Geological Survey of Alabama
WALTER BRYAN JONES, *State Geologist*

MUSEUM PAPER 12

ALABAMA MUSEUM OF NATURAL HISTORY

BY

T. H. ALDRICH, D.Sc.

UNIVERSITY, ALABAMA

1931

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To His Exc
B. M.
Govern
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Sir: I
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Alabama M

University
July, 1931.

LETTER OF TRANSMITTAL

To His Excellency,
B. M. Miller,
Governor of Alabama,
Montgomery, Alabama,

Sir: I have the honor to transmit herewith the manuscript of a report on "Description of a few Alabama Eocene Species and Remarks on Varieties," by T. H. Aldrich, Sr., with the request that it be printed as Museum Paper Number 12 of the Alabama Museum of Natural History.

Very respectfully,

WALTER B. JONES,
State Geologist and Director.

University of Alabama,
July, 1931.

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DESCRIPTION OF A FEW ALABAMA EOCENE SPECIES AND REMARKS ON VARIETIES

WITH PLATES

BY

T. H. ALDRICH

DESCRIPTIONS OF SPECIES

These species are all from the collection of the "Alabama Museum of Natural History," and the types are in this Museum.

Levifusus pagoda, Heilpr. This form is figured from one like the type which is figured in Vol. 3, in Professor Harris's Bulletin, Plate 6, fig. 10, pp 51. Professor Heilprin just gives the location as Eocene of Alabama; it probably is from Wood's Bluff Horizon. There are a great many varieties of this form as stated by Professor Harris. It remains for the Nanafalia Beds to show stout shells like L. indentus, Harris, (pl.5 fig. 5) and other forms almost without spines, (pl. 5. fig. 1) from Wood's Bluff Alabama; forms with a single row of spines (pl. 5, fig. 2 and 3); forms with a double row of spines, (pl. 5 figs. 6 and 7); and another with a triple row of spines on the body whorl (pl. 5 fig. 8). It is hardly necessary to give names to these varieties but they all belong close to the parent. (pl. 5 fig 7.) represents Levifusus supraplanus, Harris which seems to be a variety also.

Volutilithes petrosus, Con., occasionally this species which is common in Claiborne occurs with a double row of spines on the body whorl. (pl. 6 fig. 3).

Crassatellites alaeformis, Con., var., a single form more nearly like the Maryland form was found in the Gosport Bluff or Claiborne horizon and differs greatly from the ordinary Claiborne species, (pl. 6 fig. 5). It may possibly be a very sulcate form of *C. protexta.* Some of that species are also sulcate.

Eutrephoceras haltomi, n. sp., shell nautiloid in appearance, (pl. 1 fig. 1). Substance of our shell thin, shell large, the greatest width being 240 m.m. reduced to 140 m.m. in the photograph, sutures (pl. 3 fig. 2) rather straight but turning into the umbillicus abruptly having an acute angle. The septa are flat. The outer chamber seems to have been large. Sutures are rather close together. (Pl. 3 fig. 3) is another view show-

ing the sutures. The siphuncle is small, round and high up on the septa, pl. 3 fig. 3). (Pl. 2 fig. 1) shows the thickness of the specimen looking down on the top. The light part shows the thickness of the shell and the darker part is part of the shell connected with the base.

Remarks: This species is very common but mostly in fragments at Black Bluff, Tombigbee River, Alabama, or the Sucarnochee formation. It is named after the discoverer, William L. Haltom, Curator of this Museum.

Aturia alabamensis, Morton, (pl. 4 fig. 1). This is a cast of the interior of this species and has already been published by Dr. H. G. Schenck, in Vol. 19, number 19, University of California, 1931, and is repeated herewith.

Locality: The specimen was found by Dr. E. A. Smith, late State Geologist, in the Upper part of the Jackson horizon, west of Claiborne a few miles. There is another specimen quite similar in the collection of the "Alabama Museum of Natural History."

