APPENDIX.

Plate IX. shows the fully developed and sexually mature animals of the second generation from the mouth side, which, in the natural position of Star-fishes (when creeping at the bottom of the sea), in sea-stars (A 6) and sea-urchins (C 6), is below, in sca-lilies $(B \ 6)$ above, and in sea-cucumbers $(D \ 6)$ in front. In the centre we perceive, in all the four Star-fishes, the starshaped, five-pointed opening of the mouth. In sea-stars, from each arm there extend several rows of little sucking feet, from the centre of the under-side of each arm to the end. In sealilies (B 6), each arm is split and feather-like from its base upwards. In sea-urchins (C 6) the five rows of sucking feet are divided by broader fields of spines. In sea-cucumbers, lastly (D 6), on the worm-like body it is sometimes only the five rows of little feet, sometimes only the feathery tentacles surrounding the mouth, from five to fifteen (in this case ten), that are externally visible.

(PLATES X. AND XI. (Between pages 174 and 175, Vol. II.)

Historical Development of the Crab-fish (Crustacea).—The two plates illustrate the development of the different Crustacea from the nauplius, their common primæval form. On Plate XI. six Crustacea, from six different orders, are represented in a fully developed state, whereas on Plate X. the early nauplius stages are given. From the essential agreement between the latter we may, on the ground of the fundamental law of biogeny, with full assurance maintain the derivation of the different Crustacea from a single, common primary form, a long since extinct Nauplius, as was first shown by Fritz Müller in his excellent work "Für Darwin."¹⁶

Plate X. represents the early nauplius stages from the ventral side, so that the three pairs of legs, on the short, three-jointed trunk are distinctly visible. The first of these pairs of legs is simple and unsegmented, whereas the second and third pairs are forked. All three pairs are furnished with stiff bristles, which, through the paddling motion of the legs, serve as an apparatus for swimming. In the centre of the body, the per-