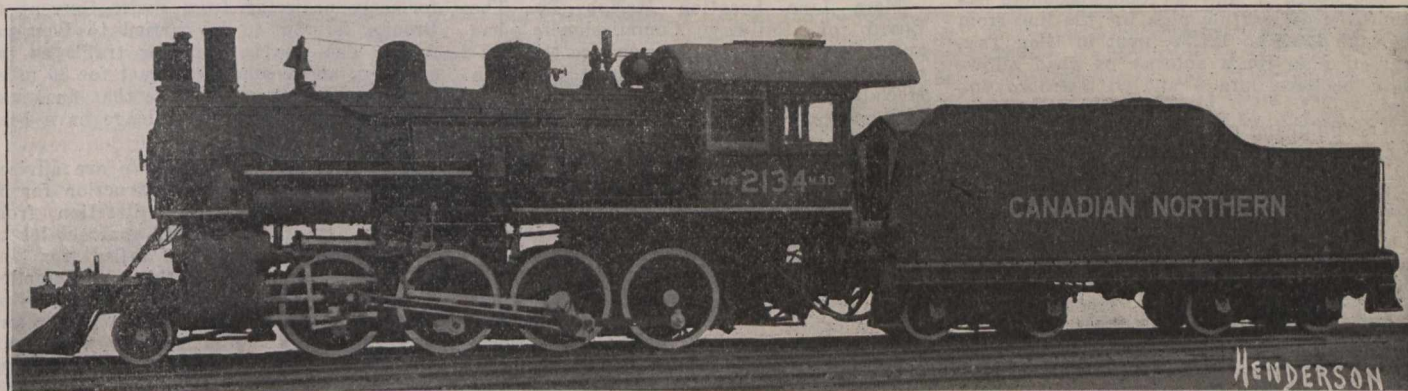


### Canadian Northern Railway Consolidation Locomotives.

The Canadian Locomotive Co. is delivering to the C.N.R. 25 consolidation locomotives for freight service, equipped with the latest type of superheater. These locomotives weigh in working order 188,600 lbs., and are of the usual type of consolidation locomotives, with semi-wide firebox over frames. Three hundred and forty-eight flexible staybolts are used in the breaking zone of firebox. The ashpan is of the C.N.R. style of hopper bottom. Outside steam pipes are used, incased within an air tight jacket secured to cylinder and smoke box. This arrangement eliminates most of the obstruction in the smoke box met with when using the inside steam pipes. The Pyle National electric headlight is used. The boiler is fed from the top, through an arrangement of check valves in base of bell stand. The tender tank holds 6,000 imperial gallons of water and 12 tons of coal. The frame is built of 10 x 13 ins. steel channels. The truck is of the equalized type, with a cast steel bolster. The equipment includes Westinghouse brakes ET no. 6 type, with two 9½ in. air pumps. The following are the principal dimensions, etc.:

|                                       |               |
|---------------------------------------|---------------|
| Tractive effort .....                 | 35,000 lbs.   |
| Weight in working order .....         | 188,600 lbs.  |
| Weight on drivers .....               | 163,000 lbs.  |
| Weight of engine and tender, total .. | 332,600 lbs.  |
| Wheel base, rigid .....               | 15 ft. 6 ins. |



Canadian Northern Railway Consolidation Locomotive.

|                                                                     |                  |
|---------------------------------------------------------------------|------------------|
| Wheel base, engine, total .....                                     | 23 ft. 9 ins.    |
| Cylinders, diar. and stroke .....                                   | 23 by 26 ins.    |
| Piston valves .....                                                 | 12 ins.          |
| Driving wheels, diar. .....                                         | 57 ins.          |
| Boiler pressure .....                                               | 180 lbs.         |
| Boiler, diar. at first ring .....                                   | 66 ½ ins.        |
| Firebox, length and width ..                                        | 114 by 40 ¼ ins. |
| Tubes, no. and diar. .....                                          | 179—2 ins.       |
| Flues, no. and diar. .....                                          | 24—5 ½ ins.      |
| Tubes, length .....                                                 | 14 ft.           |
| Heating surface, tubes and flues ..                                 | 1,772 sq. ft.    |
| Heating surface, firebox .....                                      | 179 sq. ft.      |
| Heating surface, total .....                                        | 1,951 sq. ft.    |
| Superheater heating surface, inside tubes ..                        | 360 sq. ft.      |
| Grate area .....                                                    | 31.8 sq. ft.     |
| Weight on drivers—tractive effort .....                             | 4.7              |
| Total weight—tractive effort .....                                  | 5.38             |
| Tractive effort x diar. of drivers—heating surface .....            | 800.88           |
| Total heating surface—grate area .....                              | 78.33            |
| Firebox heating surface—total heating surface per cent. ....        | 7.18             |
| Weight on drivers—total heating surface ..                          | 61.02            |
| Volume equivalent cylinder, cub. ft. ....                           | 12.5             |
| Total heating surface—volume of cylinder ..                         | 199.28           |
| Grate area .....                                                    | 2.54             |
| Equivalent heating surface, 1,951 sq. ft. (1.5 x 360 sq. ft.) ..... | 2491 sq. ft.     |

### Dominion Railway Subsidy Agreements.—

The Dominion Government has entered into subsidy agreements for the following construction,—with the Canadian Northern Pacific Ry., Aug. 7, for a line from the Yellowhead pass to Vancouver and the mouth of the Fraser river, 525 miles; and with the Canadian Pacific Ry., Aug. 2, as lessee of the Calgary and Edmonton Ry., for a bridge over the Saskatchewan river, connecting Strathcona and Edmonton, Alta.

