

larly the whole carcasses in the layers, betokens either that the layer itself which contains them was formerly dry land, or that there was terra firma in its immediate vicinity. Their disappearance renders it certain that this layer was inundated, or that this dry land ceased to exist. It is then by these that we learn in a positive manner the important fact of the repeated irruptions of the sea, with which shells and other marine productions could not have made us acquainted; it is by studying them profoundly that we may hope to ascertain the numbers and periods of these irruptions.

Secondly, the nature of the revolutions which have altered the surface of the globe must have exercised a more entire action over terrestrial quadrupeds than marine animals. As these revolutions have in a great measure consisted in changes of the bed of the sea, and the waters must have destroyed all the quadrupeds which they reached, if the irruption were general the whole class must have perished; or, if only operating on certain continents, it must have destroyed at least the species peculiar to these continents, without exercising the same influence upon marine animals. On the contrary, millions of aquatic individuals might have been left on dry land, or buried under new layers, or thrown with violence on the shore, and their race be still preserved in some places more tranquil, where it might again be propagated after the disturbance of the waters had ceased.

Thirdly, this action, as more complete, is more easily seized on; it is more easy to demonstrate its effects, because, the number of quadrupeds being limited, the greater part of their species, at least of the larger kind, being known, we have still farther