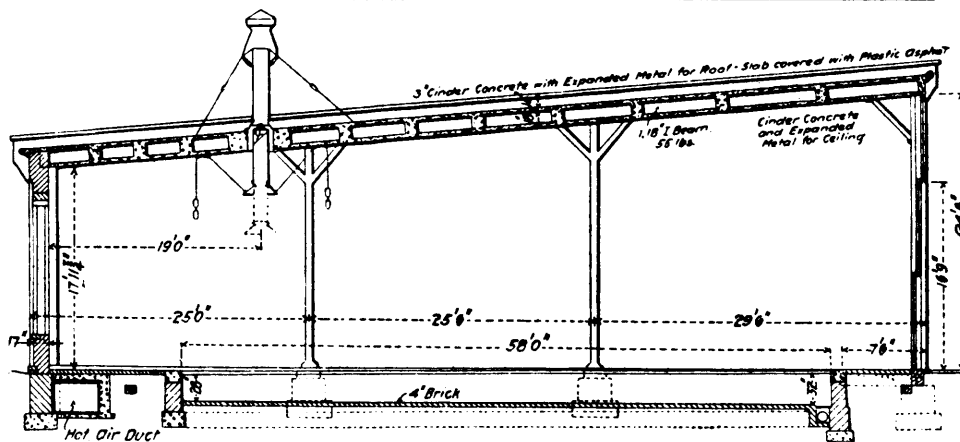


C.P.R. Locomotive Houses.

The new locomotive houses now being built by the C.P.R. are of fireproof construction throughout. The main walls are built of masonry and brick, or concrete, and the roofs of concrete and steel, supported on steel posts encased in concrete. A complete locomotive house, such as is being built at Winnipeg, plans of front elevation, and of section of which on centre line of engine pit, are given, consist of 42 stalls divided into four sections by brick firewalls. The turntable pit is 71 ft. 6 in. in diameter, and the inner wall is 95 ft. 2½ in. from the centre of pit, and the depth of the roundhouse is 80 ft. The outer door and roof supports are made of steel, and are 13 ft. 7 in. centres at the front circle, diverging to 25 ft. at the outside walls. The pits are 58 ft. in length and 4 ft. wide. The walls and footings are of concrete, and the floor paved with hard burnt brick on an arched bed of well puddled sand. They are from 2 ft. 4 in. to 2 ft. 8 in. deep, and a catch-water basin is built at the end of each pit. These catch basins are connected with 10 in. drain pipes graded to run to the main outlet. An easy inspection is obtained by this method, and any blocking of drains can be remedied without digging or taking up pipes. The track rails are bolted to the pit walls by wrought iron, angle-shaped plate anchors placed into the concrete when the wall is built. The drop pit is built between and connects two pits, and is 7 ft. wide. At the locomotive pits the opening is spanned by steel eye beams so arranged that they can be removed to facilitate the handling of driving wheels. The pit is 5 ft. 2 in. deep to the first floor level, and has a car track 2 ft. gauge. Under the track is an opening 1 ft. 5 in. wide and 5 ft. deep, for the pneumatic structure. The main beams over the posts are of steel. The cross beams are built of steel rods and concrete. The posts are steel eye beams encased in concrete, with a metal mesh close to the outer faces. Between the cross beams a 3 in. slab of reinforced concrete carries the roof, and a 2 in. slab forms the ceiling, the air space between serving to prevent condensation. The longest spans for the reinforced concrete beams are 24 ft. An extension is built at the rear of the house for the engine and boiler rooms independent of

