

it finds its way into geological manuals, and many monographs, reports, and memoirs; in some of which it has been stated that it must in the long run be accepted as the origin of those rock-basins of the northern hemisphere that are occupied by lakes.¹

Finally, if I were to classify lakes directly and indirectly produced by glacial action, it would be as follows—the first named being most and the last least numerous: 1st. True rock-basins scooped by glacier-ice out of the solid rocks. 2nd. Lake hollows due to irregular accumulation of moraine-matter on broad flattish surfaces, among which in many districts may be

¹ See Professor Geikie, 'Phenomena of the Glacial Drift of Scotland;' Sir William Logan, 'Report on the Geology of Canada,' 1863, where he states that the great North American lake-basins 'are depressions, not of geological structure, but of denudation; and the grooves on the surfaces of the rocks which descend under their waters appear to point to glacial action as one of the causes which have produced these depressions.' Also Dr. Newberry, in the 'American Annual of Scientific Discovery,' for 1863, and in other publications. Following my view, he allows that glacier-ice excavated all the great lakes, from Ontario to Lake Superior, excepting Lake Superior, an exception for which I see no necessity. See also reports by Dr. Julius Haast on the Geology of New Zealand; and the writings of Dr. Hector and Captain Hutton on the same region; Professor Geikie, 'The Scenery of Scotland viewed in connection with its Physical Geology,' 1867, and 'The Student's Manual of Geology,' by the late Professor Jukes, third edition, edited by Professor Geikie. Mr. Jukes strongly advocated this theory in papers in the 'Reader,' in a long controversy with the late Dr. Falconer. See also 'The Great Ice Age,' by James Geikie, F.R.S., both for lakes and fiords, and last, not least, the letter of Signor Gastaldi in the 'Journal of the Geological Society' to Sir Charles Lyell, 1873, vol. xxix., in which he says, 'I have given you summarily the reasons which have converted me to Mr. Ramsay's theory.' I could quote other authors on the same side of the question, and I am more than content with the rapid progress it has made. Sir Charles Lyell gives a qualified assent in his 'Student's Elements of Geology,' 1871.