

Mytili, &c. as to be distinguished by the name of the *muscle-band*. It will be seen by the following list, extracted from Mr. Farey's Index to Sowerby's Mineral Conchology, that Testacea are also found in some of the other beds.

## CHAMBERED UNIVALVES.

	<i>Stratum in which found.</i>
<i>Ammonites Listeri.</i> (p. 132. Sowerby's Brit. Min. T. 435)	3d. Shale.
<i>Ammonites Walcottii.</i> T. 106.	Argillaceous ironstone, Coalbrook D.
<i>Orthocera Steinhaueri.</i> T. 80. fig. 4.	3d. Shale.

## BIVALVES.

<i>Terebratula crumena.</i> T. 83. fig. 2. 3.	1st. Shale.
<i>Lingula Mytiloides.</i> T. 19. fig. 1. 2.	9th. Shale.
<i>Mytilus crassus.</i> Brit. Min. T. 386.	Ibid.
<i>Unio acutus.</i> T. 33. fig. 5. 6. 7.	Ibid.
<i>U. uniformis.</i> T. 33. fig. 4.	Ibid.
<i>U. subconstrictus.</i> T. 33. fig. 1. 2. 3.	12th. Shale.

The localities given are all in Derbyshire, and the beds are numbered in an ascending order.

A most important question with regard to the inferences to be deduced from these shells, as affecting our conclusions concerning the circumstances under which the coal-deposits were formed, here presents itself;—do they belong to the marine or fluviatile class?

There can be no doubt that the *Ammonites*, *Orthocera*, and *Terebratula* are marine; but on the other hand the *Unios* have been considered as fluviatile, and the *Mytilus crassus* as belonging perhaps to the fluviatile genus *Anodonta*. We are greatly inclined, however, to hesitate in admitting these representations. It is indeed well known to conchologists that the genus *Unio* was instituted in order to separate the fluviatile from the marine muscles; but it must be equally known to the students of fossil conchology that the form of hinge, assumed as its distinguishing character, belongs to several species found in a fossil state, under circumstances that preclude the suspicion of their being other than marine: thus shells called, on account of their hinge, *Unio*, are found in many of the oolites, the lias, &c. (see the lists of those formations); these occur with shells undoubtedly marine, and are too numerous, and too constantly attendant on the strata, to be considered as fluviatile shells accidentally introduced. Now some of the so-called *Unios* which occur in the oolitic series, are closely allied to those of the