

- 8 *b* — Vertical and horizontal sections magnified one-third linear, the first shewing the simple transverse diaphragms, bent down at the circumference, and the open simple vesicular tissue of the outer area; the second shews the outer vesicular area, the central clear space, and the intervening zone of radiating lamellæ, (the two concentric lines connecting the lamellæ in this section are only the deflected edges of two of the transverse diaphragms cut across).
- 9 *CYATHOPHYLLUM PARACIDA* (M<sup>c</sup>Coy). Natural size, from Derbyshire, of a single old stem shewing the usual way in which four young ones spring from within the terminal cup of the parent.
- 10 *DIPHYPHYLLUM LATESEPTATUM* (M<sup>c</sup>Coy). Small portion of mass, natural size, from Corwen.
- 10 *a* — Vertical section magnified three diameters, shewing the three areas, and apparently dichotomous mode of division of the parent-stem, and conical elevation of the transverse diaphragms below the point of fissure; the top of the left-hand branch shews a portion of a terminal cup with the broad, smooth diaphragm forming its bottom.
- 10 *b* — Horizontal section magnified three diameters; the outer vesicular area forming two rows of small connecting plates between the lamellæ at their origin.
- 11 *COLUMNARIA LAXA* (M<sup>c</sup>Coy). Portion of large mass, natural size, from Derbyshire, shewing the loose mode of growth, and the variations of the columns, from round and nearly smooth to prismatic and longitudinally sulcated; the tops, by rough fracture, exhibiting the transverse undulated diaphragms with their crenulated edges.