but in view of the fact that S. concentrica is said by Nicholson to be confined to the Devonian and not to occur in America I hesitate to place our species under that name. From S. typica the species is easily differentiated by the much coarser character of the tubes and the connecting tissue. In vertical sections six tubes and their interspaces occupy the distance of two min. The same dimensions are given by Nicholson for S. concentrica. In my specimen of S. typica nine or ten tubes occur in the same distance. Although not so apparent on limited sections, a wide view of a vertical surface shows that the tubes of S. typica are much more nearly parallel than in this example. Tangential sections exhibit a closeness and coarseness of fibre much more like S. concentrica than S. typica. In fact the differences of our species from S. concentrica are hard to find, the only point observed being that the tabulae of the zooidal tubes are a little closer together. A comparison of the figures here given of S. typica and S. constellata prove the identity of these forms. As they are not found in the Guelph no deseription is given. (Plate IV, Figs. 5-8.)

If S. gallensis is not considered to be identical with S. concentrica it must be placed very near it and may be regarded as the American type of that species. There can be little doubt that it represents the Guelph development of the Niagaran S. typica. Specimens of S. gallensis are among the rarest of the Guelph Stromatoporoids, but in this museum, and I have no doubt in many others, numerous examples of a species to be described as Stromatoporella elora have been ascribed to S. gallensis.

Dawson's type appears to have been lost. Dr. Whiteaves assures me it is not now in the collection of the Geological Survey and Dr. Adams makes the same statement for the Redpath museum at Montreal. It is very unfortunate that this should be the case, and I must disclaim any responsibility for the identification here given. Dawson's specimen