

On: 03 February 2015, At: 02:06
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 6

Publication details, including instructions
for authors and subscription information:
<http://www.tandfonline.com/loi/tnah12>

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Published online: 12 Oct 2009.

To cite this article: Edgar A. Smith & Col. H.W. Feilden (1891) XXX.—A list of the land and freshwater shells of Barbados , *Annals and Magazine of Natural History: Series 6*, 8:45, 247-257, DOI: [10.1080/00222939109460428](https://doi.org/10.1080/00222939109460428)

To link to this article: <http://dx.doi.org/10.1080/00222939109460428>

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wards, a double series of punctures above its inferior keel; lower surface furnished close to the posterior keel with a series of about twelve piliferous pores; the anterior surface smooth, its upper edge feebly granular; the upper surface when examined with a lens is seen to be adorned with a very fine reticulated pattern; *dactyli* of normal form, in contact throughout.

Legs short, *coxæ* smooth, femora very finely granular in front; two rows of spines on the under surface of the distal tarsal segment or foot, the claws free, covered only at the base by the lateral lobes of the foot, the second tarsal segment furnished with a single distal spur.

Pectines short, furnished with eleven similar teeth, the basal sclerite of the intermediate laminæ slightly lobate.

Genital operculum with right and left halves completely fused to form a plate which is about twice as wide as long, with rounded sides and a lightly convex posterior border.

Measurements in millimetres.—Total length 59; length of cephalothorax 7·5, greatest width 8; length of tail 27, of first segment 3·3, of second 3·8, of third 4, of fourth 4·2, of fifth 6·5, width of first 3, of end of fifth 2; palp—length of humerus 5·5, width 3; length of brachium 6·5, width 3; length of “hand-back” 7, width of hand 5·3, height of hand 3; length of movable dactylus 7·6.

A single female specimen from Port Darwin (N. Australia).

The form of the genital operculum in this species is the same as in the type of *Urodocus excellens*, Pocock*.

XXX.—*A List of the Land and Freshwater Shells of Barbados.* By EDGAR A. SMITH and Col. H. W. FEILDEN.

BARBADOS lies about one hundred miles to the eastward of all the West-Indian islands, and is separated from its nearest neighbours, the group designated the Windward Islands, by an oceanic depression of 1000 to 1500 fathoms; between Barbados and the island of Tobago to the southward, which latter has presumably been connected with the mainland of South America since the introduction of its existing fauna and flora, we find depths of over 1000 fathoms. To the eastward of Barbados the floor of the ocean rapidly sinks into the profound depths of the Atlantic. Though Barbados is not

* Ann. & Mag. Nat. Hist. (6) ii. pp. 170-172, pl. viii. fig. 2.

separated from the chain of the Lesser Antilles or the mainland of South America by any considerable expanse of ocean, yet its geological structure shows that it can lay claim to being a truly oceanic island, in the sense of its not having been connected with the continent since the introduction of its present, comparatively speaking, meagre fauna*.

A critical examination of the mammals and reptiles now inhabiting Barbados shows their comparatively recent introduction, and a review of its avifauna does not point to a different conclusion, which is confirmed by this reference to the land and freshwater Mollusca. The species obtained by one of the authors (Colonel Feilden) in Barbados during 1888-89 are marked in this list by an asterisk. We do not assert that some species may not have been overlooked by him, and in consequence retain in our list several whose claims appear to us open to question; these are specifically referred to in this paper.

Only two lists of the shells of Barbados have hitherto appeared—that by Thomas Bland in the ‘Annals of the Lyceum of Natural History of New York,’ 1862, vol. vii. p. 351, and that by Kobelt in the ‘Jahrbücher der deutschen Malakozoologischen Gesellschaft’ for 1880, p. 284, which is mainly based upon Bland’s Catalogue, and contains only one additional terrestrial species, “*Hyalina incisa*,” and two supposed freshwater forms, *Neritina virginia* and *N. viridis*, of which the former, however, lives in salt or brackish water, and the latter is truly marine.

In the following list altogether thirty-one species are enumerated. At present only five appear to be peculiar to Barbados, namely:—*Vitrea incisa*, *Truncatella barbadensis*, *Helicina barbadensis*, *Helicina conoidea*, and *Physa granulata*. The last three of these are included in the fauna on the grounds that the specimens were labelled “Barbados” in Cuming’s collection, a collection somewhat notorious for errors of locality. Although those species in reality may have come from this island, there will always be a doubt attached to them until their presence there is confirmed.

