We must, therefore, allow that some effect will be produced upon the coral groves. There will be trees prostrated by gales, as on land, fragments scattered, and fragmentary and sand accumulations commenced. Besides, masses of the heavier corals will be uptorn, and carried along over the coral plantation, which will destroy and grind down everything in their way. So many are the accidents of this kind to which zoöphytes appear to be exposed, that we might believe they would often be exterminated, were they not singularly tenacious of life, and ready to sprout anew on any rock where they may find quiet long enough to give themselves again a firm attachment.

But it should be observed, that the sea would have far less effect upon the slender forms characterizing many zoöphytes, among which the water finds free passage, than on the massive rock, against whose sides a large volume may drive unbroken. Moreover, much the greater part of the strength of the ocean is exerted near tide level, where it rises in breakers which plunge against the shores. Yet owing to the many nooks and recesses deep among the corals, the rapidly moving waters, during the heavier swells, must produce whirling eddies of considerable force, tending to uproot or break the coral clumps. These disrupting and transporting effects will be less and less as we recede from the shores; yet all coral depths must experience them in some degree.

There is another process going on over the coral field, somewhat analogous to vegetable decay, though still very different. Zoöphytes have been described as ever dying while living. The dead portions have the surface much smoothed, or deprived of the roughening points which belong to the living coral, and the cells are sometimes half obliterated, or the delicate lamellæ worn away. This may be viewed as one source of fine coral particles; and as the process is constantly going on, it is not altogether unimportant. This material is in a fit condition to enter into solution, and it cannot be doubted that the water receives lime from this source, which is afterward yielded to the reef.