

This article was downloaded by: [130.132.123.28]

On: 05 January 2015, At: 10:32

Publisher: Taylor & Francis

Informa Ltd Registered in England and Wales Registered Number:  
1072954 Registered office: Mortimer House, 37-41 Mortimer Street,  
London W1T 3JH, UK



## Annals and Magazine of Natural History: Series 7

Publication details, including instructions  
for authors and subscription information:

<http://www.tandfonline.com/loi/tnah13>

### XXXVI.—Brachiopod nomenclature: *Seminula*, &c.

S.S. Buckman F.G.S.

Published online: 29 Sep 2009.

To cite this article: S.S. Buckman F.G.S. (1907) XXXVI.—Brachiopod  
nomenclature: *Seminula*, &c., *Annals and Magazine of Natural History*:  
Series 7, 20:117, 223-226, DOI: [10.1080/00222930709487330](https://doi.org/10.1080/00222930709487330)

To link to this article: <http://dx.doi.org/10.1080/00222930709487330>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever

caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

XXXVI.—*Brachiopod Nomenclature: Seminula, &c.*

By S. S. BUCKMAN, F.G.S.

IN this Magazine (vol. xviii. 1906, p. 324) I put forward certain views regarding the genus *Seminula*. In the same Magazine (vol. xix. 1907, p. 194) Dr. Vaughan contested my conclusions. I have also been favoured with certain verbal criticisms concerning them.

The gist of the verbal criticisms may be given first. They are to this effect—that *Terebratula pentaëdra*, Phillips, ought not to be taken as the type of *Seminula*: that M'Coy, in using a trivial name as a generic term, indicated exactly the type of his genus: that, therefore, *T. seminula* is the type of *Seminula*: that M'Coy himself subsequently confirmed this, as Dr. Vaughan points out. To which I may add that, if the type was considered doubtful before, then M'Coy becomes the first one to select a type to his genus; and that therefore subsequent authors are barred from selecting outside his limits.

The difficulty in this case is that M'Coy himself, when he made this selection, confused as *Seminula seminula* specimens of *Dielasma*; but we have it on Davidson's authority (Carb. Mon. p. 16) that the original of *Seminula pisum*, as M'Coy called Phillips's *Terebratula seminula*, is a *Rhynchonella* [*Camarophoria*]. As that is what M'Coy originally had in his hand in naming his species and genus, then if the views prevail that M'Coy's selection of a trivial name for a generic is a better indication of his type than his giving a figure, the type of *Seminula*, M'Coy, will be *T. pisum* = *Ter. seminula*. The result will be the same as in my previous paper—that *Seminula* is a genus akin to *Camarophoria*.

Now as to Dr. Vaughan's observations on *Ter. pentaëdra*. He says that the type of this species is in the British Museum; but I had come to the conclusion that this was not the type. This alleged type Dr. Vaughan says is conspecific with *S. ambiguus*: I find so many differences that I cannot regard it as congeneric. The most important point is the contour of the beak-region. In *S. ambiguus* the dorsal umbo is not prominent, and on each side of it the two valves join flush: it has a thorough *Terebratuloid* contour. In the "*T. pentaëdra*" the beak-region has what may be called a spiriferoid contour: the umbo is very prominent and the two valves join to make a flange each side of it, features which are seen in *Spiriferids*. These same features I find in the specimens accompanying the alleged *T. pentaëdra*:

eight of these Dr. Vaughan admits are fringed Athyrids—and I agree. I claim, however, that the alleged *T. pentaëdra* is also a fringed Athyrid in imperfect preservation; and Dr. Vaughan's statement (p. 196) that the remaining specimen in the series, which he says "approaches closely to the [alleged] type," does exhibit glabristriation supports this view. My contention is that these two specimens supplement one another; that they belong to a series of globose fringed Athyrids not yet generically distinguished; that they are allied, as the characters of their beak-regions show, to the *glabristria-Roysii* forms; and that they are generically separable from *S. ambiguus* by their beak-region characters. I have examined many specimens of *S. ambiguus*, some of which Dr. Vaughan kindly sent me; and the terebratuloid contour of the beak-region is very distinctive.

#### *Composita.*

The terebratuloid appearance of *S. ambiguus* struck Sowerby (Min. Conch. iv. p. 105), and the combination of *Terebratula* and *Spirifer* characters in the shell caused him to give a hint about constructing a new genus for it. Brown took the hint, and emphasized the composite character in his name. Dr. Vaughan says (p. 197) that Brown's figures represent *Spirifer glaber*: he gives as reasons the large size, the shape, and other characters. Brown's figures, however, are exactly the same size and shape as the larger of the syntypes figured in Sowerby's plate: in fact, Brown's figures are obviously made out of the details given by the four figures of Sowerby—the size and shape are taken from the larger figures, and the characters of the smaller figures have been enlarged to fit. Brown's fig. 4 (Foss. Conch. pl. liv.\*) is obviously based on a tracing of the middle figure of Sowerby's plate: then the valve has been depicted from the outside—the details, even to a bit of coil seen through a break, being taken from the N.E. fig. of Sowerby's plate (Min. Conch. iv. pl. 376).

