It thus appears that there is one developmental stage fairly constant in the Halichondrina, in which the embryo consists of a sac of small, probably prismatic, ciliated ectodermal cells, enclosing a central mass of mesodermal (?) tissue containing the developing spicules. In some cases, perhaps in all (for it would be difficult owing to the nature of the case to make sure of the contrary) the ectoderm appears to be absent from one pole, at which the mesoderm (?) comes to the surface. This stage probably nearly corresponds with one figured by Keller for his *Chalinula fertilis*,[1] by Carter for *Halichondria simulans* and *Esperia ægagropila*,[2] by Marshall for *Reniera filigrana*,[3] and by Schulze for *Euspongia officinalis adriatica*.[4]

There is one other type of embryo, observed by us in *Esperella lapidiformis* only, which seems worth noticing in this place. The embryos (Pl. XVI. fig. 2*a*, *e*) are very numerous, more or less spherical, measuring about 0·5 mm. in diameter. Each is enclosed in a membranous capsule, and is composed mainly of a dense, solid, finely granular mass of tissue (Pl. XLVIII. fig. 1, *a*), with small nucleoid bodies scattered through it. This structure prevails throughout the embryo excepting at one pole, where there is a hemispherical cap of large cells (Pl. XLVIII. fig. 1, *c*), appearing in sections to be polygonal from mutual pressure, each with a large oval nucleus (*n*), about 0·01 mm. in longer diameter, and a nucleolus. The cap of cells appears sometimes to be slightly shrunk away by the action of the spirit from the remainder of the embryo. This would seem to be a much earlier stage of development than those above described; there are as yet no traces of spicules.

[1] *Zeitschr. f. wiss. Zool.*, Bd. xxx., pl. xix. fig. 15.
[2] *Ann. and Mag. Nat. Hist.*, ser. 4, vol. xiv., pl. xxi. figs. 21, 22, 25.
[3] *Zeitschr. f. wiss. Zool.*, Bd. xxxvii., pl. xiv. figs. *b*, *c*.
[4] *Zeitschr. f. wiss. Zool.*, Bd. xxxii., pl. xxxviii. fig. 4.