

from the symmetry and compactness of the *Apocrinidæ* of the Jurassic period.

The anchylosed ring of first radials is succeeded by a tier of free second radials, which are united by a straight syzygial suture to the next series—the radial axillaries. The surface of the funnel-shaped dilatation of the stem, headed by the ring of first radials, is smooth and uniform, and the second radials and radial axillaries present a smooth, regularly-arched outer surface. The radial axillaries differ from the corresponding joints in most other known crinoids in contracting slightly above, presenting only one articulating facet, and giving origin to a single arm. The arms, which in the larger specimens are from 10 to 12 mm. in length, consist of a series of from about twenty-eight to thirty-four joints, uniformly transversely arched externally, and deeply grooved within to receive the soft parts. Each alternate joint bears a pinnule, the pinnules alternating on either side of the axis of the arm, and the joint which does not bear a pinnule is united to the pinnule-bearing joint above it by a syzygy: thus joints with muscular connections and syzygies alternate throughout the whole length of the arm.

The pinnules, twelve to fourteen in number, consist of a uniform series of minute joints, united by muscular connections. The grooves of the arms and of the pinnules are bordered by a double series of delicate round fenestrated calcareous plates, which, when the animal is contracted and at rest, form a closely imbricated covering to the nerve, and the radial vessel with its delicate cæcal tentacles. The mouth is placed in the centre of the disk, and radial