widen toward the middle of the arm. The joints are wider and shorter than in any of the other forms; and the crest along the distal edge, which is very distinct in P. asteria, P. Mülleri, and P. Wyville-Thomsoni, is scarcely perceptible. The arms consist of about seventy joints, and there are no true syzygies distal to the last radial axillaries. The pinnules are comparatively broad and flat, and consist of about fifteen joints. The disk can not be well seen in consequence of the attitude and rigidity of the arms in our single example, but it appears to resemble closely that of P. Mülleri.

The structure of the stem is manifestly different from that of all the hitherto described species. The nodal joints are rather short and very much inflated, projecting interradially in round bead-like knobs, and the inter-nodes consist of only two very thin plate-like joints, so that the nodal joints with the rings of cirri are crowded together. The cirri start abruptly from a single nodal joint, as in P. asteria and in P. Wyville-Thomsoni; they are robust, they consist of about twenty-five joints, and in our specimen they are closely curled downward. From the attitude of the cirri, and from the appearance of the end of the stem, there can be no doubt that this specimen is complete, that it is mature, and that it was living in an unattached condition. Pentacrinus Maclearanus is thus very distinct from the three hitherto recognized species—P. asteria, P. Mülleri, and P. Wyville-Thomsoni; perhaps it approaches the last most nearly, but it differs from it markedly in the structure and arrangement of the arms, and totally in the construction of the stem.