

rectness of observation and of reasoning, which is remarkable only, because it has not been adopted by all naturalists; and few have bestowed the unremitting attention upon the subject which this respectable geologist has done. He has shewn, that the destructive action of the waters upon steep shores, and other coasts or abrupt cliffs, was considerably restrained by the very consequences of this action; that the debris which accumulated protected the lower parts of these coasts from the action of the water, or gradually reduced an abrupt coast to a very inclined and permanent slope.

Next, to *torrents*, to rapid and large *rivers*, and to *waves*, it is to *currents* that a great influence on the earth's surface has been attributed,—an influence which a highly gifted naturalist, Buffon, has employed to explain all the inequalities of the earth's surface.

Our knowledge of the action of currents is less precise than that which we possess of rivers. But if we cannot so visibly demonstrate that, in no circumstance similar to those which we have specified, do they scoop out the bottom of the sea into valleys, nor form any mountains, we can, at least, conjecture with much probability, and maintain, that we have no direct and constant proof of that action.

4. *Action of Currents.*

No one doubts that currents, near coasts, heap up upon the beach, at the mouth of rivers and harbours, pebbles, sand, gravel, mud, or other transportable matters, whether these currents constantly exist, or simply