Annals and Magazine of Natural History: Series 7

Publication details, including instructions for authors and subscription information:

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

The Echinoid Name Discoidea Subucula

F. A. Bather ^a

^a Brit. Mus. (Nat. Hist.)

Published online: 01 Dec 2009.

To cite this article: F. A. Bather (1905) The Echinoid Name Discoidea Subucula, Annals and Magazine of Natural History: Series 7, 15:85, 145-148, DOI: [10.1080/03745480509443644](https://doi.org/10.1080/03745480509443644)

To link to this article: <http://dx.doi.org/10.1080/03745480509443644>

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>

bones, the Microchæridæ do not belong to the Insectivora but to the Lemurs; *Hyrcotherium* was not Tapir-like, and *Ornithostoma* was not a Crocodile.

We note, as in former volumes, too many instances of loose writing, such as "The land Carnivores can be sorted out on their hind toes"

The long lists of names of fossil species serve to fill out the book, but it is doubtful whether they fulfil any other useful end whatever.

MISCELLANEOUS.

The Echinoid Name Discoides subucula.

By F. A. BATHER, Brit. Mus. (Nat. Hist.).

A FRIENDLY criticism of the labels attached to specimens of this Cretaceous Echinoid in the Geological Department of the British Museum has caused me to look the matter up. There is nothing very novel in the conclusions to which I have been led; indeed the tangle was almost entirely unravelled by Mr. J. Lambert twelve years ago *. But there are four reasons for reopening the question: first, Mr. Lambert's views appear to have passed unnoticed by British authors, in spite of the 'Zoological Record'; secondly, his conclusions are vitiated in the eyes of most zoologists by his acceptance of the pre-Linnean and unbinominal writer Klein; thirdly, a further erroneous alteration of the nomenclature recently appeared in a book for which I was largely responsible; and, lastly, after lying *perdu* for just a century, another use of the name *Discoides* claims attention. It may therefore be well to defend the name at the head of this note.

The name *Discoides* was invented by Klein † for a genus of his section *Fibula*, he saying in explanation:—"Discoidem appellamus mutuo nomino a figura *Disci* veterum (ff) qui cum vaso ligneo

"(ff) *Lucerna prægrandis* &c. cœnarumque reliquiis *discus* &c., Apul. 2, Miles, p. 125."

tornato convexo-concavo, quo nos reliquias ex mensa reponimus, comparari potest. *Tischkorb*, *Tellerschussel*." The sole species mentioned under this name was called by him *Discoides subuculus*.

Several of Klein's names were legitimized in 1778 by Leske in

* "Recherches sur les Échinides de l'Aptien de Grandpré," Bull. Soc. Géol. France, (3) xx. p. 77 *et seq.*; Nov. 1892. See further, Lambert, "Étude . . . Échinides crétacés dans l'Yonne," Bull. Soc. Sci. Yonne, xlviii. pp. 68, 69; 1891.

† Nat. Disp. Echinodermatum, p. 26; 1734.

his 'Additamenta ad . . . Klein &c.'; but the name *Discoidea* was not so endorsed. On the contrary, Leske threw *Conulus* and *Discoidea*, Klein's two "genera" of *Fibula*, into a single genus, for which he proposed the name *Echinites* *. The sixth species of this was *Echinites subuculus* Leske ex Klein.

The first writer to resuscitate *Discoidea* appears to have been James Parkinson, who in vol. iii. of 'Organic Remains' (1811) gave a good account of fossil Echinoids, based upon, but not blindly following, that of Leske. On p. 20 he says, "The second genus of this section is *Discoidea*, the only species of which is *subuculus*."

