

from its hydrorhizal end has a height of four inches. From the main stem, which is simple, are emitted alternate pinnæ, which are themselves occasionally branched. The hydrothecæ are absolutely cylindrical, and arise close to the distal ends of the internodes. They have but a very small portion of their epicauline side adnate to the internode, and from the fact of this portion being nearly in the same plane with the true base the hydrothecæ have the appearance of being entirely free from the base to the summit. That the attached portion, however, must be regarded as consisting not only of the true base but of a portion of the epicauline side, will be apparent from a comparison with such species as *Sertularia echinocarpa* and *Sertularia geniculata* (Pl. XXVIII.), and it will thus be seen that the present species offers no real exception to the general character of the family. The four-cusped margin of the hydrotheca distinguishes this species from *Sertularia integritheca*, which it closely resembles in almost every other respect, and with which it was associated in the contents of the dredge.

*Sertularia integritheca*, n. sp. (Pl. XXIX. figs. 2, 2a).

*Trophosome*.—Hydrocaulus consisting of unbranched, monosiphonic stems, set with pinnately disposed alternate ramuli. Hydrothecæ borne both by stems and ramuli, one on every internode, alternate, exactly cylindrical, each springing from the hydrocaulus by its base, and then free for nearly its entire height, orifice circular and entire.

*Gonosome* not present.

*Locality*.—Off Bahia.

*Sertularia integra* is a large and strong-growing species, chiefly characterised by its absolutely cylindrical hydrothecæ, whose perfectly circular and entire orifice occupies the whole summit of the hydrotheca.

The stems spring at intervals from a creeping, tubular filament, and attain a height of about four inches. They are rather thick, monosiphonic throughout, not dividing into branches, but set along nearly their entire length with alternate pinnæ.

The hydrothecæ are each attached to the hydrocaulus by its base and by a very small extent of the epicauline side. In this character they entirely agree with the preceding species (*Sertularia cylindritheca*). The joints which separate the internodes occur just above the hydrothecæ. They are sufficiently distinct towards the distal ends of the ramuli, but in the more proximal or older parts they frequently become indistinct or even obliterated.

The species is a member of the rich Hydroid fauna of Bahia, but though the specimens obtained were finely developed they were quite destitute of gonosome.