

of these 8.5 centims. are occupied by the cup and the crown of arms and 4.5 by the stem. As in *P. asteria* the basal joints of the stem form interradial button-like projections, but the projecting bosses are very evidently pointed and slightly prolonged downward, thus showing a tendency toward the depending processes which attain such remarkable dimensions in the liassic genus *Extracrinus*. The first radials are low and flat—shorter in proportion to their width than in *P. asteria* and *P. Mülleri*; the second radial and the radial axillary have much the same form and relations as they have in the previously known species; as in *P. asteria* there is a true joint between the first and second radials and a syzygial junction between the second radial and the radial axillary. The radial axillaries support two symmetrical first brachials, which are connected with the second brachials by a syzygy. From this point the branching of the arms is very uniform; each of the ten primary arms gives off, as a rule, two secondary arms from the inside close to the base. To take one arm as an example of this style of branching: the radial axillary bears two facets right and left for two uniform first brachials, which are united by syzygies to brachial axillaries; these latter have two facets of unequal size, the left facet on the right joint and the right facet on the left joint being small and supporting a simple arm, while the outer facet on either joint supports a third radial, which is connected by a syzygy with a second unequally faceted brachial axillary; here again the smaller facets are on the inside on each arm, and these give off simple arms; simple arms spring likewise from the outer and larger facets, but these are considerably more robust, and are evidently the continuations of the primary arms. Were this mode of division absolutely constant, the number of arms would be thirty, but the arrangement is slightly irregular, and in the specimen procured thirty-one arms are present.

The arms are more regularly semi-cylindrical and more robust than in *P. asteria*, and they have rather a tendency to