

Length of the longest finger . . . . .	2	$\frac{11}{7}$
— of the fourth finger . . . . .	1	10
— of the thumb . . . . .	0	3
— of the tibia . . . . .	0	$7\frac{3}{4}$
— of the foot and claws . . . . .	0	$4\frac{1}{4}$
Expanse of wings . . . . .	10	2

2. ON A NEW GENUS OF MYTILIDÆ, AND ON SOME DISTORTED FORMS WHICH OCCUR AMONG BIVALVE SHELLS. BY DR. J. E. GRAY, F.R.S., V.P.Z.S., PRESIDENT OF THE ENTOMOLOGICAL SOCIETY.

(Mollusca, Pl. XLI.)

We have for several years had some specimens of large *Mytilidæ* in the Museum Collection which I have always regarded as the types of a distinct genus, but have deferred from time to time their publication, as I was informed that Dr. Dunker and others were engaged on a monograph of the family. Dr. Dunker having published the species without forming it into a group, I have therefore brought it before the Society, and at the same time make some observations on a peculiarity which the species presents.

STAVELIA, n. g.

Shell inequivalve, inequilateral, subtrigonal; umbo anterior; the front of the ventral edge sinuous, the flatter valve with a broad expanded lobe on the front of the ventral margin, the more convex one with a deep sinuosity to fit the lobe of the other valve. Anterior adductor scar distinct, oblong; posterior roundish; submarginal scar parallel to the edge of the shell, entire. Hinge toothless. Ligament and cartilage linear, marginal, rather short.

Periostraca laminate, with elongated flat linear or tapering processes.

This genus differs from *Mytilus* in the inequality of the valve and the sinuosity of the lower edge, in the entire absence of any small teeth under the umbo, and in the paleaceous periostraca.

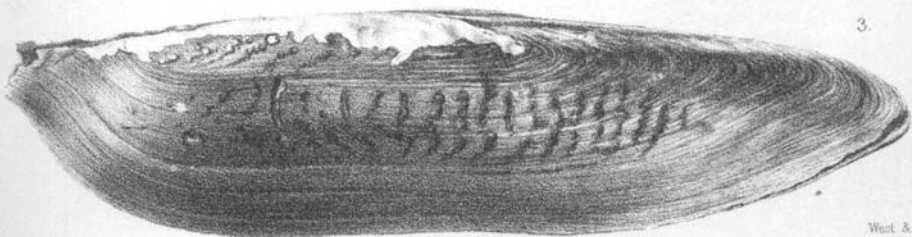
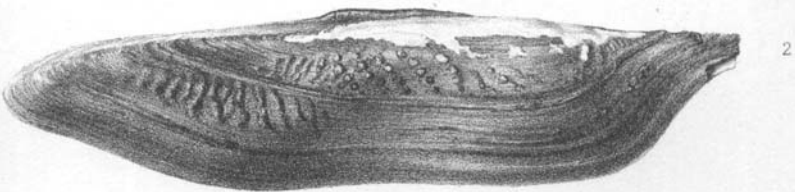
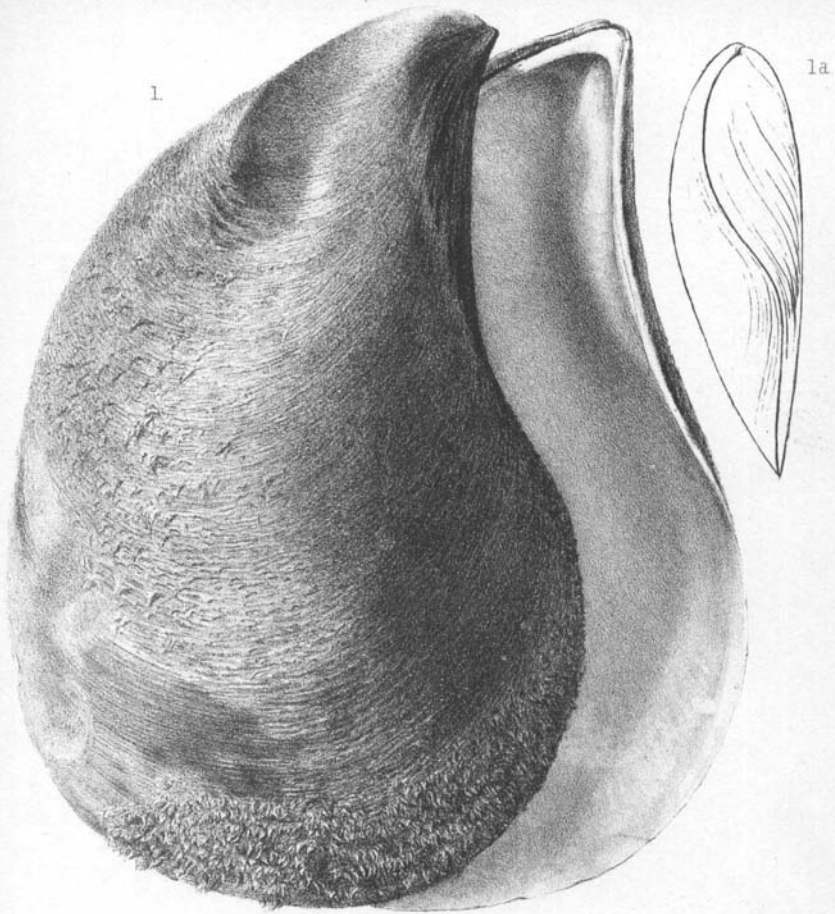
1. STAVELIA TORTA. (Pl. XLI. fig. 1.)