Levifusus bispinosus, n. sp., shell medium, whorls 6 or more, ornamented on the body of the whorl with two rows of spines nearly equal in size and 12 in each row. Both the spire and the canal are somewhat damaged. The surface is covered with finely transverse lines becoming coarser on the canal. Aperture broadly ovate, outer lip striated within. A thin callus on the upper part of the inner lip. Length remaining 28 m.m. width 12 m.m. (pl. 5 fig. 4).

Locality: Tuscahoma Landing, Alabama. Dr. E. A. Smith, collected this form a number of years ago and considers it equal to *Levifusus branneri,* Harris. Its locality and other characters makes this species probably an ancestor of the Jackson form.

Omnivenus discoidalis, Con. This species is very rare in the Claiborne sand at Claiborne, Alabama. The figure given by Conrad is poor and Mrs. Katherine Palmer of Cornell thought it best to refigure the same. See (pl. 6 figs. 4 & 4A).

Arca cuculloides, Con., this is figured on (pl. 6 figs. 1 & 1A). Professor Harris has stated that it is very doubtful that

this species is found in the Claiborne sand bed but this Survey has two or three fine specimens that undoubtedly came from Claiborne. The drawings have been presented to the Survey by Professor Harris of Cornell.

Pseudoliva nanafaliaensis, n. sp. shell rather large, smooth, ovate, subglobose, suture distinct; body whorl slightly constricted close to suture expanding rather quickly. A line on upper half of same indicates the position of a small tooth on the outer lip. Surface of body whorl is marked with fine transverse lines, thickened callosity near junction of the upper and outer lip. The interior is filled with natrix in this specimen. Length 60 m.m. breadth 38 m.m.

Locality: Nanafalia Beds, Tombigbee River, Alabama.

Remarks: This shell varies from the common *Pseudoliva vetusta,* Con., in the shape of the spiral whorls the position of the tooth and there are varieties connecting this species with some at Claiborne, Alabama. The shape of the aperture seems to connect it with *Ancilla.* (pl. 1 fig. 2).

Fusus regularoides, n. sp. Shell regularly fusiform, spire high, suture wavy; whorls seven, without the embryonic ones which are missing. A broad space between the suture carrying some transverse and vertical raised lines; angulated above the suture with about 8 or 10 nodes and 2 or 3 revolving raised lines. Body whorls with strongly raised transverse lines to tip of canal. Aperture ovate, smooth within, a callus on the inner lip; canal long with strong raised lines down to the tip. Length 50 m.m. width of body whorl 18 m.m. (pl. 5 fig. 9).

Remarks: This shell is strongly marked but approaches *Levifusus.*

Locality: W. D. Matthews Landing, Alabama.

Fusus mohri, Aldr., it seems as if Harris's shell named by him as *Fusus bellanus* is the same as the above. My specimen was described from a half grown shell but fragments connect the two. The original type is in the collection of Johns Hopkins University, together with another specimen showing a connection to Harris's form as named as above.

Ervillia lignitica, Aldr., var. *wheeleri*, is present in the Claiborne sand at Claiborne. Differs from the *E. lignitica* by being more elongated and highly polished.

EXPLANATION OF PLATES

PLATE 1.

Eutrephoceras haltomi n. sp. Type.