The fauna is, as might be anticipated, very like that of the neighbouring islands. Two or three of the species are found in St. Vincents, four in Grenada, five in St. Lucia, eight in Trinidad, nine in Martinique, and ten occur in various places in the north of South America.

What proportion of these last may have migrated from the islands to the continent or *vice versa* it is impossible to say.

* Feilden, *Ibis*, 1889, p. 478; *id. Zoologist*, 1889, p. 295; *id. ibid.* 1890, p. 52.

In the case of the *Streptaxis*, *Bulimus oblongus*, perhaps of all the *Bulimuli*, the *Orthalicus*, the *Planorbis*, and the *Palædestrina*, we may conjecture that they have spread northward to the islands, from the fact that those genera are more numerous in species on the mainland. On the other hand, we may suppose that the *Stenogyra* and the *Leptinaria* have migrated southward from the islands to the continent, as the species in question, *Leptinaria lamellata*, *St. octona*, and *St. Beckiana*, appear, as far as we know at present, to be more common in the islands. This is somewhat conjectural, as our knowledge respecting the distribution of any of these species is doubtlessly very incomplete, and we do not know the relative abundance of them in the various localities where they have been found.

Bulimus oblongus and the *Orthalicus* are said to have been introduced by direct personal agency, and in all probability the presence of others is attributable to the same cause. The introduction of trees and plants from one place to another affords an easy way for the transmission of land-shells either in the egg-stage or even as adult specimens.

1. *Vitrea incisa* (Pfeiffer).

Helix incisa, Pfeiffer, Mal. Blatt. 1866, vol. xiii. p. 78; Monogr. Hel. vol. v. p. 107.

Hab. Barbados.

This species was described from Barbados from specimens obtained by Mr. Theodore Gill. It is a very depressed form, with a flattened spire, and remarkable for the *distinct* impressed lines of growth which divide the last whorl into numerous segments.

2. *Helix (Dentellaria) perplexa*, Férussac.

Helix perplexa, Férussac, Hist. nat. Moll. vol. i. p. 378, pl. lvi. a. fig. 1.

Helix granifera, Gray, Pfeiffer, Conch.-Cab. ed. 2, pl. lxii. figs. 16, 17; Reeve, Conch. Icon. pl. lii. figs. 252 a, b, pl. clxxvii. fig. 1210 (as *perplexa*).

Hab. Grenada, Trinidad?, Barbados.

This species has not been previously recorded from Barbados; but some specimens, presented to the British Museum by Sir Rawson Rawson in 1870, were said to have come from that locality.

3*. *Helix (Dentellaria) isabella*, Férussac.

Helix (Helicogena) isabella, Férussac, Prodrôm. p. 36, no. 87; id. Hist. nat. Moll. pl. xlvii. figs. 2.

Helix isabella, Pfeiffer, Conch.-Cab. ed. 2, p. 76, pl. x. figs. 1, 2; Reeve, Conch. Icon. fig. 249.

“This species is spread throughout the island in gullies and cool damp places. The finest and handsomest specimens were found in Turners Hall Wood, the only piece of primæval forest left in the island. They were found in May under fallen fronds of the cabbage-palm, which kept the ground damp.” (*Feilden*.)

This species is recorded by M. Drouët † from Cayenne, French Guiana, where it was collected in company with its near ally, *H. dentiens*, Férussac, by Lieutenant Charles Eyriès. The latter also occurs at Martinique, Guadeloupe, and Dominica; and it is therefore rather curious that the present form appears to extend only to this one island of the Lesser Antilles. Deshayes regarded it merely as a variety of *H. dentiens*, and at one time one of the authors held the same view, but is now of opinion that they may be conveniently separated.

4*. *Helix (Fruticicola) similaris*, Férussac.

Helix similaris, Reeve, Conch. Icon. figs. 149 *a, b*; Pfeiffer, Conch.-Cab. ed. 2, pl. lx. figs. 13-16.

“This cosmopolitan species is the commonest *Helix* in the island, and is found plentifully under stones, and also after rain crawling on the grass. It is abundant on the lowlands as well as on the high ground of Scotland district, at an elevation of 1000 feet and more.” (*Feilden*.)

