casional openings. The two figures exhibit a considerable difference in the distance apart of the pillars but this is to be attributed to a more perfect preservation in the one case.

L. minora is distinctly finer than *L. durhamensis* and it is impossible to confuse the two species. The reversed specimens of both species present somewhat the same appearance as to their " pin-hole " character, but the larger size of the pores in the *L. durhamensis* is at once apparent. A normal example of *L. minora* has not been examined ; all the available specimens being reversed. In this state however the species is common and occurs in large masses at Elora, Galt, Durham, Glenroading, etc.

Genus—ROSENELLA, *Nich.*

ROSENELLA GLENELGENSIS, *sp. nov.* Plate II, Fig. 3 ; Plate III, Fig. 4 ; Plate VI, Fig. 5

Coenosteum consisting of a series of flat or undulating plates of considerable thickness enclosing large lenticular interspaces. The plates are separated from each other in a vertical direction by an average interspace of one mm. Their undulations however bring them in contact in a horizontal direction at distances varying from almost nothing to as much as 50 mm. Occasionally also contiguous plates are connected by a single vertical bar or tube. The surface of each layer is minutely ridged and tuberculated and provided with a rich system of astrorhizal canals. Occasional large pores penetrate the laminae. These seem to have no distinct distribution, as in some cases they correspond with the astrorhizal centres and in other cases are quite distinct. The plates vary somewhat in thickness but average about one-quarter to one-fifth of one mm. (Pl. III, Fig. 4.)

Vertical sections (Pl. II, Fig. 3) show the cut edges of the horizontal plates as a series of undulating lines with lenticular masses of matrix between. The upper surface of the plates,