

## Birthdays of Transportation Men in March.

In the ends of the buildings, each half has two double doors opening outwards. The roof slopes from the central dividing wall towards the sides, with a height of 11 ft. 4 ins. at the centre, and 9 ft. at the side walls. The roof consists of 4 ins. of reinforced concrete. This is carried on 12 in. I beams spanning each section, at 10 ft. centres, with two intervening 8 in. I beam stringers in each section. The wall over the end doors is supported on a through 12 in. I beam, spanning the full width of the building.

Each end of the kiln is served by a transfer table, operating in pits 80 ft. long, located 10 ft. beyond the end of the building. These pits are 5 ft. wide and 1 ft. 7½ ins. deep, with a 2 ft. gauge track extending the length of the pits, in the bottom. Lumber can be loaded from the adjoining yard tracks to kiln cars carried on the transfer tables, passing in at one end, and, when dried, out at the other.

The foundations of the building are of concrete, carried down to a safe depth. The floors of the kiln, and the portion of the yard in front of the building ends, and extending to the concrete transfer pits, are of 6 in. concrete, with a ¾ in. cement finish.

The control cabinet for the heating control apparatus is a small lean-to, 3 by 2 ft., with the outer wall 2 ft. high, sloping up to the kiln wall at the west end. The control cabinet is of concrete and covers a concrete chamber 2 ft. deep, which contains the pipe connections. The roof of the cabinet is hinged at the top to make the interior accessible from the outside only. This hinged roof consists of two thicknesses of tongued and grooved pine, fitted diagonally, with a 1-8 in. sheet of asbestos between, the whole covered with galvanized sheet iron. Inside the cabinet, at a height of 12 ins. above the ground level, or 3 ft. above the bottom of the pit, there is a floor, through which project the control valve wheels and gauge connections.

Through the bottom of the control cabinet pit the steam and return connections with the power house pit are made, steam entering in a 4 in. main, and the return through a 3 in. main. Inside the pit both divide, one for each kiln room, the steam passing through the walls in 3 in. mains, and the return in 2½ in. mains. Along the inside wall of that end of the kiln rooms there is a concrete pit, 15 by 18 in., extending the width of each room, the mains from the control cabinet passing along this pit, the steam main on the bottom of the pit, and the return carried on the side wall of the pit. Each room is divided into 7 units of heating pipes, which consist of 2 in. pipes laid on the floor of the room, extending the full length, the condensation passing out to the return main at the far end, and thence back to the pit. The heating units consist, four of 3 pipes, two of 5 pipes, and one of 10 pipes, making 32 heating units of 2 in. pipe, each about 45 ft. long. Each end header is connected from the steam main by a 2½ in. connection. The control cabinet contains valve wheels for both steam and return for both rooms, and also a recording thermometer for each room mounted on a side wall, and pressure gauges mounted on the floor. On the rear wall there is carried the electrical control apparatus for the interior lighting.

This article will be concluded in our next issue.

With saturated steam, the average maximum horsepower is reached at a piston speed of 700 ft. per min., remaining constant up to 1,000 ft. per sec., then slightly decreasing; with superheated steam, it is reached at 1,000 ft. per min., remaining constant for greater speeds.

Many happy returns of the day to:—

W. G. Annable, General Passenger Agent, C.P.R. Atlantic Steamship Lines, Montreal, born at Ottawa, Mar. 3, 1875.

John Archibald, Locomotive Foreman, C.P.R., Coquitlam, B.C., born at Edinburgh, Scotland, Mar. 13, 1872.

C. H. Bowes, Assistant General Passenger Agent, C.P.R., Vancouver, B.C., born at Bangor, Me., Mar. 22, 1877.

George Bury, Vice President, C.P.R., Winnipeg, born at Montreal, Mar. 6, 1866.

Allan Cameron, Superintendent, Land Branch, Department of Natural Resources, C.P.R., Calgary, Alta., born near Owen Sound, Ont., Mar. 14, 1864.

Frank Clark, Locomotive Foreman, Canadian Northern Ry., Radville, Sask., born at Cowes, Isle of Wight, Eng., Mar. 20, 1884.

F. G. J. Comeau, General Freight Agent, Dominion Atlantic Ry., Halifax, N.S., born at Meteghan River, N.S., Mar. 10, 1859.

W. A. Cooper, Manager, Sleeping, Dining and Parlor Cars and News Service, C.P.R., Montreal, born there, Mar. 22, 1871.

A. E. Cox, General Storekeeper, Canadian Northern Ry., Winnipeg, born at Huddersfield, Eng., Mar. 12, 1863.

Hon. N. Curry, President, Canadian Car and Foundry Co., Montreal, born in King's county, N.S., Mar. 26, 1851.

C. T. Delamere, Assistant Engineer of Construction, C.P.R., Montreal, born at Brainerd, Minn., Mar. 18, 1881.

Patrick Dubee, Secretary-Treasurer, Montreal Tramways Co., Montreal, and President Canadian Electric Railway Association, born at Montreal, Mar. 4, 1876.

G. R. Fairhead, District Freight Agent, Canadian Northern Ry., Hamilton, Ont., born at Toronto, Mar. 6, 1882.

W. T. Fitzmaurice, Assistant Superintendent, Moncton and Ste. Flavie District, Intercolonial Ry., Newcastle, N.B., born at Bedford, N.S., Mar. 19, 1870.

C. Forrester, Superintendent, Stratford Division, Ontario Lines, G.T.R., Stratford, born at Wanstead, Ont., Mar. 5, 1876.