PLATE 1

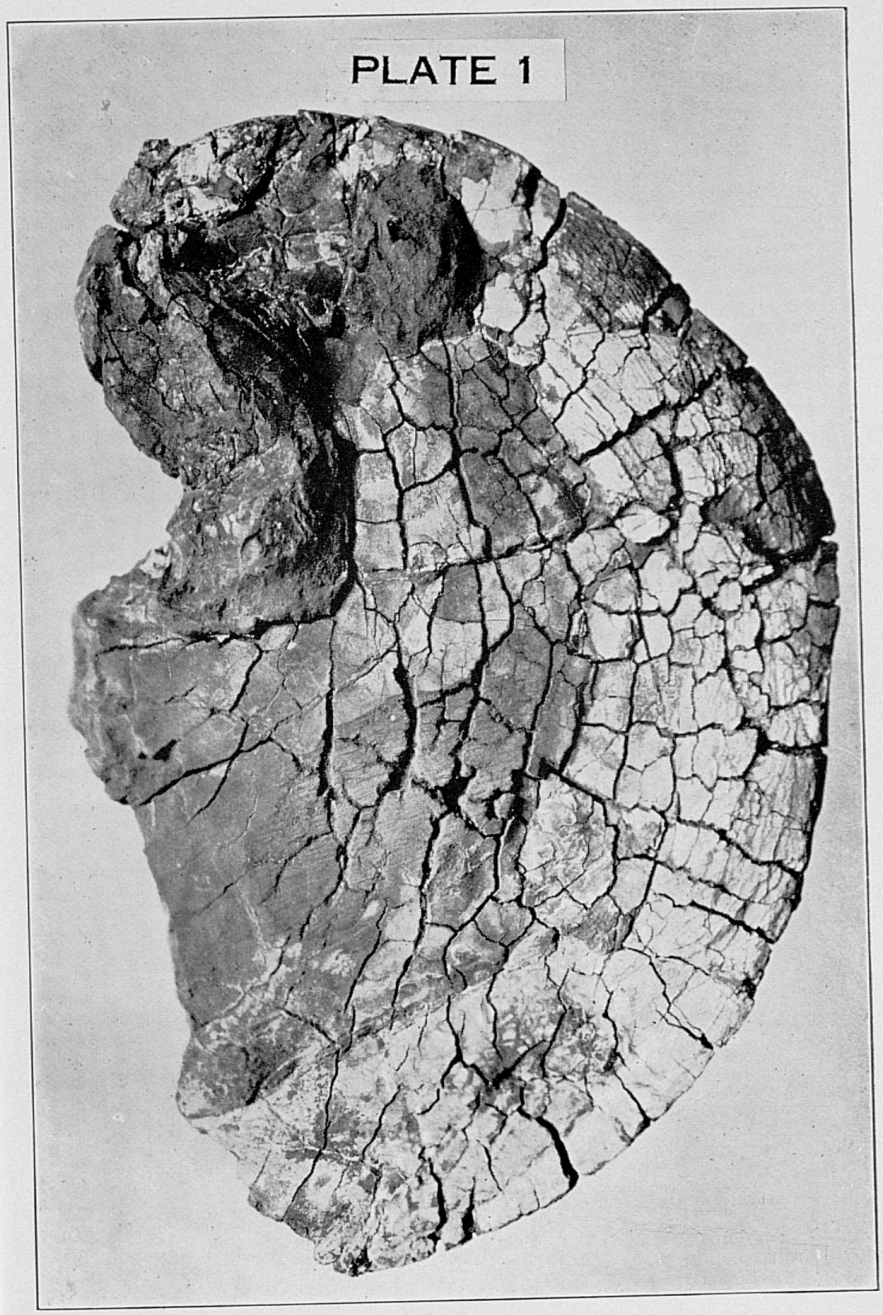

PLATE 2.

Figure.

Eutrephoceras haltomi n. sp.

This shows a figure of the specimen looking down at the top. The light part shows the thickness of the base.

top.

PLATE 2

PLATE 3.

Eutrephoceras haltomi n. sp.

Fig. 1. Showing a view of the sutures.

Fig. 2. Shows the sutures also, and position of the siphuncle.

