

3. *Siliquaria*, Bruguière, 1792.*Siliquaria* (*Tenagodus*) *bernardii*, Mörch.

Tenagodus bernardii, Mörch, Journ. de conch., 1860, vol. viii. p. 368, and 1865, vol. xiii. p. 23, pl. iv. fig. 3.

Siliquaria bernardii, Reeve, Conch. Icon., vol. xx. pl. iv. fig. 9.

May or April 1873. North Atlantic. Deep water.

Habitat.—Senegal (Reeve).

Family TURRITELLIDÆ, Gray, 1857.

Genus *Turritella*, Lam., 1799.

The genus *Turritella* is a group well defined, as regards the shell, the animal, and the operculum; nor is it unmanageably large. There is therefore no *primâ facie* reason for breaking it up as Gray has done; and his destructive process has not justified itself in the characters of the genera he proposed, which are neither strongly marked nor constant. The consequence is that the lists of species arranged under *Turritella* (with subgen. *Haustator*), *Torcula*, and *Zaria* are arbitrary in the extreme; and these divisions only cause confusion.

There are two remarkable features of *Turritella* which do not seem to have been noticed. The first is the system of microscopic spirals which covers the entire shell, and which I have found on every even fairly preserved specimen which I have examined. The second is the presence of an epidermis. This is very distinctly recognisable in *Turritella carlottæ* and in *Turritella austrina*, and somewhat doubtfully in *Turritella admirabilis*. It is filmy, calcareous, and in drying seems to contract, so as to rise off the surface of the shell in the furrows, remaining attached only to the tops of the spirals and in the suture. It also splits in the lines of growth. All this renders it of course very caducous; and, as Mr E. A. Smith remarks, "the fact of all *Turritellas* appearing to be devoid of an epidermis is quite comprehensible, seeing how excessively thin it is in this instance" (*i.e.*, of *Turritella carlottæ*, which I had sent to him for examination). Hardly sufficient importance seems generally given to the sinuation of the outer lip, which is a feature quite as distinctly marked as in *Pleurotoma*.

Species.

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| 1. <i>Turritella bicingulata</i> , Lam. | 10. <i>Turritella austrina</i> , Wats. |
| 2. <i>Turritella cingulifera</i> , Sow. | 11. <i>Turritella deliciosa</i> , Wats. |
| 3. <i>Turritella exoleta</i> (Linne). | 12. <i>Turritella admirabilis</i> , Wats. |
| 4. <i>Turritella fascialis</i> , Menke. | 13. <i>Turritella lamellosa</i> , Wats. |
| 5. <i>Turritella fastigiata</i> , Adams and Reeve. | 14. <i>Turritella runcinata</i> , Wats. |
| 6. <i>Turritella knysnâensis</i> , Krauss. | 15. <i>Turritella accisa</i> , Wats. |
| 7. <i>Turritella rosea</i> , Quoy and Gaimard. | 16. <i>Turritella carlottæ</i> , Wats. |
| 8. <i>Turritella sinuata</i> , Reeve. | 17. <i>Turritella philippensis</i> , Wats. |
| 9. <i>Turritella cordisimei</i> , Wats. | 18. <i>Turritella</i> (<i>Eglisia</i>) <i>tricarinata</i> , Adams and Reeve. |