

Trainshed at Windsor St. Station, Montreal, Canadian Pacific Railway.

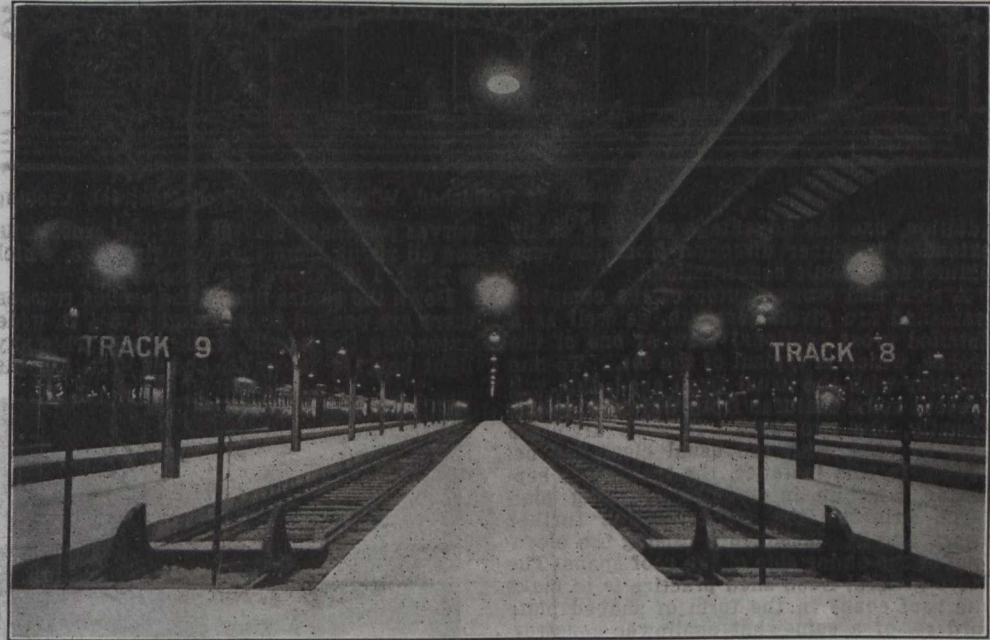
The new Windsor St. station in Montreal, which the C. P. R. has had in course of construction for the past four years, is now practically completed. Several progress articles on the work have appeared in these columns from time to time, and a description of the terminal yards in connection with the station was published in our Nov., 1913, issue, followed in the December issue by an article on the power interlocking and signaling arrangements, both of which treated the trainshed area in a general way.

In the remodelling of the station, a difficult problem was presented. The original station on this site was built for the Ontario and Quebec Ry., before its absorption by the C. P. R., about the time the latter completed its transcontinental line. The first station was built along Osborne and Windsor Streets, on the very brow of a comparatively steep hill. The station being small, to meet the then existing traffic, had ample accommodation on the narrow strip between the street and the hill descent, but as the traffic increased, the problem was presented of extending the station in the only possible direction, viz., to the south, on fills made on the side of the slope. Extensions up to the last one, were not very difficult, as the fill required was not very great, but this last addition, extending the trainshed capacity to 11 tracks, required heavy fill work along the downhill side. Under a portion of this extension, there have been built vault and third class waiting room accommodation, but the major portion is on a fill, retained by a concrete embankment wall.

The track arrangement in the station is unusual, all the tracks being entered from a ladder from the west, the ladder leaving the northerly of the tracks, branching off to each of the other tracks, so that the tracks diminish in length from the north to

arrangement of trainshed ends. The northerly, or express track, has single arch, supported on the express building wall, and rows of columns between it and the adjoining tracks, which is only 450 ft. long, the greater portion of the track being open. The next

