## Manganese in Canada.—Brumell.

and Walton, is situated the best known and most important manganese mine in Nova Scotia, the Teny Cape mine, which, since its discovery in 1862, has been operated more or less continuously. The ores, consisting mainly of pyrolusite and manganite, are found in the Carboniferous limestone which may be traced for many miles on the south shore of Minas Basin, the limestone immediately in connection with the ore deposits being highly manganiferous and interstratified with small beds and masses of manganiferous calc-shale, the whole being usually of a deep red color. The mode of occurrence is pockety, the ore being found in irregular masses and stringers which follow the bedding planes and fractures; some of these pockets are of considerable extent, one affording, it is said, upwards of 1,000 tons of high grade ore, principally pyrolusite. A very considerable proportion of all the ore extracted from this mine has been pyrolusite worth from \$100 to \$125 per ton at the works, and containing from 85 to 95 per cent. of available binoxide.

The following assays taken from an article entitled "Notes on the Manganese ores of Nova Scotia," by E. Gilpin, Jr., show the character of the ores obtained from Teny Cape and vicinity:

|                     | Teny Cape $(a)$ | Cheverie (b) | Douglas |
|---------------------|-----------------|--------------|---------|
| Manganese oxides    | 85.54           | 90.15        | 84.62   |
| Iron peroxide       | 1.18            | 2.55         | 0.60    |
| Baryta              | 0.89            | 1.12         | 0.72    |
| Insoluble matter    | 3.27            | 2.80         | 1.73    |
| Phosphoric acid     | 0.34            | 1.03         |         |
| Water               | 8.54            | 2.05         | 5.29    |
| Oxygen              |                 |              | 7.04    |
|                     | 99.76           | 99.70        | 100.00  |
| (a) Analyst Dr Howo |                 |              |         |

(a) Analyst, Dr. Howe. (b) " E. Gilpin, Jr.

(c) " H. Poole.

Deposits similar to that at Teny Cape have been worked to a smaller extent at Cheverie, Walton, Noel and Shubenacadie, on the south shore of Minas Basin, while on the north shore no important deposits of manganese have been noted, though some of the limonite and other ircn ores of the neighborhood of Londonderry are highly manganiferous; this is also the case with many of the iron ores of both Colchester and Pictou counties.

The following assays, taken also from Mr. Gilpin's article mentioned above, show the character of some of these ores, the par-

85