

other impurities thus removed, when the skeleton comes out a lovely lacy structure of the clearest glass. The six-rayed form of the spicules gives the network which is the result of their fusion great flexibility of design, with a characteristic tendency, however, to square meshes.

On the 30th of August, 1870, Mr. Gwyn Jeffreys dredged in 651 fathoms in the Atlantic off the mouth of the Strait of Gibraltar an exquisite sponge, resembling *Holtenia* in its general appearance, but differing from it in the singular and beautiful character of having a delicate outer veil about a centimetre from the surface of the sponge, formed by the interlacing of the four secondary rays of large five-rayed spicules, which send their long shafts from that point vertically into the sponge body (Fig. 65). The surface of the sponge is formed of a network of large five-radiate spicules, arranged very much as in *Holtenia*; but the spicules of the sarcode—the small spicules which are imbedded in the living sponge-jelly—are of a totally different form. A single large ‘osculum’ opens, as in *Holtenia*, at the top of the sponge, but instead of forming a cup uniformly lined with a netted membrane, the oscular cavity divides at the bottom into a number of branching passages as in *Pheronema annæ*, described by Dr. Leidy. I was inclined at first to place this species in the genus *Pheronema*, but Dr. Leidy’s description and figure are by no means satisfactory, and may refer to some other form of the *Holtenia* group. The spicules of the ‘beard’ are more rigid and thicker than those of *Holtenia*, and scattered among them are some very large four-barbed grappling hooks.