It is hardly necessary to pursue any further the idea that Brown figured *S. glaber* in this case; but in his pl. li. it may be seen how differently he did represent it.

#### *Type Specimens.*

Scepticism with regard to the identity of alleged type specimens is necessary, as I have shown before †. A case in point now concerns a Carboniferous species. In the

† Ann. & Mag. Nat. Hist. (7) vol. xiv. p. 392 (1904).

Sowerby Collection (British Museum, Natural History) under No. 43464 are four specimens—one in one box, three in another. The one alone is said to be the figured specimen of *Anomites crumena*, Martin (Petrif. Derb. pl. xxxvi. fig. 4); but Martin's figure is coloured light ochre, while this is a blackish-grey fossil of much smaller size and with less marked costæ. In the pedicle-valve of this blackish specimen I cannot find any mesial septum. It has the appearance of a Lower Lias *Rhynchonella*, and it is possibly the example mentioned by Sowerby as from Pickeridge (Min. Conch. i. p. 190).

Of the three specimens in a box, one is claimed as the original of the example of *T. crumena* figured by Sowerby in fig. 3 of pl. 83. This and another specimen in the box may both have supplied details of what is perhaps a composite figure—what Schuchert calls a synthetograph\*. But these three specimens are not from Mountain Limestone as claimed: they are from Middle Lias Marlstone and are the well-known *Rhynchonella northamptonensis*, Walker. Davidson's Ool. & Lias. Brach., Suppl. pl. xxix. fig. 8, represents them exactly.

#### The *T.-globata* series.

The Inferior-Oolite and Fuller's-Earth species, which hitherto have been designated by the above term, form a remarkable group; but their identification with *Terebratula globata* is erroneous. It is necessary to revise.

#### *Terebratula globata*, J. de C. Sowerby.

1823. Min. Conch. pl. 436. fig. 1.

An examination of the types of the species shows that the identification usually made, on the lines of the specimen figured as *T. globata* by Davidson in Ool. & Lias. Brach., Suppl. pl. xvii. 3, is quite incorrect. Sowerby's species is a very globose, almost uniplicate, barely biplicate shell, not at all well depicted by Davidson, Ool. Brach. pl. xiii. 2, 3. Sowerby's species is the shell which the late J. F. Walker has for years distinguished and distributed by the MS. name of a village near Frome: that will be a guide to its identification in many cases.

I suspect that Dav. Suppl. pl. xvii. 5 is really *T. globata* and not *T. bullata*. These two species are remarkably alike: they are isochronous homœomorphs—members of two

\* "Catalogue of Type Specimens," Bull. U.S. Nat. Mus. vol. liii. p. 15 (1905).

families. *T. globata* has much the appearance of my *T. withingtonensis* \*, but is much more tumid. It has the same peculiarly truncate beak.

This identification of *T. globata* leads to the following change of name :—

*Terebratula nunneyensis*, nom. nov.

1878. *T. globata*, Dav. (non Sow.) Ool. & Lias. Brach., Suppl. pl. xvii. 3.

Much more plicate, but much less tumid than *T. globata*. Common in the Fuller's Earth.

Various Cotteswold Inferior Oolite *Terebratulæ* were identified by Davidson with *T. globata*; but of late years it has generally been recognized that they themselves require to be separated as well as parted from *T. globata* = *T. nunneyensis*. They and *T. nunneyensis* belong to the same group; but the true *T. globata* belongs to quite a different series—that of *T. spheroidalis*.

*Terebratula cotteswoldensis*, nom. nov.

1878. *T. globata*, var., Davidson (non Sow.), Suppl. pl. xvii. 1.

Like *T. intermedia*, Sow., but more plicate and much more tumid. Common in *Clypeus*-grit of the Cotteswolds.

*Terebratula cheltensis*, nom. nov.

1878. *T. globata*, Davidson (non Sow.), Suppl. pl. xvii. 2 (type); 1851, pl. xiii. fig. 7.

Oppel (Juraf. p. 497) notes how Davidson's pl. xiii. 7 differs from his *T. Fleischeri*. The other figure cannot represent one of Oppel's types, for he does not mention Cheltenham in his list of localities, and *T. Fleischeri* belongs to the Cornbrash.

Common in the *Clypeus*-grit of the Cotteswolds.

*T. birdlipensis*, Walker, of which Dav. Suppl. pl. xvii. 18, may be taken as type, and *T. tumida*, Dav., mentioned in Suppl. p. 149 as *T. globata* var. *tumida*, are two more forms of what used to be called the *globata*-series. Presumably the specimens depicted in Ool. Brach. pl. xiii. figs. 5, 6, are what Davidson intended as *T. tumida*: Leckhampton and Cheltenham are really terms for the same locality.

\* Proc. Cotteswold Club, xiii. p. 246 (1901).