

MANGANESE,
New Brunswick.

slates of the district which are probably of Cambrian age. The ore is found in numerous small veins, some of which are said to be as wide as eight inches; and detached masses of it are often found in the superficial deposits in the neighbouring fields. This occurrence was the first to attract attention to the manganese ores of the province; it was worked a number of years ago, and a certain quantity of ore is said to have been shipped from this place. As a result of personal examination, Dr. Bailey is of opinion that the district is worthy of closer examination than it has yet received. Unfortunately, the conditions are not very favourable to easy prospecting, as the district is flat and deeply covered with clayey soil.*

Kings County. In this county are the deposits of Markhamville, which are the most important ones of the province. These deposits were examined by Dr. Penrose in 1890, and as a result of his visit he describes them as follows:

† "The Markhamville mine is situated at the village of Markhamville near the head of Hammond river in Kings county about forty miles north east of St. John, about fifteen miles north of the shore of the Bay of Fundy, and about eight miles south of Sussex on the Inter-colonial railway. The existence of manganese was noted at the head waters of the Hammond river many years ago by Mr. Geo. F. Matthew, of the Geological Survey of Canada, but the property was first opened about 1864 under the management of Major A. Markham. Major Markham was the first to attempt to develop in a systematic manner the manganese deposits of this province, and it is due to his energy and perseverance that the ores have been introduced into the market.

"The ore occurs either as crystalline pyrolusite and manganite, or in a compact, massive, nodular or bedded form, sometimes containing psilomelane.

"The ore-bearing limestone is generally of a gray colour, but at times is pink or buff, and is associated with shaly strata. It contains veins of crystalline calcite in which masses of pyrolusite are frequently found, but the principal ore deposits are lenticular bodies interstratified with the limestone. These ores occur as irregular pockets or as flat layers more or less continuous for considerable distances, and becoming thin and thick at intervals. In some places such deposits widen out into pockets from which several hundred tons of ore have been taken and in one opening 3,000 tons are said to have been mined.

* Annual Report of the Geol. Surv. of Can., Vol. X, N. S., 1897, Part M.

† The Manganese deposits of U. S. and Canada, by Dr. Penrose. Geol. Survey of America, vol. I, 1890.