Parkinson has been strangely overlooked, and most writers have taken J. E. Gray† as the authority for the genus, and have supposed themselves to be following him in spelling the name "*Discoidea*." In Gray's paper, however, the spelling is "*Discoidea*," which may be a misprint for *Discoidea*, or, as Mr. Alexander Agassiz has supposed, for *Discoidea*, since anything is possible in a paper so full of misprints. As typo, Gray quoted *Galerites rotularis*, Lamarck's name for *Discoidea subuculus*. The spelling *Discoidea* seems to have been first used in 1836 by L. Agassiz‡, who, under the heading "*Discoidea macropyga* Agass." (p. 137), wrote:—"M. Gray a judicieusement distingué de nouveau les Galérites à ambulacres étroits, que Klein désignait sous le nom de *Conulus*, et dont le *G. vulgaris* Lam. est le type, de celles dont les aires ambulacraires sont sensiblement plus larges, et que Klein appelait *Discoidea* [sic], pour en faire un genre dont le *G. rotularis* Lam. est le type." In his systematic summary of slightly later date (p. 186), under "Les Clypeâtres," he placed [Genus] "4. *Discoidea* Kl. et Gr. (*Conulus* Leske.—*Echinodiscites* V. Ph.—*Galerites* Lam.)"; then follows the diagnosis and list of species, including "*D. rotularis* Kl. [sic] (*Galerites rotul.* Lam.)." Therefore those who, for good or bad reason, prefer the form "*Discoidea*," should write "*Discoidea* Agassiz (emend. *Discoidea* Gray, err. typ.)."

But *Discoidea* Parkinson could be rejected only if the name were preoccupied for some other genus. This proves to be the case. L. Agassiz, in his 'Nomenclator,' under Mollusca, quoted "*Discoidea*, Ren., = *Pleurobranchus*," giving no reference. Writers on

* *Op. cit.* p. 171 of original edition, p. 107 of reissue in same year. In Leske's synopsis of his own species and genera, on p. xviii, this is introduced as "Genus III. *Conulus* Klein. *Echinites* mihi." This and the fact that *Echinites* had already been used by Gesner ('Tract. phys. de Petrif.' p. 34; 1758) warrant the adoption of *Conulus*. The genotype is *Conulus*, vel *Echinites*, *albo-galerus* Leske ex Klein; but this is congeneric with *Echinites vulgaris*, the genotype of *Galerites* Lamarck ('Anim. sans Vertèbres,' p. 346; 1801), which therefore is a synonym of *Conulus*. *Echinocoelus* A. d'Orbigny ex Breynius, is another synonym.

† "An Attempt to divide the Echinida &c." Ann. Philos. xxvi. p. 429; Dec. 1825. Many writers quote "Gray, 1834," but no such paper can be found; probably they are misled by the words "de nouveau," in the paper by Agassiz quoted below.

‡ Mém. Soc. Neuchâtel, i. pp. 137 & 186.

Mollusca seem to have ignored this, with the exception of Hermannsen †, who has this entry: "*Discoïdes* Renieri (? 1807. Tavol. classif.* [*=not seen]) teste Agass. Nom. . . . = *Pleurobranchus* Cuvier."

After much trouble on the part of many friends, I have at last received, through the most kind exertions of Professor Danto Pantanelli of Modena, a clear and almost complete account of the work referred to. The author's name was Stefano Andrea Renier, of Chioggia. The title of the pamphlet in question is 'Tavola alfabetica | delle conchiglie adriatiche.' The copy in the library of Padua University—the only copy that could be seen—has lost the full titlepage; according to Carus and Engelmann (Bibliogr. Zool. p. 831) it continued "nominato dietro il sistema di Linneo, edizione di Gmelin. s.l. 1788." Professor Pantanelli, however, asserts that the date is indubitably 1804. The date 1807, given by Hermannsen, refers to another pamphlet, No. 1 in Agassiz and Strickland's Bibliography, while the date 1788 may be due to a confusion with No. 5 in that Bibliography. For the present discussion it is enough to admit that any possible date is anterior to 1811.

The book is a folio and comprises two sections: Part I. pp. v–xiii, entitled "Molluschi cioè Lamellibranchi e Gasteropodi compresi quelli terrestri"; Part II. pp. xv–xxvi, "Prospetto dello classe dei vermi ossia Molluschi—Vermi intestinali—Polipi." At the end are eight large systematic tables, preceded by a titlepage. This copy may possibly be incomplete so far as the number of tables is concerned.