Tryon ‡ states that “this species inhabits the coffee-tree, and commerce has spread it all over the world, wherever coffee is cultivated.” This may be the case; but, as far as we can discover, it has at present only been recorded from one of the coffee-growing West-Indian Islands, namely Cuba, where it was collected by Rang § many years ago. This, however, is doubted by Pfeiffer ||, and its occurrence there still wants confirmation. Another fact in opposition to Mr. Tryon’s theory is its presence in the island of Ascension, where coffee is not grown.

It has been collected in several parts of Brazil, but apparently not further north than Bahia.

† ‘Essai Moll. terrest. fluv. Guyane franç.’ par H. Drouët, 1859, p. 54.

‡ Man. Conch. ser. 2, vol. iii. p. 205.

§ Ann. Sc. Nat. (1) vol. xxiv. p. 15.

|| Conch.-Cab. ed. 2, pp. 341, 342 (*Helix*).

The coffee-tree is not generally dispersed nor the berry cultivated in Barbados; but a few plants are to be met with in the shrubberies surrounding some of the planters' houses.

5. *Helix (Microphysa) turbiniformis*, Pfeiffer.

Helix turbiniformis, Pfeiffer, Mon. Hel. vol. i. p. 49; Conch.-Cab. ed. 2, pl. xcix. figs. 31-33; Reeve, Conch. Icon. figs. 167 a, b.

Hab. Cuba and Jamaica.

A single specimen, marked Barbados, and identified by Pfeiffer as this species, is in the Cumingian collection.

6*. *Helix (Microphysa) vortex*, Pfeiffer.

Helix vortex, Pfeiffer, Conch.-Cab. ed. 2, no. 526, p. 110, pl. lxxxv. figs. 7-9.

Hab. Cuba, St. Croix, Haiti, Jamaica, St. Thomas, Porto Rico, Bermuda, Georgia, and Florida.

Two dead specimens are all that were obtained. The species has already been recorded from Barbados by Pfeiffer (Mon. Hel. vol. vii. p. 153), Bland, and Kobelt.

7*. *Streptaxis deformis* (Férussac).

Helix deformis, Férussac (*Helicogena*), Prodrum. p. 34, no. 42; id. Hist. Nat. Moll. pl. xxxii. a. fig. 1.

Hab. Venezuela, Demerara, Surinam, Trinidad.

This is the first record of the occurrence of this species at Barbados. "It occurs under stones, and though generally diffused over the island is less common than either *Helix isabella* or *H. similaris*. The living animal has a pretty appearance through the translucent shell, the foot being lemon-yellow, the tentacles red, with a stripe of the same colour down the back. The eyes, as usual, are black." (*Feilden.*)

It is common at Demerara, where it has been obtained plentifully by Mr. J. J. Quelch, of the Georgetown Museum.

8*. *Bulimus (Borus) oblongus* (Müller).

Bulimus oblongus, Reeve, Conch. Icon. fig. 210; Pfeiffer, Conch.-Cab. ed. 2, pl. xxii. figs. 1, 2.

This well-known shell has already been recorded from Barbados. "It is common in some localities, especially the gardens of plantations. It occurred in considerable numbers in the garden at Lears. In hot weather the animal half buries itself in the soil under the shade of dense-leaved trees

like the bread-fruit, only the top of the shell being visible.”
(*Feilden*.)

This species inhabits the neighbouring islands of St. Vincent, Tobago, and Trinidad, and it extends along the northern parts of South America from New Granada to Brazil. It is stated by Bland † that it was introduced into Barbados from St. Vincent by the Rev. J. Parkinson.

9. *Bulimulus tenuissimus*, Férussac.

Bulimulus tenuissimus (Férussac), Deshayes, Hist. Nat. Moll. vol. ii. (2) p. 72, pl. cxlii. b. fig. 8; Reeve, Conch. Icon. fig. 288; Pfeiffer, Conch.-Cab. ed. 2, p. 241, pl. lxxiii. figs. 25, 26.

Bulimulus barbadensis, Pfeiffer, Proc. Zool. Soc. 1852, p. 61; Mon. Hel. vol. iii. p. 435.

Hab. Brazil, Cayenne, St. Vincents, &c.; Barbados (*Pfr.*).

I have compared the types of *B. barbadensis* with specimens of this species, and they appear to be inseparable. Pfeiffer's term "*solidiuscula*" is somewhat misleading, for, although one of the three specimens in Cuming's collection is a little less delicate than usual, the other two are normally thin.

10. *Bulimulus fraterculus*, Férussac.

