Lymani and of an undescribed species of the same genus. The trawl seems specially suitable to the capture of Holothurids; indeed, without its use we should never have imagined that animals of this group occurred so abundantly as they do, and acquired so considerable a size in deep water. Almost every haul along the coasts of Portugal and Africa yielded several species, and particularly many specimens of a remarkable form, referred to a section of the order with which we are now very familiar as inhabitants of the deeper regions of the sea. animal is of a rich violet color. Like Psolus, it has a distinct ambulatory surface with a central double row of water-feet. The body-cavity is small, but the perisom is represented by an enormously thick layer of jelly, which rises on either side of the middle-line of the back into a series of rounded lobes, each perforated for the passage of an ambulacral tube, and corresponding, therefore, to an ambulacral foot. The upper pair of vessels of the trivium send out series of leaf-like sacs loaded with purple pigment, which fringe the ambulatory disk on either side, and appear to be chiefly concerned in the function of respiration.

This haul gave us another interesting evidence of the wide geographical distribution of some of the characteristic forms of the deep-sea fauna. Several examples of a species of the genus *Euplectella* were entangled in the netting of the trawl.

In the year 1841, Professor Owen gave an excellent description, in the Transactions of the Zoological Society of London, of a wonderfully beautiful sponge which had been lately received from the Philippine Islands, and which he named *Euplectella aspergillum* (Fig. 28). In the specimen described by Owen, the soft gelatinous coating had been entirely removed, and nothing remained except the skeleton, composed of silica, and resembling an exquisitely delicate fabric woven in spun glass. The skeleton is in the form of a slightly curved tube, contracted downward and expanding upward to a wide circular mouth