

happened after that event ; and the human race, then in the early days of its existence, certainly suffered from this cataclysm. In the present chapter we confine ourselves to the two cataclysms which overwhelmed Europe in the Quaternary epoch.

The first occurred in the north of Europe, where it was produced by the upheaval of the mountains of Norway. Commencing in Scandinavia, the wave spread and carried its ravages into those regions which now constitute Sweden, Norway, European Russia, and the north of Germany, sweeping before it all the loose soil on the surface, and covering the whole of Scandinavia—all the plains and valleys of Northern Europe—with a mantle of transported soil. As the regions in the midst of which this great mountainous upheaval occurred—as the seas surrounding these vast spaces were partly frozen and covered with ice, from their elevation and neighbourhood to the pole—the wave which swept these countries carried along with it enormous masses of ice. The shock, produced by the collision of these several solid blocks of frozen water, would only contribute to increase the extent and intensity of the ravages occasioned by this violent cataclysm, which is represented in PLATE XXX.

The physical proof of this *deluge of the north of Europe* exists in the accumulation of unstratified deposits which covers all the plains and low grounds of Northern Europe. On and in this deposit are found numerous blocks which have received the characteristic and significant name of erratic blocks, and which are frequently of considerable size. These become more characteristic as we ascend to higher latitudes, as in Norway, Sweden, and Denmark, the southern borders of the Baltic, and in the British Islands generally, in all of which countries deposits of marine fossil shells occur, which prove the submergence of large areas of Scandinavia, of the British Isles, and other regions during parts of the glacial period. Some of these rocks, characterised as *erratic*, are of very considerable volume ; such, for instance, is the granite block which forms the pedestal of the statue of Peter the Great at St. Petersburg. This block was found in the interior of Russia, where the whole formation is *Permian*, and its presence there can only be explained by supposing it to have been transported by some vast iceberg, carried by a diluvial current. This hypothesis alone enables us to account for another block of granite, weighing about 340 tons, which was found on the sandy plains in the north of Prussia, an immense model of which was made for the Berlin Museum. The last of these erratic blocks deposited in Germany covers the grave of King Gustavus Adolphus, of Sweden, killed at the battle of Lutzen, in 1632. He was interred beneath the