Bulimulus fraterculus, Férussac, Reeve, Conch. Icon. fig. 438; Pfeiffer, Conch.-Cab. ed. 2, p. 163, pl. xlix. figs. 5, 6.

Hab. Guadeloupe?, Porto Rico, Antigua, St. Christopher, St. Kitts, St. John, St. Croix, St. Thomas, Trinidad; Barbados (*Bland*).

This species is closely allied to *B. tenuissimus*, but is somewhat different in the proportional size of the whorls, the last being smaller than that of the species referred to.

11*. *Bulimulus exilis* (Gmelin).

Bulimulus exilis, Reeve, Conch. Icon. figs. 292, 294 a, b (as *guadaloupenensis*).

This species occurs on several of the adjacent islands and also on the mainland in Guiana. "It is very common throughout the island, under stones, and clinging to the trunks of trees, and the branches of shrubs in gardens."
(*Feilden*.)

† Ann. Lyceum Nat. Hist. New York, 1862, vol. vii. p. 360.

12*. *Orthalicus zebra* (Müller).

Bulimus zebra, Reeve, Conch. Icon. pl. xv. fig. 90, pl. xxvii. fig. 90 b.

This species has received several names, and ranges from Mazatlan to Mexico, and Florida, through several of the West-Indian Islands, along the north part of South America into Brazil.

"It is very common in the neighbourhood of Kingstown, Jamaica, but seems confined to that area, and may be seen clinging in hundreds to the prickly-pear plants bordering the roads. I have not met with it in any other part of that island. In 1889 I brought a small basket full of them from Jamaica to Barbados; but being on arrival placed in quarantine, on Pelican Island, I turned them out there on the bushes. Subsequently I found them in limited numbers already introduced to gardens in the suburbs of Bridgetown." (*Feilden.*)

13*. *Pineria viequensis* (Pfeiffer).

Pineria viequensis, Pfeiffer, Novitat. Conch. vol. iii. p. 408, pl. xciii. figs. 39-41 (as *Macroceramus*).

This species, originally described by Pfeiffer as a *Bulimus*, has only been observed in one other island. It is curious that it has not been found between Vièque and Barbados.

"It is not generally spread over the island, but appears to be confined to the coral rocks bordering the sea, on the east side in Christchurch and St. Philip parishes." (*Feilden.*)

14*. *Stenogyra octona* (Chemnitz).

Achatina octona, Reeve, Conch. Icon. fig. 84.

The distribution of this species, like that of *Helix similaris*, is truly remarkable. It has been found in most of the West-Indian Islands, in several places along the northern parts of South America, at Costa Rica, and in the British Museum there are specimens from Central Africa, near Lake Tanganika, and Madagascar, which appear to be inseparable.

"In Barbados it is very abundant throughout the island, and is met with in colonies under stones and rocks." (*Feilden.*)

15*. *Stenogyra subula* (Pfeiffer).

Achatina subula, Pfr., Wiegmann's Archiv f. Naturgesch. 1839, p. 352.
Bulimus subula, Reeve, Conch. Icon. pl. lxxix. fig. 494; Bland, Ann. Lyc. Nat. Hist. New York, 1862, vol. vii. p. 351.

Hab. Florida, Mexico, Cuba, Porto Rico, Fernando Noronha; also Sarawak, Borneo (in Brit. Mus.).

"Found under stones in Barbados, but not common."
(*Feilden.*)

16*. *Stenogyra Beckiana*, Pfeiffer.

Bulimus Beckianus, Pfr., 1846, Symb. Hist. Helic. sect. 3, p. 82; Mon. Helic. vol. ii. p. 164; Conch.-Cab. ed. 2, p. 125, pl. xxxvi. figs. 29-31.

Bulimus caracasensis, Reeve, 1849, Conch. Icon. pl. lxxviii. fig. 580.

Bulimus oryza (Deshayes, ? of Bruguière), Reeve, l. c. fig. 480.

Hab. Peru, Nicaragua, Caraccas, Trinidad, Brazil, Fernando Noronha.

This species was originally described by Pfeiffer as doubtfully coming from the island of Opara.

"Found under stones and rocks in Barbados, but not very common." (*Feilden.*)

17. *Stenogyra Goodalli* (Miller).

Bulimus Goodalli (Miller), Pfeiffer, Mon. Hel. vol. ii. p. 159; Reeve, Conch. Icon. pl. lxxxiv. fig. 621.

