Some Triassic Lamellibranchs from Brazil and Paraguay.

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(PLATE I.)

A SMALL collection of Triassic fossils from three localities and two horizons has been sent me by Dr. Euzebio de Oliveira for determination. Some of them (Nos. 1–10, 12–18) come from Rio Claro, Canoinhas, Sta. Catharina, and occur in the same hard siliceous oolitic rock as those which were first described from this locality.[1] One specimen (No. 11) in a similar matrix comes from Colonia Vieira, Canoinhas, and all these specimens were collected by Aristomenas Duarte. They belong to the fauna which was described by the author[2] from Rio Claro and other localities in 1929 and 1932, and a long list of fossils was then given. But we have now to add three new species.

The other specimens (Nos. 19–30) in the present collection occur in a soft purplish massive shale or mudstone and were collected at Antonio da Platina, Paraná, by Alberto Erichsen. They are mostly crushed and poorly preserved, but clearly constitute a different fauna.

Brazil.

Locality I.

The complete list of fossils which have now been found at Rio Claro is as follows :—

Pachycardia neotropica Reed.
,, *rugosa* Hauer, var. *occidentalis* Reed.
Plesiocyprinella carinata Hold.
Pseudocorbula anceps sp. nov.
,, *subtriangularis* sp. nov.
,, *falconeri* Cox.
Terraia angusta sp. nov.
,, *martialis* (Reed).
Pleurophorus cf. *elongatus* (Moore).
Ferrazia cardinalis Reed.
Pinzonella illusa Reed.
,, *similis* Reed.

Two horizons are represented[3] in this list, but both are of Upper Triassic age.

The species occurring in the present collection and here described are the following :—

Pseudocorbula anceps sp. nov. (Nos. 1, 2, 3, 4, 5, 15, 17).
,, *subtriangularis* sp. nov. (No. 6).
,, *falconeri* Cox (No. 7).

[1] Reed, *Ann. Mag. Nat. Hist.*, **10**, ii, 1928, 39–43, pl. i, figs. 1, 7–9.
[2] Reed, "Triassic Faunas from Brazil," *Mon. Serv. Geol. Miner. Brasil*, ix, 1929, 1–97, pls. i–v ; idem., *Ann. Mag. Nat. Hist.*, **10**, x, 1932, 479–487, pl. xix.
[3] Reed, op. cit., 1932, pp. 479, 480.

Terraia angusta sp. nov. (No. 14).
,, *martialis* (Reed) (No. 13).
Pleurophorus cf. *elongatus* (Moore) (No. 9).
Pachycardia neotropica Reed (No. 10, 11, 12, 18).
Pinzonella similis Reed (No. 16).

Dr. de Oliveira has kindly presented these specimens to the Sedgwick Museum.

Pseudocorbula anceps. sp. nov.

Pl. I, Figs. 1–3*a*.

Shell transversely subelliptical, nearly equilateral, gently biconvex, with anterior end more broadly rounded than posterior end; umbones small, obtusely angular, low, inconspicuous, subcentral, somewhat nearer anterior end, slightly directed forwards; preumbonal edge nearly straight, having an elongated slightly concave lunule with sharp outer edge; escutcheon long, narrow, slightly excavated, set at right angles to valve, limited by sharp outer edge. Surface of valves gently convex, ornamented with 14–16 strong, regular rounded concentric ridges, closely placed in upper half but often more widely spaced and less regular in lower half, and having a very weak low narrow submarginal posterior carina running back from the umbo at a very small angle to the edge of the escutcheon and defining a narrow somewhat depressed slightly inclined small posterior slope reaching the small truncate posterior angle. Right valve with strong prominent subtriangular blunt cardinal tooth having a short weak submedian groove on it. Left valve with corresponding triangular dental socket and traces of a small low triangular tooth behind it; inner edge of lunular margin expanded somewhat inwards as a projecting flange and thickened marginally in front of dental socket forming a small tooth-like elevation (anterior cardinal tooth). Muscle-scars not preserved.

Dimensions :—

	No. 17.	No. 5.	No. 4.	No. 3.
Length .	17·0 mm.	18 mm.	19 mm.	12·5 mm.
Height .	12·0 mm.	14 mm.	15 mm.	10·0 mm.

Locality.—Rio Claro, Canoinhas.

