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## Ontario as a Mining Country.

By Dr. A. P. COLEMAN, Toronto.

How many hundreds of years have passed since the first mine was sunk in Ontario history does not record, for those mysterious ancient miners, mound builders or whoever they may have been, who dug their trenches and mined the native copper of Mamainse with tools of wood and stone, have left no traces either in history or tradition. The first recorded mining operations in the province were also for copper, and in the same region, and date back to 1770, a century and a quarter ago; so that Ontario is not so young a mining country as one is apt to think.

So far as I can discover, it was thirty years after this date before the next mining venture was inaugurated; this time at the opposite end of the province, and for iron. The Bureau of Mines' report for 1892 states that iron was smelted at the falls of Gananoque river about 1800.

Next followed the mining of bog iron ore in Charlotteville township, near Lake Erie, in 1823, the ore being smelted at Normandale in a romantic valley close to the lake. Some years later iron was mined and smelted near Madoc and in Essex county. With the exception of iron mining at one or two other points, no further attempts were made, so far as I am aware, to develop our mineral resources until the Bruce copper mines on Lake Huron began to attract attention about fifty years ago. Since then many mines have been opened and almost as many abandoned.

Gold, silver, copper, nickel, cobalt, iron and lead, among the metals have been obtained by mining at one time or another in our province; as well as a number of non-metallic substances, such as apatite, barite, graphite, gypsum and mica, not to mention liquids and gases obtained by boring, such as brine, petroleum and natural gas.

It must be admitted that several of these products have been mined on only a very small scale. All the cobalt obtained from the Sudbury