relatively to their width, than in *Rhizocrinus lofotensis*, while the third brachial is oblong and not trapezoidal, so that there is no sudden narrowing of the arm at the syzygy between the third and fourth brachials. The shape of the arm-joints too, especially of those which bear pinnules, is not the same in the two species; while the pinnules themselves, and more particularly those on the proximal parts of the arms, differ very considerably in appearance, those of *Rhizocrinus rawsoni* having broad lower joints.

The visceral mass of *Rhizocrinus lofotensis* is relatively lower than that of *Rhizocrinus rawsoni*, in which it is supported by the first six brachials (Pl. X. fig. 20); while in *Rhizocrinus lofotensis* the ambulacra leave the peristome at the level of the second brachials, on to which they pass.

The stem-joints of *Rhizocrinus rawsoni* are relatively shorter and thicker than those of *Rhizocrinus lofotensis*, in which the length is three times the width, and the radicular cirri at the base of the stem are much more numerous in this species than in *Rhizocrinus rawsoni*. In fact there are no radicular cirri whatever in one of the Challenger specimens of *Rhizocrinus rawsoni*, and only two, borne upon the first joint above the root, in one of those dredged by the "Porcupine." In correspondence with this, the root of *Rhizocrinus rawsoni* is more like that of *Bathycrinus*, the lowest stem-joint giving rise to three or more stout branches, which themselves eventually subdivide and bear radicular cirri (Pl. X. fig. 15). This condition appears to be comparatively rare in *Rhizocrinus lofotensis*, in which the lowest stem-joint is often provided with from five to nine slender cirri, but does not give attachment to a spreading root.

The longest cup yet known in *Rhizocrinus rawsoni* was found in some individuals which were dredged by the "Travailleur" in 1882, at a depth of 1900 metres (1000 fathoms), off Cape Blanc, on the coast of Morocco, and were referred by Prof. Perrier to a new genus *Democrinus*.[1] The cup is singularly elongated in form, as will be seen by comparing the measurements kindly furnished me by Prof. Perrier, with those given below for the Challenger, "Blake," and "Porcupine" specimens.

Democrinus Parfaiti, Perrier = *Rhizocrinus rawsoni*, Pourtalès.

Dimensions.

Length of the calyx from the terminal furrow to the first stem-joint,	9·0 mm.
Maximum diameter of the calyx,	2·0 „
Height of the radials,	0·2 „
Diameter of the stem-joints,	1·0 „
Length of the stem-joints,	2·0 „

The basals of this type thus form a cup 9 mm. high from its lower extremity to the constriction at the level of the basiradial suture; while its maximum diameter is not more than 2 mm., twice that of the stem-joints.

[1] *Comptes rendus*, t. xcvi., 1883, p. 450.