concentric lines, in well-preserved specimens, is traversed by numerous minute irregular canals, which branch and anastomose without regularity. The central portions of the masses are usually filled with crystalline, granular and oolitic material, and many specimens show the intrusion of these extraneous and inorganic substances between the concentric lamine."

In general form the masses are hemispherical or broadly turbinate, and the layers are concave upward as if they had grown from a central point or circle and expanded very rapidly in ascending, the general result resembling a series of bowls one within another. The larger masses are from one to two feet in diameter.

Thin slices, from specimens kindly presented to the Peter Redpath Museum by Prof. Hall, show that the primary laminæ are thin and apparently carbonaceous, as if originally of a corneous or membranous character, and they are usually finely crumpled as if by lateral pressure,¹ while they can occasionally be seen to divide into two lamina with intervening coarsely cellular structure. The thick intermediate layers which separate these primary laminæ are composed of grains of calcareous, dolomitic and silicious matter, in some specimens with much fine carbonaceous material. This last, under a high power in thin slices, is seen to present the appearance of a fine network or stroma in which the inorganic particles are entangled. The canals traversing these intermediate layers appear to be mere perforations without distinct walls, and are filled with transparent calcarcous matter, which renders them, under a proper light, sufficiently distinct from the grey granular intermediate matter which they traverse. So far as observed, the canals are confined to the intermediate layers, and do not seem to penetrate the primary laminæ, though these sometimes present a reticulated appearance

1 This may, however, represent an originally corrugated structure of the laminæ.