the old coral reefs, precisely like related kinds in corals of the present day. The related species now living are free-swimming animals in their young state; the free stage is ended by the animal's coming to rest on the surface

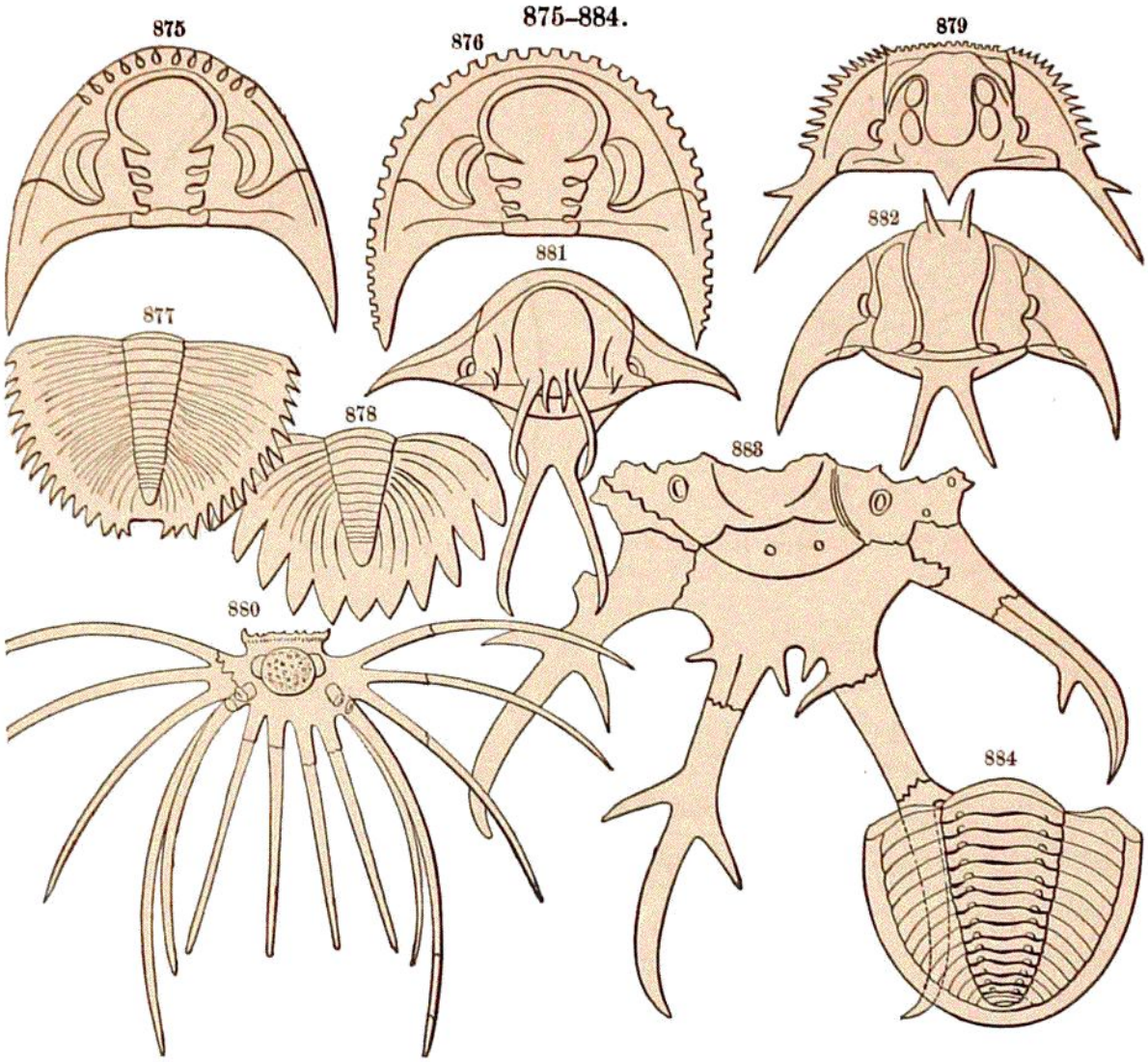

Fig. 875, Head of Dalmanites selenurus; 876, id. D. regalis; 877, pygidium of D. aspectans; 878, id. D. Boothi of the Hamilton beds; 879, head of Acidaspis callicera; 880, portion of the pygidium of Acidaspis Romingeri restored (× ½); 881, "head" of Lichas gryps; 882, id. Lichas hylæus; 883, posterior extremity of pygidium, restored, of Lichas grandis, from the Schoharie grit; 884, pygidium of Proetus crassimarginatus, from the Corniferous limestone. Hall and Clarke.

of a living Coral; and once there, it stays and forms a dwelling cavity lined with shell within the growing Coral, — a case of commensalism, not parasitism, it receiving lodging, not board. Similar Barnacles — *Palæocreusia Devonica* of Hall — were commensals of Devonian Corals, showing that the practice is an ancient one.

7. **Fishes.** — Fishes are the only Vertebrates known. The species discovered in the Corniferous limestone are: (1) Placoderms; (2) Dipnoans, or Lung-fishes; (3) Ganoids; (4) Chimæroids; (5) Selachians, or Elasmobranchs (Sharks). The Placoderms include two species of *Cephalaspis*, — one from Gaspé (Fig. 885), and the other from Campbellton, New Brunswick (Fig. 886,