Remarks.—There are seven examples of this shell in the collection, of which No. 1 shows the interior of the cardinal region of the left valve as well as part of the exterior, No. 2 the hinge of the right valve, No. 5 the complete exterior of a right valve, No. 15 the impression of the exterior of a left valve, and No. 17 the impression of the exterior of a right valve. No. 3 is a young individual. The general shape, small umbones, nearly equilateral outline and position of the weak posterior carina close to the margin would lead us to place it in the genus *Pseudocorbula*, but the strong concentric ornamentation is more like species of *Astarte*, and the projection

of the lunular margin in the left valve recalls that in the right valve of the genus *Terraia* Cox,[1] which its author regards as apparently related to *Pseudocorbula*. The single cardinal triangular tooth in the right valve with its corresponding socket in the left valve are features found in other South American species referred to *Pseudocorbula*. The umbones are lower and the shell more regularly oval than in any of the species from Brazil which have been referred by the present author to this genus, but we may strongly suspect that it is identical with the shell described by the author in 1928 from Rio Claro as *Anodontophora* aff. *trapezoidalis* Mansuy,[2] differing chiefly in the stronger, more regular concentric rugae on the surface. The characters of the hinge, lunule, escutcheon, etc., which Cox [3] has described in the Uruguayan species *Ps. falconeri* agree in most respects with those present in our new Brazilian species, but it differs particularly in its shape and concentric rugae.

Pseudocorbula subtriangularis sp. nov.

Pl. I, Fig. 4.

Shell transversely subtriangular, inequilateral, narrowing posteriorly, compressed; valves very slightly convex, most so anteriorly, somewhat flattened posteriorly. Umbones situated at about two-fifths to one-third the length of shell, low, small, obtuse, not elevated, slightly directed backward; anterior end of shell broadly rounded; posterior end narrowed and somewhat produced, truncate below; posterior hinge-line long, straight, with low straight rounded narrow carina below it, diverging from it at very small angle and running back to posterior truncate end of valve, having the narrow area between them slightly excavated. Surface of shell ornamented with 14–16 regular strong rounded narrow concentric ridges, set closely together in upper part of shell but becoming further apart towards the lower margin.

Dimensions :—

Length	13 mm.
Height	9 mm.

Locality.—Rio Claro, Canoinhas.

Remarks.—This species is only represented by one somewhat imperfect left valve (No. 6), but its shape separates it from the closely allied *Ps. anceps*. We do not know its internal characters.

Pseudocorbula falconeri Cox.

Pl. I, Fig. 5.

This species [3] which was described by its author from Uruguay is represented by one well-preserved right valve (No. 7) showing

[1] Cox, *Ann. Mag. Nat. Hist.*, **10**, xiii, 1934, 267.
[2] Reed, op. cit., 1928, p. 41, pl. i, figs. 7, 8.
[3] Cox, op. cit., 1934, p. 267, pl. x, figs. 6*a*, *b*, 7, 8.

the typical external characters and shape and the hinge on which is exposed the triangular cardinal tooth. As Cox has remarked, this new species is closely allied to *Ps. emerita* Reed [1] from Serrinha, but is subtrigonal in shape.

Dimensions :—

Length	20·0 mm.
Height	17·5 mm.

Locality.—Rio Claro, Canoinhas.

Terraia angusta sp. nov.

Pl. I, Fig. 7.

A transversely elongated subtriangular right valve (No. 14), narrowing posteriorly, has a strongly convex surface with a broad low blunt subanterior umbo ; the inferior margin is long and very slightly arched ; the posterior end is bluntly angulated and obliquely truncated above ; there is a flattened steeply inclined area on the posterior slope above the slightly sigmoidal carina which runs back from the umbo to the postero-inferior angle, making an angle of 25–30° with the ventral margin of the valve ; a weak depression lies immediately below this carina. The lanceolate escutcheon is marked off from the flattened area on the posterior slope by a weak ridge. No internal characters are seen. But we may probably regard this specimen as allied to *Terraia altissima* (Holdhaus) as re-defined by Cox [2] by means of specimens from Uruguay, and he states that it is very variable in shape. Cox regards *T. altissima* as identical with the author's *Isocyprina reducta* [3] from Serrinha in spite of certain differences in the dentition, and it is probable that the shell figured by the author from Rio Claro in 1928 as *Trigonodus* sp.[4] also belongs to Holdhaus' species as interpreted by Cox. But our present specimen cannot be considered as identical with either of them and we may give it the provisional name of *angusta*.

