

by old moraines at lower levels than those in process of formation, were noted. Here was a modern cause capable of explaining all the phenomena. Men's minds were taken by storm, and as always happens in the case of new and important discoveries, the agency of glaciers was pushed at once far beyond the possibilities of their action under any known physical or climatal laws. This exaggerated idea of the action of land ice in the form of glaciers is not yet exploded, more especially in the United States, where official sanction has been given to it by the Geological Survey, and where it has been introduced even into school and college text-books. It affords also a telling bit of scientific sensationalism, which can scarcely be resisted by a certain class of popular writers. America has also afforded greater facilities for extreme theories of this kind, owing to the wide and uninterrupted distribution of glacial deposits, and the more simple and less broken character of its great internal plateau, while the influence of great leading minds, like those of the elder Agassiz and of Dana, naturally held sway over the younger geologists. Fortunately Canada, which possesses the larger and more northern half of the North American continent; though numerically inferior, and therefore overborne in the discussion, has, in the main, remained steadfast to facts rather than to specious theories, and has been confirmed in this position by the clearer testimony of nature in a region where many of the features of the glacial age still persist.¹

The writer of these pages has, ever since the publication of the first edition of his "Acadian Geology,"² steadily resisted the more extreme views of glaciation, and has opposed the southward progress of the great continental glacier. Though, figuratively speaking, overborne and pressed back in the

¹ I may refer here to the recent researches of Dr. G. M. Dawson, Mr. R. Chalmers, Mr. McConnell and Dr. Ells.

² 1855.