# IRON IN BRITISH COLUMBIA.

## PART I.—REPORTS OF GOVERNMENT ENGINEERS

Up to the present the production of iron ore in British Columbia has been an almost negligible quantity. The total recorded from 1886 to 1903, both years inclusive, was only 62,578 tons; since 1903 the only production recorded was in 1917, when 2,500 tons were shipped.

Most of the ore—practically all magnetite—was sent to Irondale, Washington, U. S. A., where it was used in the production of pig-iron in a small charcoal blast furnace. The balance went to lead smelters to be used as flux.

The small production of British Columbia has been due, not so much to the lack of iron ore deposits, as to the lack of market for the ore. In the absence of a local iron smelting industry, there has been no particular incentive either to develop the known ore bodies, or to search for new ones.

The different varieties of iron ore found in British Columbia include magnetites, hematites, limonites or bog ores, and clay ironstones.

MAGNETITE.—The most important of the known ore bodies are a series of magnetite deposits which occur on the islands along the coast in the western part of the Province. Among the better known localities in which these are found may be mentioned: Gordon River, Head Bay, Klaanch River, and Quinsam River, in Vancouver Island; Louise and Moresby Islands, in the Queen Charlotte group; Texada Islands; and Redonda Island. Promising deposits are also reported as occurring on other islands, and various points on the coast, but little definite information is available regarding them. In general character all these deposits agree closely. The iron content is variable, ranging from 45 to 65 per cent. Phosphorus is often below the Bessemer limit; on the other hand sulphur is usually so high that the ore would require preliminary roasting, to render it suitable for economic smelting. Mining operations have not been extensive enough to determine their vertical shape and extent, or their mineralogical composition at depth.

Making due allowance, however, for lack of development, and for all doubtful and uncertain factors, it is still possible to say that there is in the