Section 6.—Production of Clay Products and Other Structural Materials.

Brick and Tile.—Although the brick and tile industry is established in every province of the Dominion, production is naturally greatest near the chief centres of population, that is, in Ontario and Quebec. Here the widespread clays of glacial and post-glacial age that occur over considerable areas of the St. Lawrence Lowlands have furnished the materials for numerous brick and tile industries. Production in these industries fluctuates with building activity and reached its highest point in the year 1912. Since that time the gradual substitution of steel and reinforced concrete for brick construction has reduced the production of brick so that while the value of construction undertaken in both 1928 and 1929 is estimated to have exceeded that of 1912, the quantity of brick produced in each of the later years was only about half that of 1912. On the other hand, as will be seen from Table 27 below, the production and consumption of cement in 1929 greatly exceeded that of 1912 or 1913. The production of building brick of various types in 1929 was 453,865,000, as compared with 421,301,000 in 1928 and 894,372,000 in 1912. Preliminary figures for 1930 are 323,509,000.

Cement.—The cement industry in Canada began with the manufacture of hydraulic or natural rock cement. The first production was probably at Hull, Quebec, between 1830 and 1840. The manufacture of Portland cement began about 1889. Owing to its superior qualities of uniformity and strength, it soon superseded the older product. Portland cement consists of an accurately proportioned mixture of lime, silica and alumina. The lime is usually furnished by limestone or marl, and the silica and alumina by clay or shale. The cement industry has naturally become established where these materials are situated with good facilities for a supply of fuel and for shipment of the product to the markets. The largest production is in Quebec and Ontario, although there are also active plants in Manitoba, Alberta and British Columbia. As may be seen from the table following (Table 27), the production of cement in 1929 established a record, and, while production was reduced in 1930, it still exceeded that of 1928. The industry thus shows a healthy recovery from the unfavourable conditions from which it suffered during the war and post-war periods. Whereas in pre-war years Canada was an importer of Portland cement, she is now an exporter of this commodity.

27.—Production of Portland Cement, by Quantities and Values, calendar years 1910-1936, and Imports and Exports, fiscal years ended Mar. 31, 1910-1936.

Year.	Production.2		Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
-	bri.t	\$	cwt.	*	ewt.	\$
1910. 1911. 1912. 1913. 1914. 1915.	7,132,732 8,658,805	6,412,215 7,644,537 9,106,556 11,019,418 9,187,924 6,977,024	490,809 1,283,721 2,592,025 4,958,814 709,104 287,402	158, 487 494,081 936, 425 1,955, 177 322, 564 123, 613	-	97,380 2,571 3,742 2,861 2,393 1,065
1916. 1917. 1918. 1919.	4,768,488 3,591,481 4,995,257	6,547,728 7,724,246 7,076,503 9,802,433 14,798,070	94,136 63,074 26,243 26,687 45,458	37,048 29,719 17,417 26,437 47,156		5,139 2,727 16,909 15,945 660,884