

elevation of the land and sea-bottom, was re-united to the Continent, chiefly by a broad plain of Boulder-clay. Through this plain I think that the Rhine must have wandered in pre-historic times to what is now a northern part of the North Sea, and all the eastern rivers of England—the Thames, the rivers of the Wash and the Humber, the Tyne—and possibly some of the rivers of Scotland, were its tributaries.

This Boulder-clay, from the manner in which it was formed had a very irregular surface, enclosing lakes and pools, some of which may still be seen on the plains of Holderness. I have said that *after* the deposition of the Boulder-clay, Britain was re-united to the Continent, but it is well known that various oscillations of the relative level of the land to the sea took place during the Glacial epoch, and under these circumstances it may, not improbably, have been partly joined to the mainland during inter-Glacial episodes, or again, when glacier ice covered broad tracts of country.

At such times the present mouths of many British rivers could have had no immediate relation to their ancient mouths, for the places of their present mouths then lay far inland. Under such circumstances it seems not unlikely that alluvial gravels, such as those of Bedford Level, may have been deposited in lakes dammed up by some old Boulder-clay that formed part of the plain through which the rivers flowed. The wide gravel plain within the circuit of the great moraine of the Dora Baltea in Piedmont forms a sort of case in point, for, according to Gastaldi, an old lake-hollow has there been entirely filled with gravel borne by the river from the Val d'Aosta.

It is often difficult to account for the great thickness of these lowlying gravels on any other hypo-