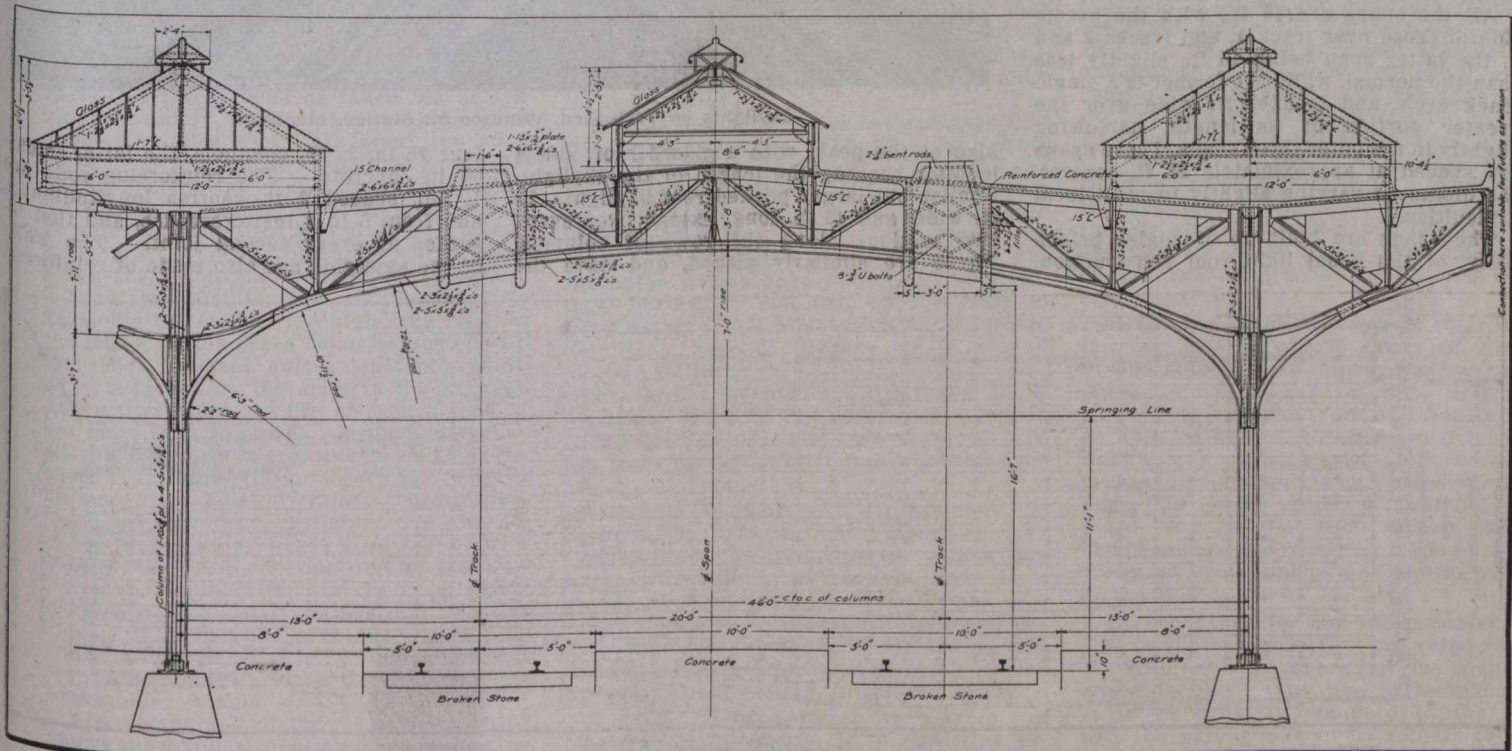
different in the details of design, as a comparison of existing design with the one under consideration will show. An interesting instance of the usual design is that of the G. T. R. central station at Ottawa, which was described in Canadian Railway



Interior of Trainshed, Windsor Street Station, Montreal, Looking from Station End.

four tracks, 2 to 5 inclusive, have trainshed roofs extending 1,003 ft., with the next two, 6 and 7, 807 ft. long, and the next two pairs, 8 and 9, and 10 and 11, cut off at 534 and 450 ft. respectively. This, including canti-

and Marine World for Nov., 1911. In contradistinction to the former practice of either having a high arched or plain span roof, high above the tracks, to be clear of the injurious effects of the locomotive fumes, or



Cross Section of One of the Arches of Trainshed, Windsor St. Station, Montreal.

the south, the track capacity varying for train lengths from 5 to 14 cars, the northerly track having a length in the clear of 1,400 ft.

The tracks cutting off in this manner from the ladder, have made necessary a staggered

lever umbrellas over outside platforms, gives a total covered trainshed area of 5 acres, or a train capacity, making due allowance for locomotive length, of about 120 cars.

The usual Bush trainshed is somewhat

else the umbrella type of overhanging platforms, which are more or less common in stations of small size, the Bush trainshed is a series of short span arches, usually made to span two tracks, and supported on rows of columns, of low construction, a duct