### Grand Trunk Railway, Betterments, Construction, Etc.

**Southern New England Ry.**—Press reports state that surveys are being made under the direction of G. M. Thompson, for a line from Hoyalake, Mass., eastward to the Central Vermont Ry.; and through New Hampshire, towards Boston, Mass.

**St. Lambert Yards, Etc.**—In connection with the work now in progress at St. Lambert, Que., press reports state that the company has bought 400 acres of land, and a long strip extending almost to St. Hubert, and that in addition to laying out yards there, locomotive and other shops will be built. These will not replace the Point St. Charles shops, but will, it is said, be utilized for G.T. Pacific Ry. purposes. One report says that the new shops will be completed within five years.

**Victoria Jubilee Bridge Approaches, Etc.**—Plans are under consideration by the Montreal city council for the enlargement of the yards at Point St. Charles, for which purpose it is necessary to rearrange the approaches to the Victoria Jubilee bridge. The City Engineer was directed to examine the plans and report fully.

We are advised that a contract has been let to the John S. Metcalf Co., Montreal, for a freight warehouse at the corner of Wellington and Bridge streets, Point St. Charles, Montreal. It will be 1,200 by 60

**Port Burwell to London, Ont.**—Construction is in progress at Port Burwell, Ont., on a line to Aylmer, and engineers are reported to be in the field locating a route from Aylmer to London. Press reports state that construction will be pushed so as to have the line completed to London within a year. (Sept., pg. 448.)

### Grand Trunk Pacific Railway Annual Meeting.

A. W. Smithers, of London, Eng., Chairman of the Board, presided at the annual meeting in Montreal, Sept. 18. Good progress was reported on the construction of the main line, as well as on branch lines, the latter comprising approximately 2,000 miles, which the company has at present under construction in Manitoba, Saskatchewan and Alberta, which make connection at many different points with the main line. Track-laying on the main line to the Pacific Coast has reached mile 1,100 west of Winnipeg and beyond the Rocky Mountains. Track laying from the Pacific Coast at Prince Rupert easterly has reached mile 176 at Hazelton, B.C. This leaves a section to be constructed of about 460 miles, which, however, is all under contract, and the work is being carried to completion as rapidly as the character of the country and the labor supply will permit.

ft., concrete foundations, with brick walls and steel posts, wooden doors and roof.

**Prescott, Ont.**—The ratepayers of Prescott, passed a bylaw, Sept. 23, conferring an agreement between the town council and the company, for the establishment of divisional terminal facilities. Under the agreement the land owned by the company will be assessed at \$16,000 a year for 25 years, and the town will provide \$35,000 for the settlement of land damages, etc. The company agrees within two years to lay out terminal yards, and erect a roundhouse, repair shop and other buildings at a cost of not less than \$150,000.

**Diversion Near Bracebridge, Ont.**—The Board of Railway Commissioners has approved of revised location plans for the line in the vicinity of Moore's crossing, near Bracebridge, Ont.

**King St. Subway, Toronto.**—Plans are under consideration for the reconstruction of the bridge across King street west. It is proposed to remove the present stone pillars in the centre of the roadway, replacing them by steel, and to increase the headway to 14 ft. The city council has the plans under consideration, and it is suggested that the headway might be increased to 18 ft.

**Hensall, Ont., Yards.**—Plans have been approved by the Board of Railway Commissioners for the rearrangement of the yards, and the building of a new station.

Following is the board as constituted for the current year: President, E. J. Chamberlin; other directors, A. W. Smithers, Sir Henry M. Jackson, Sir Felix Schuster, Sir Wm. Henry White, W. Wainwright, M. M. Reynolds, E. H. Fitzhugh, W. H. Biggar, E. B. Greenshields, Hon. R. Dandurand, W. M. Macpherson, Hon. G. A. Cox, E. R. Wood and J. R. Booth.

Jules Hone is also a director, appointed by the Dominion Government under the agreement with the company respecting the construction of the eastern division. The newly elected directors are Sir Felix Schuster and Sir Wm. Henry White, who are directors of the G.T.R. Co., and serve in their turn on the G.T. Pacific board.

**Ore Shipments from Fort William.**—The Northern Pyrites Mining Co., which is located near Fort William, Ont., is said to be negotiating for special arrangements with the Grand Trunk Pacific Ry. for the shipment of large quantities of pyrites ore in the near future. The proposed arrangements would necessitate the construction of ore docks and other ore handling facilities at Fort William.

A Montreal press dispatch towards the end of September, stated that the C.P.R. had placed an order with the Montreal Locomotive Works, for 125 locomotives, but up to the time of going to press we were unable to obtain any confirmation of this.