

ORDER—STROMATOPOROIDEA, *Nicholson and Murie*
Section A. (Hydraetinoïd Group)Family—ACTINOSTROMIDAE, *Nich.*Genus—ACTINOSTROMA, *Nich. and Murie*ACTINOSTROMA VULCANI, *sp. nov.* Plate I, Figures 1, 2, 5

Coenosteum massive, known only by fragments, composed of delicate curving horizontal laminae and continuous radial pillars. The laminae occur to the number of seven or eight in the space of one mm. The pillars are slightly stouter but are practically the same distance apart. The species is characterized by a most peculiar structure observed in one specimen only. Growing on what was at one time the surface of the coenosteum is a volcano-like prominence composed of laminae and pillars like the general skeletal matter but provided with a central, distinctly differentiated portion presenting an inverted cone-in-cone structure. A vertical section of this internal pipe shows it to have an almond-shaped outline with a rounded lower termination while the cone-in-cone arrangement of its constituent parts makes a cup-like depression at the top, at once suggesting a volcanic crater. The resemblance to a volcano is further emphasized by the arrangement of the laminae around the "pipe", for they appear exactly like a series of successive flows from a central vent (Pl. I, Fig. 5). This structure is eventually covered by the ordinary growth of the coenosteum. The whole elevation shows a height of ten mm. and a width of fifteen, while the "pipe" is five mm. high and two mm. wide.

Vertical sections of the coenosteum (Pl. I, Fig. 2) show it to be composed of well defined, delicate, horizontal laminae, seven or eight of which appear in the space of one mm. The laminae are connected by vertical pillars which are slightly stouter than the horizontal components but practically the same distance apart, so that the general appearance is that