multiplying uses for it when competitors can supply it upon terms relatively as satisfactory as those companies now dominating nickel markets. How formidable these latter have become, in that they contribute about 80 per cent. of the world's nickel, is illustrated by the following progressive Bureau of Mines tables giving the Ontario output and value by years, since the organization of the International Nickel Company in 1902:

companies is not repeated as a disastrous experiment with mining industrial matters exacting thorough organization and sane finance. Necessarily the output of the producing nickel mines has conformed to demand. Supply never was at issue since the Sudbury District ores and the solution of their treatment. Were the world prepared to take more nickel—at a price that would yield a satisfactory profit—the world could have it, and the turn over

## NICKEL AND COPPER PRODUCTION OF ONTARIO MINES

						_
		1902.	1903.	1904.	1905.	
	Production Details—	Tons.	Tons.	Tons.	Tons.	
	Ore raised	269,538	3 152,940	203,388	284,090	
	Ore smelted	233,388		102,844	257,745	
	Ordinary matte produced	24,691		19,123		
	High grade matte produced	13,332		6,926	17,388	
	Nickel contents	5,945		4,743	9,503	
	Copper contents	4,066		2,163	4,525	
	Value of nickel\$			\$1,516,747	\$3,354,934	
	Value of copper	616,768		297,126	688,993	
	Wages paid	835,050		570,901	833,822	
		Num/ber	The state of the s	Number	Number	
	Men employed	1,448		1,063	1,176	
	Men employed					
		1906	1907.	1908.	1909.	
	Production Details—	Tons.		Tons.	Tons.	
	Ore raised	343,814		409,551	451,892	
	Ore smelted	343,059	359,076	360,180	462,336	
	Ordinary matte produced					
	High grade matte produced	20,364		21,197	25,845	
	Nickel contents	10,776			13,141	
	Copper contents	5,260	7,003	7,501	7,873	
	Value of nickel\$	3,839,419	\$2,270,442	\$1,866,059	\$2,790,798	
	Value of copper	806,413	3 1,020,913	1,062,680	1,212,219	
	Wages paid	1,117,420	1,278,694	1,286,265	1,234,804	
		Numbe		Number	Number	
	Men employed	1,11	7   1,660	1,680	1,796	
			1910.	1911.	1912.	
	Production details—		Tons.	Tons.	Tons.	
	Ore raised		652,392	612,511	737,656	
	Ore smelted		628,941	610,788	725,065	
	Ordinary matte produced					
	High grade matte produced		35,033	32,607	41,925	
	Nickel contents		18,636	17.049	22,421	
	Copper contents		9,630	8,966	11,116	
	Value of Nickel			\$3,664,474	\$4,722,040	
	Value of copper			1,281,118	1,581,062	
	Wages paid			1,830,526	2,357,889	
	riagos para		Number	Number	Number	
	Men employed		2,156	2,439	2.850	
	men employed		2,100	2,100	2,000	
-					THE RESERVE THE PERSON NAMED IN COLUMN 2 I	_

## Recapitulation.

Tons raised	\$4,469,688
Tons smelted	4,301,365
F.O.B., Sudbury value of nickel	28,722,414
F.O.B., Sudbury value of copper	14,453,331
Wages	13,789,802

Obviously 31.9 per cent. of the Sudbury valuation of the nickel-copper contents of the practically four-and-a-half-million tons raised was paid out to employees of the Canadian Copper Company, which is the producing organization of the International Nickel Company; the Mond Company—and latterly, in a mall way, the Alexo Company. As obvious is it that the nickel industry is at its best—a best that will be more superlatively so if markets for the metal are conserved and the demoralization due to random promotion of asbestos

on capital would compensate somewhat for any reduction in the market price of the metal. But the world shied at more than so much—consequently the companies engaged in supplying it had to modulate their output and conform to the momentary requirements.

Inspection of the foregoing tables will convince economists that financial depression—periodic depressions—automatically influenced the nickel output. Had the situation been what the Englishman describes as "all beer and skittles"—otherwise defined as "all jam"—the International Nickel Company sooner might have begun to "get back some of its money." Just as the nickel industry was beginning to benefit from enlarged markets, the 1907 panic occurred. It will be observed that the 1907 aggregate was but a trifle in excess of that of 1902, the year in which the International Company