

*Development of Alcyonarians and Zoantharians compared.*—It seems extremely difficult to reconcile the extraordinary succession of the mesenteries in the development of the Zoantharians, discovered by Lacaze-Duthiers, with the facts presented by Alcyonarians. Did the development of the eight mesenteries of Alcyonaria correspond with that of the first eight mesenteries formed in Actiniadæ, the first mesenteries formed would be either the lateral dorsal or lateral ventral; but these are those which are most rudimentary in the zooids of *Sarcophyton*. Moreover, the mesenterial filaments of the two lateral pairs of septa are in the development of Actiniadæ the first to appear, and not the dorsal, which are longest in the Alcyonarian polyps and most persistent in the zooids.

Apparently, however, development in Alcyonarians follows a different course. In *Halysceptrum*, the development of which has been examined by Kölliker, the eight mesenteries appear from the very first. In *Kalliphobe* (Busch), one of the Edwardsiæ, according to Metschnikoff, the larva has, in its earliest stage, eight tentacles and two mesenterial filaments.