Species 1. Euplectella aspergillum, Owen.

Somewhat curved tube, slightly widened towards the upper end, bearing external ridges and cuff-like fringe. Circular parietal gaps alternate with closed meshes, and are disposed in spiral rows, ascending at an angle of 45°. The principal supporting spicules of the square-meshed framework are oxytetracts. The annular membrane round the parietal gaps contains strongly developed compressed oxypentacts. Zebu (Philippines); 95 fathoms.

Species 2. Euplectella suberea, Wyville Thomson.

Straight, somewhat bulging tube, without ridges or cuff. Circular parietal gaps alternate with closed arched meshes, and are spirally arranged, ascending at an angle of 45° The principal supporting spicules of the loosely united meshed framework are strongly developed oxypentacts with distal radial ray. The annular membrane of the parietal gaps contains straight knotted diacts and sceptres. West of Gibraltar, 600 to 1090 fathoms; north-east of Bahia, 1600 fathoms; off the Berlingues, 1600 fathoms.

Species 3. Euplectella cucumer, R. Owen.

Straight, somewhat bulging tube, without ridges or cuff. Circular parietal gaps alternate with closed arched projecting meshes, and are disposed in spiral rows, ascending at an angle of 45°. The summit of each protruding arched mesh bears the projecting distal ray of a strongly developed oxyhexaster. Seychelle Islands.

Species 4. Euplectella jovis, O. Schmidt.

Straight tube, somewhat widened towards the upper end, without external ridges, but with a terminal marginal cuff. Round parietal gaps occur in approximately regular spiral rows. The principal supporting spicules of the square-meshed framework are strongly developed oxypentacts, with long projecting distal ray. The annular membrane of the parietal gaps contains sceptres and S-shaped clasps. Antille Islands, 423 fathoms.

Species 5. Euplectella oweni, Marshall.

Straight phallus-shaped tube, with oval cross section, without ridges or cuff. Circular parietal gaps arranged in longitudinal and transverse rows. The principal supporting spicules of the square-meshed framework are strong oxytetracts. The annular membrane of the parietal gaps contains compass-shaped oxydiacts disposed tangentially. Japan.