

TO GEORGE M. DAWSON, C.M.G., LL.D., F.R.S.,

*Director of the Geological Survey of Canada.*

SIR,—I beg herewith to submit to you a Report upon the Geology and Economic Resources of that portion of the Laurentian region lying to the north of the Island of Montreal, together with a geological map of the same.

In the spring of 1885 I was instructed by Dr. A. R. C. Selwyn, then Director of the Survey, to undertake a detailed geological examination of this district, with a view to ascertaining the true character and relations of the great masses of anorthosite which occur in it and which had been supposed by Sir William Logan to constitute an upper member of the Laurentian system. These rocks, which are also very extensively developed in several other parts of the Laurentian, had attracted much attention on account of the large deposits of iron ore which they contain, but their true relation it was believed could best be ascertained in this district, which is for the most part comparatively easy of access, while forming as it does an eastward continuation of the Grenville district, previously mapped by Sir William Logan, it also promised to afford important additions to our knowledge of the Laurentian system as a whole. These expectations have, it is hoped, been in a measure realized.

The field work was carried out during portions of the summers of 1885, 1887, 1888 and 1889, and was completed in 1891 after the severance of my connection with the Geological Survey, to accept the Logan Professorship of Geology in McGill University.

The south-western corner of the area I have not studied, as no anorthosites occur there, and that portion of the sheet was carefully examined by Logan, being embraced in his map of the Grenville district, which appears in the Atlas accompanying the "Geology of Canada," and published in 1865. It has also quite recently been re-examined by Dr. Ellis, to whom I am indebted for information concerning the distribution of the crystalline limestones in this portion of the area.

The north-west and south-west sheets of the "Eastern Townships" map, issued by the Geological Survey, and the Sectional Map of the Province of Quebec, published in 1894 by the Crown Lands Department of the province, have been taken as a basis for the topography of the accompanying map. It has, however, been corrected and