## BUFFON'S

cause they had transported all the clay from the bottom and sides, and then the waves attacked the rocks, possibly because the first sediment came from one part, and the second from another. This perfectly agrees with observation, by which we perceive that beds of earth, stone, gravel, sand, &c. followed no rule in their arrangement, but are placed indifferently one on the other as it were by chance.

But this chance must have some rules, which can be known only by estimating the value of probabilities, and the truth of conjectures. According to our hypothesis, on the formation of the globe, we have seen that the interior part of the globe must have been a vitrified matter, similar to vitrified sand, which is only the fragments of glass, and of which the clays are perhaps the scoria; by this supposition, the centre of the earth, and almost as far as the external circumference, must be glass, or a vitrified matter; and above this we shall find sand, clay, and other scoria. Thus the earth, in its first state, was a nucleus of glass, or vitrified matter; either massive like glass, or divided like sand, because that depends on the degree of heat it has undergone. Above this matter was sand, and lastly clay. The soil of the waters