

On entering the cloacal tube the oxæas and cladoxæas extend longitudinally through the walls of the component canals in bundles, which chiefly occur in the angles between the canals. The long cladi of the cladoxæas, extending from them at right angles, are curved so as to encircle the canal of which they form the skeleton for about one-half of its circumference. As the history of the cladi of these spicules can be traced with tolerable clearness, it may be as well to introduce an account of it in this place. Let *a*, *b*, *c*, (Fig. 1A) be the three cladi of a normal orthotriæne seen in plan. In the cloacal tube the spicule is so placed that the cladus *a* has opposed to it the rhabdome of the next succeeding spicule of the bundle; it therefore becomes suppressed; the cladus *b* projects into the collenchyma of the canal, which is present only in thin lamellæ;

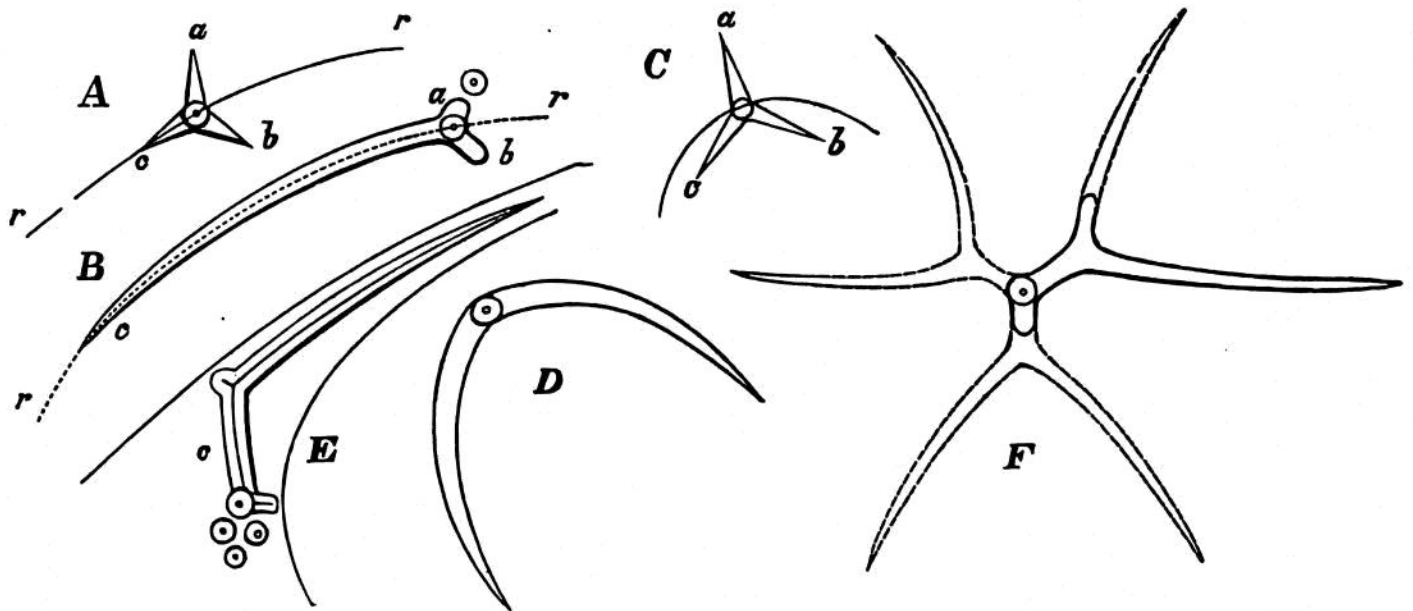


FIG. 1.—Diagram in explanation of the modified triæne spicules of *Disyringa dissimilis* (Ridley).

as soon as it reaches the limits of a lamella its growth is arrested by default of supporting tissue, and it remains a mere tubercle; the cladus *c*, on the other hand, lies in the circumference of the wall of the canal *r*, *r*, its growth can take place unimpeded, and it does not cease increasing in size till it has half encircled the canal (Fig. 1B).

Again the spicule may be so situated (Fig. 1c) that both cladi *b* and *c* lie in the direction of the circumference of the canal, both these may enlarge (Fig. 1D), though as one is usually more favourably situated than the other their growth is unequal. Dichodiænes are produced as follows:—They occur in the spicular bundles which lie closest to the exterior of the cloacal tube; the long cladus *c* follows the wall of the canal to which it belongs (Fig. 1E), but as this suddenly changes from a curve of less radius to one of much greater radius on leaving the interior to form part of the external boundary of the cloacal tube, so the spicular cladus changes direction with it and thus becomes bent. In this way spicules