*Mytilus tortus* et *M. horridus*, Dunker, Proc. Zool. Soc. 1856; Reeve, Conch. Icon. t. 3. f. 6 & 9.

*Hab.* North Australia and Philippines.

I cannot discover any permanent character between the two specimens described by Dr. Dunker.

The specimens of this genus in the Museum, and others which have come under my observation, offer a peculiarity which I have hitherto only observed in a very few other bivalve shells, and in none to the extent which is presented in this species.





In my paper "On the Formation and Structure of Shells," in the 'Philosophical Transactions' for 1833 (reprinted by Dr. Johnston, 'Letter on Conchology,' p. 413), I observe,—

"In some very rare instances the shells (bivalves) are also reversed; but the fact is not easily observed except in the unequal-valved kinds. There were formerly in the Tankerville collection two specimens of *Lucina Childreni*, in one of which the right valve was a dextral shell, in opposition to the general structure. These specimens are now in the British Museum Collection."

The four specimens of this shell which I have under my eye present the same anomaly as the two specimens of *Lucina Childreni* above referred to, that is to say, two of them have the left valve the flattest and furnished with the large lobe on the front of the ventral margin, and in the other two it is the right valve which has this form and development; and I cannot observe any other peculiarity between the specimens than this indifference between the development of the sides of the animal. So that, as a *Lucina Childreni*, it is impossible to determine which is the normal form of the species. A somewhat similar indifference as to the direction of the shell is to be observed in some land univalve shells, as *Bulimus aureus*, where the shell appears to be indifferently dextral and sinistral; but in the genus *Stavelia* it appears more extraordinary on account of the great difference of the form of the two valves.

We have just received from China a large species of *Muteladae* (Pl. XLI. figs. 2, 3), allied to *Unio Grayii* of Lea, which I do not name, as Mr. Cuming informs me that Mr. Isaac Lea is describing and figuring it in Philadelphia\*, which offers a curious peculiarity.

These shells have the hinder extremity twisted up on one side somewhat like *Arca tortuosa*, but not so regularly; and unlike that species, the flexure is not always in the same direction: some have the bend towards the right, and the others towards the left of the animal.

I may observe, that, as far as I have been able to examine, the side seems a matter of indifference, for as many of the specimens are bent to the one side as the other.

It is to be observed that in *Arca tortuosa* and *A. semitorta* the hinge-line is always straight, and it is only the basal line which is bent to one side, the valves being slightly unequal, and in fact the shell is not distorted; while in the *Hyria* under consideration the upper edge of the shell is bent as well as the lower one, and the shell is truly altered in form by some external circumstance.

The shells appear as if they had been softened and suddenly twisted on one side. It has been suggested that this change in the form may be produced by the position which the shell occupies in the mud or under the stones near which it lives; but it is to be observed that *Uniones* generally live sunk in the mud, and not lying on one side, and that, like shells which live in an erect position, they have equal valves, while those that live lying on their side almost always have unequal ones; and if the form depended on this circumstance,

\* *Triquetra lanceolata* seu *contorta*, Lea.

as the animal must sometimes move and must be sometimes turned over, we ought to find some specimens with the flexure partly on one side and partly on the other, but no such specimens have occurred to me.

I am inclined to believe that it arises from some peculiar predilection of the animal itself, by which it probably more easily obtains its food in the peculiar situation in which it resides.

These shells were sent to England from China by one of Mr. Fortune's collectors. They were accompanied by some specimens of reptiles and insects, on which the Chinese collectors had been exercising their ingenuity in hopes of adding to their value. Thus there was a stuffed specimen of a Night Lizard (*Gecko Reevesii*) which had a square tuft of hair from some mammal stuck on the back of its neck.

A Snake, which had the claw of a mammal surrounded with fur inserted on each side of its neck just behind the head, so as to make it appear as if it had rudimentary feet armed with large claws.

Several of the Coleopterous insects, especially the larger *Cerambyces*, were painted, so as to give them quite a different appearance from the usual and natural colour of the species.

I may add that the work was so coarsely executed as to be discovered on the most cursory examination of the specimens, and could only have been intended to deceive the most ignorant collectors.

### 3. OBSERVATIONS ON THE GENUS *NERITA* AND ITS OPERCULUM. BY DR. J. E. GRAY, F.R.S., V.P.Z.S., PRES. ENT. SOC., ETC.

The distinction of the species of this genus is rather difficult; therefore whatever assists in dividing the species into smaller groups is of use, as limiting the number of species between which any doubt can be entertained.

Considerable confidence has therefore been placed in the form of the surface of the inner lip, which in some species is smooth, in others tubercular or ridged, or both ridged and tubercular; but in examining a large series of specimens from the same locality, though the character is generally permanent, the tubercles or ridges vary considerably in number and size, and are sometimes almost entirely wanting. It is to be observed that in many of the species which have this part tubercular, the tubercles are more distinct and crowded in the younger, and especially the youngest, than in the older, or what is usually called the more perfectly developed state of the species. In other genera such characters are generally more developed in the shells formed in the most perfect state of the animal. Mr. Adams has formed subgenera on the surface of the inner lip.

My studies on Mollusca have proved to me that few parts offer