

now extinct, was brought about during this concluding phase of the glacial epoch.

Although it may be impossible in the present state of our knowledge to come to a positive conclusion on this head, I know of no inquiry better fitted to clear up our views respecting the geological state of the northern hemisphere at the time when the fabricators of the flint implements of the Amiens type flourished. I shall therefore now proceed to consider the chronological relations of that ancient people with the final retreat of the glaciers from the mountains of Scandinavia, Scotland, Wales, and Switzerland.

*Superficial Markings and Deposits left by Glaciers and Icebergs.*

In order fully to discuss this question, I must begin by referring to some of the newest theoretical opinions entertained on the glacial question. When treating of this subject in the 'Principles of Geology,' ch. xv., and in the 'Manual (or Elements) of Geology,' ch. xi., I have stated that the whole mass of the ice in a glacier is in constant motion, and that the blocks of stone detached from boundary precipices, and the mud and sand swept down by avalanches of snow, or by rain from the surrounding heights, are lodged upon the surface and slowly borne along in lengthened mounds, called in Switzerland moraines. These accumulations of rocky fragments and detrital matter are left at the termination of the glacier, where it melts in a confused heap called the 'terminal moraine,' which is unstratified, because all the blocks, large and small, as well as the sand and the finest mud, are carried to equal distances and quietly deposited in a confused mass without being subjected to the sorting power of running water, which would convey the finer materials farther than the coarser ones, and would produce, as the strength of the