Canada's total annual mineral output value in 1939 (estimated at $473,107,021) was 7·1 p.c. higher than in 1938; almost 3¼ times that of 1913; and nearly 2¼ times that of 1918, under the maximum pressure of war demand. Annual output value does not, however, provide an accurate basis by which to measure progress in mining development, because of the wide fluctuations in the prices of the several minerals over the period. In order to appreciate the contribution that the Canadian mineral industry can make to the present war effort, it is necessary to review its position with respect to each important war mineral produced, including those of primary importance in the building up of financial resources.

Essential War Minerals Produced in Canada.

Metallic War Minerals—

In the first month of the present War, the large Canadian producers of copper, lead, and zinc entered into a one-year agreement (with the privilege of renewal) with the British Government to supply 210,000 short tons of refined copper, and the entire output of refined lead and zinc surplus to Canadian domestic requirements, at prices approximating the low prices then prevailing, with adjustments for shipping costs and for possible rises in production costs. A substantial portion of the British requirements was thereby assured at prices very much lower than were paid during the War of 1914-18. In any review of Canada's war effort this co-operation of the Canadian mining industry should receive due recognition.

Copper.—Copper is usually considered as the second most important of the war metals, more by reason of the large quantities required in application of the ordinary commercial uses to war needs than for its specific military uses. Canada has greatly strengthened its position as a copper producer since the close of the War of 1914-18. The annual production of 59,385 tons in 1918 under the pressure of war needs and high prices was more than doubled by 1929, and has shown an even greater increase in the period of depressed world prices that has since elapsed. The 1938 production of 285,625 tons represented 13·1 p.c. of world output, and ranked the Dominion as the third largest producer. Preliminary figures for 1939 show a further increase to 304,050 tons. Moreover, this large growth has been brought about chiefly by the discovery and development of new deposits across the Dominion. While the 1938 output from British Columbia, the largest source in 1918, was little reduced, the production from the deposits near Sudbury, Ont., the present largest source, was almost seven times that of 1918. Large quantities are obtained from new producers, including Noranda, Waite-Amulet, Normetal, and Aldermac, in Quebec; and Flin Flon and Sherritt Gordon in Saskatchewan and Manitoba. In addition to the strength derived from such broadening of sources of production, the Dominion is now equipped with two large copper refineries at Copper Cliff Ont., and at Montreal East, Que., with a combined rated annual capacity at present being increased to 245,000 tons of refined metal. While in 1918 the amount of copper refined in the original refinery at Trail (since closed) amounted to only 3,809 tons, or little more than 6 p.c. of the copper produced in that year, the production of refined metal in 1938 amounted to 227,240 tons, or to almost 80 p.c. of the year's total copper output.

The Canadian copper-mining industry is therefore in a position to make a major contribution to the copper needs of the overseas Allies in addition to taking care of domestic requirements. As already pointed out, shipments of the very substantial