, can purchase through tickets via Chicago and St. Paul, where connection is made with the Canadian Northern Flyer for Winnipeg via Great Northern Railway, also with Northern Pacific Railway.

Freight Rates, Folders and other Information furnished on application to:—

R. H. BELL, T. F. & P. A., Board of Trade,
MONTREAL, QUE.

WM. PHILLIPS, G. E. A.,
TORONTO, ONT.

GEO. H. SHAW, Traffic Manager,
WINNIPEG, MAN.