The body of the Helianthoïda may be compared to a truncated cone or short cylinder, seated on a flat plain base, while the opposite end is dimpled in the centre with the oral aperture, and garnished with variously figured tentacula which originate from a space between the proper lip and the free somewhat thickened border of the disk. In a state of contraction the mouth is closed, the tentacula are shortened, and the whole concealed by this border, being drawn like a curtain over them, leaving a mere depression on the top. The mouth leads by a very short and wide passage into a large stomach, which is a membranous bag puckered internally with numerous plaits, and divided in a perpendicular direction into two equal halves, by a deep smooth furrow with cartilaginous sides, as was first remarked by Reaumur.\* There is no intestine, nor any other visible exit from the stomach than the mouth, by which the undigested remains of the food are ejected, always enveloped in a large quantity of a clear glairy fluid. But in a state of expansion and of hunger, many kinds of Helianthoïda can protrude the stomach beyond the lip in the form of large bladder-like lobes, which often hang over the sides and almost conceal the rest of the body; and amidst them there are very frequently extruded at the same time some white filaments, like bundles of ravelled thread, which have escaped either through a rupture, or a circular opening in the bottom of the stomachal membrane. space between the walls of this organ and the outer envelope is divided into numerous narrow compartments by perpendicular and parallel lamellæ of a musculo-tendinous texture, which extend from the oral disk to the base, and radiate to the centre like the gills of a mushroom to its stalk,—a comparison the more exact as some only of the lamellæ reach and touch the stomach, the rest coming more or less short, and forming consequently imperfect interseptal spaces. "The breadth of the leaflets va-

<sup>\* &</sup>quot;They (the furrows) are produced on each side by the firm adherence of the gastric membrane to a pair of very dense, fleshy, but narrow leaflets, throughout their whole extent, or, in other words, from the top to the bottom of their internal border. These depressions divide the animal into two lateral halves, constituting a bilateral symmetry in Actinia, as has been observed by M. Agassiz in other supposed radiated animals." Teale in loc. cit. 102.—But in Actinia Dianthus the channel or furrow exists on one side only.