

Sulphur is used in Canada chiefly in the production of sulphide pulp and in the production of artificial silk and newsprint. It is used to a large extent also in the manufacture of sulphuric acid, explosives and rubber and in the production of fertilizers.

Section 8.—Production of Clay Products and Other Structural Materials

Statistics in this Section include the output of those firms engaged in the production of clay products, Portland cement, lime, sand, gravel and stone, and the production of these materials is naturally dependent upon the activity of the construction industry as a whole. The output of such materials attained an all-time high value of \$58,534,834 in 1929; however, the output of structural materials suffered severe annual declines throughout the depression period of the early 1930's. The construction of defence projects during the war years resulted in a very pronounced expansion in the output of structural materials, the combined value in 1942 totalling \$45,729,807 as compared with \$35,362,759 in 1939. However, the peak of such construction was passed in that year and the value in 1943 was somewhat lower at \$42,010,254. There has been an increasing consumption of stone and lime for other than building purposes. This has been particularly evident in recent years and is the result of expansion in certain industries where these materials are utilized in chemical processes.

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. Production reached its highest point in the year 1912. Since that time the gradual substitution of steel and reinforced concrete for brick has reduced the production of brick so that, while the value of construction undertaken in 1928 or 1929 is estimated to have exceeded that of 1912, the quantity of brick produced in the later years was only about half that of 1912. On the other hand, the production and consumption of cement in 1929 greatly exceeded that of 1912 or 1913. The production of building brick of various types in 1941, 1942 and 1943, is shown in Table 2 of this chapter, while the production by provinces in 1943 is given in Table 6. The estimated value of all clay products made in 1942 was \$7,081,723 and \$6,608,193 in 1943.

Cement.—The cement industry in Canada began with the manufacture of hydraulic or natural-rock cement. Production was probably first obtained at Hull, Que., between 1830 and 1840. The manufacture of Portland cement began about 1889. Owing to its superiority in 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 and the silica and alumina by clay or shale. The cement industry has naturally become established where these materials are situated and where fuel supplies and transportation are readily available. 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 Table 31, production declined greatly from 1930 to 1933,