and alter their form. "When placed under the microscope," says Professor Grant,* "and viewed by transmitted light, they appeared as opaque spheres surrounded with a thin transparent margin, which increased in thickness when the ova began to grow, and such of the ova as lay in contact united and grew as one ovum. A rapid current in the water immediately around each ovum, drawing along with it all loose particles and floating animalcules, was distinctly seen flowing with an equal velocity as in other ciliated ova, and a zone of very minute vibrating ciliæ was perceptible, surrounding the transparent margin of all the ova. The progressive motion of the ova, always in a direction contrary to that of the current created by their ciliæ, was very obvious, though less rapid than in any other zoophyte in which I have observed the same remarkable phenomenon. The specimen suspended in a glass jar filled with pure sea-water I now brought so close to the transparent side of the vessel, that I could examine through it, with the assistance of a powerful lens, and without disturbing the animal, the motions and progress of the groups of ova passing through the colourless bodies of the polypi. To the naked eye at first sight all appeared motionless. The deep vermilion hue of the small round ova, and the colourless transparency of the outer covering of the polypi, formed a beautiful contrast with the pure white colour of the delicate longitudinal folds, the central open canal, and the slender filaments which wind down from its sides towards the clusters of white ova at the base; but the living phenomena discovered within were even more admirable than the beautiful contrast of colours, the elegant forms, and the exquisite structure of all the parts. When observed with a lens the ova were seen to be in constant motion, and quite free within the bodies of the polypi. They moved themselves backwards and forwards, and frequently contracted their sides, as if irritated or capable of feeling. I could observe none passing upwards between the stomach and the sides of the polypi. They never assumed the appearance of a string of beads inclosed in a narrow shut curved tube, as represented by Spix, but swam freely in the water which distended the polypi, as figured by Ellis. Their motions in the

* Dr Grant's observations, quoted in the text, were made on Alcyonium digitatum, but the generalities may be safely applied to the other families, agreeing as they do with the observations of Cavolini on Gorgonia.