Dimensions :—

	No. 14.
Length	22 mm.
Height	11 mm.

Locality.—Rio Claro, Canoinhas.

Terraia martialis (Reed).

Pl. I, Figs. 6, 6*a*.

The species which the present author described from Serrinha as *Myophoriopis martialis* [5] is represented by one (No. 13) excellent

[1] Reed, op. cit., 1929, p. 37, pl. ii, figs. 4–6.
[2] Cox, op. cit., 1934, p. 271, pl. x, figs. 1*a–c*, 2*a*, *b*, 4, 5.
[3] Reed, op. cit., 1929, p. 41, pl. i, figs. 11–17.
[4] Reed, op. cit., 1928, p. 42, pl. i, fig. 9.
[5] Reed, op. cit., 1929, p. 31, pl. iii, figs. 14–17.

right valve in the present collection having the shell preserved. The generic characters, as far as the external shape, carination, posterior truncation, lunule, escutcheon, and position of umbones are concerned, agree precisely with those given by Cox for his new genus *Terraia*, but unfortunately we do not know the internal features of our species. It is closely related to *M. brasiliensis* Reed [1] from Roxo Roiz, which was first [2] described in Dr. du Toit's collection from Rio Claro as *M.* aff. *carinata* Bittn. and which also occurs in Dr. von Huene's collection [3] from a locality between Ferraz and Morro Grande. It seems that one of the specimens figured by Cox [4] from Uruguay as *Terraia altissima* (Holdh.) bears a great resemblance to our *M. martialis*.

Dimensions :—

Length	.	36 mm.
Height	.	22 mm.

Locality.—Rio Claro, Canoinhas.

Pleurophorus cf. *elongatus* (Moore).

In the author's previous Memoir [5] it was suggested that the shell from Agua Quente which Holdhaus figured and described as *Sanguinolites elongatus* might be compared with *Pleurophorus elongatus* (Moore).[6] In the present collection there is the imperfect cast of a right valve (No. 9) which seems to be similar, and it undoubtedly resembles very closely in external appearance this British Triassic species, but the upper edge of the posterior part of the valve and the anterior end of our specimen are broken and no internal characters are visible.

Jaworski [7] who discusses the affinities of this species figures a specimen from the Myophoria Limestone of Huairas as *Anodontophora? elongata* (Moore) which bears some resemblance to our specimen.

Dimensions :—

Length	.	*c.* 27 mm.
Height	.	*c.* 12 mm.

Locality.—Rio Claro, Canoinhas.

Pachycardia neotropica Reed.

This species which has been previously described from more han one locality in Brazil [8] is represented by several well-preserved specimens (Nos. 10, 11, 12) comprising left valves and a portion

[1] Ibid., p. 73, pl. v, figs. 1, 1*a*.
[2] Idem, *Ann. Mag. Nat. Hist.*, **10**, ii, 1928, 44, pl. i, figs. 6, 6*a*, 6*b*.
[3] Ibid., x, 1932, 485.
[4] Cox, op. cit., 1934, pl. x, figs. 2*a*, 2*b* (non cet.).
[5] Reed, op. cit., 1929, p. 79.
[6] Moore, *Quart. Journ. Geol. Soc.*, xvii, 1861, 503, pl. xv, figs. 14, 15 (*Axinus longatus*).
[7] Jaworski, *Neues Jahrb. f. Miner.*, B.B. xlvii, 1923, 122, t. iv, fig. 8.
[8] Reed, op. cit., 1928, p. 44, pl. i, figs. 3, 3*a*, *b*; ibid., 1932, p. 485; idem, op. cit., 1929, p. 70, pl. v, figs. 2–6*a*.

of a right valve, two of which (No. 10) expose the internal hinge-characters clearly and the external features are also well shown. The largest of the specimens, a left valve, measures 28 mm. in length and 14 mm. in height.

Localities.—(1) Rio Claro, Canoinhas; (2) Colonia Vieira, Canoinhas.

Pinzonella similis Reed.

One small right valve (No. 16) of this species [1] exhibiting the typical characters, though in a poor state of preservation, occurs in the collection.

Locality.—Rio Claro, Canoinhas.

Locality II.—Antonio da Platina, Paraná.

LIST OF SPECIES.