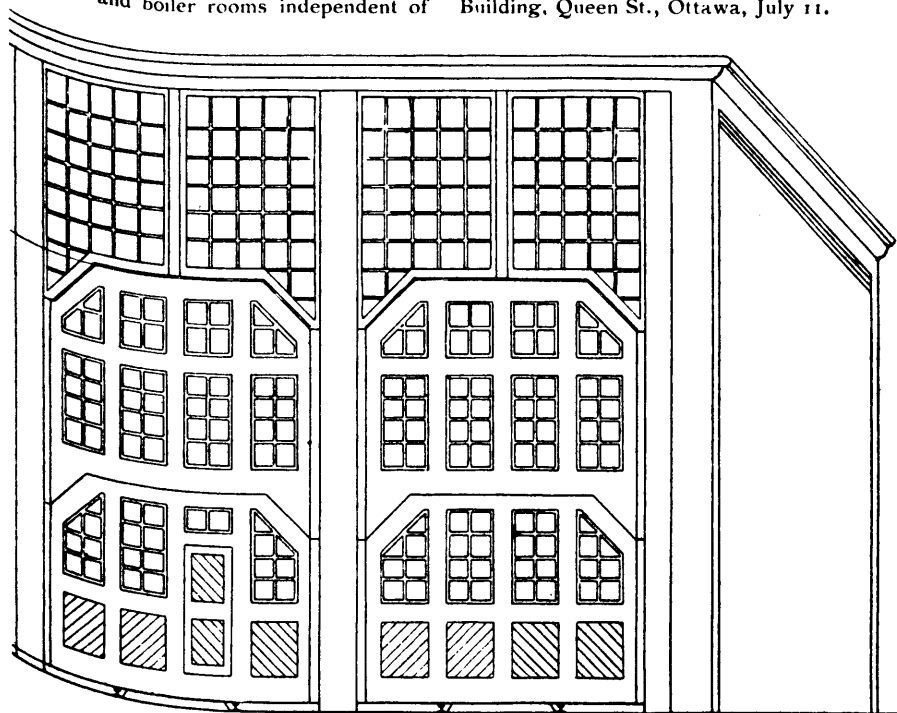


C. P. R. LOCOMOTIVE HOUSE—SECTION THROUGH PIT.

the roundhouse. The engine room contains the fan engine and blower for heating purposes. The houses are heated by hot air, the air being conducted through concrete and tile pipe ducts to the pits. The floor of the engine house is composed of brick with sand grout resting on a bed of well puddled sand. The pipes from the boiler house consist of a 3 in. exhaust steam pipe with attachments to connect with the steam domes of locomotives. Exhaust steam is used for heating purposes, a 4 in. wrought iron pipe serves for hot and cold water and a 1½ in. pipe is used for compressed air. Attachments and valves are provided between each pair of pits. The houses are wired for electric light; three 16 candle power drop lights are hung over the main beams between pits and sockets for connecting hand lights are provided in a convenient position on each post.

The houses completed, now under construction and nearing completion, built after this design, are as follows:—North Bay, Ont., 18 stalls; Ignace, Ont., 12 stalls; Winnipeg, Man., 42 stalls; Brandon, Man., 18 stalls; Medicine Hat, Assa., 18 stalls; Swift Current, Assa., 10 stalls; Moose Jaw, Alta., 10 stalls; North Bend, B.C., 6 stalls.

The Board of Railway Commissioners moved into its new offices in the Woods Building, Queen St., Ottawa, July 11.



C. P. R. LOCOMOTIVE HOUSE—FRONT ELEVATION.

August Birthdays.

Many happy returns of the day to—

H. H. Adams, Superintendent Canadian Division, Michigan Central Rd., at St. Thomas, Ont., born at Detroit, Mich., Aug. 13, 1876.

H. W. D. Armstrong, C.E., Lindsay, Ont., born at Ottawa Aug. 1, 1852.

R. Atkinson, ex-Superintendent of Rolling Stock, C.P.R., now Division Master Mechanic Philadelphia and Reading Rd., at Reading, Pa., born at Crewe, Eng., Aug., 1851.

G. J. Chadd, Purchasing Agent Central Ontario Ry., at Trenton, Ont., born in London, Eng., Aug. 21, 1837.

J. F. Chapman, General Freight and Passenger Agent Bay of Quinte Ry., born at Frankford, Ont., Aug. 25, 1863.

H. G. Elliott, Assistant General Passenger and Ticket Agent, G.T.R., at Montreal, born at Chambly, Que., Aug. 22, 1860.

Hon. W. Gibson, railway contractor, Beamsville, Ont., born at Peterhead, Scotland, Aug. 7, 1849.

G. H. Ham, Literary Department C.P.R., at Montreal, born at Trenton, Ont., Aug. 23, 1847.

W. P. Hinton, General Freight and Passenger Agent, Canada Atlantic Ry. and Canada Atlantic Transit Co., at Ottawa, Ont., born at Hintonburg, Ont., Aug. 30, 1871.

R. Kerr, Passenger Traffic Manager, C.P.R., at Montreal, born at Toronto, Aug., 1845.

G. M. Lang, Resident Engineer, C.P.R., at Winnipeg, born at Ottawa, Ont., Aug. 16, 1859.

J. D. McDonald, District Passenger Agent, G.T.R., at Toronto, born there Aug. 27, 1855.

T. McHattie, Master Mechanic, G.T.R., at Montreal, born at Dufftown, Banffshire, Scotland, Aug. 8, 1854.

J. E. Matthews, C.P.R. soliciting passenger agent, at Charlottetown, P.E.I., born at Albany, P.E.I., Aug. 17, 1869.

W. E. Mullens, Superintendent of Transportation Central Vermont Ry., at St. Albans, Vt., born at Stratford, Ont., Aug. 13, 1870.

W. S. Nevins, Travelling Freight Agent, C.P.R. and Minneapolis, St. Paul & Sault Ste. Marie Ry., at Buffalo, N.Y., born at Towanda, Pa., Aug. 13, 1850.

J. F. Richardson, Superintendent Eastern Division C.P.R. Telegraphs, Montreal, born at Granby, Que., Aug. 23, 1861.

C. R. Scoles, General Manager, Atlantic and Lake Superior Ry., at New Carlisle, Que., born at Grantham, Lincoln, Eng., Aug. 27, 1856.

M. C. Sturtevant, Car Service Agent, G.T.R., at Montreal, born at St. Albans, Vt., Aug. 28, 1866.

W. N. Warburton, General Freight Agent, Niagara, St. Catharines and Toronto Ry., at St. Catharines, Ont., born at St. Thomas, Ont., Aug. 24, 1851.