

result from the momentary action of a predominating wind ; but this action, although already limited to the mobile matters which form the bottom of the sea only in some parts, whether this action, I say, extends to a great depth, that is to several hundred yards, is a question not yet resolved. In the first place, the observation made by mariners, that, in the most violent tempests, the sea is only agitated towards the coasts, or on shallows, and that bodies, sunk to a great depth, (and still what is this depth in comparison with that of the sea,) do not feel the motions of its surface, nor that of currents ; and, secondly, reasoning, and even calculation, according to Messieurs La Place and Poisson, concur to shew, that the violent motions of the waters of the sea are not propagated to a great depth. It is therefore probable, that all the transportable matters, which are at this depth, must remain nearly in the position in which they are, since our Continents have assumed their present configuration, unless phenomena and motions of the sea take place at the bottom, of which we are ignorant, and which are foreign to the subject which at present occupies our attention.

But if we have no perfectly certain ideas regarding the propagation of the motions of the sea in depth, we can assert, that, whatever that extent and that power may be, the submarine currents no more abrade the rocks than rivers do the surface of the land. This proof is always derived from the same kind of fact, namely, from the vegetable and animal bodies which constantly cover the rocks, and which are found, at all times, by means of various sorts of dredge-fishing. In fact, no one has remarked, that the places in which oysters, mussels,