Palaeoneilo platinensis sp. nov. (Nos. 20, 22, 24 ?).
,, cf. *otamitensis* Trechm. (Nos. 25, 24*a*).
,, ? sp. (No. 26).
Anodontophora morata sp. nov. (Nos. 21, 22*a*, 23).
Loxonema ? ? sp. (Nos. 19, 22, 23).
Indet. ostracoda ? (Nos. 28, 29).

Palaeoneilo platinensis sp. nov.

Pl. I, Fig. 10.

Shell transversely suboval, narrowing somewhat behind umbo; anterior end projecting, rounded; posterior end blunt, subtruncate; umbo small, broad, low, directed forwards, situated at more than one-third length of shell from front end; dorsal margin nearly straight; ventral margin gently arched. Surface of valves gently convex, with a very weak straight umbonal ridge running back to postero-inferior angle, having the posterior slope above it somewhat flattened and inclined. Hinge-line furnished with numerous minute transverse slightly oblique teeth. Surface ornamented with fine concentric lineation.

Dimensions :—

Length . .	12·5 mm.
Height at umbo .	7·0 mm.

Remarks.—There is only one good cast (No. 20) of a left valve of this species and from it the above description has been drawn up. The denticulated hinge-line is distinct behind the umbo and seems to extend along fully half the post-umbonal dorsal edge. If it were not for the presence of hinge-teeth of the *Palaeoneilo* type we might refer it to *Anodontophora? trapezoidalis* Mansuy, some of which shells as figured by Patte [2] from Na Cham, Tonkin, resemble

[1] Reed, op. cit., 1932, p. 484, pl. xix, figs. 12, 12*a*.
[2] Patte, *Bull. Serv. Géol. Indo-Chine*, xv, fasc. 1, 1926, 166, pl. x, fig. 42, pl. xi, figs. 1, 3 (? non cet.).

it, and we may note that there is some doubt about the generic reference of his species. The form from the New Zealand Trias which Trechmann[1] compares with *Palaeoneilo preacuta* Klipstein, does not seem to be closely allied to our shell, which more resembles in shape *Leda tirolensis* Wöhrm.[2] from the Raibl beds. Probably it belongs to the group of *Palaeoneilo triangularis* described by Burckhardt[3] from the Mexican Trias, but it must be regarded as a new species.

Palaeoneilo cf. *otamitensis* Trechmann.

Pl. I, Fig. 11.

Shell transversely elongated; umbo broad, low, situated at anterior fourth of valve; anterior end rounded; posterior end obliquely truncate above with inferior angle sharply rounded; ventral margin gently arched; dorsal margin nearly straight. Surface gently convex, somewhat flattened on posterior slope, without distinct umbonal ridge except near umbo; ornamented with rather strong concentric growth ridges near lower margin. Dentition unknown.

No. 25.

Dimensions :—

Length . .	11·5 mm.
Height at umbo .	5·5 mm.

Remarks.—This elongated species is only represented by one cast of a left valve (No. 25) and by the impression of the exterior of part of a right valve (No. 24*a*). It differs from the species above described as *P. platinensis* in its more elongated shape, more pointed and obliquely truncate posterior end, obsolete umbonal ridge, and more anterior umbo. But neither of the specimens is very satisfactorily preserved. In shape it much resembles the shell from the Trias of Tonkin which Mansuy described as *Anodontophora tonkinensis*.[4] But *Palaeoneilo otamitensis* Trechmann[5] from the Upper Trias of New Zealand may be regarded as more probably comparable with our Brazilian form.

Palaeoneilo ? sp.

Pl. I, Fig. 12.

There is one dorso-ventrally crushed specimen (No. 26) of the internal cast of a right valve which shows a long straight hinge-line behind the umbo with a row of 10–12 small stout transverse teeth of equal size, and in front of the umbo there are 6–8 similar

[1] Trechmann, *Quart. Journ. Geol. Soc.*, lxxiii, 1917, 190, pl. xxi, fig. 22.
[2] Wöhrmann, *Jahrb. K.K. geol. Reichsanst.*, xxxix, 1889, 212, t. viii, fig. 16.
[3] Burckhardt, *Boll. Instit. Geol. Mexico*, No. 21, 1905, 17, pl. ii, figs. 4–6, pl. iii, figs. 1–3.
[4] Mansuy, *Mem. Serv. Géol. Indochine*, vi, fasc. 1, 1919, 12, pl. ii, figs. 10*a*–*i*.
[5] Trechmann, *Quart. Journ. Geol. Soc.*, lxxiii, 1917, 190, pl. xxi, fig. 21.

teeth in nearly the same straight line. The shell is much elongated and has sharply rounded subequal ends; there is a doubtful trace of a weak umbonal ridge with a flattening of the posterior slope above it; the umbo is broad, low and rounded, not rising above the hinge-line, and is situated at about two-fifths the length of the valve from the anterior end. The surface is ornamented with rather coarse unequal concentric growth-ridges and striae; but it is poorly preserved.

