

traces of a "diluvium" of tertiary, secondary, or even primary date?

Lacustrine deposits formed in and since the tertiary era, are not so clearly distinct even by position, as to allow us, in all cases, to be well satisfied about their date; witness the ossiferous beds of Weighton in Yorkshire, the Val d'Arno, Æningen, Gmünd, and many other localities.

Yet, notwithstanding these objections, geologists have for a long time recognised the classifications which are based on the principle that, since the tertiary era, marine, fluviatile, and lacustrine deposits have happened on the land in various parts of, at least, the northern zones of the globe; and though impartial researches have led us to doubt the practicability and advantage of this broad distinction, we shall now endeavour to develop the history of the "post-tertiary," or diluvial, alluvial, and modern aqueous deposits; reserving for the section on organic remains what general reasoning we are disposed to advance.

In one point of view, these deposits of post-tertiary periods are of the highest possible importance: they form the connecting links between the great phenomena of long past time, whose causes we are to seek, and the less obvious effects occasioned in modern nature by causes which are known. The post-tertiary accumulations consist of detrital deposits, reminding us of ancient conglomerates, lignitic beds like ancient coal strata, calcareous, arenaceous, and argillaceous layers, which are specially comparable with tertiary, and through them with secondary strata. On the other hand, almost every thing that we see among these deposits is clearly intelligible by study of analogous diurnal operations in nature; and thus it is desirable to include in one section the consideration of post-tertiary and modern aqueous products, and to reason on the agencies concerned, as if the whole were one connected series of events still in continuation.

To preserve clear ideas on the subject of these super-