probably be ascribed partly to the shallowing of the whole upper end of the Adriatic, and partly to the alterations of the system of internal drainage, whereby the rivers, enclosed in extensive embankments, are prevented from depositing much of their sediment upon the ancient alluvial lands. "From the northernmost point of the Gulf of Trieste, where the Isonzo enters, down to the south of Ravenna, there is an uninterrupted series of recent accessions of land, more than 100 miles in length, which within the last two thousand years have increased from *ten to twenty miles in breadth.*"—(Lyell, book ii. ch. iv.)

The surfaces of deposition from rivers thus entering quiet seas are in general inclined at a very moderate angle: at the mouth of the Rhone the water deepens gradually from four to forty fathoms, in a length of six or seven miles ($\frac{3}{5}\frac{6}{7}\frac{}{2}\frac{}{0}$), or 1 in 160, a "dip" less than the average inclination of our so-called "horizontal" strata. Reasons are assigned for adopting the opinion that the Adriatic, now so shallow, was once a deep sea; if so, the sediments on its bed, raised into dry land, would constitute a modern formation equal in importance to a large part of the subapennine tertiaries, and, according to the testimony of Donati, very similar to them in mineral composition, and the arrangement of their organic contents. The sediments consist of mud and calcareous rock, with shells grouped in families, as we often find them in ancient strata. The deposits from the Rhone are ascertained to be in a considerable degree calcareous, sheets of limestone indeed; and the mud of the Nile contains nearly one half of argillaceous earth, about $\frac{1}{4}$th of carbonate of lime, and $\frac{1}{10}$th of carbon, besides silica, oxide of iron, and carbonate of magnesia. (Girard, quoted by Lyell.) Materials of this description may be deposited together; but little doubt can exist that, during their solidification, the arrangement of the particles may be so influenced by peculiar attractions, as to exhibit many of the circumstances noticed among old sedimentary rocks, as concretions of