

of the umbilical lines of the twenty-six remaining radii, and among these some remain simple, while others bifurcate once or twice. Almost all the lines have a double curve in the course of their length, and the hyaline radii terminate before arriving at the circumference in a salient or denticulate point. The apices of the granulated segments are sharply truncated.

The specific name of this elegant frustule has been given in honour of the late Professor Sir Wyville Thomson, formerly Director of the Challenger Commission.

*Asteromphalus antarcticus*, n. sp. (Plate XVI. fig. 11.)

Forma rotunda, parva; dissepimentis cuneatis, ad verticem truncatis; lineis umbilicibus rectis; areis radialibus linearibus et denticulo terminali instructis. Ad mare Antarcticum.

This small disc was collected by means of a surface net to the south of Heard Island in the Antarctic Ocean, being found associated with many specimens of *Asteromphalus darwini*, Grev.<sup>1</sup> It possesses five radii — apart from the obsolete radius — and the umbilical lines are straight and proceed from the centre. The radial areas are broadly linear, and each terminates near the margin in a well-defined granule. The areolated segments are bounded by internally concave margins, with the exception of those which flank the obsolete radius, and which pass by an elegant curve into the smooth area in the centre of the disc. The *ensemble* of such characters must be looked upon as sufficient to constitute a good species.

*Asterolampra*, Ehrenb.

The genus *Asterolampra*, though bearing a great affinity to certain forms of *Asteromphalus*,<sup>2</sup> has been too hastily united with the latter by Greville.<sup>3</sup> It embraces some of the most elegant forms of Diatoms, and has been defined by Ehrenberg, as noted by Pritchard (*op. cit.*, p. 836), in the following manner:—"Frustules simple, disciform; disc orbicular with marginal areolated or punctated compartments, separated by smooth rays which proceed from a hyaline central area; central area divided by lines which radiate from the umbilicus to the apex of each compartment, compartments and rays symmetrical." The

<sup>1</sup> *Micr. Journ.*, vol. viii. pl. iv. figs. 12 and 13.

<sup>2</sup> This genus was established by Ehrenberg for certain Antarctic Diatoms brought home by Sir Joseph Hooker, and collected during the cruise of H.M.S.S. "Erebus" and "Terror," *Monatsber. d. k. Akad. d. Wiss. Berlin*, 1844, p. 198. See also Kützing, *Spec. Alg.*, 1849; *Amer. Journ. Sci. and Art.*, vol. xxii. p. 1; Ehrenberg, *Mikrogeologie*, pl. xxxv. A closely allied genus, *Spatangidium*, was proposed by Brébisson in 1857, *Bull. de la Soc. Linn. de Normand.*, vol. ii.

<sup>3</sup> Greville, Descriptions of Diatoms observed in Californian Guano, *Micr. Journ.*, vol. vii. p. 157; Greville on the *Asterolampræ* of the Barbados Deposit, *Micr. Journ.*, n. s., vol. ii. p. 42; Wallich on Siliceous Organisms found in the Digestive Cavities of the Salpæ, and their relation to the Flint Nodules of the Chalk Formation, *Micr. Journ.*, vol. viii. p. 44.