

**World Production of Copper.**—World production of copper was estimated at 1,523,200 short tons in 1931, as compared with 2,150,400 tons in 1929, the record year. Canada had an output of 146,152 tons in 1931, producing about 9.4 p.c. of the world's estimated total and standing third among the nations.

### 16.—Copper Production of the Leading Countries and of the World, 1913-31.<sup>1</sup>

(In short tons of 2,000 pounds.)

Year.	Canada. <sup>1</sup>	Northern Rhodesia.	Belgian Congo.	Chile.	Japan.	Mexico.	Peru.	Spain and Portugal.	United States.	World Production.
1913....	38,488		-	46,574	73,283	58,185	30,600	39,683	614,255	1,072,674
1914....	37,868			49,221	77,650	40,043	29,853	29,652	579,133	1,021,233
1915....	50,393			57,680	83,108	34,128	38,269	40,895	712,126	1,188,172
1916....	58,575			78,559	110,900	60,751	47,472	39,021	971,123	1,533,294
1917....	54,614			112,985	119,058	52,348	49,784	45,084	961,016	1,579,675
1918....	59,385			117,851	99,583	83,233	48,944	50,596	968,687	1,569,523
1919....	37,527			87,721	86,468	66,661	43,245	38,581	604,642	1,069,437
1920....	40,800			109,075	74,727	49,866	39,356	25,353	635,248	1,082,652
1921....	23,810			65,299	59,626	13,576	36,689	36,596	238,420	600,960
1922....	21,440			112,985	59,663	29,842	40,133	40,234	511,970	995,045
1923....	43,441			201,042	70,315	60,538	48,684	57,115	754,000	1,411,480
1924....	52,229			209,855	69,378	49,150	38,495	60,713	819,000	1,522,294
1925....	55,725	83	99,323	209,654	72,413	59,123	41,180	63,933	854,000	1,589,717
1926....	66,547	793	88,889	233,015	72,277	62,303	46,709	63,983	878,000	1,637,489
1927....	70,074	3,685	98,278	264,242	73,361	63,760	52,438	60,351	847,319	1,682,361
1928....	101,348	6,642	123,962	316,141	75,214	72,280	62,233	61,600	904,898	1,892,800
1929....	124,060	6,122	151,007	353,434	83,190	95,409	61,855	75,040	997,555	2,150,400
1930....	151,739	7,021	153,164	242,895	87,119	80,922	52,416	73,920	705,073	1,769,600
1931....	146,152	25,536	132,160	247,520	83,608	59,757	48,832	62,720	528,875	1,523,200

<sup>1</sup> From the Imperial Institute except in the case of the production for Canada, where the official figures of the Dominion Bureau of Statistics are used.

### Subsection 4.—Lead.

Lead is obtained in Canada largely from the deposits of British Columbia. From 88,665 lb. in 1891 the production advanced to over 39,000,000 lb. in 1897. Owing to the low price of silver in 1898 and labour troubles in the Slocan in 1899, the output in the latter year fell to 21,900,000 lb., but rose to 63,200,000 lb. in 1900. The output fell to 18,100,000 lb. in 1903, owing to the condition of the market affecting the production of the low-grade silver-lead ores of the East Kootenay district. An Act of October, 1903, provided for the payment of bounties on lead contained in lead-bearing ores mined in Canada and, as a direct result of the bounty, the output increased to 56,900,000 lb. in 1905 but fell off gradually to 23,800,000 lb. in 1911. A marked increase has since been experienced, a record total of 337,946,688 lb. being reached in 1928, while production in 1929 and 1930 continued at nearly the same level. Owing to the very low price to which the metal has since declined, production has fallen off, the preliminary estimate for 1932 being 255,949,960 lb.

**British Columbia.**—In the East and West Kootenay districts there are many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley. The ore averages about 11 p.c. lead, 7 p.c. zinc and 5 ounces of silver to the ton. The successful solving by the Consolidated Mining and Smelting Co. of the metallurgical problems connected with the separation and reduction of these lead-zinc ores accounts to a considerable extent for the rapid growth in lead pro-