The name *Discoïdes* is found only in Part II., and occurs first in line 5 on p. xvi, being the ninth in a list of genera of Mollusca, thus:—

"IX Discoïde *Discoïdes* Ren. Discoïde *Discoïde* barcolante
D. natans D. Branlant Renier."

At the foot of the page are various footnotes; of these (c) gives a description of the genus and (d) an account of the locomotion of the species and of its chief variations. The author promises a more complete description of the species, with anatomical details and a figure, in a futuro "Saggio"; but this he never published. The descriptions here given are, however, enough to justify the name *Discoïdes*. Whether that name is a synonym of *Pleurobranchus*, established by Cuvier about the same time, must be left to the malacologists to determine.

The Echinoid genus therefore cannot bear the name *Discoïdes* Parkinson 1811, but must accept the modification *Discoïdea*. The American school of purists would enforce the validity of Gray's misprint, while a contrary school would reject both *Discoïdea* and *Discoidea* because of their common etymology with *Discoïdes*. The latter view, which I do not admit, might lead to the acceptance of one of the names next to be considered.

Gradually other species were described as belonging to the genus,

† *Indicis generum malacoz. &c.*, i. p. 394; 1846.

and in 1883 Pomel, perhaps following a suggestion by Desor*, thought it necessary to separate these from the true *Discoidea* (*D. subuculus*) as a subgenus *Pithodia*, of which, if it were accepted, the type would be *D. cylindrica* †.

Ignoring this action by Pomel, P. Martin Duncan, on p. 139 of his "Revision of the Echinoidea" ‡, proposed a similar subdivision of the genus on very similar grounds, and erected a subgenus *Echinites*, of which the unique representative was *D. subuculus*. The name, as we have seen, was doubly preoccupied, indeed trebly, for Müller and Troschel had also used it for an Asteroid. The subdivision had been anticipated by Pomel. And Duncan's method of subdivision was impossible, since *D. subuculus* is the genotype of *Discoidea*.

Prof. J. W. Gregory, however, while properly rejecting the name *Echinites*, has gone further, and not merely proposed a new name, *Protocyamus*, "to indicate the affinity of this Echinoid with the *Echinocyamus* series," but has raised the form to the dignity of a genus §.

The name *Protocyamus* cannot stand, and it is very doubtful whether any subdivision is required. Gregory made no attempt to rebut the arguments of Lambert, who (*op. cit.* 1892) pointed out that the chief diagnostic character used by both Pomel and Duncan, namely the distribution of the hydropores on the genital plates, was one that, in some genera at any rate, varied among individuals of a single species.

So far, then, the conclusion is that all the species should be left in one genus under the name *Discoidea* Agassiz.

As for the trivial name *subuculus*, the question has been raised whether it should not be *subucula*. Klein, Leske, and, indeed, most authors have written *subuculus*. Klein explains this as "*Kamisol-Knopff*" (Anglico "shirt-button"), which, however, is not a translation of *subuculus*, but includes the word *Fibula* understood, since the *Conulus* and *Discoidea* of Klein are divisions of his "*Sectio I. Fibula*," which he explains as a *Spharula vel glomerula vestiaria*. *Subuculus*, then, was Klein's Latin for *Kamisol*; but the Latin word used by Horace and many other authors (see Facciolati and Forcellini's Lexicon) was *subucula*, signifying "a man's shirt," masculine enough in meaning if not in form. If no other authority for *subuculus* can be found, it seems preferable to employ in the Exhibition Galleries of the British Museum the spelling *Discoidea subucula*.

* 'Synopsis des Échinides,' p. 175; 1858.

† Pomel, "Classification méthodique &c.," Doctoral Thesis, Fac. Sci. Paris, Alger, p. 75.

‡ Journ. Linn. Soc., Zool. xxiii.; 31 Dec., 1889.

§ 'Treatise on Zoology,' ed. Lankester, vol. iii. "Echinoderma," p. 316; 1900.