

Fig. 5—*Stromatopora typica*. Tangential section.

Fig. 6—*Stromatopora constellata*. Tangential section.

Fig. 7—*Stromatopora typica*. Vertical section.

Fig. 8—*Stromatopora constellata*. Vertical section.

Figures 1, 2, 3 and 4 from specimens collected by Mr. Joseph Townsend.

Figures 6 and 8 from specimens from the Cobleskill, lent by Professor J. M. Clarke.

Figures 5 and 7 from a specimen identified by Nicholson in the Wenlock of England and presented by Dr. B. E. Walker.

PLATE V

Fig. 1—*Stromatoporella clora*. Vertical section.

Fig. 2—*Stromatoporella clora minuta*. Tangential section, somewhat diagrammatic, prepared from polished surface to show the connecting arms and the invasion of the pillars by tubules.

Fig. 3—*Stromatoporella clora*. Tangential section through a lamina.

Fig. 4— " " Tangential section passing largely through an interlamellar space.

Fig. 5—*Stromatoporella clora minuta*. Vertical section.

Fig. 6— " " Tangential section.

Fig. 7—*Clathrodictyon ostiolatum*. Tangential section.

Fig. 8— " " Portion of surface. Natural size.

Figures 1-6 from specimens collected by Mr. Joseph Townsend.

Figures 7 and 8 after Nicholson (An. and Mag. Nat. Hist.)

PLATE VI

Fig. 1—*Labeckia durhamensis*. Showing the vertical section partly polished and partly weathered, also the wrinkled concave epitheca, x 4.

Fig. 2—*Labeckia durhamensis*. Tangential section showing the cut ends of the pillars, their hollow centres and the clear crystalline calcite surrounding them.

Fig. 3—*Hermatostroma guelphica*. Tangential section.

Fig. 4— " " Vertical section. The photograph does not show the hollow character of the pillars and horizontal elements.

Fig. 5—*Rosencella glenalgensis*. Portion of surface of a plate showing its ridge-like character and less clearly the ramifications of the fine astrothizal canals.

Fig. 6—*Stromatoporella clora*. Tangential section from polished surface.

Fig. 7—*Stromatoporella clora minuta*. Tangential section from polished surface. On comparing this figure with Plate IV, Fig. 6, it will be observed that the latter figure, being prepared from a thin section, has lost many of the fine connecting arms. On the other hand the present figure has too fine an appearance owing to the photographic reproduction of matter not forming part of the coenosteum. Plate V, Fig. 2, is the mean of these two and although considerably restored and diagrammatic approaches most closely to the real structure of the coenosteum.

Fig. 8—*Clathrodictyon striatellum*. Tangential section.

All figures are produced from un-retouched photographs. Numbers 2, 3, 4 and 8 are from thin sections and numbers 1, 5, 6 and 7 from surfaces.