the tertiary and certain parts of the oolitic systems of strata; and a benefit would be conferred on geology if a careful and accurate survey were made of the mineral and organic contents of the whole bed of the German Ocean, for which object its shallowness (it nowhere exceeding 30 fathoms in depth between the Humber and the Elbe) offers unusual facilities.

LACUSTRINE DEPOSITS.

Until the publication of Cuvier and Brongniart on the Environs of Paris, the attention of geologists was but feebly turned to the study of the numerous fresh-water deposits, from which, chiefly, we are to learn the ancient condition of the land, as the stratified marine sediments give us information of the contemporaneous operations in the sea. The general scale of geological time most certainly is founded on the series of marine deposits; but our views of the changing conditions of the globe will be very imperfect if we are not able to arrange on the same scale the monuments which remain of the contemporaneous operations on the land.

At certain points in the series of tertiary strata this can be done with certainty, or probabilities of various value, by the legitimate process of observed *interstratification*. Marine post-tertiary deposits are sometimes associated with lacustrine sediments, in such a manner as to determine a few points of union in times approaching our own day.

But, for a very large proportion of lacustrine formations, the important data of interposition among marine strata are wanting, and we are only able to affirm that the fresh-water sediments are of a date *posterior* to a certain marine formation, because they *rest upon it*.

Some few of these lacustrine formations can, by some monuments of art and civilisation, be proved to belong to the period since the creation of man, or even be limited within certain historical dates; but there remains a large class of desiccated lakes whose antiquity must