

points, they become rapidly broader, "coalesce with the plates of the body," (Professor Hall), and are altogether undefined at their extremities. These characters, as given in the Palæontology of New York (vol. 2, p. 245; and plate 51, figs. 18-20) from an examination of several specimens, are exactly the reverse of those which obtain in our new species. Whilst, also, (although this character is probably somewhat indefinite,) the small border plates in *A. Billingsii* form two or three circles, in *A. parasiticus* they appear to occur only in a single row.

2. *Analytical Review of the Genus Agelacrinites and its included species.*—The generic characters of *Agelacrinites* may be thus defined. Form, circular; stemless; flat or concave below, and somewhat convex above; and covered by numerous small plates, arranged in part irregularly, and in part in regular order. The definitely arranged plates form five rays (ambulacral areas, ?) which originate at the centre of the upper side of the body. These rays are either short and straight, or long and curved. They are also composed of a double series of small polygonal plates, interlocking along the central line of the ray; or, otherwise, of a single (?) series of plates (Roemer's *A. Rhenanus*). The irregularly arranged plates are elliptical or circular, variable in size, very numerous, thin, scale-like, and imbricating; or, imbricating at and around the margin of the disciform body, and joining by their edges in the more central part of the disc. The marginal plates are commonly very small, and, in some species, are separated from the more central plates, by a circle of comparatively large pieces. In the centre of one of these (interambulacral ?) spaces, and about midway between the apex of the body and the margin, is situated an orifice covered by a pyramid of five or more (moveable ?) plates. The apex itself, or centre and origin of the rays, is covered by a single circular plate; or is surrounded by five or ten angular plates—these latter constituting the first plates of the rays. Characters of the under side of the body, position of mouth, &c., not definitely known.

From this definition, it is clear, as, indeed, universally allowed, that *Agelacrinites* belongs to the ECHINODERMATA. In the present state of our knowledge, however, it is impossible to refer it satisfactorily to any one of the admitted Orders or Families of that class. With the Crinoids proper, and the Blastoids, it appears to have only general affinities; but with the Cystideans it is evidently closely