

Mr. Conrad presented for publication in the Proceedings the following papers, viz.

1. Descriptions of three new species of *Unio*.
2. Observations on the Eocene deposit of Jackson, Miss., with descriptions of thirty-four new species of shells and corals.

All of which were referred to a Committee consisting of Dr. Wilson, Mr. Chas. E. Smith and Mr. Phillips.

January 23d.

Vice-President BRIDGES in the Chair.

A letter was read from Dr. Wm. E. Dearing, dated Augusta, Georgia, 16th Jan., 1855, acknowledging the receipt of his notice of election as a Correspondent.

A paper was presented for publication in the Journal, entitled "Remarks on the Cryptogamic Flora of the State of Georgia, by Professor Julien Deby;" which was referred to Dr. Zantzinger, Dr. Bridges and Dr. Durand.

January 30th.

Vice-President BRIDGES in the Chair.

The Committee on Mr. Conrad's papers, read Jan. 16, 1855, reported in favor of publication.

Descriptions of three new species of Unio.

By T. A. CONRAD.

UNIO.

1. *U. Grandensis*.—Suboval, ventricose posteriorly, disks somewhat flattened; umbo distant from anterior margin, and with minute radiating lines extending to the tips of the beaks; no concentric undulations; within purple.

Locality. Rio Grande, Texas.

Allied to *U. cardium*, Raf., but differs in the striated beak, purple interior, &c.

2. *U. Taumilapanus*.—Oblong, somewhat compressed; substance of shell thick anteriorly and over the umbo; disks flattened; ligament margin nearly parallel with basal margin; umbo decorticated; within pure white.

Allied to *U. niger*, Raf., but more regularly oblong and very white inside.

Locality. San Juan river, Taumilapas.

3. *U. Pearlensis*.—Suboval; umbo ventricose; sides contracted before the umbonal slope, which is ridged or inflated; two or three radiating folds posteriorly, most prominent over the umbo; within whitish, with a purple margin.

Locality. Pearl river, Miss. Prof. Thomas.

Allied to *U. crassidens*, Lam., (*trapezoides*, Lea,) but proportionally much shorter, more ventricose over the umbones, and less folded. This shell belongs to my proposed genus *Plectomerus*, which, if without sufficient distinction in the animal to constitute a genus, will form a convenient and very natural subgenus.

Observations on the Eocene deposit of Jackson, Mississippi, with descriptions of thirty-four new species of shells and corals.

By T. A. CONRAD.

The following table will show the order of succession of Eocene groups; but is not pretended to be more than an exposition of my limited knowledge of them, though they are doubtless presented in the true order of superposition. Further research may develop intercalated groups. No. 6, is probably synchronous with the Orbitulite limestone of St. Stephens, Alabama, as its two most prominent fossils are very abundant in this stratum at Vicksburg. No. 5, is the lowest bed exposed in the bank of the Mississippi river, at Vicksburg. Col. Wailes found a large *Ostrea* on the top of the Jackson group, which is probably the shell referred to in No. 5. It would be convenient to designate these sub-divisions thus:—Claiborne group; Jackson group; Vicksburg group; St. Stephens group;

GROUPS OF CHARACTERISTIC FOSSILS.

8.	Crassatella Missisippiensis, Arca Missisippiensis, Meretrix sobrina, M. imitabilis, Turbinella Wilsoni.	} Newer Eocene, Vicksburg.
7.	Corbula alta, Natica.	
6.	Pecten Poulsoni, Orbitulites Mantelli.	
5.	Ostrea Georgiana?	} Older Eocene, Jackson.
4.	Umbrella planulata, Cardium Nicolleti, Conus tortilis, Cypræa fenestralis, Galeodia Petersoni, Rostellaria extenta, &c.	
3.	Crassatella alta, Pectunculus stamineus, Meretrix æquorea, Gratelupia Hydii, Leda cœlata, Crepidula lirata, &c.	
2.	Ostrea sellæformis.	} Older Eocene, Claiborne.
1.	Cardita densata. Cyclas ———.	

Alabama river,

Nos. 1 to 3 represent the Claiborne group; 4, Jackson group; 6, the St. Stephens group; 7 and 8, the Vicksburg group. When a group of corresponding fossils is to be found elsewhere, its relative position can be stated by referring to the typical subdivision which contains many identical species.

Since my discovery of the Eocene formation of Claiborne, Alabama, in 1832, by means of fossil shells collected by Judge Tait, numerous localities have been found in the southern States, and characteristic fossils have also been obtained by Major Emory, in Western Texas, and even in California, by Mr. Blake. Localities widely separated contain some species in common, but I did not anticipate that groups would vary to the extent they do in the three localities of Claiborne, Alabama, Jackson and Vicksburg, Mississippi. Col. B. L. C. Wailes, of Mississippi, has lately discovered a new group of Eocene fossils at Jackson, in which none of the Vicksburg species occur; and of forty species, five only are identical with Claiborne fossils. One of the Jackson shells, *Cardium Nicolleti*, Conrad, was first discovered in the bank of Red river, Washita; and, therefore, this latter locality will probably prove to belong to the same division of the Eocene as that of Jackson. The Mississippi deposit described by Col. Wailes, is a group of shells chiefly, of more than ordinary beauty and preservation, imbedded in sand of a gray color, consisting of fine angular grains of quartz and minute fragments of shells. One of the species, *Cypræa fenestralis*, is closely

related to *C. elegans*, of Deshayes; two remarkable species which have no analogue or kindred shell in later Tertiary formations. The state of preservation and the forms of these fossils are closely analogous to those of the Paris basin; and I find no recent nor any Miocene species among them. I believe the group to be newer than the Claiborne deposit, and certainly older than that of Vicksburg.

