

Canadian Railway and Marine World

October, 1914.

Locomotive Shop Addition, Angus Shops, Canadian Pacific Railway, Montreal.

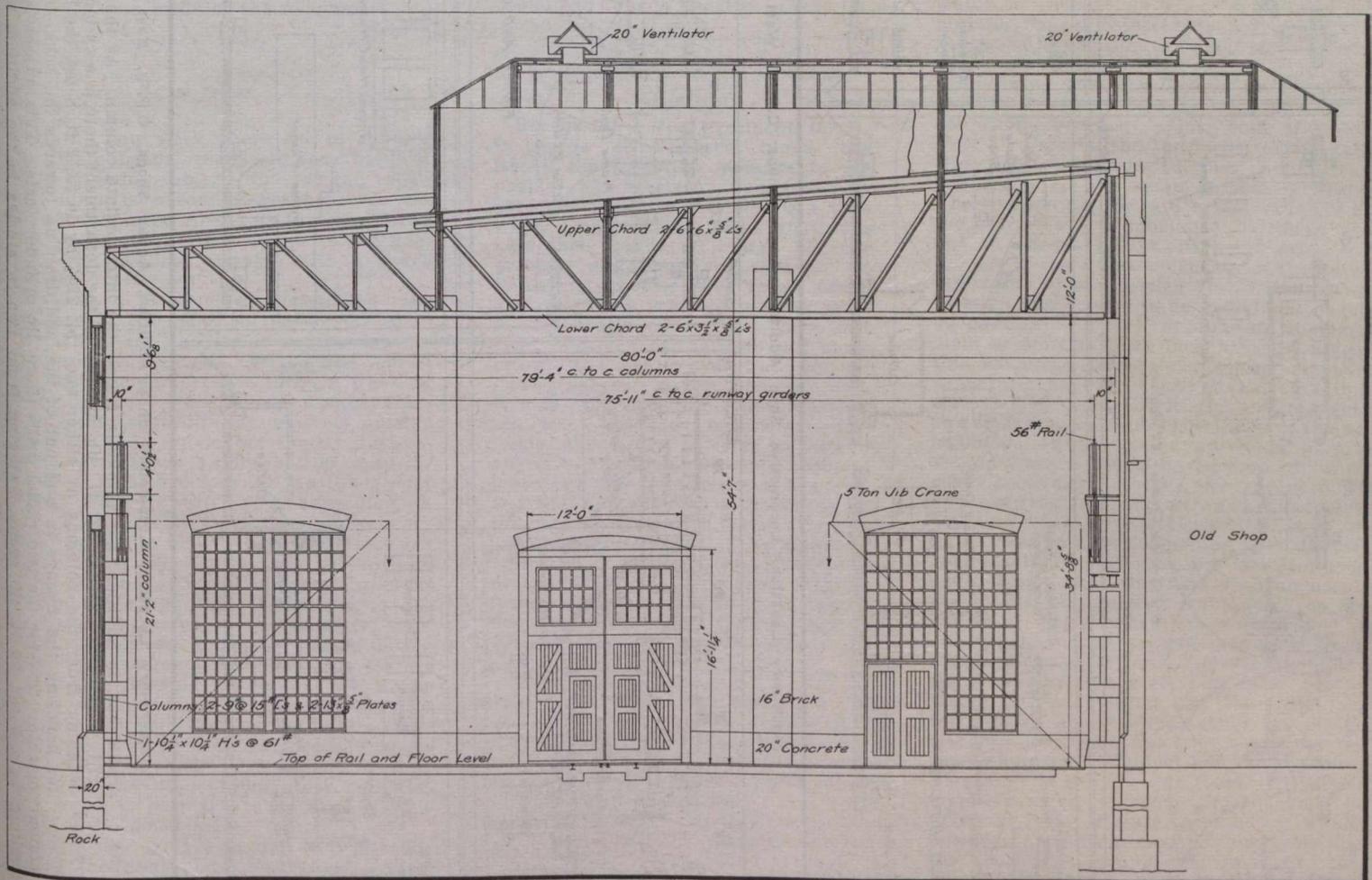
A large addition to the C.P.R. Angus locomotive shop at Montreal has been completed, and was placed in service recently, relieving certain of the departments that were materially cramped in the old shop. The addition is 594 by 80 ft., extending along the north side of the building from near the midway end of the shop, more than half the length of the old shop. It is a structure similar in all details of design to that of the older part, consisting of a steel framework, on a concrete subwall, with red brick in the upper portion, with the roof trussed by steel spans at 22 ft. centres, which divides the addition into

rail, the base of which is 25 ft. 2½ ins. above the level of the floor. Two 10 ton travelling cranes operate the length of the shop, with a clear span of 75 ft. 11 ins.

Centrally through the length of the shop, entering the latter through large doors at either end, there extends a standard gauge track, the rails of which form the outer rails of two 2 ft. gauge shop tracks. At five points in the shop length these tracks connect to similar track sets at right angles, four of which pass across the shop, from the old building to the outside of the new shop, through large doors, while the fifth only connects across into the old shop.

tions would accommodate, in so far as practicable, the tool equipment for handling some of the heavier parts, in addition to providing accommodation for the fitting gangs, whose work necessarily requires that they be located as near as possible to the erecting tracks. Bringing several of the departments from their former locations in the old shop gave room for adjoining departments to expand, providing much needed room. The several departments in the addition are shown divided off by dot and dash lines in the accompanying machinery location plans.

The frame and cylinder shop occupies



Cross Section of Addition to Locomotive Shop, Angus Shops, C.P.R.

27 bays, from no. 12 of the old shop to no. 38. The shop addition has a clear span of 80 ft., with a clearance under the truss of 34 ft. 8½ ins. Over each cross bay, there is a skylight extending over a portion of the old shop. The building columns are composed of two 9 in. 15 lb. channels and two 13 by 5½ in. plates, and the crane columns, 21 ft. 2 ins. long, are 10¼ x 10¼ ins. H. section members, at 2 ft. 0½ in. centres with regard to the building columns, these two sets of columns being tied together by 1 by ½ in. batten plates. The crane girder is 4 ft. 0½ in. deep, supporting a 56 lb.

Turntables are provided at all the intersections. The partition between the old building and the new section has been knocked out with the exception of a 10 ft. width at the columns, leaving a 12 ft. opening in each bay between the shops. This provides clear communication at a large number of points through the length of the shop for the interchange of materials.

Along the adjoining wall of the old shops are located the two long erecting tracks, served by a travelling overhead crane. In consequence, in planning for the new addition, the idea borne in mind was to so rearrange the departments that the addi-

bays 12 to 19 of the new shop, of the easterly 8 bays, the cylinder machine tool equipment on the north side of the central track, and the frame machinery on the south side. The cylinder machine tool equipment comprises the following:—

- No. 5 cylinder boring machine.
- 3 spindle cylinder boring machine.
- 6 ft. radial drill.
- 9 ft. radial drill with pit.
- 6 by 6 by 14 ft. cylinder planer.
- 6 by 6 by 22 ft. heavy planer.
- Cylinder cover grinding machine.

This equipment occupies the easterly end of the department. The frame machine tool equipment comprises:

- 4 spindle frame drill.