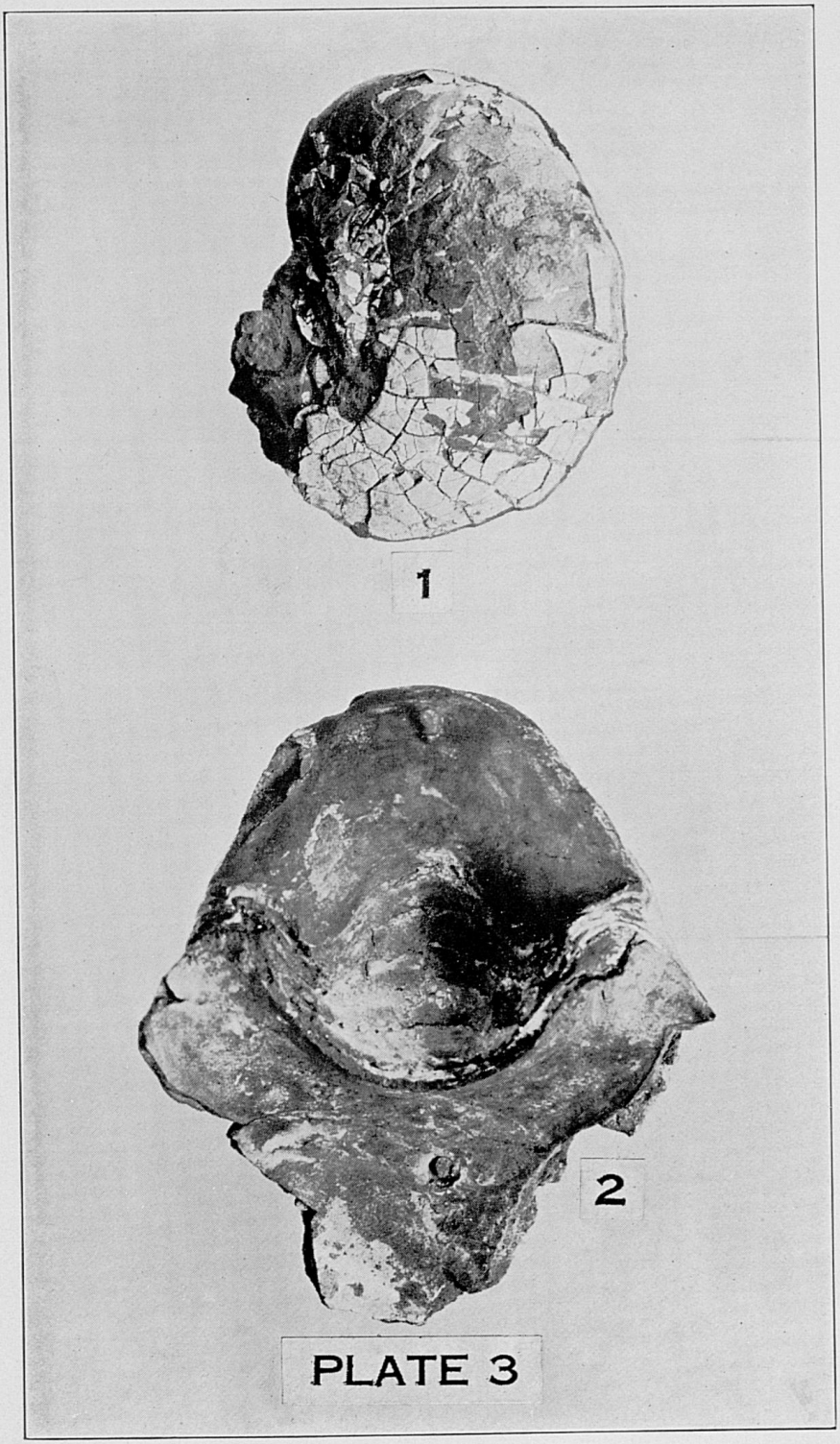

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PLATE 3

PLATE 4.

Figure.

Aturia alabamensis, Morton.

This view is of a species showing an interior cast of the septae.

