

to them in position in the four other rays. But in each ray those plates now seem to me to be the upper and lower half of a compound radial (R_s and R_i). This view is based on facts which were not fully apparent before the specimen itself was cleaned and examined. First, the upper plates are quite as wide as the lower at the line of junction. Secondly, the union of the two plates along the suture just mentioned seems to be closer than the union along the suture immediately succeeding. In these respects the right-hand of Mr. Billings' two drawings of the crown and my own previous analysis convey a false impression. Thirdly, the upward tapering of the plates here regarded as IBr_1 , is in most rays more rapid than that affecting the plates regarded as R_s and R_i .

If, then, the present interpretation be correct, the two proximal elements of r. post. ray are, as in so many allied genera, the Radial proper (derived from R_s) and the Radial (derived from R_i). The peculiarity of the interpretation lies in the view that all the other radials are horizontally bisected.

The interpretation of the radials here adopted has an important bearing on crinoid morphology. In 1900 ("Treatise on Zoology," III, Echinodermata, p. 112) I quoted *Ottawacrinus* as a Dicyclia genus in which some of the radials had been shifted so as to lie almost vertically above the basals; and I continued: "The suggestion then is that the inferradials and basals of Monoeyclia represent basals and infrabasals respectively of Dicyclia. If then the R_s and the R_i fuse, a truly monoeyclia type is produced with one circle of BB and one of RR. One obvious objection to this theory is the presence in many Dicyclia of a plate (the radial, RA), which is now generally regarded as a slightly modified inferradial." In putting forward that hypothesis as a possibility, I had in mind evidence other than *Ottawacrinus*, long since submitted to me by a foreign colleague, but not yet published by him. Now, so far as *Ottawacrinus* is concerned, it not merely ceases to be evidence for the hypothesis, but becomes the strongest evidence against it. If it be the case that inferradials coexist in this genus with basals and infrabasals, it is obvious that they cannot be homologous with basals.

It has been suggested to me that *Ottawacrinus* may have some connexion with the *Flexibilia Impinnata*. The somewhat close lateral abutment of the proximal brachials as well as of the