

## Family III. ARGONAUTIDÆ, Cantraine.

*Argonauta*, Linné.*Argonauta argo*, Linné.

1758. *Argonauta argo*, Linn., Syst. Nat., ed. x. p. 708.  
 1817. „ *haustum*, Dillwyn, Descr. Catal., p. 335 (= *forma aurita*).  
 1838. „ *argo*, d'Orb., Céph. acét.; Argonaute, pl. ii. figs. 1, 2.  
 1852. „ *Gruneri*, Dunker, Zeitschr. f. Malak., p. 48 (= *forma mutica*).  
 1861. „ „ Reeve, Conch. Icon., pl. iii. fig. 2*b* (= *forma mutica*).  
 1861. „ *argo*, Reeve, Conch. Icon., pl. iii. fig. 2*c*.  
 1861. „ *haustum*, Reeve, Conch. Icon., pl. ii. (= *forma aurita*).

*Habitat.*—Cape of Good Hope, December 1873. One medium sized specimen.

Atlantic, Cape of Good Hope (d'Orbigny, Tryon); Madeira (Suhm, MS.); Mediterranean (d'Orbigny, Cantraine, Vérany, &c.); east coast of the United States (Lockwood, Verrill); Pacific and Gulf of California (Tryon).

The specimen brought home by the Challenger measures 90 mm. in length, and is of special interest because it shows the process of repair. On the right hand side a large crack has run across the shell from a point about 10 mm. from the inner cusp to about midway along the convex curve; at its commencement this expands into a notch 18 mm. across and 11 mm. deep, while farther back it leads into a hole in the form of an isosceles triangle whose sides are 25 mm. and whose base is 18 mm. It passes also quite across the carina of the shell, and about 15 mm. on to the left side. Besides this crack there are two irregularly oval holes, each about 10 mm. long on the left side, a small one on the right, and two on the carina.

Repair has proceeded to such an extent that the notch is almost filled up, and from a consideration of the lines in the calcareous matter deposited this seems to have taken place while from 3 to 5 mm. were being added to the rest of the margin. The large triangular hole has been quite filled, though the layer covering it is somewhat thinner than the remainder of the shell; and the smaller holes are partially or completely filled by an exceedingly delicate membrane, so thin as to be quite flexible, and bearing a strong superficial resemblance to goldbeaters' skin.

Assuming that the injuries were all inflicted at one time, this would indicate that the most important lesions were most rapidly repaired. Another matter deserving of special notice is that the material which has filled up the marginal notch is quite different from that which has been employed in repairing the holes. The former is perfectly smooth, shining, and porcellanous, and marked with striæ parallel to the margin, while the latter is dull, rough, and irregularly scratched, one or two lines describing elliptic curves; this latter substance, moreover, seems to rise up from the under surface of the shell, for