the glacial furrows and striæ imprinted almost everywhere on the solid rocks underlying the drift. Their direction rarely deviates more than fifteen degrees E. or W. of the meridian, so that we can scarcely doubt, in spite of the general dearth of marine shells, that icebergs floating in the sea, and often running aground on its rocky bottom, were the instruments by which most of the blocks were conveyed to southern latitudes.

There are, nevertheless, in the United States, as in Europe, several groups of mountains which have acted as independent centres for the dispersion of erratics, as, for example, the White Mountains, latitude 44° N., the highest of which, Mount Washington, rises to about 6,300 feet above the sea; and according to Professor Hitchcock, some of the loftiest of the hills of Massachusetts once sent down their glaciers into the surrounding lower country.

Great southern Extension of Trains of Erratic Blocks in Berkshire, Massachusetts, U. S., lat. 42° N.

Having treated so fully in this volume of the events of the glacial period, I am unwilling to conclude without laying before the reader the evidence displayed in North America, of ice-action in latitudes farther south, by about ten degrees than any seen on an equal scale in Europe. This extension southwards of glacial phenomena, in regions where there are no snow-covered mountains like the Alps to explain the exception, nor any hills of more than moderate elevation, constitutes a feature of the western as compared to the eastern side of the Atlantic, and must be taken into account when we speculate on the causes of the refrigeration of the northern hemisphere during the post-pliocene period.

In 1852, accompanied by Mr. James Hall, State geologist of New York, author of many able and well-known works