

The first all-lightweight concrete multi-storey building in Canada, the National Trust Office, was completed in Toronto in 1962. More than 13,000 cu. yards of lightweight concrete, with a specified 28-day compressive strength of 4,000 psi. and a unit weight of 115 lb. per cu. foot, were cast in the 22-storey concrete frame. In addition, about 75,000 lightweight blocks were used in masonry. Precast concrete curtain walls with exposed aggregate finish emphasize a modern trend in architectural application.

Potash.—Nineteen years after potash salts were discovered at depth in Western Canada, this important natural resource was brought into successful production. Bulk concentrates of muriate of potash began moving to the market from the Esterhazy, Sask., plant of International Minerals and Chemical Corporation (Canada) Limited on Sept. 1, 1962. The project reached full production a few months later. With a capacity of 1,200,000 tons K_2O equivalent per annum, Esterhazy is the largest capacity potash unit in North America if not in the world. The mine shaft, 18 feet in diameter, was bottomed at 3,380 feet to provide access to the potash horizon at about 3,150 feet. Using the room-and-pillar method, potash is excavated by electrically operated, continuous-mining machines with twin cutting heads operating in a vertical plane and cutting a $7\frac{1}{2}$ -foot by 13-foot oval opening.

The Potash Company of America Ltd. completed a 16-foot concrete-lined shaft at Patience Lake near Saskatoon in 1958 and limited production was sustained for a ten-month period in 1958-59. However, technical difficulties in maintaining a dry shaft caused the mine to cease operation for extensive repairs. The company plans to resume production at an annual rate of 350,000 tons K_2O equivalent during 1963.

The emphasis being placed on Canadian potash is demonstrated by the fact that, at the end of 1962, 15 companies had under their control more than 2,000,000 acres underlain by potash and had invested an estimated \$100,000,000 in Saskatchewan. World demand for potash is increasing by more than 500,000 tons K_2O equivalent per annum. Since, depending on the grade, several times this amount of ore is needed, a new mine each year is required to satisfy this demand. By the end of 1963 the Canadian potash industry should be in a position to supply 15 p.c. of the world market and will contribute \$40,000,000 annually to the country's mineral economy. Almost all the output will be exported, mainly to the United States but also to overseas markets, particularly to Asia.

Sulphur.—The large-scale development of natural gas resources of western Alberta and northwestern British Columbia has brought about a dramatic change in Canada's sulphur position. A few years ago, this country was entirely dependent upon foreign elemental sulphur to supplement the sulphur dioxide and sulphuric acid recovered from smelter gases and from the roasting of pyrite; today, it stands as a major source of that product. As a direct result of the expanded demand for western natural gas, the 1962 production of refined elemental sulphur was 668,000 tons, almost double the 1961 output, having a value of nearly \$9,000,000.

Canada ranks second to the United States among the elemental sulphur producers of the world and is capable of supplying 15 p.c. of the present world market. As a consequence, the Canadian industry is becoming a dominant factor in global markets. In 1962 shipments entered the northern United States and bulk cargoes moved from West Coast ports to the Republic of South Africa, Formosa, Australia and Britain.

Gypsum.—Although gypsum is mined in Newfoundland, Nova Scotia, New Brunswick, Ontario, Manitoba and British Columbia, 83.0 p.c. of the Canadian output comes from Nova Scotian mines and much of it is exported to the United States in crude form. Total shipments in 1962 amounted to over 5,000,000 tons valued at \$9,033,000. The quantity increase over 1961 was 5 p.c., accounted for by increased demand in the United States. The year was an active one for the industry. Of particular note was the commencement of shipments by the Flintkote Company of Canada Limited from its deposit in the Flat Bay area of Newfoundland where gypsum reserves are estimated to