

of bodies of the poorer class of Hindoos thrown annually into the Ganges, is so great, that some of their bones or skeletons can hardly fail to be occasionally enveloped in fluviatile mud.

It sometimes happens, at the season when the periodical flood is at its height, that a strong gale of wind, conspiring with a high spring-tide, checks the descending current of the river, and gives rise to most destructive inundations. From this cause, in the year 1763, the waters at Luckipour rose six feet above their ordinary level, and the inhabitants of a considerable district, with their houses and cattle, were totally swept away.

The population of all oceanic deltas are particularly exposed to suffer by such catastrophes, recurring at considerable intervals of time; and we may safely assume that such tragical events have happened again and again since the Gangetic delta was inhabited by man. If human experience and forethought cannot always guard against these calamities, still less can the inferior animals avoid them; and the monuments of such disastrous inundations must be looked for in great abundance in strata of all ages, if the surface of our planet has always been governed by the same laws. When we reflect on the general order and tranquillity that reigns in the rich and populous delta of Bengal, notwithstanding the havoc occasionally committed by the depredations of the ocean, we perceive how unnecessary it is to attribute the imbedding of successive races of animals in older strata to extraordinary energy in the causes of decay and reproduction in the infancy of our planet, or to those general catastrophes and sudden revolutions so often resorted to.

*Deposits in the delta.*—The quantity of mud held in suspension by the waters of the Ganges is found to exceed that of almost any other great river, as might be expected from the peculiar climate and geographical circumstances of the basin which it drains. In the first place, its head waters flow from mountains of unrivalled altitude, and they do not clear themselves in any deep lakes, as does the Rhine in the Lake of Constance, or the Rhone in that of Geneva. Secondly, the whole course of the Ganges is nearer the equator, by ten degrees, than the Mississippi, or any other river, respecting which careful experiments have been made, to determine the quantity of its earthy contents. The fall of rain, as is usual in tropical countries, is enormous; the mean annual quantity, even to the foot of the Himalaya, being excessive, and still more so the number of inches which sometimes pours down in one day. Accordingly, it appears from the computations of Mr. Everest, that the amount of solid matter suspended in the water is, on the average, no less than  $\frac{1}{878}$  in bulk during the four months or 122 days of the rains, which is far beyond the proportion of sediment in any other large-flooded river, so far as our present knowledge extends.\*

The sea where it receives the Ganges only recovers its transparency at the distance of sixty miles from the coast. The general

\* See below, p. 271.