C. O. Foss, M. Can. Soc. C.E., District Engineer, National Transcontinental Ry., St. John, N.B., born at Wentworth, N.H., Mar. 20, 1852.

H. M. Gain, Trainmaster, Districts 6 and 7, Belleville Division, Eastern Lines, G.T.R., Belleville, Ont., born at Lindsay, Ont., Mar. 21, 1879.

R. A. Gamble, Assistant General Yardmaster, C.P.R., Winnipeg, born at Dublin, Ireland, Mar. 1, 1876.

H. W. Gays, General Manager, Ottawa and New York Ry., Ottawa, Ont., born at Brant, Erie Co., N.Y., Mar. 21, 1848.

E. P. Goodwin, Inspecting Engineer, National Transcontinental Ry., Ottawa, Ont., born at Baie Verte, N.B., Mar. 17, 1865.

J. Halstead, Division Freight Agent, C.P.R., Calgary, Alta., born at Bracebridge, Ont., Mar. 2, 1877.

R. M. Hannaford, M. Can. Soc. C. E., Assistant Chief Engineer, Montreal Tramways Co., Montreal, born there, Mar. 22, 1865.

C. A. Hayes, General Traffic Manager, Canadian Government Railways, Moncton, N.B., born at West Springfield, Mass., Mar. 10, 1865.

H. T. Hazen, M. Can. Soc. C.E., Mackenzie, Mann & Co., Toronto, born at Truro, N.S., Mar. 14, 1870.

Joseph Hobson, M. Can. Soc. C.E., Consulting Engineer, G.T.R., Hamilton, Ont., born at Guelph, Ont., Mar. 1834.

J. I. Hobson, Treasurer, Canada Steamship Lines, Ltd., Montreal, born at Guelph, Ont., Mar. 30, 1872.

N. J. Holden, President, The Holden Co., Ltd., Montreal, born at Nobleton, Ont., Mar. 22, 1866.

A. R. Holtby, Master of Bridges and Buildings, Mountain Division, G.T.P.R., Prince Rupert, B.C., born at Rawdon, Que., Mar. 23, 1859.

Frank Lee, M. Can. Soc. C.E., Principal Assistant Engineer, C.P.R., Winnipeg, born at Chicago, Ill., Mar. 7, 1873.

R. W. Long, Division Freight Agent, G. T. R., Hamilton, Ont., born at Appin, Ont., Mar. 20, 1873.

T. W. Lowe, General Boiler Inspector, C.P.R. Western Lines, Winnipeg, born at Montreal, Mar. 30, 1858.

J. M. McKay, Superintendent, District 1, British Columbia Division, C.P.R., Revelstoke, born at Tiverton, Ont., Mar. 13, 1868.

Owen McKay, M. Can. Soc. C.E., Chief Engineer, Essex Terminal Ry., Walkerville, Ont., born in Ross tp., Renfrew co., Ont., Mar. 13, 1848.

Sir Donald D. Mann, Vice President, Mackenzie, Mann & Co., Ltd., and First Vice President Canadian Northern Ry., Toronto, born at Acton, Ont., Mar. 23, 1853.

H. H. Melanson, General Passenger Agent, Canadian Government Railways, Moncton, N.B., born at Scadouc, N.B., Mar. 9, 1872.

J. V. Murphy, District Passenger Agent, C.P.R., Nelson, B.C., born at Bowmanville, Ont., Mar. 5, 1885.

C. B. Mutchler, Signal Engineer, G. T. Pacific Ry., Winnipeg, born at Pine Island, Minn., Mar. 8, 1879.

Peter Paton, Assistant Operating Superintendent, Passenger Steamers, Canada Steamship Lines, Ltd., Toronto, born at New Lowell, Ont., Mar. 13, 1869.

R. Patterson, Master Mechanic, G.T.R., Stratford, Ont., born at Brantford, Ont., Mar. 13, 1860.

F. W. Peters, General Superintendent British Columbia Division, C.P.R., Vancouver, born at St. John, N.B., Mar. 25, 1860.

E. H. Sewell, City Passenger Agent, C. P. R., Sherbrooke, Que., born at Quebec, Line, Montreal, born at Kingston, Ont., Mar. 21, 1855.

W. Y. Soper, Vice President, Ottawa Electric Ry. Co., Ottawa, Ont., born at Oldtown, Me., Mar. 9, 1854.

E. F. L. Sturdee, Assistant District Passenger Agent, C.P.R., Toronto, born at St. John, N.B., Mar. 29, 1876.

G. W. Vaux, General Agent, Passenger Department, Union Pacific Rd., Chicago, born at Montreal, Mar. 21, 1866.

A. T. Weldon, General Freight and Passenger Agent, Black Diamond Steamship Line, Montreal, born at Dorchester, N.B., Mar. 6, 1876.

D. O. Wood, General Freight Agent for Ontario, Allan Line Steamship Co., Toronto, born at Kleinburg, Ont., Mar. 16, 1864.

The grate surface required for saturated steam locomotives is the horsepower divided by 30, and for superheated steam locomotives, the horsepower divided by 36.9.

F. Stockdill, Interlocking Inspector, C.P.R., Montreal, in remitting his renewal subscription for Canadian Railway and Marine World, writes: "Please find enclosed subscription for your valuable paper."

An evaporation of 10 lbs. of water per hour per sq. ft. of outside heating surface may be obtained from 2¼ in. tubes 18 ft. long, and 55 lbs. per sq. ft. of firebox heating surface.

It is estimated that about 10% of all motive power is normally out of commission, undergoing repairs. As about 2% of these repairs can be handled with locomotive house facilities, there ought to be main shop accommodation for 8 stalls per 100 locomotives belonging to the line.