

but occasionally they arise at a point nearer to the main axis (*Fig. 14*), but always on that side toward which the twin hydræ calyces converge. At first, one of these reproductive bodies (*Figs. 5, 5^a, and 14, a*) resembles the incipient stage of a pair of hydræ (*Fig. 14^a*), and, in fact, the process of the development of the walls is the same in both. Primarily the organ in question is turbinate, and strictly circular in a transverse section (*Figs. 5, 5^a, and 14*); the outer wall (*Fig. 5^a, a a¹*) is very thick, and composed of very distinct, columnar cells; whereas the inner wall (*d c*), although it has a very well-marked contour, exteriorly appears like a confused mass of dark brown cells. The cavity contains granules, apparently detached from the inner wall, which are in a constant state of circulation around its sides, and backwards and forwards through the pedicel, in direct communication with the common canal of the main stem. Before the axis of the reproductive body has completed its terminal growth (*Fig. 10, g*), the outer wall (*a¹*) detaches itself from the now oval calyx (*c*), and begins the development of its medusa (*b b¹*). At this time, the outer wall (*a¹*) of the axis is no thicker than in the main stem; but the inner one (*c*) has a much greater depth, and the cellular structure is quite recognizable. The medusa commences, as a mere lateral hernia (*b b¹*) of the outer and inner walls of the axis, and, eventually, by a process similar to the mode of development in the medusa of *Hydractinia* (Pl. XVI. *Figs. 7, 8, and 9*), *Thamnocnidia* (Pl. XXII. *Figs. 1-7*), and *Parypha* (Pl. XXIII. *Figs. 3-8*), becomes a double-walled sac (Pl. XXXII. *Fig. 8, b, b¹*), the disk proper, in the axis of which a probosciform, single-walled, actinostome (*l*) projects, as we have described more fully on a previous page (p. 329). In the mean time, the axis (*a¹*) increases in length, by the further development of the solid mass (*g*), which fills the mouth of the calyx, and, when mature (*Fig. 8, a¹*), is attached terminally to the thin edge of the calyx and its operculum (*g*).