whether by its own power or by the action of the vibratile cilia which line the capsule it is not possible to say, as we have never seen the cilia in a quiescent state. The narrow longitudinal area is a shallow furrow with a well-circumscribed and somewhat prominent margin. The irregular transverse bulbs at the base of its anterior and posterior halves, near the black speck, are the swollen extremities of two branches of the medial vertical funnel. Starting from these facts, we may perhaps throw some light upon the structure and functions of the whole structure. Let us, for this purpose, consider anew the funnel itself. We have seen that it is simply a central, vertical prolongation of the digestive cavity, tapering gradually into a narrow neck; but before it reaches the abactinal surface it enlarges again very suddenly, branching into two forks, which are themselves swollen into two irregular bulbs projecting towards the surface, one in front, and the other behind the central black speck, but both close to it and partly encircling the tubercle upon which the black speck rests. These two bulbs are therefore simple dilatations of the forked abactinal extremity of the funnel, and we constantly see undigested matters crowded in them and revolving in their cavity, with a tendency to accumulate laterally in an obliquely opposite direction in each of them. And at long intervals these prominent oblique angles will open outward, when the fœcal matter within the bulbs is discharged, the aperture remaining for a longer or shorter time extended, and the vibrating cilia lining the inner surface playing very actively; but after a little while these openings shut again.

These apertures might therefore be considered as a double anus; but I think it would be a very injudicious comparison to homologize them with the anus of higher animals, for in this type the process of digestion and assimilation and the circulation of the nutritive digested food are carried on by means of organs widely different from those of either Mollusca, Articulata, or Vertebrata. We have seen above, that the food is introduced into the digestive sac which occupies the centre of the spherosome; that this sac opens freely into the central chymiferous cavity, and discharges into it its contents, mixed with a large quantity of water; that this peculiar apparatus is subject to regular contractions, and circulates the fluid, with the nutritive parts suspended in it, into the various tubes branching through the whole system; and that gradually the refuse matters accumulate on the abactinal prolongation of the central vertical funnel, to be discharged through the openings of the two hollow bulbs branching from its extremity. We have here, therefore, rather openings in the circulatory system than anal apertures; or, rather, we have here an apparatus entirely different in its adaptation from either the alimentary canal or the circulatory system of higher animals, but constructed upon the same plan as similar organs in the class of Polypi and in other Acalephs, with only this difference, — that in Polypi the digestive central sac empties its contents into