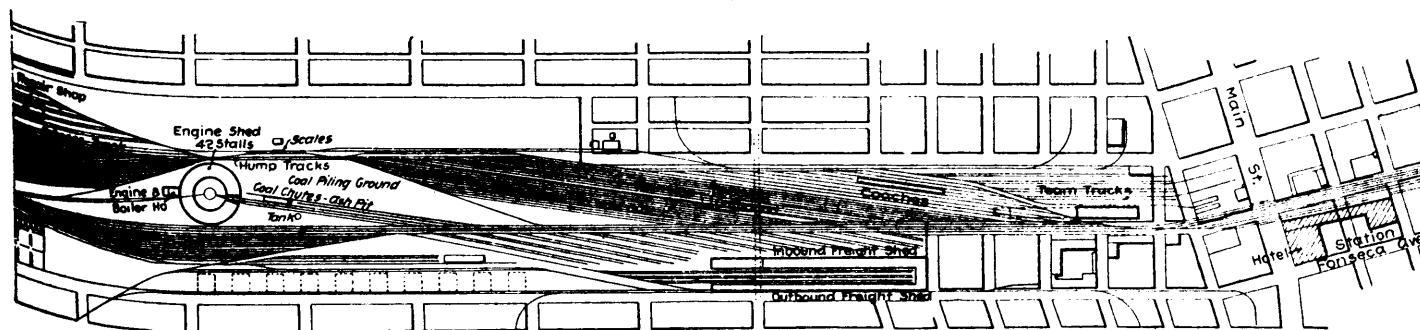


WESTERN PORTION C. P. R. TERMINALS AT WINNIPEG.



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C.P.R. Betterments, Construction, Etc.

Atlantic and Northwest Ry.—The Dominion Parliament at its current session passed an act extending the time for the completion of the lines authorized by the act of incorporation of the A. and N. Ry. (June, pg. 193.)

Grade Reduction at Farnham.—Press reports state that work is in progress near Farnham, Que., on an extensive piece of grade reduction.

Piles Jct. to Grand Mere.—The C.P.R. has been given, at the current session of the Dominion Parliament, an extension of time for the construction of its proposed line from Piles Jct. to Grand Mere, Que. (June, pg. 193.)

Place Viger Yards Extension.—After lengthened discussion and negotiation the Montreal city council has passed a resolution permitting the C.P.R. to close up certain streets in the vicinity of the Place Viger station, with the object of extending its yard accommodation there. (Oct., 1903, pg. 355.)

Toronto-Toronto Junction Double Track.—The double-tracking of the line between Toronto and Toronto Junction has been completed and ballasting is in progress. Nothing had been done beyond Toronto Junction June 25, but it is understood that the work is to be gone on with not only on the Owen Sound line as far as Weston or Kleinburg, but also on the Windsor and Detroit line as far as Streetsville. (June, 1903.)

Toronto-Sudbury Line.—F. Paget is assistant engineer at Wahnapiata, in charge of construction of the Toronto-Sudbury extension between Romford and Byng Inlet, Ont., having under him the following resident engineers in charge of 10-mile sections each: Residency no. 1, H. A. Le Sueur; Residency no. 2, H. B. R. Craig; Residency no. 3, R. Harcourt; Residency no. 4, E. L. Miles; Residency no. 5, A. J. Isbester. On the location south of Byng Inlet there are two parties in the field, one under H. M. Killaly, and the other under S. Keemlé, while on location working north from Woodbridge are also two parties, one under H. Carry, and the second under J. T. Morkill, who are all assistant engineers. The whole is under F. S. Darling, Divisional Engineer of Construction.

Winnipeg Terminals, Station, Hotel, Etc.—From time to time we have published

considerable information about the extensive works contemplated and under way by the C.P.R. at Winnipeg to meet the requirements of its greatly increasing traffic there. Early last year the company bought 350 acres west of its present yard site, and it is now utilizing this property for its new shops, etc. The improvements being made in the yard are of a radical nature, as the general layout has been entirely changed with the exception of the main tracks and a few of the branch line tracks serving the industries surrounding the yard. The plans provide for two combination receiving and classification yards for branch and main line traffic which are connected by means of two "hump" tracks. Each yard contains six inbound and six outbound main tracks, nine branch line tracks, six storage tracks and three independent running tracks. The yard is arranged with the locomotive shed, stand pipe, coal chutes and ash pit in the middle, and all freight is classified over the hump tracks. This system of having all the facilities convenient to the point where the engines are engaged will save a large amount of time and money. Other interesting and economical features are the arrangement of the weigh scales, which are on a descending grade, thus allowing cars to be separated and weighed by gravity without rehandling, and an elevated caboose track situated so as to be convenient to the outlet of the classification yard, so that cabooses can be attached to outgoing trains with little delay. The accompanying yard plan shows how both the local and main line traffic may easily be classified. The arrangement of the eastbound and westbound main tracks has not been changed, and they run directly through the lower part of the yard. The junction of the tracks of the branch lines to Souris, Teulon and Winnipeg Beach has, however, been moved further west between the main yard and the new car and locomotive shops. According to the new arrangement all the eastbound trains of both branch and main lines will pull directly into the west receiving yard. The cars are weighed in passing over the hump and are then classified on the main and branch line tracks in the eastern half of the yard. The same operation reversed will take place with the trains from the east, which are classified in the western half of the yard.

In connection with these yard changes,

new car, locomotive and other shops are being built to the west of the main yard. The new buildings include two passenger shops 100 by 240 ft., freight car shop 100 by 408 ft., planing mill 100 by 216 ft., power house 100 by 100 ft., locomotive shop 162 by 68 ft., blacksmith shop 100 by 216 ft., foundry 100 by 100 ft., and a stores building 85 by 260 ft., with a 200-ft. platform and offices above. Some of these buildings are nearly finished and all are under construction.

In the main yard proper a new locomotive house and freight sheds are being built. The locomotive house is of fireproof construction throughout, with walls of masonry, brick and concrete, and with roofs of concrete and steel supported on steel posts encased in concrete. It contains 42 stalls divided into four sections by brick fire walls. The turntable pit is 71½ ft. in diameter, and the inner wall is 95 ft. 2½ in. from the centre of the pit. The depth of the roundhouse is 80 ft. The outer door and roof supports are made of steel, and are 13 ft. 7 in. from centre to centre at the front circle, diverging to 25 ft. at the outside walls. The pits are 58 by 4 ft. wide. The walls and footings are of concrete, and the floor is 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 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 the pipes. The track rails are bolted to the pit walls by wrought iron angle-shaped plate anchors placed in 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 I-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. in gauge. Under the track is an opening 1 ft. 5 in. wide and 5 ft. deep for the pneumatic jack. The roof is of concrete and steel construction and the main beams over the posts are of steel. The cross beams are built of steel rods and concrete. The posts are steel I-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