cept where traversing the dike, the vein holds nothing but a little galena. But the part which lay within the dike, and constituted a perpendicular square prism, proved to be rich in argentite and native silver, to a depth of about 1,000 feet, when it began to fail and at 1,200 feet it had become so poor as to be no longer worth working. The total value of the silver taken from this mine amounted to about $3,250,000. The rock of the dike itself, on analysis, was found to contain a variety of metals in notable quantities.

On the shore of Thunder Bay, a short distance to the northeast of the Shuniah and Thunder Bay mines, a rather small vein which cuts both the Huronian and Animikie rocks was worked to a limited extent under the name of the 3A mine. It was noted for producing occasional specimens of nickelite.

COPPER STATISTICS.

The fourteenth annual issue of Messrs. Aron Hirsch & Sohn's Copper Statistics gives the copper production of the world for the preceding twelve months. The following extracts should be of interest to all connected with the mining, smelting and refining of copper:—

The most complete estimate of the world's copper production is published by Henry R. Merton & Co., Ltd., of London, whose figures for 1905 are not yet available. We give their figures for former years for comparison:

1880: 153,959 t, 1885: 225,592 t, 1891: 279,309 t, 1892: 310,472 t, 1893: 303,975 t, 1894: 324,405 t, 1895: 334,565 t, 1896: 373,363 t, 1897: 397,390 t, 1898: 424,126 t, 1899: 470,866 t, 1900: 486,084 t, 1901: 518,788 t, 1902: 542,470 t, 1903: 565,828 t, and pro 1904: 640,935 t.

STATISTICS OF THE PRINCIPAL COPPER CONSUMING COUNTRIES.

Germany.

	1904.	1905.
Importations, except ores:		
From United States	98,417	90,202
From other countries	30,555	33,830
Total	128,972	124,032
Less re-exports	14,343	17,663
	114,629	103,369
Production, including prod. from imported ores	30,456	30,533
Home consumption	145,085	136,902
Exports of manufactures	64,085	77,993

The apparent decrease in German consumption, contrary to the evident better business of the copper consuming industries, is explained by the fact that the high prices ruling in 1905 caused consumers to reduce their supplies to a minimum, while in 1904, foreseeing the advance in prices, consumers had bought freely forward.

A careful investigation of the different branches of consumption of copper in Germany has resulted in the following estimate:—

	1904. Tons	p. cent.	1905. Tons	p. cent.
Electrical machinery and copper wire	59,000	40.50	57,500	42
Sheet copper; Copper rolling mills.	23,000	16	24,000	17.50
Brass mills	37,000	25.25	35,000	25.50
Chemical industry and blue vitriol makers	2,000	1.25	2,000	1.50
Shipyards, railroads and miscellaneous casting	25,000	17	18,500	13.50
	146,000		137,000	

The above figures of consumption do not provide for the movement of old metals in Germany. We estimate that about 20,000 to 25,000 tons of old metals pass annually back into consumption, and this quantity has to be added to above figures in order to arrive at the figure of actual consumption.

There is no Metal Exchange in Germany and consequently no stocks of copper are accumulated, the quantities imported going practically all into the hands of consumers.

The outlook continues to be an excellent one.

England.

	1904.	1905.
Imports of copper in ores, pig or refined.	157,897	139,313
Domestic production	225	200
	158,122	139,513
Decrease of stocks	.....	3,047
Increase of stocks	3,048	.....
	155,074	142,560
Exports of crude copper	21,794	35,162
Domestic consumption	133,280	107,398
Exports of manufactures	34,617	31,590

(In figuring up the English copper consumption, the increase or decrease of stocks carried in public warehouses is taken into consideration.)

United States.

	1904. Tons.	1905. Tons.
Production: Reporting mines	366,522	397,545
Production: Outside sources	.....	.....
Imports (less re-exports)	79,910	94,211
	446,432	491,756
Home consumption	214,285	277,053
Exports to Europe	247,421	239,863
Stocks at the end of the year	79,094	56,762

The figures of consumption for 1904 are estimated on the following basis:—

January to March	40 millions lbs.	monthly	120 mil. lbs.	
April to June	38 "	" "	114 "	"
July to September	39½ "	" "	118½ "	"
October to Dec'ber	42½ "	" "	127½ "	"
			480 "	"

or 214,285 gross tons.

The figures of consumption for 1905 are estimated on a basis of a consumption of 50,000,000 lbs. per month, but as good authorities think this basis was exceeded in certain months, we add an amount of 5,000 tons for the year, viz., 600,000,000 lbs. equal to 272,053 tons plus 5,000 tons making a total of 277,053 tons.

Details of Production.

	—1904— corrected figures, according to the Geological Survey.	—1905— Our own estimation.
Lake Superior	208,309,130 lbs.	218,000,000 lbs.
Arizona	191,602,958 "	231,000,000 "
Montana	298,314,804 "	325,000,000 "
New Mexico	5,368,666 "	5,000,000 "
California	28,529,023 "	21,000,000 "
Utah	47,062,889 "	58,000,000 "
Colorado	9,506,944 "	10,000,000 "
Alaska	2,043,586 "	5,000,000 "
Wyoming	3,565,629 "	2,500,000 "
Idaho and Nevada	2,158,858 "	1,000,000 "
Tennessee and Southern States	15,211,086 "	12,000,000 "
Other States	863,694 "	2,000,000 "
	812,537.267 lbs. = 362.740 t.	890,500.000 lbs. = 397.545 t.