diverges in many respects from the typical structure of Cirripeds; yet, though perhaps a certain resemblance with some of the parasitic Isopoda is not to be denied, it would be hazardous, contrary to the authority of de Lacaze-Duthiers, to doubt its Cirripedial nature. The points in which it differs from the true Cirripedia are the following :---

1. The shell (carapace, test) has a very remarkable form, which perhaps slightly resembles that of the true parasitic Cirripedia (Sacculina, &c.). It almost entirely envelops the body, leaving only a very small aperture, and consists of a cartilaginous outer and a soft inner layer. Between the two layers the female genital organs and the liver are situated.

2. The extremities are one-branched, and bear a very remarkable relation to the genital organs; the oviducts open at the base of the first pair; the testes are placed in the four following pairs of limbs, and open at the basal joint of each leg with a distinct aperture. The sixth pair is short, and has nothing to do with the genital organs.

3. The structure of the head, with its small antennæ, and the parts of the mouth united to compose the "calotte céphalique." The latter forms a suctorial apparatus, which, however, according to Lacaze-Duthiers, is rudimentary in the adult animal.

4. The absence of the organs of respiration, and the high development of the circulatory apparatus.

5. Also the way in which the adult animal takes its food ; the shell is overgrown by a polype (*Gerardia*), and the *Laura* sucks its food by means of ramifications of the capillaries which are spread through the shell, and which penetrate with countless roots the tissue of the polype.

6. Finally, the structure of the abdomen, which is distinctly segmented, the hindermost segment terminating in two anal appendices (pièces anales).

Lacaze-Duthiers proposes for this curious parasitic Crustacean a distinct group in the sub-order of the abnormal Cirripedia, which he calls the Ascothoracida or Rhizothoracida. No doubt the mutual relations of these abnormal Cirripedia with each other, as well as with the Cirripedia Thoracica, are still very imperfectly known, and new investigations are necessary.

## NOTE ON THE RHIZOCEPHALA.

The naturalists of the Expedition have recorded the occurrence of *Peltogaster* in their Station Books and Journals several times during the cruise, viz. :--Station 158, March 7, 1874; lat. 50° 1' S., long. 123° 4' E.; 1800 fathoms; south of Australia, one specimen in the pouch of *Hymenaster*. On this specimen R. v. Willemoes Suhm has the following note :---- "In the cavity of a *Hymenaster* which came up to-day there was a parasitic Rhizocephalid, showing a large sucker and a flat body filled with eggs. I could not find any anus, and am not