

ing of the waves, and has listened to the hollow hum of the stones and pebbles rubbing against each other, with ceaseless friction, can doubt, that rounded, water-worn pebbles are now every moment forming; and were they found no where else, except on the shores, and in moving waters, there would generally be no difficulty in assigning their origin to this cause. But rounded stones, water-worn pebbles, and boulders, are found in every country, on the surface and in the soil, and in regions the most remote from the ocean. This of course proves the universal prevalence, sooner or later, at once or successively, of diluvial waters.

Why not attribute the rounding, as well as the position of the inland water-worn stones to the *diluvial* ocean? The answer which must be returned, is, that the time allotted by the deluge described in Genesis is too short for the process of grinding down hard stones, which would occupy a very long period. A general deluge could transport immense masses of these ruins, and deposit them where, to a great extent, we now find them; but it was not possible that it could, in so limited a period, have effected much, in grinding down the angular fragments of quartz* and of other hard stones, into ovoidal and globular pebbles, and boulders. That effect appears to have been, principally, the work of the earlier oceans.

The form of the loose materials, that cover the rocks, more or less, in every country, is attributable chiefly to the wearing effects of agents, operating, *in all time*, to produce disintegration and decomposition; their present position may be fairly attributed to diluvial agency.

An ingenious author, Mr. Penn, convinced that the deluge could not account for the geological successions, has supposed them to be formed in the ocean, between the creation of man and the deluge, at which time the then existing continents were, as he thinks, sunk, and the bed of the ocean raised, to form our present continents, bringing up, of course, all the marine deposits of sixteen centuries.

It is not necessary to discuss this theory. It is disproved by the discovery in caverns, and in the loose wreck, on the surface of the ground, of immense deposits of the bones of terrestrial animals, which have not existed in those countries within the limits of human knowledge, and many of which could not live in the present climates of those countries; for instance, the tropical animals, elephants, tigers,

* Topaz pebbles are found on the shores of New Holland: we have one which is perfectly ovoidal.