comosteum in the male (?) Gastrozooids cylindrical, with four club-shaped tentacles and four basal canals. Dactylozooids entirely retracted. Gonophores in the female solitary in the gonangia. The free margin of the cup-shaped spadix becomes converted into a ramified fringe, embracing the embryo as development proceeds. Planula as in *Pliobothrus*. Structure of male stocks unknown.

4. Distichopora, Lamarck.

Coenosteum branching flabelliform, with branches usually flattened in the plane of the flabellum; composed of very compact coenenchym. Pores in most species confined to narrow lines or rows running along the exact centres or edges of the sides of the branches, usually absent on their faces, except as occasional abnormalities or rudimentary branchlets budding in a direction out of the plane of the flabellum. The lines of pores composed of three rows, a central row of larger gastropores with circular or oval mouths; and a row on each side of this of smaller dactylopores, sometimes very minute, sometimes prominent and tubular, often slit-like in aperture, the length of the slit being directed at right angles to the line of the row. Pores very deep, prolonged in curved lines side by side in the plane of the flabellum, inwards and downwards towards the bases of the branches; forming thus throughout the flabellum a thin continuous tract of fragile tubulate tissue, in which the successively-developed curved pore-tubes stand out fanwise, separating from one another the compact masses of coenenchym forming the opposite faces of the branches. The branches may, therefore, be readily split into two halves along this tubular tract. Older gastropores with immensely long filiform styles; those in the younger gastropores much shorter. Dactylopores devoid of styles. Ampulæ sometimes on one, sometimes on both faces of the flabellum, prominent in the females and often forming confluent masses; sunk beneath the surface of the coenosteum in the males and invisible exteriorly. Soft structures closely like those of Errina. Dactylozooids with very long retractor muscular slips; gastropores with four clavate tentacles. Gonangia as in Errina in the females; in the males, containing four or five ovoid masses of spermatozoa.1

5. Labiopora, Moseley 2 (Pl. II. fig. 5).

(Type specimen in British Museum; mistaken by Gray for a Bryozoon, and described by him as *Porella antarctica*), (Proc. Zool. Soc., 1872, p. 746, pl. lxiv. fig. 4).—Coenosteum minutely reticulate in texture, composed of a few rounded branches with tapering extremities. The entire surface covered with nariform projections, with elongate cavities, which are arranged in rows along the lengths of the branches, often disposed with great regularity for long stretches. The projections of very uniform shape, and rising from the

¹ Some specimens dredged off the Tristan da Cunha group are probably males, having the ampullo small, and buried in the substance of the comosteum.

Prelim. Report, Phil. Trans. Roy. Soc., 1878, part 2, p. 476.