warrant that takes off at last the commoners about the base of the tree; it keeps growing and budding, and the tree thus continues its increase.

The death of the polyps about the base of a coral tree would expose it, seemingly, to immediate wear from the waters around it, especially as the texture is usually porous. But nature is not without an expedient to prevent to some extent this catastrophe.

In the first place, there is often a *peritheca* over the dead corallum—that is, an outer impervious layer of carbonate of lime, secreted by the lower edge of the series of dying polyps, a fact in the *Goniopora columna* figured on page 32. Then, further, the dead surface becomes the resting-place of numberless small encrusting species of corals, besides Nullipores, Serpulas, and some Mollusks. In many instances, the lichen-like Nullipore grows at the same rate with the rate of death in the zoöphyte, and keeps itself up to the very limit of the living part. The dead trunk of the forest becomes covered with lichens and fungi, or, in tropical climes, with other foliage and flowers; so among the coral productions of the sea, there are forms of life which replace the dying polyp. The process of wear is frequently thus prevented.

The older polyps, before death, often increase their coral secretions also within, filling the pores as the tissues occupying them dwindle, and thus render the corallum nearly solid; and this is another means by which the trees of coral growth, though of slender form, are increased in strength and endurance.

The facility with which polyps repair a wound, aids in carrying forward the results above described. The breaking of a branch is no serious injury to a zoöphyte. There is often some degree of sensibility apparent throughout a clump even when of considerable size, and the shock, therefore, may occasion the polyps to close. But, in an hour, or perhaps much less time, their tentacles will again have expanded; and such as were torn by the fracture will be in the process of complete restoration to their former size and powers. The