regular and synchronous pulsations of the minute fringed arms of the whole polypi." And Bohadsch asserts that he has been a witness of this spectacle. " Deget nostrum *Zoophyton* in altiori mari, ubi interdum cum aliis piscibus capitur. Dum versus maris superficiem fertur, bullulæ innumeræ corpus ejus circumdant, quæ stellarum instar de die splendent; id quidem non hac occasione, sed anno 1749, dum Liburno Marsiliam versus per mare proficiscerer, observavi. Quo tempore in historia naturali minime versatus corpus bullulis nitens ad quatuor circiter pedes infra superficiem maris conspiciens e nautis quæsivi, quidnam rei esset? qui *Pennam* esse pro responso dedere." An. Mar. p. 107.—Linnæus had therefore some grounds for inserting the " phosphorescent Sea-Pens, which cover the bottom of the ocean, and there cast so strong a light, that it is easy to count the fishes and worms of various kinds sporting among them"—amongst the most memorable productions in Nature. See Smith's Tracts relating to Nat. History, p. 43. But some authors, as Lamarck and Schweigger, reasoning from what is known regarding other compound animals, have denied the existence of this great locomotive power in a zoophyte placed so low in the scale, as contrary to every analogy, and not necessary to the existence or wants of the animal. And there is little doubt these naturalists are right, for, when placed in a basin or plate of sea-water, the Pennatulæ are never observed to change their position, but they remain on the same spot, and lie with the same side up or down just as they have been put in. They inflate the body until it becomes in a considerable degree transparent, and only streaked with interrupted lines of red; they distend it more at one place and contract it at another; they spread out the pinnæ, and the polypes expand their tentacula, but still they never attempt to swim or perform any effort towards locomotion. Our fishermen believe that they are fixed at the bottom with their ends immersed in the mud, and the paleness of the base, when viewed in connection with the preceding observations, go far, in my opinion, to prove this statement to be correct. " Si les pennatules nagent aussi," says Blainville, " ce dont je doute un peu, quoiqu'elles rampent trés-lentement, c'est peut-être en chassant le fluide qui est entré dans leur système acquifère, plutôt qu'à l'aide des pinnules polypifères."—Actinolog. p. 83.

As the name imports, this Pennatula is a phosphorescent animal, but the light, of a faint blue colour, is emitted only under circumstances that tend to shew that the polypes have felt some painful irritation which they would drive away by the dread influence of their tiny lamps. I have repeatedly kept living specimens for several days