

Canadian facilities for the production of most structural materials have expanded in recent years and, at the same time, many new plants have been established to produce materials previously imported. For instance, during the past ten years facilities have been constructed for the manufacture of both large- and small-diameter pipe to be used for oil and gas transmission. Large-size wide-flange steel beams and plate, aluminum extrusions and plastic sheathing are now among Canadian products. The output of bottled gas, a major requirement in the provision of refrigeration service and in construction, has increased considerably. The development of the petrochemical industry has made available cheap basic raw materials for the production of other construction products such as floor and acoustic tile, new insulating materials and paint solutions. Titanium-based pigments for paint manufacture are being recovered as by-products, using raw materials from titanium slag piles and waste petroleum refinery gases. Additional capacity for the production of titanium-based pigments is being installed and will be operative in 1963.

Because of continually increasing demand, cement production capacity has more than doubled. The rapid expansion of this industry has led to its diversification and output integration. Ready-mix plants are now common in most major communities and are a vital link in the quality control and efficient application of cement in large-scale production projects. New techniques of application and use have led to an expansion of secondary product manufacture such as blocks, brick, pipe and pre-stressed beams and slabs. Recent developments suggest the greater use of cement for soil stabilization purposes which will assist in the building of good roadbeds.

At present, the Canadian construction materials industry is relatively self-sufficient, except for certain items that are unique in their application for architectural and aesthetic needs.

**Outlook for the Construction Industry.**—Forecasts of construction expenditures for the next twenty-five years indicate a growing emphasis on engineering construction, realizing the increasing need for roads, electric power, research development and fully manufactured products of many kinds. Of significance in recent years has been the acceptance of contracyclical federal construction programs. Such programs have been oriented largely to requirements of the community for services in the form of housing and schools, hospitals and other institutions. This factor, in conjunction with aggressive business investment programs, will assist in restraining and stretching out construction booms and will stimulate construction actively in less prosperous times. Such stabilization of the construction cycle should, to a great extent, create greater efficiency and less fluctuation of activity within the building industry and, by so doing, also effect more constant growth of the multitudinous construction materials industries.

## **Section 1.—Capital Expenditures on Construction and on Machinery and Equipment**

Capital expenditures of all sectors of the economy amounted to \$8,200,000,000 in 1960, a reduction of 2.6 p.c. from the 1959 total of \$8,417,000,000. The decline was wholly accounted for by a smaller construction program—\$5,487,000,000 being spent compared with \$5,709,000,000 in the previous year. Purchases of machinery and equipment totalling \$2,713,000,000 in 1960 were unchanged from the level of 1959. Total capital expenditures increased throughout most of the decade since 1950 and reached a record level in 1957. Since 1958, capital spending in Canada has remained at a high and fairly stable level, the variations being within a relatively narrow range. The 1960 capital program accounted for almost 23 p.c. of Canada's gross national product; thus it may be said that 23 p.c. of the gross national product was devoted to expanding, modernizing and renewing the nation's productive facilities.