ing them as representatives of a new section of the genus *Balanus*. The absence of radii, the solidity of the parietes, the membranous base, form the characteristic marks of this section, which at present comprises only two species. Both species are from rather deep water; and we need hardly doubt that the structure of the shell affords a very striking instance of the influence of their living at a more considerable depth. Being solid (not permeated by pores), the compartments have by no means the strength of other species of the genus, which, as a rule, have the compartments composed of two laminæ united by longitudinal septa; and, moreover, the strength is diminished by the absence of the radii, which in other species, as modified parts of the side of the compartments, overlap the adjoining compartments. In the present species the compartments adhere so feebly as almost to separate on being manipulated. The largest specimen of *Balanus corolliformis* which was obtained, and which, therefore, has been figured (Pl. VI. figs. 21, 22), showed the compartments quite loose from one another, and only adhering by means of the muscles which were attached to them. For an animal living near the surface, the violent beating of the waves would soon prove fatal if its walls showed the structure of our *Balanus corolliformis*. It was taken at a depth of 150 fathoms, at which depth it may be taken for granted that the water does not experience the direct influence of the beating of the waves. The other species was taken at a depth of no less than 516 fathoms.

Balanus corolliformis has to a certain degree the shape of the corolla of a flower, the orifice of the shell being much wider than its base, and being very deeply toothed. The latter character is due to the obliquity of the summits of the alæ, and to some extent also to the circumstance that the alæ are very broad at a certain distance from the base, and then slope downwards, so as to be extremely narrow at the base of the shell. In the largest specimen of this species which was collected, the width of the shell, which is very considerable at the orifice, grows smaller downward, but remains the same almost from the middle to the base. The growth-ridges run regularly nearly parallel in the upper half of the shell, and much more irregularly in the under half. As in some of the cases in which the radii are not developed, mentioned by Darwin, the sutures of the valves in the lower half of the shell at least are marked only by fissure-like lines. The sheath extends one-third down the shell; the rostrum, which, seen from the exterior, does not show a trace of radii, has, when seen from the interior, the sheath divided into three parts, of which the two lateral portions may be considered as rudimentary radii. The rostrolateral compartment and the extremely narrow carino-lateral compartment show also on the inner side traces of what might be considered a radius.

Colour of the shell dirty white; the limits of the growth-ridges are coloured yellowish by the persistence of the membrane, which is distinctly hairy. The hairs are short, stiff, chitinous spines. At different places the surface is irregularly invested by calcareous masses of a Polyzoon. Of the smaller specimens some are attached to the spines of an