Dimensions :—

Length	11 mm.
Height	*c.* 3·5 mm.

Remarks.—This specimen owes the above described features largely to its dorso-ventral compression, and the position and breadth of the umbo and straightness of the hinge-line are apparently due to this cause. It was at first suspected that it might belong to such a genus as *Macrodon*, *Arca*, or *Cucullaea*, and be allied to *Macrodon esinense* (Stoppani),[1] but the unnamed form of *Palaeoneilo* figured by Burckhardt [2] from the Upper Trias of Mexico as *P.* sp. ind. (Groupe des Palaeoneilo comprimées) resembles it closely.

Anodontophora morata sp. nov.

Pl. I, Figs. 8, 9.

Shell regularly transversely oval, compressed, with both ends approximately equally rounded; ventral margin rather strongly arched; dorsal postumbonal margin straight, passing gradually into rounded posterior end; umbo situated at about one-third length of valve, small, low, directed forwards, rounded; pre-umbonal dorsal edge slightly excavated. Surface of valves very weakly convex, without any trace of umbonal ridge or flattened posterior slope, but with concentric lines and striae of unequal strength; a specially marked narrow concentric groove being present at about one-fifth the height of the shell from the ventral margin. Hinge-line edentulous ?

Dimensions :—

Length	13 mm.
Height	7 mm.

Remarks.—One good internal cast of a right valve with its impression (No. 21) shows the above characters, and there are several (Nos. 22, 23) less well-preserved valves of the same form. It seems to resemble *Anodontophora lutrariaeformis* Krumbeck,[3] from the Upper Trias of Sumatra and *A. edmondiformis* Trechm.[4] from New Zealand, with which Jaworski [5] has compared a specimen from Cerro de Pasco. But the ends of our shell are subequal

[1] Assmann, *Jahrb. preuss. geol. Landesanst.*, xxxvi, 1, 1916, 616, t. 34, fig. 4.
[2] Burckhardt, op. cit., 1905, 33, pl. iii, figs. 4*a–e*.
[3] Krumbeck, *Palaeontographica*, Suppl. IV, Abt. ii, 3, 1914, 246, t. xv, figs. 18, 19.
[4] Trechmann, *Quart. Journ. Geol. Soc.*, lxxiii, 1917, 208, pl. xxi, fig. 8.
[5] Jaworski, *Neues Jahrb. f. Miner. Geol.*, B.B. xlvii, 1923, 121.

or equal in size, and neither is truncate or blunt, and the umbo is less anterior, so that it is more like *Pleuromya bavarica* Winkler [1] from the European Trias. The shells from the Trias of the Jordan valley ascribed by Cox [2] to *A. münsteri* Wissm. may also be compared, while the specimen from Serrinha (No. 27) compared by the author [3] with *A. recta* Gümbel, seems to bear a considerable resemblance.

Loxonema ? ? sp.

There are some imperfect internal casts (Nos. 19, 22, 23) of a small turreted gasteropod about 8 mm. in height with a diameter of about 2·0–2·5 mm. at the base, showing 4–6 convex rounded whorls, rather rapidly increasing in size from the apex, which seems to have an angle of 15–20°. No external ornament is preserved and the generic reference is quite uncertain, but it probably belongs to some species of *Loxonema* or *Coelostylina*. The author has previously described [4] some poor specimens from Roxo Roiz and Serrinha which probably belong to one of these genera.

PARAGUAY.

Locality III.

Pinzonella cf. *illusa* Reed.

Pl. I, Figs. 13, 13*a*.

