

basic refractories and magnesium metal, and for various other uses, particularly in agriculture. Magnesitic dolomite is mined at Kilmar, Que., by Canadian Refractories Limited and converted into basic refractory products. In 1953, a large plant was built at Dundas, Ont., by Steetley of Canada, Limited, for the production of a refractory product known as "dead-burned dolomite" from the extensive dolomite deposits in that area. *Building stone* is produced from limestone in Ontario, Quebec and Manitoba. *Marble* is produced in Quebec, Ontario and British Columbia and is available in many of the other provinces. *Crushed stone* for road metal, concrete aggregate, railroad ballast, and numerous other uses is produced in a great many parts of Canada. *Roofing granules* are made from rhyolite, basalt, and slate in Quebec, Ontario and British Columbia.

The *Portland cement* industry, which uses limestone and cement as its main raw materials, is established in seven of the ten provinces. It has been expanding its production facilities steadily in recent years to keep pace with construction activity in Canada and at present has an installed capacity of about 23,000,000 bbl. of cement annually which places Canada well up among the nations of the world on a per capita production basis.

The *lime* industry also has been experiencing rapid growth in the past decade. Production in 1953 was 1,184,963 tons valued at \$13,457,648 which is close to the all-time record. The growth of the lime industry was mainly caused by the rapidly growing chemical industry because over 80 p.c. of the lime produced now finds chemical use. Lime is made in all provinces except Nova Scotia, Prince Edward Island and Saskatchewan. Most of the production is marketed in the lump form (quicklime), but hydrated lime, which is a specially slaked dry powder, is steadily gaining in popularity.

Shales and *clays* suitable for the manufacture of brick and tile are found in all provinces and are being widely utilized by the ceramic industry. This is a rapidly growing industry and production to-day is nearly four times as great as it was ten years ago, reflecting, in part, the great activity in construction throughout Canada. Shales and clays that bloat on being heated are now being sought for the production of lightweight aggregates to supply the demand from the construction industry for lightweight building materials. Two new plants to make these products have been built recently and several others are in prospect.

A volcanic rock, known as *perlite*, that expands greatly on heating and yields a lightweight product that is incorporated into plasters and other building materials, has been found in British Columbia and has been quarried at François Lake for use in Western Canada.

The *granite-quarrying* industry is active in Quebec, British Columbia, Ontario, Nova Scotia and Manitoba. In addition to use for building and monumental stone, granite is extensively used for road metal, concrete aggregate, and railway ballast. It is also used in minor quantities for poultry grit and in the making of artificial stone.

Sand and *gravel* together constitute the greatest tonnage of any mineral substance produced in Canada. In 1952, approximately 100,000,000 tons of sand and gravel were used by the construction industry in this country. Owing to increasingly strict specifications, industry is considering the manufacture of sand from rock in order to obtain exactly the kind of sand required and considerable research is being carried on to this end.