

some even a head, but none but the polypes and infusories multiply themselves in the way above stated. It seems, therefore, most advisable to adhere to Lamarck's system, by considering the animals in question as forming a group by themselves, and to adopt his name of *Radiaries*.

These are distinguished from the class immediately preceding, the polypes, by being limited as to their growth to a certain standard, as to their form by the general appearance of radiation they usually present, being either divided into rays, as in the star-fish; or having rays exhibited by their crust, as in the sea-urchins; or embedded in their substance, forming appendages to their viscera, as in the sea-nettle or jelly-fish. They have not, like the polypes, a terminal mouth or orifice surrounded by food-collecting tentacles; but one placed, most commonly, underneath their body. Their digestive organs are distinct and more complex. They are never fixed, and are to be met with only in the sea and its estuaries. Lamarck has divided this class into two orders, the *Gelatines** and the *Echinoderms*.†

1. The *Gelatines*, which some consider as a distinct class under the name of *Acalephes*,‡ are distinguished by a gelatinous body, and a soft and transparent skin; they have no retractile tubes issuing from the body; no anal passage; no hard parts in the mouth; and they have no interior cavity, their viscera being imbedded in their gelatinous substance.

Some genera,§ in this order, like the fishes, are remarkable for an air-vessel which they can fill or empty, and so rise to the surface or sink to the bottom at their pleasure, but it differs from that of the fishes in being external; others are distinguished by a dorsal crest, which they erect and use as a sail.||

* Radiaires molasses.

§ Physophora, &c.

† R. Echinodermes.

|| Velella.

‡ Acalepha.