

sweep round to the front, sometimes in a direction parallel to the frontal horn, and sometimes with a moderate amount of divergence. We have already mentioned that *C. arcticum* and *C. longipes* belong to the Tricho-plankton and that *C. intermedium* and *C. macroceros* are Styli-plankton. We have finally a whole series of variations belonging to the tropical Desmo-plankton, namely *C. vultur*, *C. pavillardii*, *C. trichoceros*, and *C. tenue*, which we reproduce from Jörgensen's excellent monograph (see Fig. 247), and many others. They illustrate the different tendencies to variation. In similar fashion there are series of variations which group themselves round the other main types of the genus.

Guiding forms like these are of very great assistance in defining the boundaries of adjacent currents which have a different biological character. But

we need to exercise the utmost care in drawing conclusions as to

the origin of ocean-currents from the composition of their pelagic flora, and it must not by any means be taken for granted that areas where the same species occur are necessarily united by a continuous stream connection. We have repeatedly made discoveries which go to indicate that most plankton-species of any consequence are to be found scattered about here and there outside their proper domain, so that these stray individuals might easily originate an abundant flora whenever conditions of existence became favourable.

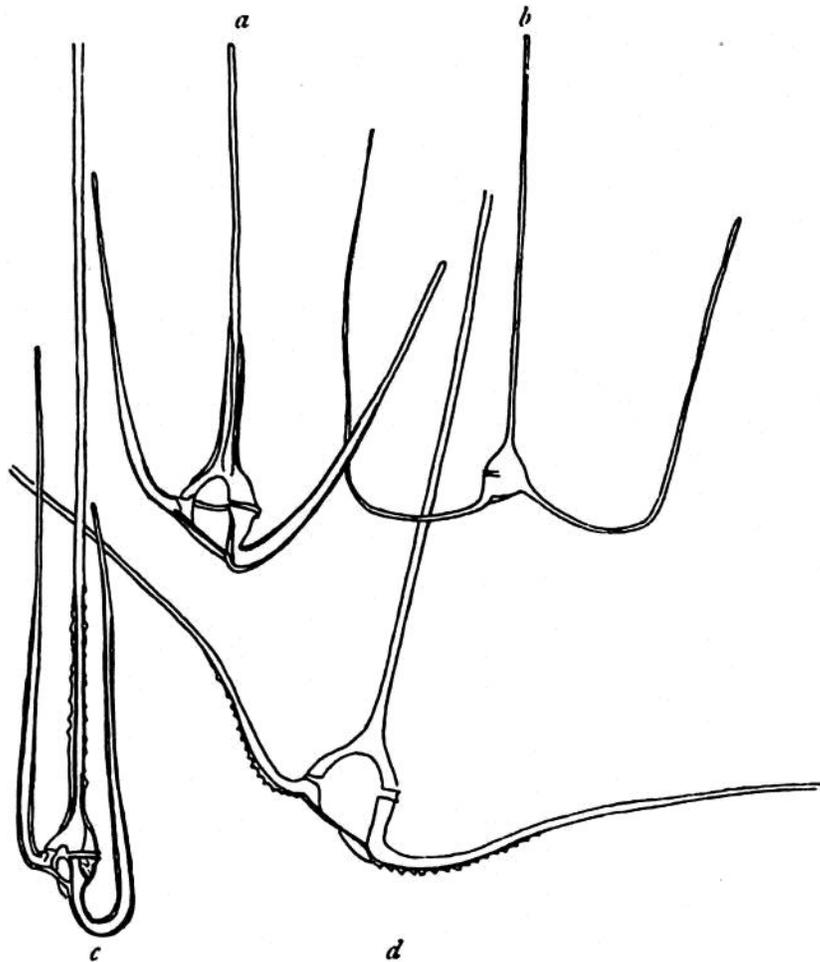


FIG. 247.—SPECIES OF *CERATIUM* BELONGING TO THE TYPE OF *C. MACROCEROS*, TROPICAL SPECIES.

*a*, *C. pavillardii* (♂<sup>♂</sup>); *b*, *C. trichoceros* (♂<sup>♂</sup>); *c*, *C. vultur*, var. *japonica* (♂<sup>♂</sup>); *d*, *C. tenue*, var. *buceros* (♂<sup>♂</sup>). (Jörgensen.)