Hab. Cuba, Porto Rico, Jamaica, Guadeloupe, &c.; Barbados (*Bland*).

18. *Stenogyra octonoides*, C. B. Adams.

Bulimus octonoides, C. B. Adams, Pfeiffer, Mon. Helic. vol. iii. p. 400; Reeve, Conch. Icon. pl. lxxxiv. fig. 593.

Hab. Jamaica, St. Thomas, Cuba, Grenada, St. John; Barbados (fide *Bland*).

19. *Stenogyra Gundlachi*, Arango.

Bulimus Gundlachi, Pfeiffer, Mon. Hel. vol. vi. p. 95; Novitat. Conch. vol. iii. pl. lxxxvii. figs. 13-15.

Hab. Cuba; Barbados (fide *Bland*).

20*. *Pupa pellucida*, Pfeiffer.

Pupa pellucida, Pfeiffer, Mon. Hel. vol. ii. p. 360; Conch.-Cab. p. 89, pl. xii. figs. 24, 25.

Pupa jamaicensis, C. B. Adams, Contrib. Conch. 1849, p. 37; Pfeiffer, Mon. Hel. vol. iii. p. 558; Küster, Conch.-Cab. p. 138, pl. xvii. figs. 27, 28.

Hab. Jamaica (C. B. Adams); Cuba (*Mus. Cuming*).

"Found only in one spot, under stones, at Maxwell Hall, Christchurch Parish." (*Feilden.*)

It seems very probable that *P. barbadensis*, Pfr., may be the same as this species, and that the additional teeth may

either not have been noticed by Pfeiffer, or not developed in the specimens he examined. His species was described from specimens in Cuming's collection; but these we have not been able to find. There are five specimens without name or locality attached to them which may be his types, but these have the dentition of *pellucida*.

The figure of *jamaicensis* given by Küster is very good, but one of the teeth on the outer lip is omitted. Altogether there should be five—one parietal, one on the columella, and three on the outer lip.

21*. *Succinea barbadensis*, Guilding.

Succinea barbadensis, Guilding, Zool. Journ. vol. iii. p. 532, pl. xxvii. figs. 4-6.

Succinea bermudensis, Pfeiffer, Mon. Hel. vol. iv. p. 817.

Hab. "Very common under stones in pits and indentations of the coral rock, also on the top of the hills of Scotland district, crawling on the grass after a shower of rain." (*Feilden.*)

S. bermudensis is the same as this species.

22*. *Leptinaria lamellata* (Pot. & Mich.).

Achatina lamellata, Pot. & Mich. Gall. Moll. i. p. 128, pl. xi. figs. 7, 8.

Pupa lamellata, Küster, Conch.-Cab. p. 147, pl. xviii. figs. 1, 2.

Hab. Porto Rico, Guadeloupe, St. Vincents, Trinidad, Venezuela, Demerara, Guayaquil, Peru.

"Very uncommon. I have met with only four examples, all under a stone at Lears plantation, in St. Michael's Parish." (*Feilden.*)

23*. *Cylindrella (Gongylostoma) costata*, Guilding.

Cylindrella costata, Pfeiffer, Philippi's Abbild. vol. i. p. 183, pl. i. fig. 16, vol. ii. p. 52, pl. ii. fig. 8; id. Conch.-Cab. pl. v. figs. 4-6; H. & A. Adams, Gen. Moll. pl. lxxvi. fig. 7; Sowerby, Conch. Icon. vol. xx. pl. xii. fig. 109.

This species is also common in St. Lucia "upon damp walls and among stones in shady places" (*Tate*). "In Barbados it is very abundant under stones, particularly in the lowlands" (*Feilden*). There are specimens in the British Museum from St. Vincents.

24*. *Truncatella barbadensis*, Pfeiffer.

Truncatella barbadensis, Pfeiffer, Proc. Zool. Soc. 1856, p. 337; Monogr. Auricul. p. 192.

"Found on the coralline-limestone cliffs at Bathsheba and The Crane, on the Windward side of the island." (*Feilden.*)

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This species is allied to, but not quite the same as, *T. bilabiata*, Pfr., from Cuba.

25*. *Helicina substriata*, Gray.

Helicina substriata, Gray, Zool. Journ. vol. i. pp. 66 and 251, pl. vi. fig. 4; Sowerby, Thesaur. vol. i. p. 14, pl. i. fig. 22, vol. iii. p. 287, pl. cclxxiv. figs. 331, 332; Pfeiffer, Conch.-Cab. ed. 2, p. 69, pl. ix. fig. 30; Sowerby, Conch. Icon. vol. xix. pl. xi. figs. 94 *a, b*.