In 1929 the late Prof. Windhausen sent me some specimens of a pinkish or buff-coloured fine-grained sandstone containing numerous poor impressions and internal casts of one or more kinds of small lamellibranchs. They were collected by him in 1924 and were labelled " Entre San José y Valenzuele, Paraguay ", and he promised to send me later on details of the locality and of the geological occurrence of these fossils, but he was primarily anxious to know if they were of Triassic age. Unfortunately no further information has ever reached me. A provisional reference of these shells to the genus *Megalodus* was made by me and reported to him in 1930 after a study of the material, but it was recognized that they belonged to a new species and probably a new genus. Since then Dr. von Huene's specimens from the " Lower fossil horizon of the Corumbatahy (' Estrada Nuova ') beds between Ferraz and Morro Grande, Rio Claro," have been in my hands, and there is no doubt in my mind now that the supposed *Megalodus* from Paraguay belongs to the same genus as *Pinzonella illusa* and *P. similis* which was then founded and the species described by me from this Brazilian locality and considered to be of Upper Triassic age. One internal cast of a left valve from Paraguay shows

[1] Winkler, *Zeitschr. deut. Geol. Gesell.*, 1861, 484, t. viii, fig. 2.
[2] Cox, *Ann. Mag. Nat. Hist.*, **9**, xiv, 1924, 76, pl. ii, figs. 8, 9.
[3] Reed, op. cit., 1929, 55, t. ii, fig. 10.
[4] Reed, op. cit., 1929, 65.

distinctly the large thick hinge-plate with a large subtriangular deep dental socket obscurely divided near its base and having a low elongated cardinal tooth behind it; the small anterior muscle-scar is also seen immediately below the dental socket and close to the margin of the valve. The umbo and postumbonal edge are not well preserved in any of the specimens, but the general characters of the hinge-plate and dentition, as well as the shape and convexity of the shell agree closely with *P. illusa* Reed.[1] None of the right valves are in a sufficiently good condition to determine the cardinal characters, and it is possible that *P. similis* Reed[2] may also be represented by some of the casts and impressions. The shells vary somewhat in size from 10·5 mm. to 17 mm. in length and from 8·5 mm. to 13 mm. in height. The resemblance to the genus *Megalodus* is suggestive, but we cannot have much hesitation in referring these specimens to *Pinzonella* and probably to *P. illusa*, though the conditions of preservation are so different as to render a complete identification with this species rather doubtful.

EXPLANATION OF PLATE I.

FIG.

1. —*Pseudocorbula anceps* sp. nov. Right valve. × 2. Rio Claro, Canoinhas, Santa Catharina, Brazil. (No. 5.)
2. —Ditto. Portion of left valve. × 2. Same locality. (No. 1.)
2*a*.—Ditto. Umbonal view of same specimen, showing lunule, etc. × 2.
2*b*.—Ditto. Interior view of same specimen showing dental socket, hinge-line, etc. × 2.
3. —Ditto. Portion of right valve. × 2. Same locality. (No. 2.)
3*a*.—Ditto. Interior of same specimen, showing cardinal tooth. × 2.
4. —*Pseudocorbula subtriangularis* sp. nov. Left valve. × 2. Same locality. (No. 6.)
5. —*Pseudocorbula falconeri* Cox. Right valve. × 2. Same locality. (No. 7.)
6. —*Terraia martialis* (Reed). Right valve. × 1½. Same locality. (No. 13.)
6*a*.—Ditto. Umbonal view of same specimen. × 1½.
7. —*Terraia angusta* sp. nov. Right valve. × 1½. Same locality. (No. 14.)
8. —*Anodontophora morata* sp. nov. Right valve. × 2½. Antonio da Platina, Paraná (No. 21.)
9. —Ditto. Impression of right valve. × 2½. Same locality. (No. 21*a*.)
10. —*Palaeoneilo platinensis* sp. nov. Internal cast of left valve. × 3½. Same locality. (No. 20.)
11. —*Palaeoneilo* cf. *otamitensis* Trechmann. Left valve. × 2½. Same locality. (No. 25.)
12. —*Palaeoneilo* ? sp. Distorted right valve. × 3. Same locality. (No. 26.)
13. —*Pinzonella* cf. *illusa* Reed. Internal cast of left valve. × 2. Paraguay.
13*a*.—Ditto. Squeeze from same specimen, showing hinge-plate, dental socket, etc.

[1] Reed, op. cit., 1932, 482, pl. xix, figs. 6–11.
[2] Ibid., 484, pl. xix, figs. 12, 12*a*.