deep water. In the Silurian, however, we have species which are figured with a double row of alternating, angular under arm plates, an arrangement found in no living species.[1] Such are *Ptilonaster princeps* and *Eugaster logani*. It is plain that simple armed Astrophytons begin as low as the coal; for *Onychaster flexilis*, Meek and Worthen, evidently belongs in this group.

Two French authors[2] have endeavoured to discriminate the separate pieces of genera found in the middle Lias marles. In the absence of a general knowledge of the finer anatomy of the hard parts, their attempt is of the most elementary character, but one which nevertheless deserves great praise, for in everything there must be a beginning, and it is always creditable. They found some marles largely composed of this debris, a most important fact, showing that the Triassic Ophiuridæ lived in herds, as they often do now. There is one mouth shield which with much probability they determine as belonging to *Ophioglypha*. The parts referred to *Ophiothrix* may rather, perhaps, belong to some genus near *Ophiacantha*. It is partly with a view to aid similar researches that I have given several plates of the skeletons of Ophiurans.

[1] Twentieth Report Regents of University of New York on State Cabinet, 1867, pl. ix. figs. 8, 9.

[2] Terquem et Berthelin, Étude microscopique, &c., Mem. Soc. Geol. de France, 2ème Série, vol. x. p. 99, 1875 pl. xviii. figs. 22–25.