

The Pleistocene and Recent Deposits of the Island of Montreal.

CHAPTER I.

INTRODUCTION.

GENERAL GEOLOGY.

For the purposes of this report the geology of the Island of Montreal may be said to fall into two sharply marked divisions. The first includes the Pre-Cambrian and Palæozoic subdivisions of the earth's history, and to these two can be referred the "bed-rock" of the island. The second includes the deposits of the Pleistocene and Recent periods. The rocks of the former division are of great geological age, and since their formation they have been consolidated into rocks of such cohesion that they can be used for structural materials without any further treatment than dressing. The rocks of the latter division are in practically the same condition as when they were formed, and here it may be mentioned, that a bed of unconsolidated sand is a rock in a geological sense.¹ They have been subjected to practically no changes beyond alteration of level in relation to sea-level. The deposits of the two divisions are, therefore, easily distinguishable from each other. Of the later Palæozoic, the whole of the Mesozoic, and the greater part of the Tertiary eras there are no records. If any deposits were formed in those times they have been totally removed so as to leave an unknown blank between the Devonian and Pleistocene periods. It is known, however, from the drowned valleys of the Atlantic coast, that the elevation of the land relative to sea-level was greater than now at some period shortly before the Pleistocene, possibly in Pliocene time.

¹A. Geikie, *Textbook of Geology*. Fourth Edition, 1903, p. 82.