

magnified. Fig. 4. *Cellepora ramulosa*, nat. size. Fig. 5. A cross section of a branch enlarged. Fig. 6. *Cellepora Skenei*, nat. size. Fig. 7. The same magnified. Fig. 8. A transverse section.

PLATE XXXIII. Fig. 1. *Cellepora cervicornis*, nat. size. Fig. 2. A magnified view of old or mature cells. Fig. 3. The cells from near the edge of the divisions. Fig. 4, 5. Transverse sections of the branches.

PLATE XXXIV. Fig. 1, 2, 3. *Lepralia coccinea*, 1, nat. size; 2, a few of the cells magnified; 3, the cells with their ovarian opercula. Fig. 4. *Lepralia variolosa*. Fig. 5. *Lep. trispinosa*. Fig. 6. *Lep. ciliata*. Fig. 7. *Lep. nitida*. Fig. 8. *Lep. immersa*. Fig. 9. *Flustra tuberculata*. Fig. 10, 11, 12. *Membranipora pilosa*. 10, nat. size; 11, cells of, magnified; 12, cells of variety β .

PLATE XXXV. Fig. 1, 2. *Flustra foliacea*. Fig. 3, 4. *Flustra truncata*.

PLATE XXXVI. Fig. 1, 2. *Flustra carbarea*. Fig. 3, 4. *Fl. avicularis*. Fig. 5, 6. *Fl. Murrayana*. Fig. 7, 8. *Cellularia avicularia*.

PLATE XXXVII. Fig. 1, 2, 3. *Flustra membranacea*, nat. size and magnified. Fig. 4. *Flustra lineata*. Fig. 5. *Fl. carnosa*. Fig. 6, 7. *Farcimia salicornia*.

PLATE XXXVIII. Fig. 1, 2. *Cellularia ciliata*, nat. size and magnified. Fig. 3, 4. *Cell. reptans*. Fig. 5, 6. *Cell. scruposa*.

PLATE XXXIX. *Acamarchis plumosa*, of the natural size and magnified.

PLATE XL. *Eschara foliacea*, reduced one half, with portions magnified to shew the cells.

PLATE XLI. *Alcyonium gelatinosum*. Fig. 1 and 2, specimens of the natural size to shew the variations to which the species is subject in outward form. Fig. 3. The polype removed. This figure was made in the year 1833; and is less accurate than that of Dr Farre's. Fig. 4, 5. *Alcyonium parasiticum*.

PLATE XLII. Fig. 1. *Alcyonium hirsutum*, of the natural size; and Fig. 2, a portion of the surface as seen through a magnifier. Fig. 3, 4. *Alcyonium echinatum*. Fig. 5. *Cliona celata*. Fig. 6. The spicula of the same.

PLATE XLIII. *Cristatella mucudo*, copied from Turpin. Fig. 1. The polype at the period of its birth, magnified. Fig. 2. The same when fully developed: *a*, the transparent margin; *b*, the disk of the polypidom; *c*, the holes whence the polypes protrude; *d*, the neck of the polypes and anus; *e*, the tentacular arms, with the mouth at their base; *f*, the filaments which fringe the tentacula: the arrows mark the direction of the currents of water. Fig. 3. The tentacular filaments very much magnified to show their cilia.

PLATE XLIV. *Alcyonella stagnorum*. Fig. 1. natural size and appearance. Fig. 2. A longitudinal section. Fig. 3. A portion of the surface magnified. Fig. 4. A transverse section. Fig. 5. A front view of the polype. Fig. 6. A back view of the same: copied from Raspail.