

from the infero-lateral region to the median line. These muscles are composed of a number of very fine, closely arranged plates which give a regularly striated appearance to the part in section. The muscles are most bulky inferiorly. The ventral region presents two prominent curved ridges, and an intermediate hollow. In the former the longitudinal ventral muscles are situated, and they are of considerable size, notably exceeding those in the previous genus. A long hiatus exists between them. The body-cavity was so distended with reproductive elements that the nerve-cords could not be seen distinctly, but they appeared to be in their usual position at the inner border of the muscles.

*Placostegus benthalianus*, n. sp. (Pl. LV. fig. 7; Pl. XXXA. fig. 28).

*Habitat*.—Dredged on the nodule forwarded by Mr. Murray at Station 253 (Mid Pacific), July 14, 1875; lat.  $38^{\circ} 9' N.$ , long.  $156^{\circ} 25' W.$ ; depth, 3125 fathoms; bottom temperature  $35^{\circ} \cdot 1$ , surface temperature  $67^{\circ} \cdot 7$ ; sea-bottom, red clay.

The specimen is quite fragmentary, so that a minute description is unattainable. It is smaller than the foregoing, the widest portion being only a little more than 1 mm.

The branchiæ seem to approach those of *Placostegus ornatus* in forming a somewhat truncated outline in mass, and in possessing a smooth free filament at the tip of each radiole. The operculum constitutes a hollow platter with a yellowish-brown rim, carried upon the summit of a hollow process, shaped like a wine-glass. The peduncle is dilated distally, and forms a kind of shoulder at its junction with the former region.

The bristles of the anterior region are similar to those of the preceding species, presenting a long and very attenuate tip, with a bend where it joins the shaft, and distinct wings.

The anterior hooks (Pl. XXXA. fig. 28) differ from those of the former species in outline. Only four teeth occur above the great fang. The prow beneath the latter is much better developed than in *Placostegus ornatus*, and the concavity in the dorsal outline is deeper.

The tube of this form is pentagonal, the three upper ridges especially being prominent, and armed with a series of blunt teeth, which posteriorly (at the smaller end of the tube) disappear, leaving only slightly rugose ridges. One surface, as in the preceding, has been attached to the nodule.

*Placostegus mörchii*, n. sp. (Pl. LV. fig. 8; Pl. XXXA. figs. 29, 30).

*Habitat*.—Trawled at Station 285 (in the Pacific, mid-way between Sydney and Valparaiso), October 14, 1875; lat.  $32^{\circ} 36' S.$ , long.  $137^{\circ} 43' W.$ ; depth, 2375 fathoms; bottom temperature  $35^{\circ} \cdot 0$ , surface temperature  $65^{\circ} \cdot 0$ ; sea-bottom, red clay.