

Service, having held a wide variety of posts both in Ottawa and abroad. Assigned to London in 1944, he was transferred to Brussels a year later and was thus given an opportunity to study problems of reconstruction in post-war Europe and to familiarize himself with the operation of Canadian missions abroad. After his return to Ottawa, in 1948, he became, at the age of 33, head of the Department's Personnel Division. In this position, Mr. Cadieux was associated with the development of the Department's recruiting, promotions, posting, and establishment policies at a time when it was undergoing a period of rapid expansion.

IRON ORE PRODUCTION

Canadian producers' shipments of iron ore reached an all-time high of 21,854,468 tons in 1959. This was 9.5 per cent above the 1956 record of 19,953,820 tons and 55 per cent above the total for the recession year 1958. Shipments from all producing provinces increased.

Owing to the steel strike in the United States, which lasted from July 15 to November 7 and closed that country's iron-ore mines, the traditional imports into Ontario from the Lake Superior area of the United States were lower than normal. To make up this deficiency in the iron-ore supply, Canadian producers greatly increased the proportion of their shipments to Canadian plants - to such an extent that Ontario blast furnaces operated at a record rate.

U.S. STILL MAIN BUYER

The United States, despite the strike, was again the main market for Canadian iron ore. Prior to the strike, shipments were high because United States blast furnaces were operating close to their rated capacity. During the strike, although most of the country's iron-ore and steel-producing facilities were idle, about 15 per cent of its steel-making capacity continued to operate, thus providing a market for some Canadian ore. Of more importance to Canadian producers was the expansion of stockpile facilities at United States ports for fear of an ore shortage expected for the winter of 1959-60. This expansion permitted Canadian and other foreign producers to ship large tonnages even during the strike.

EUROPE AND JAPAN

Exports to Japan and Western Europe increased slowly in the first part of the year, but an increase in industrial activity,

particularly in Western Europe, resulted in a strong demand toward the latter part of 1959. The demand for Canadian iron ore in relation to that for iron ore from other exporting countries was good. Several other countries, however, are in a strong competitive position for acquiring new iron-ore markets. Venezuelan exports to the United States, for example, remained large during the recession of 1958 while Canadian exports decreased sharply. The same situation exists in several of the Western European market areas. Among the advantages Venezuelan producers have over their Canadian counterparts are higher grade direct-shipping ores that are more easily mined the year round, all-year shipping, and lower production costs.

During 1959, three new mines were brought into production - two in British Columbia and one in Ontario. Direct-shipping ores accounted for 68.6 per cent of Canada's iron-ore shipments; concentrates and agglomerates for 18.6 and 12.8 per cent respectively. About 83 per cent of the ore shipped was of the hematite-goethite variety, and magnetite and sintered siderite accounted for 8.5 per cent each. About 80 per cent of the ore shipped came from open-pit mines.

In addition, three companies produced iron by-products that are not included in the normal iron-ore production statistics. One produced iron-oxide pellets as a co-product, with nickel carbonates and sulphuric acid, from the treatment of nickeliferous pyrrhotite concentrate. Another produced iron-oxide sinter and calcine as co-products, with sulphuric acid, from the treatment of pyrrhotite-pyrite concentrate. A third firm smelted ilmenite ore to produce titania slag for the manufacture of pigments and 'remelt iron', a type of pig iron.

In previous years iron ore from the port of Seven Islands, Quebec, was shipped to the United States by one of three routes: to the east coast, then inland by rail; to Contrecoeur, Quebec, for transshipment to small canal boats that could pass through the old St. Lawrence canals to Lake Erie ports; or to Contrecoeur, then inland by rail. During 1959, shipments of iron ore through the newly-opened Seaway totalled 5.3 million tons; in 1958 and 1957, shipments through the old St. Lawrence canal system amounted respectively to 1.3 million and 2.2 million tons. In 1959, shipments by water from Seven Islands to the United States east coast totalled 4.8 million tons; in 1958 and 1957 they amounted respectively to 4.4 million and 7.0 million tons. It is expected that by 1970 from 20 million to 25 million tons of iron ore will be shipped through the Seaway annually.