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## PYRITES IN CANADA

The chief advertisements that the mineral industries of Canada have received have been derived from the exploitation of rich gold and silver deposits. While both Canadian asbestos and Canadian nickel occupy unique positions, yet neither has been the source of very much popular excitement.

It is not desirable that any branch of the mining industry in Canada should have to live down a period of foolish flotations and of disproportionate expansion. For many years the mining of iron pyrites has been going on quietly in Canada. The world's production of iron pyrites is about 2,000,000 tons. Canada's production is, roughly, 100,000 tons per year. In the United States not more than 300,000 long tons are produced. The United States, however, imports practically three-quarters of a million tons from Spain, and is, also, the chief market for the Canadian mineral. For instance, one-third of the pyrites produced in Canada is shipped to the United States.

Within easy reach of the Canadian producer there are at least twenty large firms that are possible purchasers of the Canadian product. In Canada itself there are five corporations manufacturing sulphuric acid. The market for acid is growing at a rate far greater than is the mining of iron pyrites.

The whole situation as regards Canada has been carefully investigated and fully reported upon in the latest monograph of the Mines Branch, Department of Mines, Ottawa. Dr. Alfred W. G. Wilson, Chief of the Metal Mines Division of the Branch, is the author of that monograph. It is entitled "Pyrites in Canada, Its Occurrence, Exploitation, Dressing and Uses." It is a well-printed, carefully illustrated volume of more than 200 pages.

Dr. Wilson approaches his subject after he has, evidently, been fully seized of its commercial meaning. The uses of sulphuric acid are numerous. The reduction of silver ores and the refining of petroleum are two of the largest channels. Both are of primary importance. Either could form the basis of a substantial iron pyrites enterprise, where the pyrites was being used for the production of sulphuric acid.

But, more important than either of these two uses are the possibilities held out by the paper manufacturing trade. In Europe the pulp mills that use the sulphite process use also iron pyrites as the source of their sulphur. This is not the case in Canada. Imported crude sulphur is used here. Yet it is commercially feasible, and most probably it would be commercially profitable to use pyrites in lieu of sulphur. Not only would this save all the complications of international