

have given, will not doubt, the earth was formerly covered by the waters of the sea, and that it is the currents of the sea which have given to the surface of the earth, the form we at present perceive.

The principal motion of the sea is, as we have already observed, from east to west. It also appears that the sea has gained above 500 leagues of ground on the eastern coasts of both the old and new continents; for the proofs of which we refer to those given in Article XI. and shall only add thereto, that all straits which join two seas, are directed from east to west; the straits of Magellan, Frobisher, of Hudson, of Ceylon, and those of the seas of Corea and Kamtschatka have all this direction, and appear to have been formed by the currents of the waters, which being impelled from east to west, opened these passages in the same direction, and in which they preserve a more considerable motion than in any other; for in these straits there are high and violent tides, whereas in those situated on the western coasts, like that of Gibraltar, Sund, &c. the motion of the tides is almost insensible.

The inequalities of the bottom of the sea change the direction of the water's motion; they