

ferous limestone or other formations is distinctly poor." Accordingly, it will be of interest to notice briefly the chief physical features of the Island of Montreal where the material for this study has been collected.

The Island of Montreal contains about two hundred and six square miles and is a rough isosceles triangle in shape. The long side is bounded by the Lake of Two Mountains and the Rivière des Prairies, and the other two sides by Lake St. Louis and the St. Lawrence River, respectively.

The island itself is a part of a great palæozoic plain, which extends up the Laurentian plateau on the north, southward into the United States, and from the Notre Dame Mountains in Quebec to Lake Huron on the west. The plain is flat, and the average elevation in the vicinity of Montreal is about a hundred feet above the sea level. The whole area is covered with drift and forms excellent farming lands. On the Island, the continuity of the plain is broken by Mount Royal, an igneous mass rising behind the city and occupying an area of about one and a half miles. This is the most westerly of a line of old volcanoes and laccolites, known as the Monteregian Hills. About the base of Mount Royal, the strata of the lower Silurian are represented by the Trenton Group, which covers the greater part of the island,—with Calcareous limestone at the western extremity, Chazy at Point Claire and at Cartierville, and Utica Shale along the river front at Verdun and Bout de l'Île.

The upper part of the Palæozoic and the whole of the Mesozoic and Tertiary are unrepresented, but the Pleistocene has left its record in a drift of Leda clay and Saxicava sand and in a series of terraces between Mount Royal and the harbor, marking the gradual retreat of the Pleistocene Sea.

#### COLLECTION OF ALGÆ.

Throughout the month of October I collected material for study and classification from a variety of