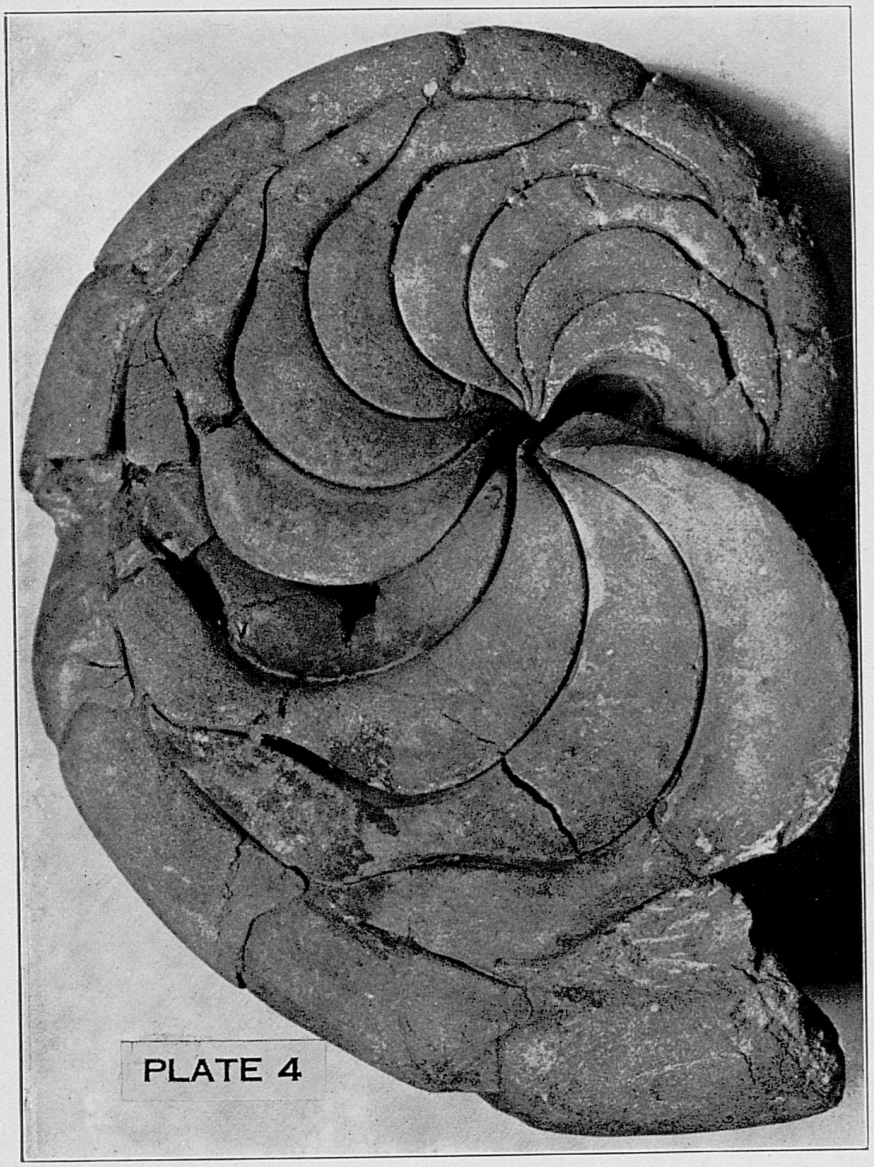

PLATE 4

PLATE 5.

Figures of various species and varieties.

Fig. 1. Levifusus pagoda, Heilpr.
Without spines.

Fig. 2. The normal form with a single row of spines.

Fig. 3. Probably the type specimen.

Fig. 4. Levifusus bispinosus, n. sp.

Fig. 5. Levifusus indentus, Harris.

Fig. 6. Levifusus pagoda, Heilpr with a double row of spines.

Fig. 7. Levifusus supraplanus, Harris, with a double row of spines.

Fig. 8. Levifusus pagoda var. with a triple row of spines.

Fig. 9. Levifusus regulariodes n. sp.

