

- LXXI. *MÆANDROSPONGIDÆ*, Zittel.
 The very regular dictyonal framework enclosing cubical meshes has perforated nodes of intersection with octahedral edges (*Aulocystis*, F. E. S.), . . . LXXII.
 The nodes of intersection of the dictyonal framework are simple and imperforate, . . . LXXIII.
- LXXII. *Aulocystis*, F. E. S.
 The octahedral edges of the perforated nodes of intersection of the dictyonal framework are formed of simple oblique round buttresses. The parenchyma contains abundant discohexasters in which the terminal rays are as long as the principals, . . . *Aulocystis zittelii*, . . . 359
 CIV.
- The octahedral edges of the perforate nodes of the dictyonal framework are formed of the sometimes repeatedly perforate plates, which extend between the intersecting beams. The principal rays of the parenchymal discohexasters are much shorter than the terminals, . . . *Aulocystis grayi*, . . . 357
 CIV.
- LXXIII. The nodes of intersection of the dictyonal framework are thickened and beset with broad tuberculate warts (*Myliusia*, Gray), . . . LXXIV.
 The nodes of intersection of the dictyonal framework possess no broad tuberculate warts (*Dactylocalyx*, Stutchbury), . . . LXXV.
- LXXIV. *Myliusia*, Gray, with the single species, . . . *Myliusia callocyathus*, . . . 352
 CIII.
- LXXV. *Dactylocalyx*, Stutchbury.
 The body forms a flatly expanded thick-walled cup, which consists of a system of narrow tubes, only 1 to 2 mm. in width. The parenchyma contains, besides other isolated spicules, oxyhexasters, . . . *Dactylocalyx pumiceus*, . . . 346
 The body forms a deep thick-walled goblet, which consists of a system of narrow (only 1 to 2 mm. in width) tubes. No oxyhexasters in the parenchyma, . . . *Dactylocalyx subglobosus*, . . . 347
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- The flat body consists of tubes 3 to 5 mm. in width, . . . *Dactylocalyx patella*, . . . 348
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