

and finally passes out by the large 'osculum' at the top. Over the upper third of the sponge a multitude of radiating rigid silicious spicules form a kind of ornamental frill, and from the lower third a perfect maze of delicate glassy filaments, like fine white hair, spread out in all directions, penetrating the semi-fluid mud, and supporting the sponge in its precarious bed by increasing its surface indefinitely while adding but little to its weight.

This is only one of the ways by which sponges anchor themselves in the ooze of the deep sea. *Hyalonema* sends right down through the soft mud a coiled whisp of strong spicules, each as thick as a knitting needle, which open out into a brush as the bed gets firmer, and fix the sponge in its place somewhat on the principle of a screw pile. A very singular sponge from deep water off the Loffoten Islands spreads into a thin circular cake, and adds to its surface by sending out a flat border of silky spicules, like a fringe of white floss-silk round a little yellow mat; and the lovely *Euplectella*, whose beauty is imbedded up to its fretted lid in the grey mud of the seas of the Philippines, is supported by a frill of spicules standing up round it like Queen Elizabeth's ruff.

The sponges of the deep-water ooze are by no means confined to one group. The *Hexactinellidæ* are perhaps the most abundant, but corticate sponges even, closely allied to those which look so rigid when fixed to stones in shallow water, send out long anchoring spicules and balance themselves in the soft mud (Fig. 7); and off the coast of Portugal Mr. Gwyn Jeffreys dredged in 1870 several small forms of