tents. * The number of the gemmules in each vesicle, and their shape, varies in every species. In the vesicle they are connected to a central placentular column, though there are some exceptions to this, and when mature they escape outwards by a disruption or fall of the lid which closes the top, being extruded in succession and, in some cases at least, after intervals of some hours. It appears to be deducible from some figures of Ellis, † rather than from his expressions, ‡ which are equivocal, that the ovules are sometimes developed into perfect polypi before their expulsion from the matrix, but the fact, though not incredible, needs confirmation, and it is certain that their birth in the oviform condition is the general rule. At this period they are clothed with cilia, as Ellis has figured them, § and as Professor Grant first distinctly brought into view; and by means of the rapid vibrations of these minute organs they are carried to and fro through the water for some time, varying from a few hours to two or three days, until, having at length in due course settled on a proper site, they throw out, in the manner of a vegetable seed, a root-like fibre to fix themselves, and then push up a shoot as a commencement to the future polypidom. ‖ Polype-cells and polypes are rapidly evolved on the sides of this shoot, and nourishment being now re-

* So that Hedwig's axiom, adopted by M. Virey, "that the reproductive organs of animals are continuous with the life of the individual, while the reproductive organs of perennial plants, when their functions have been performed, are thrown off, and replaced in the succeeding season by others,"—must be received with some limitations.—See Tiedemann's Comp. Physiology, p. 76.

† Corall. pl. v. fig. A. ‡ Corall. Introd. p. x.

§ Corall. pl. xxxviii. fig. B.

‖ Mr Lister has minutely described the ova of Campanularia gelatinosa. "The ova were roundish, and consisted of two portions; the outer and more transparent, that might be called the white, inclosing an inner bag filled with particles in fluid like those in the currents of the stem, and connected with them by the cord. The current and agitation were seen in the inner bags only, and the flow into and from them alternately along the cord was strongly marked." As they approach maturity "the ova became more opaque, which hid the changes that might be taking place within them. The number in a full ovary was about seven." When mature they emerged from the cell "in succession at an average interval of six hours. The protrusion took about a quarter of an hour, and was commonly preceded by a transparent projection, like torn membrane, before the end of the ovary, and a few active particles in the water." —Phil. Trans. 1834, p. 375.