

actually incapable of observing them. To a greater or less degree this is true of all untrained persons, from the honest miner down to that worst product of the devil, the "mining expert." Long training, keenness of vision, scrupulous honesty, and adequate experience are necessary to qualify a mining engineer to observe the geological, mineralogical, and other facts, and to record them properly. To see in their true light the facts concerning labor, transportation, market, water, fuel, timber, and the multitudinous other factors that affect all mines, is by no means an easy task. To write of what his professional training has enabled him to see, is even harder. For the engineer is called upon not to disguise his thought in the cheap jargon that the "mining expert" employs on his victim as an anaesthetic. He should set down his facts so clearly, so fully and so accurately that they will be intelligible to any educated man of business.

It is highly probable that the engineer who is able to write such a report as that outlined above, is the person best qualified to draw logical conclusions from the facts recorded. And the engineer's opinion is naturally, that part of the report that is considered most valuable by his clients. But the best opinion has in it more or less of human error. Faulty logic may mar an otherwise unexceptionable document. The "mining expert's" deal with a minimum of fact and a maximum of opinion. The mining engineer owes it to himself and to his clients to present not only his opinions, but also the grounds upon which his opinions are based. Then his recommendations will stand upon their own merits, and not upon the unsafe foundations of professional prestige and public ignorance.

SUFFERING CANADA.

When, not long ago, President Roosevelt organized his famous Annanias Club, membership in which was entirely voluntary, the persons whom he singled out as charter members were the nature-fakirs.

Lately an enterprising magazine has been corraling a bunch of "Canada-fakirs," writers who toy with snow and thermometer at the expense of the Canadian climate. Ignorance and the exigencies of modern novel manufacturing do not justify the practice of libelling our country. There is ample color in facts and there is no difficulty nowadays in obtaining facts.

Except for occasional magazine writers who sometimes select a misty mine as a background and who make as many breaks as space will permit, the mining industry has suffered little at the hands of fictionists. The most that can be said of casual writers about the mineral wealth of the Dominion is that the knowledge behind their allusions is inadequate; even if the writers' goodwill is undoubted.

A case in point is furnished by Miss Agnes Laut, whose "Conquest of the Great Northwest" has recently been published. The book describes the explorations

that began with Hudson's voyage of three hundred years ago, and is based mainly upon Hudson Bay Company records, some of which are brought to light for the first time by Miss Laut.

The Company made several attempts to discover minerals. The expedition of Captain Knight, in 1719, perished on Marble Island, in the northwest part of the Bay. Samuel Hearne's trip to the Coppermine River, in 1770, brought fame to him but no dividends to the Company. Other rumours of minerals on the interior were not regarded seriously. Miss Laut refers to them: "There were legends, too, at Moose and Rupert of great silver mines [what is a mine?] toward Temiscamingue—the field of modern cobalt beds." . . . "How true some of these legends were has been proved by the great cobalt mines of Modern Ontario."

No reader of Miss Laut could suppose that silver is being mined in the Temiscamingue. She evidently supposes that only cobalt is found at Cobalt, and, also, that cobalt is something akin to peat or asphalt. "Cobalt beds" is a delightfully feminine description. Imperfectly informed persons, who have heard of Cobalt, might even believe that Miss Laut wishes them to understand that there is no silver in the district. It is to weep that Canadian writers at least do not give the whole truth about matters on which they write with every assurance of authority.

There can be no fair complaint to-day either of lack of authentic information concerning Canada, or of dearth of inspiration in the history of the Canadian nation. The story of the Hudson Bay Company is romantic enough to satisfy the most imaginative. And, coming down to our own times, there is no better reading to be found than many of the records of explorations conducted by Canadians. Take, for instance, Dr. Low's "Cruise of the Neptune," a simple, direct narrative of adventure in our northeastern sub-arctic; or J. W. Tyrrell's "Across the Sub-Arctic of Canada." Both these books should be available to every school child. Mr. Tyrrell's book, descriptive of an arduous journey undertaken by himself, and his brother, Mr. J. B. Tyrrell, is a straightforward, unornate story of adventure in the great barrens of northwestern Canada and the Hudson Bay region. In due time it will be looked upon as a classic, not alone because we know it to be scientifically accurate, but also because it is as entertaining as the best novel. At present the Canadian public is content to assimilate silly libels on its climate and resources, dished out by persons whose knowledge of the country is both inaccurate and scanty.

An important witness in giving evidence before the Royal Commission on safety in mines, declared himself to be opposed to frequent inspection of collieries. The Government inspector, he contended, should always be equal or superior to a manager. The working-man grade of inspector would be an anomaly.