

Materials of Construction.—The record activity in construction during 1958 resulted in a great demand for materials of construction and the mineral industries supplying these operated at record levels.

Preliminary estimates show that nearly 168,000,000 tons of sand and gravel valued at \$97,500,000 were used in 1958. This tonnage was exceeded by that of no other mineral substance produced in Canada, and the value was exceeded by only six other mineral products. This great production came from some 8,000 pits scattered across the country. Part of the production consisted of manufactured sand made directly from limestone, sandstone, and other rocks, which must pass the strictest of specifications for use in concrete and is being used in ever-increasing amounts. It costs more than natural sand and it must be made adjacent to the structures in which it is to be used in order to keep transportation costs to a minimum. Most of the nearly 3,000,000 tons of sand used as fine aggregate in concrete for the St. Lawrence Seaway and Power Project was manufactured sand.

Crushed stone for use as aggregate in concrete was also produced in record amount in 1958 when an estimated 40,517,000 tons valued at \$57,700,000 was marketed. This production came from more than 500 quarries.

Gypsum was the only mineral connected with the construction industry to show a decline in production in 1958 but, even so, value was well up over the previous year; 4,043,364 tons valued at \$8,302,037 were produced in 1958 compared with 4,577,492 tons valued at \$7,745,105 in 1957. The reason for the decline in production was a prolonged strike at the quarries of the largest producer at Windsor, N.S. This is also an area where cost of production is low and that accounts for the increase in value per ton. The quarries in Nova Scotia are among the largest in the world. Almost all the production is shipped by boat to gypsum plants along the Atlantic coast of the United States where it is made into various products. Gypsum is also quarried in Newfoundland, New Brunswick, Ontario, Manitoba and British Columbia. The principal products made are wallboard, wall plaster, sheathing board, lath and tile. The use of gypsum has developed phenomenally in the past few years.

The Portland cement industry, which has plants in all provinces except Nova Scotia and Prince Edward Island, also achieved a record production in 1958 of 6,068,977 tons valued at \$95,869,547. The industry has expanded threefold since the end of World War II but, even so, was unable until 1957 to supply all the domestic demand and large imports were necessary. In 1958 imports were only nominal and were greatly exceeded by exports. Two new companies entered the Canadian Portland cement industry in 1958. These were Lafarge Cement of North America Limited at Vancouver, with a plant designed to produce 1,300,000 bbl. per year, and Lake Ontario Portland Cement Company at Picton, Ont., with a plant rated at 1,800,000 bbl. a year. Canada now has what is probably the highest per capita output of cement of any country, indicative of the high level of industrialization in this country.

Sales of clay products made from domestic clays totalled \$42,611,899 in 1958, the highest on record. In addition products valued at \$20,656,000 were made from imported clays. About 200 plants scattered through all provinces except Prince Edward Island, are engaged in making clay products in this country. The products include brick, tile, ceramic pipe, pottery, porcelain and certain types of refractories. A program of modernization in effect throughout the industry has been speeded up in the past year or two in order to take advantage of natural gas as fuel for kilns.

An industry closely allied to the clay products industry is that engaged in the manufacture of light-weight aggregates made from clay, shale, slag, perlite and vermiculite. When used with cement they give concrete and plasters that are only one-half to two-thirds the weight of the conventional products and thus by reducing the weight of structures in which they are used, such as bridges and tall buildings, they enable important savings to be made in the structural steel frameworks. The light-weight aggregate industry has