

line of lamellae; 13 c, same, natural size; 13 d, transverse section of corallum, natural size; 13 e, vertical section of same.—p. 224.

Fig. 14. *ORBICELLA PATULA*, natural size, polyps not expanded; 14 a, profile of section of cells, showing outline of lamellae; 14 b, enlarged view of the same; 14 c, 14 d, vertical sections, natural size; 14 e, transverse section, natural size.—p. 209.

Fig. 15. *ORBICELLA HYADES*, transverse view of corallum, natural size.—p. 212.

Fig. 16. *ORBICELLA EXCELSA*, transverse view of corallum, natural size.—p. 212.

## PLATE 11.

Fig. 1. *ASTREA SPECIOSA*, part of corallum, natural size; 1 a, profile of cell and ridge, outline of lamellae; 1 b, lamella enlarged; 1 c, transverse section of corallum, natural size; 1 d, vertical section, natural size.—p. 220.

Fig. 2. *ASTREA PANDANUS*, zoophyte, unexpanded, natural size; 2 a, a few cells of corallum, in outline, natural size; 2 b, profile of cell, ridge and lamellae, enlarged; 2 c, vertical section of corallum, natural size; 2 d, transverse section, *ibid.*—p. 222.

Fig. 3. *ASTREA PUTEOLINA*, a few cells of corallum, natural size; 3 a, profile of cells and ridges, and outline of lamellae, natural size; 3 b, vertical section of corallum, natural size.—p. 223.

Fig. 4 a. *ASTREA DIPRACEA*, profile of cell and ridge, and outline of lamellae; 4 b, same, through longer diameter of cell; 4 c, vertical section of corallum, natural size; 4 d, transverse section, natural size.—p. 225.

Fig. 5. *ASTREA FORCATA*, zoophyte unexpanded, natural size; 5 a, profile of cell and ridges, and outline of lamellae; 5 b, same, enlarged; 5 c, vertical section of corallum, natural size; 5 d, transverse section, *ibid.*—p. 226.

Fig. 6. *ASTREA FLEXUOSA*, part of zoophyte, with polyps partly expanded; 6 a, 6 b, tentacles enlarged; 6 c, view of mouth aperture, enlarged; 6 d, profile of cell and ridges and outline of lamellae, natural size; 6 e, vertical section of corallum, natural size.—p. 227.

Fig. 7. *ASTREA FUSCO-VRIDIS*, part of zoophyte, animal unexpanded; 7 a, another variety, enlarged; 7 b, vertical section of corallum, natural size; 7 c, profile of cell and ridge, and outline of lamellae, enlarged.—p. 228.

Fig. 8. *ASTREA VIRENS*, zoophyte, unexpanded; 8 a, portion of corallum, in outline, natural size; 8 b, profile of cell and outline of lamellae, enlarged; 8 c, vertical section of corallum, natural size; 8 d, transverse section, *ibid.*—p. 228.

## PLATE 12.

Fig. 1. *ASTREA ECHINATA*, zoophyte, natural size; 1 a, vertical section of corallum; 1 b, transverse section.—p. 229.

Fig. 2 a. *ASTREA FRAGILIS*, vertical section of cell and ridges, showing outline of lamellae, natural size; 2 b, same enlarged; 2 c, vertical section, natural size; 2 d, transverse section.—p. 230.

Fig. 3 a. *ASTREA MAGNIFICA*, cells of corallum, natural size; 3 b, transverse section; 3 c, vertical section.—p. 231.

Fig. 4. *ASTREA FILICOSA*, cells of a worn corallum, natural size; 4 a, transverse section, natural size; 4 b, vertical section.—p. 232.

Fig. 5 a. *ASTREA VERSIFORA*, vertical section of cell and intervening ridges, showing outline of lamellae; 5 b, transverse section of corallum, natural size.—p. 233.

Fig. 6 a. *ASTREA DENTICULATA*, vertical section of a cell and intervening ridges, showing outline of lamellae, natural size; 6 b, transverse section; 6 c, vertical section.—p. 234.

Fig. 7, 7 a, 7 b, 7 c, 7 d. *ASTREA DEFORMIS* var. ?—p. 236.

