

REPORT
ON THE
GEOLOGY OF A PORTION OF THE LAURENTIAN AREA
LYING TO THE
NORTH OF THE ISLAND OF MONTREAL.

PHYSICAL FEATURES.

The continent of North America, as is well known, has been gradually built up by the accumulation of sediments, about certain very ancient land areas which now form the skeleton of the continent and are termed its Protaxes. Of these by far the largest and most important is the great Northern Protaxis, which forms the hilly and mountainous country bounding the plains of central Canada on the north, its southerly limit extending from Lake Superior in a north-easterly direction to the coast of Labrador, while in a north-westerly direction from that lake it runs nearly to the shores of the Arctic Sea.

This great core or nucleus of the American continent, lying almost entirely within the Dominion of Canada and embracing as exposed an area of some 2,001,250 square miles,* constitutes what the distinguished Austrian geologist Suess, has termed "The Canadian Shield" or "Boss," of the earth's crust, as well as the more mountainous stretch of country along the Labrador coast, and is composed exclusively of very ancient crystalline rocks.

Northern
Protaxis.

The district covered by the present Report forms a portion of this Protaxis, being situated at its southern edge, which here runs nearly parallel to the course of the River St. Lawrence and is about twenty miles north of the Island of Montreal, as shown in the accompanying map, which comprises an area of 3258 square miles, situated in the counties of Argenteuil, Terrebonne, Montcalm, Joliette, L'Assomption, Berthier and Maskinongé, in the province of Quebec.

* This does not include the outlying and separated Archean areas, occurring in Newfoundland, and in the States of New York and Michigan, and is based on the supposition that the limits assigned to the nucleus in the imperfectly explored regions of the far north by Dr. G. M. Dawson are correct. See G. M. Dawson, Notes to accompany a Geological Map of the Northern Portion of the Dominion of Canada, Annual Report, Geol. Surv. Can., vol. II. (N.S.), 1886.