

such of these as presented the most distinct outlines were photographed on a uniform magnification of ten diameters. A tracing was then made on drawing paper by placing the photographic print and paper before a strong light. It was found that by using a drawing paper of the proper density the outline of the skeleton appeared in greater perfection than in the photographic print itself as the less dense images of foreign particles and refraction lines were obscured. The detail of the drawing was then filled in partly by reference to the original thin section and partly by comparison with a polished surface of the specimen under review. Some of the figures are not continuous, i. e. they do not represent a continuous portion of the section but are made up from observations on different parts of the *same* surface. While these drawings may therefore lack the exactitude which can be obtained by direct photographic reproductions from good material they are infinitely better than the almost useless photographs which might be prepared from the badly preserved Stromatoporoids of the Guelph dolomite.

In the Report of Progress, Geol. Sur. Can., 1863, no mention is made of Stromatoporoids in the chapter on the Guelph formation. On reference to the Index of Reports 1863-1884, it is found that no account is given of the *Stromatoporidae* of the Guelph formation up to that date. The first reference to *Stromatopora* in this formation appears to have been made by Professor Nicholson in the *Annals and Magazine of Natural History*, Series 4, Vol. xii, 1873. A description with two figures is there given of *Stromatopora ostiolata*, Nich. (Pl. II, Figs. 1, 2). In the Report of the Palaeontology of Ontario, 1875, Professor Nicholson gives a lengthy account of *Stromatopora ostiolata* which at that time he was inclined to regard as a sponge. *Stromatopora concentrica*, Goldfuss, is also mentioned, but the author expresses doubt as to the identification of this species.