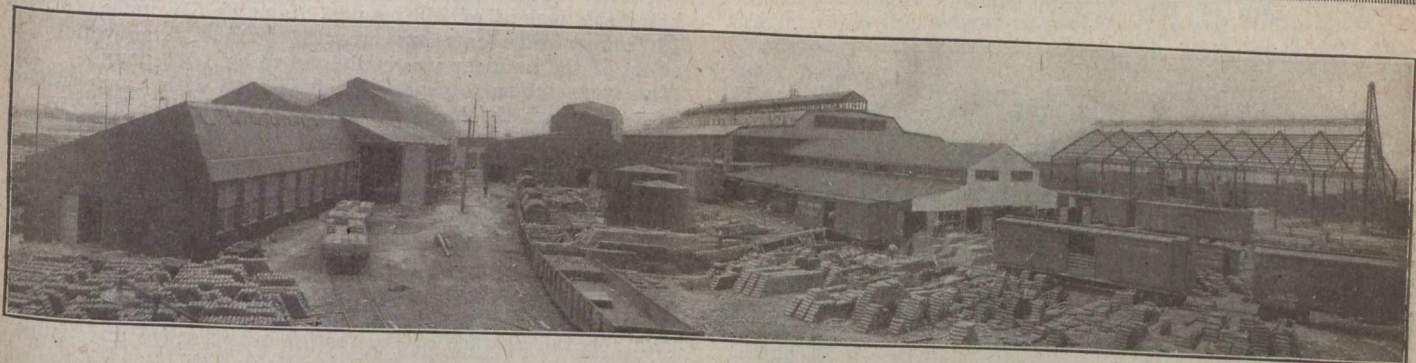


The Canadian Engineer

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World's Largest Electric Steel Plant in Toronto

The British Forgings, Limited, Occupies 127.65 Acres in the Eastern Harbor Terminal District—5,000 Lin. Ft. of Concrete Docks, Accommodating Vessels of 24 Ft. Draught—Complete Plant Built for the Manufacture of 6-in. and 9.2-in. Forgings From Raw Material

By GEORGE T. CLARK* and FREDERICK PHILLIPS**

Part of this article was written during the war, and the reader may note the use of the present tense. The article has just been released by special permission of Sir Joseph Flavelle. The plant is no longer being used for munitions manufacture.—EDITOR.

IN 1917 the Imperial Munitions Board was confronted with the problem of ever-increasing production of munitions. Manufacturers had quickly converted many factories into shell plants, all of which forged from cast billets. These forgings were sent in turn to many machine shops situated in various parts of the Dominion. Scrap turnings had accumulated to vast quantities, which, with the prevailing shortage of raw material, were of the utmost value as an additional source of raw material. There was no plant in

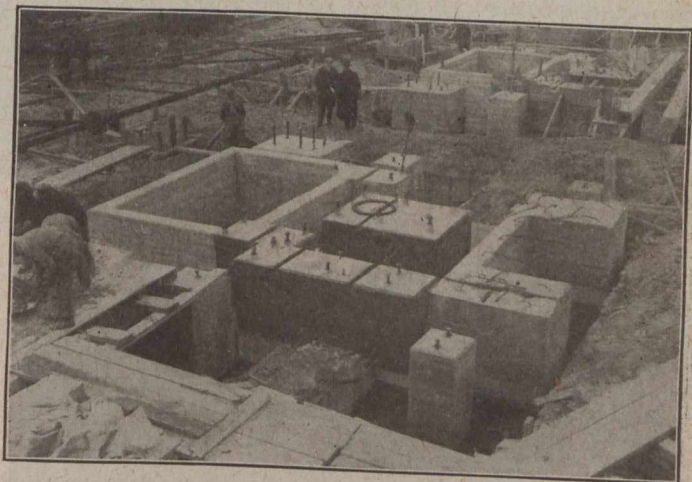
The plant was constructed in the most approved and substantial manner, to operate in a dual capacity, the first, and more important, being the installation of a battery of 10 electric furnaces to cast from scrap turnings, the second being, like the ordinary forge plant, to forge billets provided from any source.



BEARING PILES FOR CONCRETE FOUNDATIONS UNDER ELECTRIC FURNACES IN MELTING HOUSE

existence at that time which was capable of rapidly and economically manufacturing billets from these scrap turnings. The construction of the British Forgings, Ltd., was the result of this urgent necessity.

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FURNACE FOUNDATIONS, REINFORCED CONCRETE, CAPPING 50 ROUND BEARING PILES UNDER EACH ELECTRIC FURNACE.

The site of the British Forgings, Limited, steel plant comprises about 127.65 acres of land in the Toronto Harbor Commissioners' eastern harbor terminal district, formerly known as Ashbridge's Bay. The site, which lies between Commissioners Street and the Ship Channel, has five thousand feet of dockage facilities along the ship channel, which is a body of water four hundred feet wide and seven thousand feet long, ending in a turning basin one thousand feet square (described in *The Canadian Engineer*, issue of August 16th, 1917). The channel itself is dredged to twenty-four feet in depth at mean low water.

In addition to the dockage facilities above mentioned the site is also served with about 7 miles of railway sidings, the connection for these sidings coming from the Toronto Harbor Commissioners' main lead, just east of the Don River.