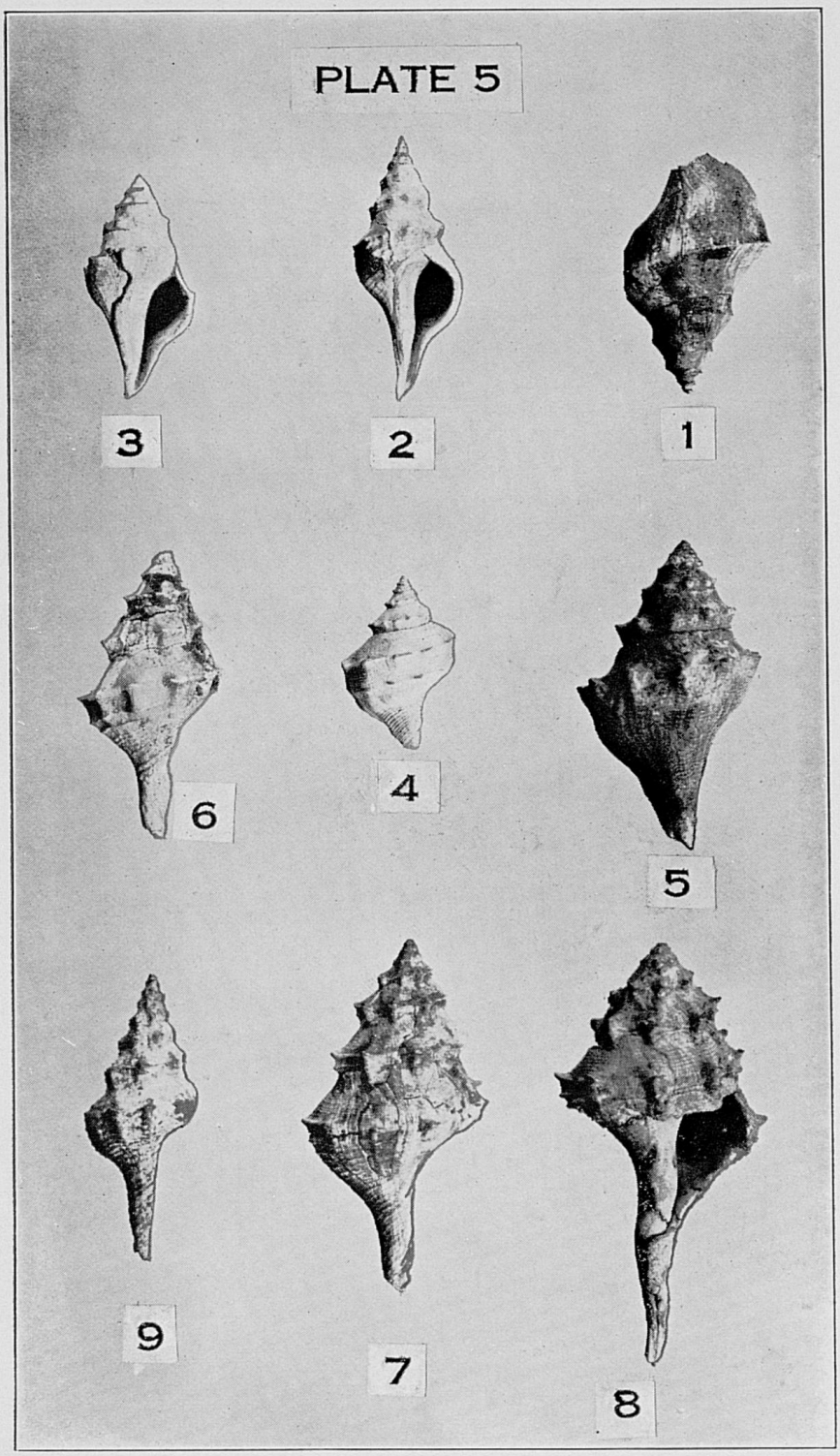
PLATE 5
3
2
1
6
4
5
9
7
8

PLATE 6.

Figures.

Fig. 1. and 1A., Arca cuculloides, Con.

Fig. 2. Pseudoliva nanafaliaensis, n. sp.

Fig. 3. Volutilithes petrosus, Con.

Fig. 4. and 4A., Omnivenus discoidalis, Con, n. sp.

Fig. 5. Crassatellites alaeformis, Con. var.

