

upon them may plausibly be viewed as accumulations in the same water, depending on convulsive movements of the areas from which the materials were drifted.

On the other hand, it seems clear, from the occurrence of the bones of land mammalia among some of the diluvial gravel and clays, that the track of the watery currents was, in places at least, over the solid land; though it seems not *necessary* to imagine that the ossiferous accumulations in question (Brandsburton gravel hills, Overton near York, Wilford in Essex, Harwich, Brentford, &c.) were heaped upon the land. They might be finally aggregated in the sea; and thus the seemingly contradictory evidence of marine shells and quadrupedal bones, in the same set of deposits, be reconciled.

However this may be, it appears absolutely certain that none but oceanic currents are adequate to explain the extensive ravages of the solid land which produced, and the violent currents which distributed, the diluvium. Nor would the ordinary currents of the sea be adequate to the effect. It is requisite further to conceive that the sea was most violently disturbed, either over the points whence the detritus was brought (which supposes those points also to have been under the waves), or at some other situation. In the latter case, we may, perhaps, imagine so great a violence of water to be generated, as to permit the waves to be thrown to some height over the land; and it seems not impossible hereafter, when the geographical relations of the diluvium are well understood, to offer some reasonable explanation of the whole matter, on the principle now known to be true, of great and sudden changes of relative level of land and sea, which, though limited in the area of the masses moved, might have very extended effects through the agency of water. Floating glaciers may also be called to aid the speculation; but they would be useless for any other purpose than to explain particular cases of erratic blocks, and small tracts of peculiarly associated gravel masses.