CHAPTER XXXI.

RELATION OF RIVER VALLEYS AND GRAVELS TO THE GLACIAL DRIFTS—RIVER TERRACES—BONES OF EXTINCT MAMMALS AND HUMAN REMAINS FOUND IN THEM—RAISED BEACHES, ETC.

It is certain that by far the greater number of the river valleys of Britain, north of Bristol Channel and the Thames, have been very much modified, and some of them deepened during the Glacial period, a fact indeed sufficiently proved by the Glacial excavation of all the lakes that lie in rock-bound basins. Some valleys in England have been greatly modified since the Glacial period came to an end.

It may, however, be safely said that before the Glacial period the larger features of the river systems of Britain were much the same as now. When, before and during partial submergence, Boulder-clay overspread great part of the country, the river channels of the lower lands often got filled with that clay entirely, or in part. When the land emerged and surface drainage was restored, most of the rivers followed their old channels. In some cases they nearly scooped the Boulder-clay entirely out of them from end to end, but in others, as with the Tyne and the Wear, accidents partly turned the rivers aside, and having disposed of a thin covering of Boulder-clay, they proceeded to excavate deep and winding valleys in the Sandstone rocks