

form presents, however, so many peculiarities that the erection of a special genus seems to be justified, even apart from the different form of the body and its microscopic structure.

In a Notice of a New Vitreous Sponge—*Pheronema grayi*¹—Saville Kent first justified the change of the generic title *Holtenia*, which had been applied by Wyville Thomson to his *Holtenia carpenteri*, into *Pheronema* (Leidy), on the ground of priority, since a generic agreement between the two species *Pheronema annæ*, Leidy, and *Holtenia carpenteri*, Wyville Thomson, cannot be doubted. He now brought forward a third species—*Pheronema grayi*—belonging to the same genus *Pheronema*. Of this several specimens had been procured during the expedition of the "Norna" off the coast of Portugal and in the neighbourhood of Setubal, from depths varying from 400 to 600 fathoms. This new species was further described and figured by Kent in the Monthly Microscopical Journal (1870, p. 243). *Pheronema grayi* is distinguished by the Portuguese fisherman as "Nidos de Mer," or "the sea bird's nest," being so named chiefly on account of the very broad and depressed form of the body, which is indeed very like the nest of a chaffinch, and also on account of the uniform distribution of the hair-like siliceous spicules over the whole surface, but especially on the inferior arched portion. These spicules are not arranged in bundles, but are isolated, and project for a greater or less distance, while in some specimens they are prolonged to form a very long basal tuft. Saville Kent also called attention to the fact that the shaft of the amphidiscs or "recurvate birotulate spicula" appeared to him to be rougher or "more profusely echinate," than in the case of the similar spicules of *Pheronema carpenteri*. "The sarcode investing and constituting the sponge body was of a brilliant orange colour."

Under the name of *Holtenia pourtalesii*, Oscar Schmidt described and figured in the same year 1870,² several sacciform sponges, some of which are provided with a superior oscular opening, while others are entirely closed. The form of these types, however, makes it difficult to refer them to this genus, or even to *Pheronema*; they are rather to be related, as Carter noted in 1875,³ to *Rossella* (or *Lanuginella*, Schmidt). It is impossible to say whether a form designated by O. Schmidt *Holtenia saccus* belongs to *Pheronema*. It is described by O. Schmidt as "sacciform, the wide opening having very thin walls and irregularly projecting spicules." In the sarcode, according to Schmidt, "innumerable small hexradiate spicules occur, besides many five-rayed spicules with a projecting fifth ray, while whorl-like double anchors (amphidiscs) here and there occur. The sparsely distributed large hexradiate spicules and the long spicules are disposed on the incomplete meshes."

In some Notes on Anchoring Sponges,⁴ Gray announced his inclination to unite

¹ *Ann. and Mag. Nat. Hist.*, ser. 4, vol. vi. pp. 182-186.

² *Spongien des atlantischen Gebietes.*

³ *Ann. and Mag. Nat. Hist.*, ser. 4, vol. xv. p. 118.

⁴ *Ann. and Mag. Nat. Hist.*, ser. 4, vol. vi. pp. 309-312, 1870.