The dark linear bodies represented as embedded in the calcareous matter are cavities bored by parasitic vegetable organisms, the black dots being spore-cavities. In one of the dactylopores a branched mycelial thread is seen to cross over between the tubular cavities bored in the comosteum.

- Fig. 7. Shows the appearance presented under transmitted light by a thin horizontal section of the comosteum of a species of *Millepora* from Samboangan, Philippines, in which the pores and canal-systems have become filled with opaque matter. The black streaks thus shown represent the ramifications of the canals of the comosarc within the tortuous canals in the substance of the comosteum, and show their anastomoses with the pore cavities.
- Fig. 8. Portion of a fine section of the comosteum, as seen under Hartnach's objective No. 8, eyepiece No. 3.

The canals bored by the parasitic fungus are seen traversing the calcareous matter.

At (a) the fibro-crystalline elements of the hard tissue project in a series of points.

## PLATE XIV.

Various structures occurring in Millepora nodosa,

- Fig. 1. View of a group of zooids in the expanded condition. In the centre is the short gastrozooid, provided with only four tentacles. Grouped around are seen five dactylozooids. A sixth dactylozooid belonging to the group is omitted from the drawing for the sake of clearness.
- Fig. 2. Vertical section of the decalcified living superficial lamina. A gastrozooid and a dactylozooid are shown in the retracted condition. In the gastrozooid one tentacle is omitted for the sake of clearness. The open spaces in the network of the cœnosarc are in the recent condition occupied by the calcareous network. The vessels are in places cut through, and have the pigmented endodermal cells exposed to view.
  - E. Superficial layer of the ectoderm.
  - D Z. Dactylozooid.
  - G S. Gastrozooid.
  - A. One of the spaces occupied by calcareous matter in the recent condition.
  - B. Secondary branch of one of the canals of the coenosarc.
  - O. One of the cut openings into one of the vessels.