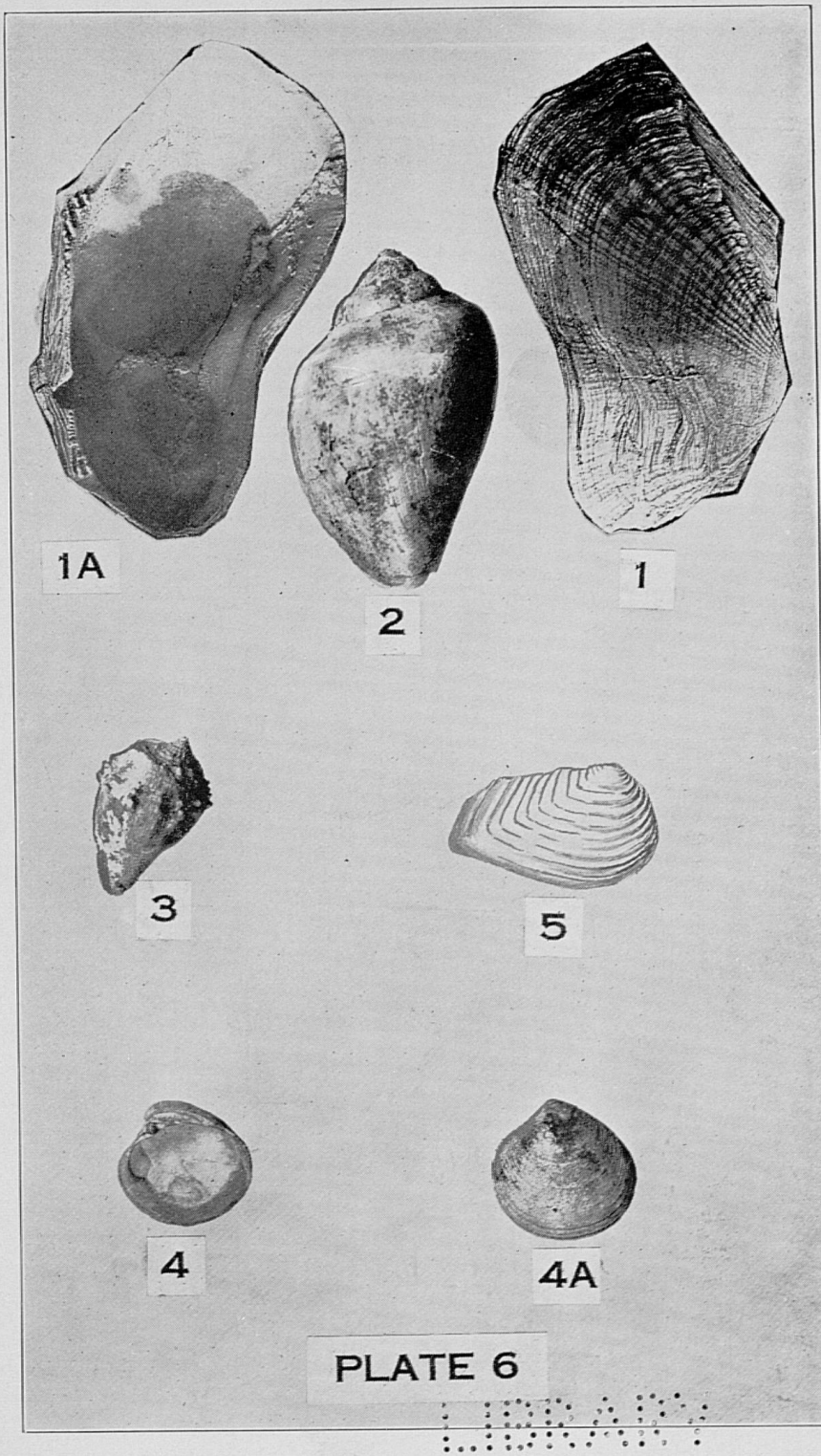

PLATE 6