

ter ; its flat downy radiated surface gradually diminishes by the widening of the central opening, till only thin margins are left around the orifice, and the current is again seen to play briskly from it. In recent specimens of the Cliona dredged from an oyster-bed near the shore at Prestonpans, and examined under the most favourable circumstances on the coast, I have twice observed polypi of extraordinary minuteness and delicacy placed around the margin of the orifice, and which kept in constant motion, advancing and withdrawing themselves into the substance of the papilla, while the current flowed from its central opening. The polypi were perfectly invisible to the naked eye in an ordinary light and position ; but by suspending the Cliona in a crystal jar with clear water, and placing it between the eye and a candle, or the sun, they were seen like filaments of silk or asbestos constantly rising and sinking on the margin of the papilla. On cutting off a papilla, and placing it under a microscope in sea-water, the polypi continued their motions, and were seen to consist of a long, slender, transparent, cylindrical, tubular fleshy body, at the farther extremity of which were placed about eight short broad tentacula, slightly dilated at their free ends, which were constantly inflecting and extending themselves irregularly, while the polypi advanced or retreated. In two entire and fresh specimens, the polypi continued visible and in motion for more than twenty-four hours in a jar of water at Prestonpans ; but I have not yet succeeded in perceiving them in any of the numerous specimens which I have preserved alive in the water procured from Newhaven." *Professor Grant.* The spicula " are about the fourth of a line in length, and appear through the microscope as minute curved pins spread irregularly through the whole fleshy substance of the animal : " they are " slender, cylindrical, tubular, slightly curved, shut at both ends, a little fusiform in the middle, acutely pointed at one end, and terminated by a small hollow round head at the other." *Grant.*

Dr Coldstream writes me that, judging from the form of the spicula, he believes he possesses another species of Cliona from Bute, perforating the walls of the limpet (*Patella vulgata.*)