the level of an interlaminar space (Pl V, Fig. 4) the tissue is less continuous and presents a ring-like appearance. These rings are not proper tube walls but are made up of two or more pillars which are deformed and united into a ring surrounding the zooidal tube. In some cases they are contiguous so that the section appears as series of coalesced circles. Occasionally very delicate lines can be made out connecting the pillars as in *Actinostroma* but in the majority of cases they are united by their own deformation as described above.

It is apparent from this description that we have to deal with a form intermediate between *Stromatopora* and *Actinostroma*. The minute structure of the fibre is distinctly of the character ascribed to the Milleporoid group, while the incomplete fusion of the vertical and horizontal elements as well as some sign of delicate connecting arms points to a relationship with the genus *Actinostroma*. Nicholson's genus *Stromatoporella* approaches nearer to this species than any other, but in this example the zooidal tubes are much more numerous and more closely set than in any other *Stromatoporella* ; in this respect it approaches closer to the true *Stromatopora*.

The bad preservation and the diverse appearance of sections not accurately cut render this species very difficult of description and identification. However after the examination of a number of sections one becomes accustomed to the general aspect and may recognize examples with facility. It is quite possible that this species is *Stromatopora galtensis* of Dawson.

Stromatoporella elora is one of the commonest forms of the Guelph dolomite and may be obtained at any of the well known localities.

STROMATOPORELLA ELORA, *var.* MINUTA, *var. nov.* Plate V, Figs. 2, 5, 6 ; Plate VI, Fig. 7

There are in the University collection a half-dozen of fragments which have caused me a great deal of uncertainty