

THE NICKEL AND COPPER DEPOSITS OF SUDBURY, ONTARIO.

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INTRODUCTION.

Eleven years having elapsed since the appearance of the first official and detailed account of these famous ore bodies, (1) coupled with the fact of a renewed and even increased interest and activity in the mining of nickel, marked the time as most opportune when another attempt should be made to arrive at a more accurate and complete understanding of the true nature and extent of these deposits which have proved such a valuable asset to Canada. Besides, the first edition of the map of the Sudbury Mining district, published in 1891, to accompany a report by Dr. Robert Bell on the geology of this area (2), had nearly all been distributed, and this in spite of the fact that the Bureau of Mines of Ontario had on several occasions issued special editions of practically the same geological map to accompany the Annual Reports of their department, as, for instance, in the years 1892 and 1900. In addition it was felt that although the general accuracy and usefulness of this map had never been questioned it was lacking in certain details which are now known to be of the first importance, and which are most essential for a proper interpretation and judgment of these deposits. Thus, on the first map, the intrusive mass with which the Chicago and Victoria mines occur is entirely separated from a band of similar rock, along the southern borders of which the Gertrude, Creighton and North Star deposits are situated, whereas it has now been ascertained that all of these properties are developed along the southern boundary of one large and continuous band, constituting the southern or principal belt of the nickel bearing eruptive. Again, on this first map, no distinction is drawn between the masses or belts of nickel bearing norite, and certain older horn-

(1) Ann. Rep. Geol. Sur. Can., Vol. V., part B, 1890-91, pp. 122-128.

(2) Ann. Rep. Geol. Sur. Can., Vol. V., part F, 1890-91, pp. 1-95.