

Corporation Limited in the Dawson City area recovered about 75 p.c. of Canada's total placer gold production. The small gold output of the Atlantic Provinces came as a by-product of base-metal production.

**Uranium.**—Canada has been one of the world's leading producers of uranium since the metal became important as a fissionable material for military purposes and, more recently, in the development and production of atomic energy for electric power generation. One of the largest known deposits in the world is in Canada where present reserves represent about 37 p.c. of the total in the non-communist world. The production of uranium in Canada has been characterized by features which are unique in this country because the industry was started by the Canadian Government at a time of emergency and, unlike other minerals, the sale of uranium products is government controlled.

The rapid growth of the uranium mining industry since World War II was a remarkable achievement. In 1958, Canada was the world's leading producer of uranium and the value of  $U_3O_8$  produced in both 1958 and 1959 exceeded the value of any other Canadian-produced metal. As an export commodity, uranium ranked fourth in value in 1959 following newsprint, wheat and lumber. Production from 25 mines in that year was 15,892 tons of  $U_3O_8$  valued at \$331,000,000. Since 1959, however, the decline in production, resulting from declining export markets, has been almost as rapid as the spectacular rise from 1953 to 1959. In 1963, 8,141 tons were produced and at the end of the year only seven mines were in operation; it is expected that the number will be reduced to two by the end of 1965.

The present surplus of uranium in the United States and Britain, the major consuming countries to which Canada has been shipping, makes it unlikely that demand will rise again before the 1970's. Practically all of Canada's uranium was sold under contract to the United States Atomic Energy Commission (USAEC) and the United Kingdom Atomic Energy Authority (UKAEA). The United States, Canada's largest customer, announced in 1959 that it would not exercise its option to purchase additional uranium from Canada. To prevent a collapse of the industry in 1962 and 1963, when the USAEC contracts would expire, the Government of Canada, through Eldorado Mining and Refining Limited (see p. 121), negotiated a delivery stretch-out for the uranium already under contract with the USAEC and the UKAEA. This plan also permitted the transfer of contracts between companies. By September 1968, when the stretch-out period ends, most companies will have fulfilled their original contracts and any additional ones they may have acquired through transfers from other companies.

In 1962, a contract was signed with the UKAEA for the delivery of 12,000 tons of  $U_3O_8$  over a period extending until late 1971. This contract permitted each of the seven mining companies, which were still operating in 1962, to extend its operating life approximately 16.7 months past the completion date of its previous commitments. However, only one mine will be able to stretch out its production into 1971.

Procurement and marketing of most of the uranium produced in Canada is the responsibility of Eldorado Mining and Refining Limited. Canadian producers are permitted, however, to make small sales of surplus uranium ( $U_3O_8$ ) to countries that do not hold agreements with Canada for co-operation in the peaceful uses of atomic energy. The maximum amount that any such country may receive in total from Canada is 2,500 lb. Producers may also sell larger amounts, under permit from the Federal Government, directly to countries that hold bilateral agreements with Canada, but sales of this nature have been small.

Ore reserves as of Jan. 1, 1964, were estimated at 225,000,000 tons containing 207,000 tons of recoverable uranium oxide ( $U_3O_8$ ) and about 82,000 tons of thorium oxide ( $ThO_2$ ). Reserves in the conglomeratic deposits in the Blind River-Elliot Lake district of Ontario constitute 93 p.c. of Canada's total. Reserves in pitchblende-bearing vein-type deposits in the Beaverlodge Lake area of northern Saskatchewan comprise 6 p.c. and the pegmatitic deposits in the Bancroft area of southeastern Ontario make up about 1 p.c. Scheduled deliveries of  $U_3O_8$  to the USAEC and the UKAEA from 1964 to 1971, inclusive, total 16,851