the existing family of star-fishes, and approach most nearly to the Comatula; (see Miller's Crinoïdea, Pl. 1, and p. 127): the bony skeleton constitutes by far the largest portion of these animals. In the living species this bony framework is invested with a gelatinous membrane, accompanied by a muscular system, regulating the movements of every bone. Although, in the fossil species, these softer parts have perished, yet an apparatus for muscular attachment exists on each individual bone.*

The calcareous joints which compose the fingers of the P. Europæus, together with their tentacula, are capable of contraction and expansion in every direction; at one time spreading outwards, like the Petals of an open flower (Pl. 52, Fig. 2), and at another rolled inwards over the mouth, like an unexpanded bud; the office of these organs is to seize and convey to the mouth its destined food. Thus the habits of living animals illustrate the movements and manner of life of the numerous extinct fossil members of this great family, and afford an example of the validity of the mode of argument, to which we are obliged to have recourse in the consideration of extinct species of organic remains. In this process we argue backwards, and from the mechanical arrangements that pervade the solid portions

* See the tubercles and corrugations on the surfaces of the bones engraved at Pl. 52, Figs. 7, 9, 11, 13, 14, 15, 16, 17.