642

25,705 cu. yds.; structural steel, 3,755,220 lbs.; white oak or B.C. fir, 215,365 ft.; and dredging, 3,078,000 cu. yds.

Marginal way: Piles, 228,412 lin. ft.; hemlock timber, 490,300 ft.; southern pine or B.C. fir, 3,127,000 ft.; concrete blocks, 4,400 cu. yds.; mass concrete, 3,082 cu.

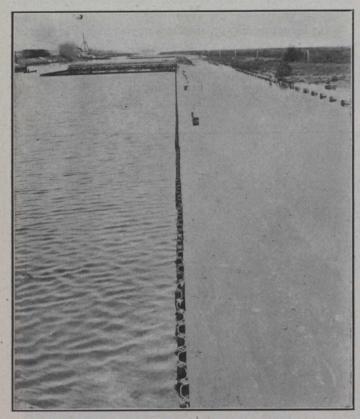


Fig. 5.—Sheet Piling on South Side, Don River Diversion.

yds.; reinforced steel, 372,667 lbs.; structural steel, 439,947 lbs.; white oak or B.C. fir waling, 84,654 ft.; and dredging, 48,515 cu. yds.

Operations were commenced early last year and an expenditure of about \$1,500,000 was made before the

close of the season. This year's expenditure will probably exceed that amount, as the contracts outlined above will be in full swing in addition to other contemplated work. In the western section over 3,000 ft. of crib work has been placed and filled eastward from the Humber, and about 1,000 ft. opposite Stanley Barracks and running westward from a point about 200 ft. from the western channel entrance to the bay. This crib work will be continued this year, and a portion of the concrete superstructure will likely be placed. The crib work is of pile construction and the topping will consist of concrete blocks. About a million yards of reclamation work will also be done this year, and the construction of a retaining wall about 900 ft. long near the mouth of the Humber is also contemplated. The foundations for the new club house of the Parkdale Canoe Club, near the foot of Triller Avenue, were completed by the commissioners in 1914.

In the eastern section the reclamation work in connection with the industrial area commenced last year is rapidly proceeding, and this season's operations there will probably aggregate over 3,000,000 cu. yds. of fill. A commencement will likely be made on the construction of a bascule lift bridge, 88 ft. wide and 120 ft. span across Keating's Cut at the foot of Cherry Street, at an estimated cost of \$105,000. Dock work on the marginal way and ship channel is also proceeding, about 1,000 ft. of wall having been completed. This is also of pile construction, but with mass concrete top. About 4,000 ft. of the substructure has been completed and topping will be proceeded with. It is estimated that 9,000 ft. of substructure will be placed this year. A large quantity of fill is now being placed behind the completed wall to provide for early track construction. The Don River diversion channel, involving an expenditure of over \$170,000, was completed last year, and it is likely that the balance of the north slip extending to the harbor will be finished

The engineering work is being carried out under the direction of Mr. E. L. Cousins, chief engineer, and Mr. J. R. Wainwright, acting chief engineer. Mr. L. H. Clarke is chairman of the Toronto Harbor Commission and Mr. A. C. Lewis its secretary.

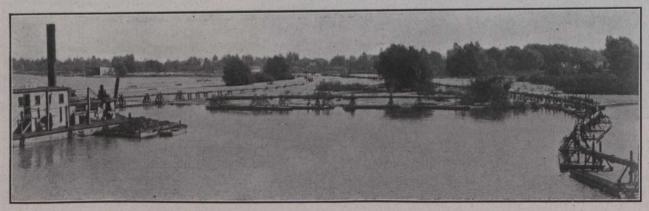


Fig. 6.—Reclamation Work at Centre Island, Toronto.

In the Crow's Nest Pass, British Columbia, the Corbin Coal and Coke Company are operating a seam of coal 125 feet thick.

According to the final statement of the Hamilton Board of Works concerning the construction of roads, sewers, and walks, under the local improvement plan, in 1914, the expenditure was as follows: Roadways, \$243,353.95; walks, \$145,363.65; sewers, \$41,594.36.

The coal production in Prussia in 1914 was 152,957,673 tons, as compared with 179,861,015 tons in 1913.

In the Bostonnais River bridge of the Transcontinental Railway the deck plate girders are supported on comparatively low concrete piers, and the spans are tilted out of a horizontal plane so that the girder webs are slightly inclined to the vertical and provide without shimming for the superelevation of the outer rail on a curve.