as in the adult. Posteriorly the body presents, firstly, two lateral chambers with fibres internal to the basement-layer, and secondly, a median (dorsal), with a process of basement-tissue running to the ventral line, and forming the septum between the two former. The pedicle seems to be filled with muscle-cells.

In the terminal region of the pedicle of the adult certain areas containing a coagulable fluid with globules and granules are present, and occasionally in the elevation caused by a developing bud one or two of them are observed; and they are also seen in the buds here and there in the course of the central muscles of the pedicle. Some appear to be nucleated. The origin of these bodies is unknown, but they may be connected with the mesoblastic or hypoblastic elements for the buds, though this is only a conjecture. In regard to the presence of the three primary embryonic elements, as a rule, in such buds, the remarks of Professor Haddon [1] seem to me to be very interesting, but they have yet to be proved. The doubt remaining in the present case, for instance, relates to the precise nature of the hypoblastic elements. In connection with this subject it is well to state that some observers, as Mr. Harmer, demur to the connection of the latter layer with the origin of the buds.

As development proceeds, the anterior or disk-bearing region of the body increases much more in proportion than the posterior or pedicellate part. The buccal disk is rapidly enlarged, and shows traces of the broad arch of pigment anteriorly and the reddish band posteriorly, as well as the two median elevations on the surface. The posterior moiety of the disk is especially large. Moreover, the body begins to project outward superiorly, and the papillæ of the plumes increase in number. These papillæ form a slightly curved row in front of the dorsal projection of the body (woodcut, fig. 2).

In the next stage the disk is almost completely formed, though of smaller size and more massive than in the adult. It is thickest anteriorly, much thinner posteriorly. In the former region it presents in transverse section the elongated central chamber, bounded ventrally by the massive hypoderm of the shield, which has the two median prominences observed in the adult. This hypoderm folds over at each side, and is continued as a thinner stratum dorsally, with a basement-layer next the chamber. Two additional structures have now appeared, viz., a dense (narrow) layer outside the basement-tissue just alluded to, and fan-like fibres from the middle of the dorsal wall of the chamber. Two of the most ventral plumes (the first to appear) have now attained some size, the tip being furnished with the radiate terminal glands having the central chamber, and the sides with short papillæ representing the filaments. Both the latter and the axes of the plumes are composed of hypodermic tissue, and are apparently solid. Longitudinal striæ are visible along the centre of the axis, and they run into the lining of the cavity in the terminal enlargement. Then the central chamber appears dorsally

[1] *Quart. Journ. Micr. Sci.*, N.S., vol. xxiii. p. 34, 1883.