Fig. 8 a. *ASTREA RIGIDA*, vertical section of cells and ridges, showing profile of lamellae, natural size; 8 b, half of a cell with a vertical section of corallum beneath; 8 c, size and form of cells; 8 d, transverse section of corallum.—p. 237.

Fig. 9 a. *ASTREA RETICULARIS*, vertical section of cells and intervening ridges or septa, natural size; 9 b, size and form of cells; 9 c, transverse section of corallum, natural size.—p. 237.

Fig. 10. *ASTREA PURPUREA*, zoophyte, natural size, expanded; 10 a, cells of corallum, natural size; 10 b, vertical section, showing profile of lamellae and ridges, enlarged; 10 b', same, natural size; 10 c, vertical section of corallum, enlarged; 10 d, same, natural size; 10 e, transverse section, enlarged four diameters.—p. 239.

Fig. 11. *ASTREA FULCHRA*, zoophyte, natural size; 11 a, polyp enlarged; 11 b, vertical section, showing profile of lamellae and ridges, enlarged; 11 c, same, natural size; 11 d, vertical section, enlarged; 11 e, same, natural size; 11 f, transverse section.—p. 240.

Fig. 12 a. *ASTREA PETROSA*, transverse section of corallum, natural size; 12 b, vertical section, natural size.—p. 238.

Fig. 13 a, 13 b. *ASTREA VARIA*, transverse sections of cells, showing profile of cells and lamellae.—p. 236.

## PLATE 13.

Fig. 1. *ASTREA TENELLA*, part of surface of a worn corallum, enlarged one-sixth; 1 b, vertical section of corallum, natural size.—p. 231.

Fig. 2. *ASTREA FAVISTELLA*, part of surface of corallum, natural size, showing cells; 2 a, 2 b, profile of vertical sections of cells, natural size; 2 c, transverse section of corallum, enlarged; 2 d, vertical section of corallum.—p. 241.

Fig. 3 a. *ASTREA FAVISTELLA?* transverse section of corallum, natural size; 3 b, vertical section of same.—p. 242.

Fig. 4 a. *ASTREA EXIMIA*, profile of vertical section of cells, natural size; 4 b, size and form of cells; 4 c, transverse section of corallum, natural size; 4 d, vertical section, *ditto.*—p. 242.

Fig. 5. *ASTREA SINUOSA*, cells of corallum, natural size; 5 a, profile of vertical section of cells, natural size; 5 b, transverse section of corallum, natural size; 5 c, vertical section, *ditto.*—p. 243.

Fig. 6. *ASTREA PARVISTELLA*, cells of corallum, natural size; 6 a, transverse section of corallum, enlarged; 6 b, same, natural size; 6 c, vertical section of corallum, natural size.—p. 244.

Fig. 7. *ASTREA FAVELUS*, cells of corallum, natural size; 7 a, profile of vertical section of cells, natural size; 7 b, transverse section of corallum, natural size; 7 c, vertical section, *ditto.*—p. 245.

Fig. 8. *ASTREA CERIUM*, transverse and vertical sections, natural size.—p. 245.

Fig. 9 a, 9 b, 9 c. *ASTREA TENNERIFERA*, profiles of vertical sections of cells, natural size; 9 d, transverse section of corallum, natural size.—p. 248.

Fig. 10. *ASTREA ROBUSTA*, cells of corallum, natural size; 10 a, profile of vertical sections of three successive cells; 10 b, similar profile, enlarged; 10 c, transverse section of corallum, natural size; 10 d, vertical section, *ditto.*—p. 248.

Fig. 11 a, 11 b. *ASTREA HELOPORA?* transverse and vertical sections of corallum, natural size.—p. 250.

Fig. 12. *ASTREA INTERSEPTA*, surface of corallum, natural size; 12 a, cells enlarged; 12 b, vertical section of cells, showing profile of lamellae, natural size; 12 c, profile of lamellae, enlarged; 12 d, transverse section of corallum, enlarged; 12 e, vertical section, natural size.—p. 246.

Fig. 13 a. *MONTICULARIA MICROCONA*, part of surface of corallum, enlarged; 13 b, part of surface of zoophyte, enlarged; 13 c, transverse section of corallum, enlarged; 13 d, vertical section, *ditto.*; 13 e,