

transverse diaphragms either none or rudimentary ; increase by lateral budding."

The type specimen, by far the most perfect specimen in the collection, has been closely examined and by means of a longitudinal section of one of the corallites close set complete horizontal tabulæ are found to be present. The supposed absence or rudimentary condition of tabulæ being the only character distinguishing *Palæophyllum* from *Columnaria*, the knowledge that tabulæ exist removes the barrier to the union of these two genera.

*Columnaria rugosa* may be defined as follows,—corallum consisting of an aggregation of circular or rounded polygonal corallites, from about 3 to 9 mm. in diameter, which are in contact with one another or free for greater or less distances. Septa, numbering about forty in well developed corallites, alternately long and short, the long ones reaching to or almost to the centre, the short ones almost rudimentary. Tabulæ complete, horizontal, slightly irregular, at times slightly concave or convex and often turned downward at their edges, about four in the space of 2 mm. Increase by lateral calicular gemmation. Exterior of corallites marked by annular lines of growth and faint longitudinal lines corresponding with the septa within.

The corallites in this species vary considerably in size in some specimens, in others they are more uniform and when in contact whether circular or polygonal they still remain distinct one from another generally with interspaces between them.

*Columnaria erratica*, Billings was described as "forming large masses of corallites, either in contact or separate. The separate cells are round, those in contact more or less polygonal, the radiating septa rudimentary, forming about four sulci in the breadth of one line upon the interior ; diameter of corallites from two to five lines, in general about three and a-half lines. The transverse diaphragms are not visible in the specimens examined. The walls of the separate corallites are thick and concentrically wrinkled." This species is now represented in the museum collection by a single specimen labelled in the handwriting of Mr. Billings and consists of a corallum with corallites