

*Stromatoporella*. On ordinary inspection the *Stromatoporella* might easily be mistaken for *Stromatopora* and as far as Dawson's description goes might serve as an example of his *S. gallensis*. Nicholson however has stated that the specimen examined by him resembles *S. typica* therefore we must conclude that one of the *Stromatopora* represents the species. The one most closely resembling *S. typica* is much finer in grain than the other and is made the basis for the description here given. Without an opportunity to inspect the type I can not positively state that we are dealing with a true example of the species described by Dawson.

Coenosteum massive, concentric. Neither upper nor under surface observed with certainty. Lamilaminar structure but faintly indicated. Skeletal matter minutely fibrous. Pillars and laminae completely fused. The coenosteal tissue is pierced by numerous, slightly flexuous, tabulate zooidal tubes which are about one-eighth of a millimetre in diameter. The tabulae are numerous and distinctly preserved; as many as ten appearing in the space of one mm. The interspaces between neighbouring tubes are about one and one-half times as wide as the tubes themselves. Astrorhizal systems are well developed and are superimposed, being centred by a continuous wall-less axial canal. The systems average 6 mm. apart.

Vertical sections exhibit the inosculating fibre of the tissue, the zooidal tubes, the cut ends of astrorhizal canals and an occasional vacuity in the skeletal matter which is however fairly dense. (Pl. IV, Fig. 3.)

Tangential sections show the cut ends of zooidal tubes, vacuities in the tissue and the astrorhizal canals. (Pl. IV, Fig. 4.) These various features are typical of true *Stromatopora*; specific differentiation is largely a matter of fineness of grain and the character of the zooidal tubes.

In my opinion the present example more closely resembles *S. concentrica* than *S. typica*. It is certainly not the latter,