extent as to render necessary a revision of the group by a more stringent limitation of *Lafoëa*. See below, p. 32.

The genus *Halisiphonia* is represented in the Challenger collection by a single species, which presents many points of special interest.

Halisiphonia megalotheca, n. sp. (Pl. XVI. figs. 1, 1*a*).

Trophosome.—Hydrocaulus a creeping and adherent tube which supports at irregular intervals pedunculated hydrothecæ. Hydrothecæ very large, cylindrical, gradually passing below into the long, smooth, cylindrical peduncle.

Gonosome.—Gonangia spatuliform, borne on short peduncles and with the summit opening by a long, narrow, transverse slit.

Locality.—Station 160, south of Australia; lat. 42° 42′ S., long. 134° 10′ E.; depth, 2600 fathoms.

The very long tubular hydrothecæ gradually passing into their long peduncles confer on this remarkable species an aspect as striking as it is distinctive. The hydrothecæ measure about one-tenth of an inch in length, and are borne on peduncles whose length is for the most part nearly the same. The creeping stolon from which they spring twines in irregular contortions round the body to which it has attached itself. The deep cylindrical hydrotheca begins, at about three-fourths of its height from the margin, to taper into the peduncle, with the cavity of which its own is uninterruptedly continuous, so that it is not easy to say where the one ends and the other begins.

The gonangia are, like the hydrothecæ, borne by the creeping stolon-like hydrocaulus. Their form is remarkable. They are much compressed, so as to present a spatuliform shape, widening upwards, and gradually narrowing into a short peduncle below. They are widest at the summit, where they terminate in a sharp edge. Along this edge the walls of the gonangium admit of being separated from one another so as to bring into view a narrow slit through which the contents of the gonangium may be liberated. The appearance, indeed, of the gonangium with its slit-like opening is such as to suggest rather forcibly that of a flat bivalve shell, or the ovarian nidus of certain Gasteropodous Mollusca. Nothing can be asserted of its contents, which had in every case disappeared.

The collection contains but a single and somewhat fragmentary specimen, which twined round a portion of a fascicled stem, probably that of *Cryptolaria abyssicola*, a species with which it was associated.

The enormous depth of 2600 fathoms from which both *Halisiphonia megalotheca* and *Cryptolaria abyssicola* were obtained has much significance, in connection with the fact that in both species the gonangia are present, *Halisiphonia megalotheca* affording the only known instance, and *Cryptolaria abyssicola* one of the very few, in which any part of the gonosome has been observed in these genera.