

**Article XIX.**—NOTICE OF A REMARKABLE SPECIMEN OF THE WEST INDIA CORAL MADREPORA PALMATA.

By R. P. WHITFIELD.

PLATE XXIV.

During March of the present year (1898) I spent my vacation in the Bahama Islands. While searching among the Keys about Nassau, N. P., in company with the Brown Brothers of that place, I chanced upon a comparatively young reef of the beautiful coral *Madrepora palmata*. After examining many individual colonies of large size, all of which had more or less dead and blackened fronds, we discovered one large colony that was entirely alive. I at once concluded that this must be obtained for the American Museum of Natural History in New York City.

After making an examination of the reef and its surroundings, we concluded that, with great care and additional help, and with the tide and wind at an advantageous stage, the specimen might be obtained.

Accordingly at the first favorable opportunity, with two good-sized boats and four trusty helpers, the attempt was successfully made and the specimen secured and carried into shallow water. A boat was then sunk and the specimen gotten into it, after which the boat was righted and bailed out and towed behind the larger boat to a suitable place for cleaning, near Mr. Brown's store on East Bay Street, Nassau, whence it was shipped to the Museum in New York, and is now on exhibition there. Experts who have visited all European and American museums pronounce this to be by far the finest specimen of this kind of coral in any existing collection.

The colony was rooted on the solid rock by its broad spreading base, and stands about three feet high ; it is six feet two inches in the longest diameter by five feet four inches in the other diameter, the whole being of a very broadly oval outline with broad spreading and branching fronds so characteristic of the species.

There are a few features about the colony that are well worthy of special notice. On the unsymmetrical side, just above the letter *A* in the figure, there is a small frond which has at some time been broken from a point just below *B*, and has turned upside down, but has continued to live and grown fast to the part below it, the peculiar features of the basal polyps being retained in spite of its reversed position. The frond marked *B* has also been broken from the spot immediately over its small end, but, being caught by a small frond below, retained its upright position and continued to grow and became attached permanently to the fronds on which it rests. A little further to the right of *B*, at *C*, can be seen a narrow dark scar; at this point the large frond *C* with its four divisions was broken in life, but, being caught by the fronds below, has healed almost across the neck, leaving only a narrow space unhealed.

Another feature worthy of mention is seen over all the larger spreading fronds in the form of broad undulations. These mark periods of growth, being thicker and thinner in substance, and are undoubtedly annual growths of the coral, as at the time it was collected the outer thin edges of all these fronds were young growing polyps and of a very delicate texture and lighter color. Eleven of these undulations may be detected on the upper fronds outside of the thickening of the basal parts. It may, therefore, be supposed that the thin spreading fronds are of eleven years' growth, while the thick parts below may have taken an equal time before these thin fronds were thrown out. The difference in the temperature of the water at Nassau between the winter and summer months would probably account for this change in growth.

The specimen, when living, was of a light brown color over the entire colony, including the living portion of the thickened root. The growing edges were of a whitish yellow, and extremely tender and fragile. When first taken from the water and exposed to the air it emits a disagreeable sickening odor that is very repulsive, and probably may be distinguished in the water by fishes or other animal forms, and may act as a means of defense against parasitic growths, from which these Madreporae are generally particularly free.



MADREPORA  
PALMATA, Lk.



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