

entry from the southwest, climbed over talus debris, and dropped similarly, although not so viciously, to the Windsor St. Station.

Our discovery gave us an entry somewhat circuitous, it is true, but with a short maximum grade of 30 ft. to the mile. This, then, was the obvious route for a freight line from the west to Montreal harbor, and it must be remembered that the C.N.R. was at that time purely a granger road and interested almost exclusively in the hauling of wheat to the seaboard.

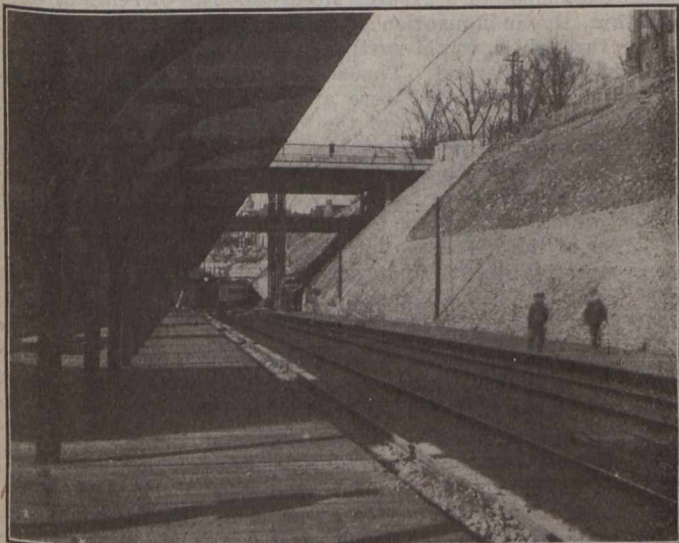
Here, therefore, was the starting point of the survey to Port Arthur, and we still hope to see this line built at a very early date.

Development of Transcontinental Route

The surveys west showed that an excellent line could be had north of the Great Lakes to Port Arthur at moderate cost; in proportion to cost probably the best long distance line in the world. The Pacific coast extension also gave wonderful results, and the system promised to be easily the best of all the transcontinental lines on this continent or any other. While, however, this arrangement was entirely satisfactory as regards through freight traffic to and from the west, it did not meet the requirements of the local traffic, both passenger and freight, of the city itself. Moreover, a transcontinental, such as that described, must of necessity have a suitable terminal in the eastern metropolis to make it complete and well balanced, and this became the new study of the location staff.

Montreal proper, as everyone knows, and many have said, is wedged in between the river and the mountain, on a narrow strip of territory consisting first of a river flat half a mile wide, and farther back a terrace 70 ft. higher, and of about the same width, extending to the mountain slope.

Up to thirty years ago, the site was an ideal one for a city of moderate size, although even then it was remarkable among American cities for its density of population. While Toronto was building up, with detached houses with lawns and gardens, Montreal adhered to long terraces of houses of grey limestone, built right up to the street, and extending for miles almost without a break. Only on the slopes of the mountain the "seats of the mighty," of the Allans, the Redpaths, the



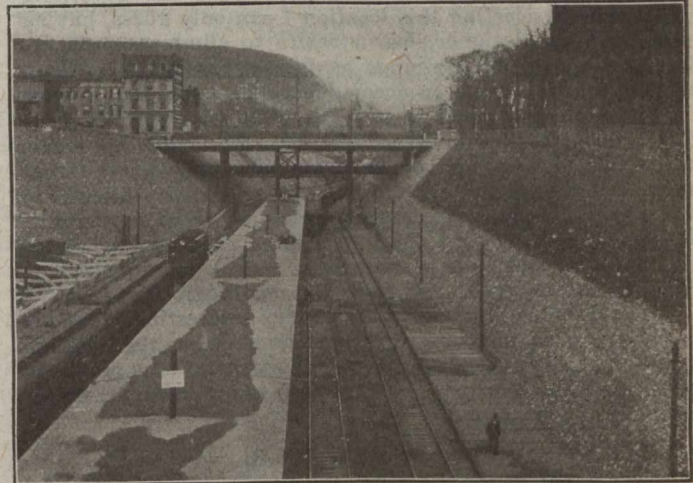
TRAIN EMERGING FROM TUNNEL AND APPROACHING DEPOT

Angus's, and other merchant princes showed more attractive surroundings, even if built on a sharp slope. Westmount was then in its infancy and was deterred in its growth by the long distances from the commercial centre of the city.

Thirty years ago was marked by the advent of the C.P.-R. and the selection of Montreal as its headquarters. Montreal began to grow very rapidly indeed, and is said to be increasing in population nearly 10% a year, and has now a population of over 800,000. Montreal a few years ago had

an area of 19 square miles, and a population of 580,000. Cleveland, with about the same population, occupied 45 square miles; Boston, with 670,000, covered 43 square miles. Between 1900 and 1910 Montreal added 10,000 people to each square mile, New York only 4,000 and Chicago only 2,500.

Montreal, to use the words of a writer in an American paper, was "choking to death for want of room." In its efforts to find this it has extended down the river almost to Bout de l'Isle, and upward almost to Lachine, and answers much more closely even than Duluth itself, to the Eastern



TRAIN AT RIGHT EMERGING FROM TUNNEL AND PASSING BENEATH DORCHESTER ST. BRIDGE—IN THE BACKGROUND IS MOUNT ROYAL

Yankee's description of that city as being "25 miles long, a mile wide, and pretty nearly a mile high."

Some long-sighted men (Sir William Van Horne for one) had repeatedly cast wistful and prophetic eyes towards the hinterland, "the great beyond" on the other side of the mountain. The Montreal Tramways Co. built a line around it, and Sir William suggested a tunnel of about 1,000 ft. to reduce the extreme summit of the Cote des Neiges hill. Only at one point had any actual expansion in this direction taken place, and this was largely due to the C.P.R. Mile End station and the Tramways Co.'s extensions to it. This was along the extensions of St. Lawrence, Main and St. Denis Streets, and later of Park Ave. This question of city expansion was one consideration which led to the conception and inception of the Montreal tunnel, but it was not by any means the only, or the principal one.

Topography

To most Canadians the mention of the St. Lawrence suggests a river running east and west. It carries east and west commerce, and Sault Ste. Marie is pretty nearly due west of Montreal, and Port Arthur only three degrees farther north; but the St. Lawrence proper, from Lake Ontario to the sea, flows northeast, and at Montreal it runs almost due north and south. It is the Ottawa which is the east and west river, and it is the Ottawa valley which has been in the past the great highway of commerce, and which has resumed this place as the route of the two transcontinental roads. The result is that the direct route from the heart of Montreal to the west, lies directly through the mountain, and almost at right angles to the river and the great thoroughfares of St. Catherine, St. James and Notre Dame Streets which parallel it. As grade separation was an essential feature of any terminal scheme, this was a very important consideration.

Three railways had already entered Montreal from the west. The Grand Trunk entered it when the problem was a comparatively simple one. The Victoria bridge was located at what was considered the best point for a bridge, as was the St. Anne's bridge over the Ottawa. The intermediate line was built as directly as possible between them, and one of the pioneer roads of Canada, the Lachine Portage Ry., was used as an approach to a dead end station in the