

The Orford refining process recovers a much smaller quantity of the precious metals than the Mond and electrolytic processes. The recovery of the metals of the platinum group constitutes an interesting chapter of the report. It states that the platinum and palladium contained in the Copper Cliff mattes for the year 1916 would be worth \$794,600.

Inevitable Losses in Metal Production.

Losses in mining, smelting and refining are discussed in the report. These are stated to be considerable. Certain losses are inevitable at each of the successive stages of treating the ore. In mining, heap-roasting, smelting, converting and refining, such losses cannot be wholly eliminated. In smelting there is not much reason to anticipate that further savings of the metals can be made. The abolition of heap-roasting would make a small saving in nickel and copper. The whole of the sulphur in the ore must be got rid of and at present all goes to waste. The question of the possible recovery and utilization of sulphur fumes is given a chapter in the report. Fumes from the roast-heaps are most objectionable and injurious, and there is no means of collecting the sulphur given off from the heaps. A million tons of ore contains sulphur enough to make a million tons of sulphuric acid, but sulphuric acid can only be produced at

heavy loss, since the freight charges to market on so bulky an article would cost more than the article is worth.

A chapter is devoted to statistics of nickel production, showing the output of Ontario, New Caledonia, Norway, and other countries.

The important subject of taxation is dealt with in the concluding chapter. The commissioners were instructed to report upon a just and equitable system for taxing, not only nickel and copper mines, but mines of all kinds. Their report is, that the present method of taxation on net profits is the fairest and best. In their opinion the present rate of 3 per cent. should not be raised beyond 5 per cent. Gold mining companies occupy a unique position; their product has a fixed price of \$20.67 an ounce, and while all other metals have advanced, some of them very materially, the gold companies get no more for their product than before, yet their costs are largely increased by the higher prices for labor and cost of supplies.

The Royal Ontario Nickel Commission is composed of the following members: Geo. T. Holloway, associate of the Royal College of Science, London, and vice-president of the Institution of Mining and Metallurgy, and English metallurgical expert of high repute; Dr. W. G. Miller, provincial geologist, and McGregor Young, K.C., a well-known barrister of Toronto. Thomas W. Gibson, deputy minister of mines, acted as secretary.

UNLICENSED FIRE INSURANCE

An increase during the past year of some \$12,000,000 of unlicensed fire insurance in force in Canada is shown in the annual report of the Dominion department of insurance. The figures for the two years are as follows:—

Province in Which Property is Situated.

	1915	1916.
Nova Scotia	\$ 5,713,674	\$ 6,304,087
New Brunswick	10,733,775	8,358,815
Quebec	76,907,525	89,054,985
Ontario	103,645,877	105,100,547
Manitoba	9,462,290	11,383,827
Saskatchewan	9,030,304	8,515,339
Alberta	6,723,638	6,099,883
British Columbia	13,196,664	12,559,055
Prince Edward Island	16,850	19,702
Yukon	340,000	401,800
	\$235,770,597	\$247,798,040

Nature of Property Insured.

Lumber and lumber mills	\$ 15,488,299	\$ 14,680,118
Other industrial plants and mercantile establishments	154,450,371	173,567,202
Stock and merchandise	40,649,711	34,727,095
Railway property and equipment..	24,896,076	24,048,237
Miscellaneous	286,140	775,388
	\$235,770,597	\$247,798,040

Nature of Insurers.

Lloyds Associations	\$ 63,188,168	\$ 54,040,523
Reciprocal Underwriters	22,109,561	27,111,426
Mutual Companies	119,174,939	124,704,514
Stock Companies	31,297,929	41,941,577
	\$235,770,597	\$247,798,040

The following companies with Ontario charters, have changed their names:—The Unique Shoe Company, Limited, to the Simcoe Shoe & Glove Company, Limited; McConnell & Prospectors Exploration Company, Limited, to Amick Mining Company, Limited.

DEATH RATE IN CANADIAN FORCES

One Man Out of Every Seven, According to Life Insurance Actuary

That the loss of life among Canadian troops on the battlefields of Europe has been as high as one man in every seven was indicated from reports of the Canadian representatives of insurance companies who were delegates at the convention of the Actuarial Association of America at New York.

The highest mortality has been in the infantry service, where, some of the actuaries said, the death rate at times reached 20 per cent. The lowest is in the medical corps.

Canadian and other insurance companies doing business in the Dominion paid out nearly \$7,000,000 in claims up to December 31, 1916, according to Mr. A. B. Wood, actuary of the Sun Life Insurance Company.

Mortality Caused by Battles.

"The war rates of the Canadian companies run from \$75 to \$150 a thousand per year to men in service in Europe," said Mr. Wood. "At the outbreak of the war \$50 a thousand was charged, but as soon as the casualties began to come it was realized that this was too low and the rates were advanced."

"All the Canadian companies have protected the policies that were in force when the war began. They charged no extra premiums on these. At that time most of the companies charged no extra premiums on new policies for service within the country. The difficulty in fixing a war rate was that we had no definite basis to work on, for this war is unlike any other, most of the mortality being caused by battle and very little by disease."

Popularized Life Insurance.

A surprising thing about the war was that it had made the general public realize how valuable a thing insurance is. The result was that the companies, despite the millions they had paid out since the war began, were doing a larger business than ever in their history.

"The companies have been able to meet all their obligations, and have not found it necessary to make any changes in their dividends to policyholders," Mr. Wood added. "War has popularized insurance, and made the once unwelcome insurance solicitor a friend."

"It is remarkable to think that despite the fact that more than 400,000 of our best young men have gone to the front, or are on their way there, there has been a big increase in our business each year over the previous year."