Hab. St. Kitts and St. Vincents.

"This species is very common, found from the shore-line to the tops of the hills in Scotland district." (*Feilden.*)

26. *Helicina barbadensis*, Pfeiffer.

Helicina barbadensis, Pfeiffer, Proc. Zool. Soc. 1853, p. 60; Monogr. Pneumon. vol. ii. p. 218.

Hab. Barbados (in coll. Cuming).

27. *Helicina conoidea*, Pfeiffer.

Helicina conoidea, Pfeiffer, Proc. Zool. Soc. 1853, p. 53; Monogr. Pneumon. vol. ii. p. 211; Sowerby, Thesaurus, vol. iii. pl. cclxx. figs. 168, 169.

Hab. Barbados (in coll. Cuming).

In Sowerby's figures the spire is represented a little too elevated and acuminate. The figures in the 'Conchologia Iconica' (figs. 49 *a, b*), as pointed out by Bland (Journ. de Conch. 1875, p. 247), are altogether incorrect.

28*. *Physa rivalis*, Maton & Rackett.

Bulla rivalis, Maton and Rackett, Trans. Linn. Soc. 1807, vol. viii. p. 126, pl. iv. fig. 2.

Lamnea (Physa) rivalis, Sowerby, Genera Shells, pl. clxxxix. fig. 9.

Hab. Brazil, Cuba, St. Vincents, Trinidad, &c.

This species is said by Jeffreys and others to be the same as *Sowerbyana* of d'Orbigny. This is probably the case, and *P. acuminata*, Gray, is also identical.

P. rivalis of the 'Conchologia Iconica' (fig. 31) is not this species, and is at once separated by the reddish thickening within the margin of the outer lip, which does not exist in the true *P. rivalis*.

29. *Physa granulata*, Shuttleworth.

Physa granulata, Shuttleworth, Sowerby, Conch. Icon. vol. xix. pl. v. figs. 39 *a, b*.

Hab. Barbados (in coll. Cuming).

The close spiral striation of this species, being crossed by the lines of growth, has a minutely subgranular appearance. It is not apparent to the naked eye, but is distinctly visible under a simple lens.

30*. *Planorbis lucidus*, Pfeiffer.

Planorbis lucidus, Pfeiffer, Wiegmann's Archiv f. Naturgesch. 1839, vol. v. p. 534; Sowerby, Conch. Icon. fig. 53^p (enlarged); Clessin, Conch.-Cab. ed. 2, p. 193, pl. xxix. fig. 2.

Hab. Cuba, Porto Rico, Guadeloupe, Martinique.

A single half-grown specimen is all that was obtained at Barbados.

31*. *Paludestrina crystallina*, Pfeiffer.

Paludina crystallina, Pfeiffer, Wiegmann's Archiv f. Naturgesch. 1840, p. 253; Philippi, Abbild. vol. i. p. 118, pl. i. fig. 18 (fig. 17, var. *coronata*); Küster, Conch.-Cab. p. 50, pl. x. figs. 7, 8 (figs. 9, 10, 11, 12, var. *coronata*).

Hab. Cuba, Jamaica, &c.

Both forms of this species, that with smooth whorls and that with short spines, occur at Barbados. "It was met with in Græme Hall Swamp, and was very difficult to find. They laid an immense number of eggs when captured." (*Feilden.*)

BIBLIOGRAPHICAL NOTICE.

Handbook of the London Geological Field-Class. Small 8vo, 215 pages, with 18 woodcuts. George Philip and Son. 1891. London.

THIS interesting little book consists of Lectures on the Geology of the London district, by Professor H. G. Seeley, F.R.S., and Reports by Students of the excursions made, from the year 1886 to 1889, to examine practically the Physical Geology of the rocks discussed in the Lectures. The plan of this Field-class Society and its Director (Chairman) is "to teach the elements of Physical Geography and Geology direct from Nature without preliminary study from books;" and, whilst taking their out-door recreation, the Students are thus training their "powers of observation, imagination, and reasoning." Local scenery and all the features of the surface are by these means not only directly noticed, but their relations to the geological structure of the country are learnt, and the causes and history of that structure are brought under notice.

Ann. & Mag. N. Hist. Ser. 6. Vol. viii. 17