

The Curtis balanced trap is also often used as a water-line trap on large plants, when there is need to balance any particular circulation, to prevent snapping and cracking in the pipes and radiators. This is accomplished by connecting the direct steam-pipe to the top of the trap, and bringing in the return below the water line of the trap.

MONTREAL ISLAND BELT LINE RAILWAY.

The Montreal Island Belt Line Railway, about thirteen miles of which was opened for operation during the past year, constitutes perhaps one of the most significant facts of recent years in connection with the development of the commercial capital of Canada. At the time the North Shore Railway was being constructed between Montreal and Quebec, great pressure was brought to bear upon the Government to bring it across the Riviere des Prairies at Bout de l'Île, and thus traverse the Montreal Island to the city of Montreal. For reasons, apparently political, this influence was disregarded, and the North Shore Railway was brought into the city via St. Martin's Junction, thus adding fifteen unnecessary miles to the length of the line. The lower part of the Island, which comprises its best half, covering a distance of about thirteen miles, consequently remained in a large measure inert, until a year ago, when operations were begun by the Belt Line. This seems to be the beginning of the much-talked-of scheme to girdle the Island, a charter for which is held by the Belt Line Company.

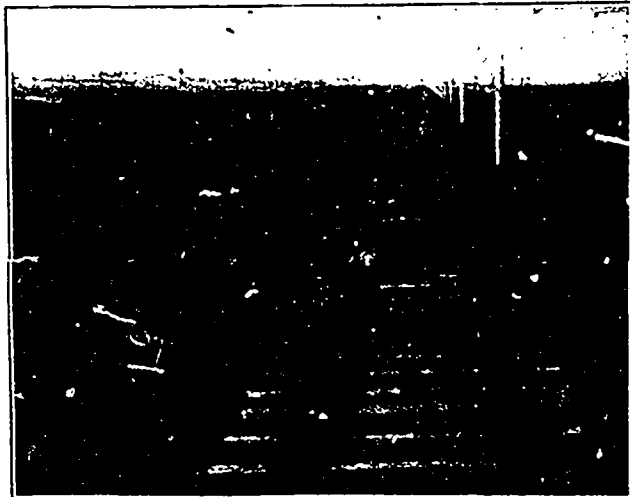
In 1897 the old Belt Line Company was reorganized, new blood and large capital brought into it, and operations begun on a vigorous scale. Although the charter is for the construction and operation of either a steam or electric railway, the directors judged it in the interests of the company to make use of the latest developments of electricity as a motive power. The construction of the line was pushed rapidly forward in the face of great difficulties in the way of land expropriations, and the line was opened for traffic a little more than a year ago.

The line is thoroughly constructed, on the standard gauge, and specifications of the Dominion Government railways. It has its own private right-of-way, constituting a strip of land eighty feet in width, the whole distance. It is almost a straight line from one end to the other, and with the single exception of the Canadian Pacific Railway at Hochelaga, its gradients are practically level. The line leaves the Canadian Pacific Railway at Hochelaga, and passing near the proposed Inland Basin, traverses the municipality of Maisonneuve, Longue Pointe and Pointe aux Trembles. Where the line crosses La Salle street (one of the principal streets in the town) to Notre Dame street, crossing on its way the tracks of the Montreal Street Railway at Ontario street, St. Catharine street and Notre Dame street. The Town Council of Maisonneuve, alive to its own interests, secured this concession from the Belt Line Company by granting them a perpetual franchise of the street in question and exemption from taxation for a long term of years. In its course through the municipality, the line passes close to several large manufactories, to which sidings have been laid by the company. Passing through the municipality of Longue Pointe it runs within a few hundred feet of the immense Asylum for the Insane, which is now in course of construction.

It may not be known by everyone that the extensive Longue Pointe Asylum, which has existed for many years near the banks of the St. Lawrence in Longue Pointe for the care of an unfortunate class of the community, about to be removed to a more suitable location, about a mile and a half further back on the same property, where the buildings will be reconstructed on an immensely larger scale than ever existed before, and that to this end the Quebec Government guaranteed a loan of \$500,000 at a low rate of interest. The buildings of the new asylum are in the course of construction, and when completed will constitute almost a town of themselves.

From Longue Pointe the line of railway pursues a perfectly straight course to Pointe aux Trembles, a most flourishing and attractive suburban village, situated about six miles from Montreal. Since the advent of the railway building, operations in the village have been very active, and there is every prospect of a most prosperous time for the village. From Pointe aux Trembles the line turns slightly to the left, and following the

course of the St. Lawrence River, and in full view of it, it reaches Bout de l'Île, a distance of another six miles, passing on its way the Catholic convent at Pointe aux Trembles, and the French Protestant Training School.



A STRAIGHT BIT OF TRACK.

At Bout de l'Île, where the cars are connected by a steam ferry with the town of Charlemagne and other points, a large park has been established by the company, covering more than twenty-five acres. Bout de l'Île ("the end of the Island") is an ancient hamlet, beautifully situated at the "meeting of the waters," where the Ottawa (Riviere des Prairies), merges into the blue St. Lawrence. The company has transformed this dreamy hamlet into an ideal summer resort. Its charming grove of maples and elms has been turned into a picnic ground, and ample pavilions, band stand, boat-houses and bath-house put up. A bicycle track has also been laid out around the park, to form at no distant date an important feature in the plans of devotees of the wheel in Montreal. The large hotel overlooking the two rivers has just been purchased by the company, and plans have been made for a big extension, which is to be ready for occupation by the Queen's birthday. The idea is to provide first-class accommodation and harmless and amusing diversions for the citizens. The hotel grounds will comprise 330,000 sq. ft. of land, and the new building will have a dining-room 36x60 ft., and a billiard-room 20x50 ft. The grounds will have fountains, tennis lawns and croquet courts. That the susceptibilities of temperance people may not be offended, the bar will be kept away from the hotel building altogether.

The company, in equipping their line, made a new departure from what has seemed to be the established custom in Montreal. The cars placed upon the road are of the best description, finished inside and out of imported mahogany, oiled and polished. The cars, instead of being the orthodox one-truck, were equipped each with double Taylor electric trucks of the latest construction. Inside they are luxuriously upholstered and polished, while the unsightly stoves of some electric railways have vanished, and each car is heated with six electric heaters of the latest description. They are handsomely vestibuled at both ends, and brilliantly lighted. These cars can only be compared to Pullman coaches on a smaller scale. The open cars, so much appreciated by summer travelers, are likewise built and finished in the handsomest possible manner. They are forty-five feet long, also double trucked with the Taylor Electric trucks. One of the open 45 ft. cars is shown in the accompanying engraving.

The company has also placed upon its line an electric locomotive, built to handle ten loaded cars. This latter move was made in order to meet the demands of the trade in the lower part of the city, connections having been made with the tracks of the Canadian Pacific Railway. A satisfactory arrangement was made with the latter company and the Belt Line for switching the East End freight coming over the Canadian Pacific Railway and destined for points in Maisonneuve, Longue Pointe and Pointe aux Trembles, and the end of the Island, in car lots.

An electric rotary plow has been in operation all the winter, and has performed most efficient work. The snowfall of the past winter is well known to have been one of the most severe in the memory of man, and on the occasion of the most severe