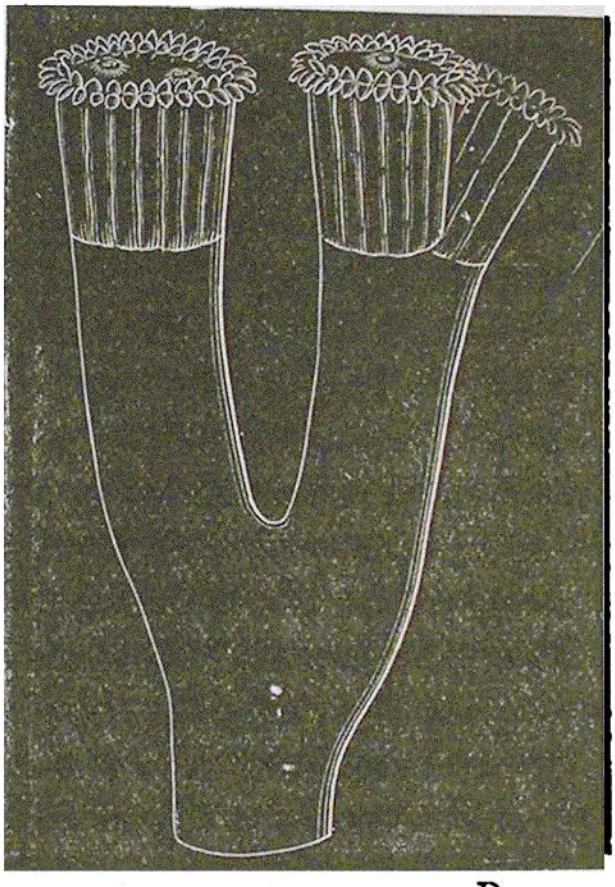
chance for the polyp to mount upward on the coral, as it lengthens it by secretions at the top. But, to be successful in this ascending process, either the polyp must have the power of indefinite elongation, or it must desert the lower part of the corallum as growth goes forward; and this last is what happens. In some instances, a polyp, but a fourth of an inch long, or even shorter, is finally found at the top of a stem many inches in height. The following figure represents a case of this kind; for all is dead coral, excepting less than an inch at the extremity of each branch. The tissues that once filled the cells of the rest of the corallum have dried away, as increase went on above. Another example is shown on page 34, in which the living part had a length of one eighth of an inch. The Goniopora, on page 32, is still another example of the process; but here the living part combines a great number of polyps: these are growing and budding with all the exuberance of life, while below, the old polyps gradually disappear, and even their cells become superficial and fade out. Trees of Madrepores may also have their limits—all below a certain distance from the summit being dead; and this distance will differ for different species. But this is not a limit to the existence of the zoöthome, even though a slender tree or shrub, or of its flourishing state; for the dead coral below is firm rock itself, often stronger than ordinary limestone or marble, and serves as an ever-rising basement for the still expanding and rising zoöphyte.



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