

and hardly distinguishable. Fifteen species (one new one, *Balanus tenuis*, n. sp.).

G. Parietes not permeated by pores. Radii wanting. Basis membranous. Two species (both new, *Balanus corolliformis*, n. sp., and *Balanus hirsutus*, n. sp.).

Section A. Parietes, and basis, and radii permeated by pores.

*Balanus tintinnabulum*, Linn. sp. (Pl. XII. figs. 18, 19).

*Lepas tintinnabulum*, Linnæus, Systema Naturæ, 1767.

*Balanus tintinnabulum*, Darwin, Balanidæ, 1854, p. 194.

According to Darwin this is one of the most difficult and variable species in the whole genus. Darwin, therefore, distinguishes eleven varieties; he does not consider them as so many different species, because by repeated and very close observation he became convinced that the several points of difference by which each variety is characterised are variable.

The species is represented by two different forms in the collection made during the cruise of the Challenger. I will treat of them separately. The first must be considered as variety (1) *communis*. It is represented by two specimens of very great size; in the largest of the two the base measures 63 × 51 mm., the height 50 mm.; the other is only a little smaller. The surface is totally hidden by a thick layer of calcareous substance; this sticks firmly to the surface; where it is taken away, the bluish-purple colour of the original shell appears.

The shape of the shell is tubulo-conical, the orifice is large, rounded, triangular, very irregularly toothed. Surface longitudinally ribbed; ribs rather strong and flexuous; radii transversely plaited in lines, slightly darker-coloured than the parietes. The sheath is not distinctly coloured and very broad. The strength of the shell is so considerable that it deserves the name of massive.

Scuta and terga with prominent lines of growth. The ribs on the surface of the scuta are finely toothed. The basi-tergal corner of the scutum is very much rounded off. Articular ridge broad and much reflexed; it is very slightly hooked. Adductor ridge not quite confluent with the articular ridge, bounding the cavity for the depressor muscle; it is rather prominent, as Darwin says it generally is in var. *coccopoma* and var. *concinuus*. The cavity for the lateral depressor muscle is deep, as, according to Darwin, is only the case in the two varieties just mentioned, and sometimes in var. *communis*. The surface of the valve is slightly externally depressed in the line of the adductor ridge.

The tergum is broad, the longitudinal furrow is closed. Apex only indistinctly