I think it will be found that No. 6, of the above table, represents that extensive limestone, which, in Alabama, contains the *Basilosaurus* remains; the *Laganum Rogersi*, Morton, near Claiborne, and near Brandon, Mississippi, where it has been discovered by Col. Wailes, occupying a higher position than the Jackson group. The limestone of Jacksonboro', Georgia, described by Lyell, is probably referrible to the same division, and contains the *Laganum Rogersi*, (*Scutella Jonesi*, Forbes.)

The following species of organic remains were collected by Col. B. L. C. Wailes, and are figured in his work on the Geology of Mississippi. Those illustrations are referred to in the descriptions.

CORBULA.

1. *C. densata*, Geol. of Miss. Pl. xiv., fig. 9.—Triangular, subequilateral, very thick in substance; surface undulated and having angular concentric striae; umbonal slope submarginal and acutely carinated, posterior extremity angular.

Related to *C. nasuta*, Con. but proportionally shorter, thicker, with a more rounded base, &c. The description applies to the larger valve, as I have not seen the opposite one.

2. *C. bicarinata*, Pl. xiv., fig. 3.—Elevated, triangular, slightly oblique, thick in substance, profoundly ventricose, with robust reflected concentric lines; umbo profoundly prominent, and the beak incurved; posterior slope biangulated; space between the angles flattened, direct.

Resembles *C. oniscus*, Con., but is thicker, more elevated, not rostrated, and its slight obliquity is the reverse of that in the former species. I have not seen the smaller valve.

LEDA, Schum.

L. multilineata, Pl. xiv., fig. 4.—Ovato-elliptical, inequilateral, ventricose, with fine sharp concentric lines, which are somewhat undulated; anterior side rostrated, with closely-arranged, radiating, minute, tuberculated striae; posterior side with unequal fine radiating lines, a few of which are very distinct; a few radiating lines are continued near the base over the middle of the valves.

Allied to *N. calata*, Con., but very distinct.

NAVICULA, Blainville.

N. aspera, Pl. xiv., fig. 5.—Trapezoidal, disk contracted behind the middle, cancellated; concentric lines distant, imbricated; radiating lines largest towards the umbonal slope, subspinous; umbonal slope acutely angulated; posterior slope excavated; series of cardinal teeth uninterrupted; inner margin crenulated.

CARDIUM, Lin.

C. (Protocardia) Nicolletti, Pl. xiv., fig. 6. Proceed. Acad. Nat. Sc., 1841, p. 33.

This shell agrees, except in size, with the specimen originally described from the Washita, and doubtless the beds of that locality will prove to be of synchronous origin with those of Jackson. A species of *Cardium* very nearly allied to this, I formerly believed to be the same; but it accompanies a different group, and presents variations entitling it to be a specific distinction.

It is from Pamunkey river, Virg.

Compared with *C. Nicolletti*; umbo less inflated, posterior margin oblique, shell proportionally longer, and the radiating lines 22; in the other 25. The posterior cardinal tooth larger, &c. It may be named *C. lena*.

CRASSATELLA, Lam.

C. flexura, Pl. xiv., fig. 7.—Trapezoidal, inequilateral; ventricose medially; slightly contracted anteriorly, and more so posteriorly; umbonal slope angulated and prominent; whole surface with concentric prominent lines, some of which bifurcate anteriorly; inner margin crenulated.

Approaches *C. proteata*, Con., but has the striæ over the whole disk, the cardinal teeth more compressed; inner margin with larger crenulations, &c.

GLOSSUS.

G. filosus, Pl. xiv., fig. 8.—Orbicular, ventricose, with radiating lines, unequal, medially flattened, and towards the ends angulated; concentric lines microscopic, series of cardinal teeth uninterrupted, generally large and prominent.

Allied to *G. stamineus*, Con., but very distinct.

OSTREA, Lin.

O. trigonalis, Pl. xiv., fig. 10.—Triangular, flat, surface irregular, with some indistinct radiating lines; muscular impression obliquely suboval, situated nearer the summit than the base; margin somewhat ascending, submargin carinated.

A single imperfect upper valve is all that I have seen of this shell, but it is widely different from any other Eocene species known to me.

PECTEN, Lin.

P. nuperus, Pl. xiv., fig. 11.—Suborbicular, ventricose, with about twenty-three angular, prominent ribs, crossed by fine closely-arranged wrinkled lines; ears finely striated obliquely.

A single valve with the ears broken is all of this species in the collection.

UMBRELLA.

U. planulata, Pl. xiv, fig. 1.—Suboval, flattened, surface undulated, rising a little towards the apex, which is prominent and acute, and situated much nearer to one side and nearer to one end; lines of growth conspicuous; inner side with a very large suboval cicatrix, with radiating interrupted lines.

This fine species is the only one yet known in North America. Two specimens occur, one of which is marked with some hair-like brown radiating lines, both internally and externally.

CAPULUS, Mont.

C. Americanus, Pl. xv., fig. 1.—Obliquely ovate, longitudinally contracted on one side; lines of growth profound; summit very oblique; apex profoundly prominent, acute, curving towards the base and projecting far beyond the basal margin; aperture obtusely oval or suborbicular.

TROCHITA, Schum.

T. alta, Pl. xv., fig. 3.—Conic, elevated, with three or four transverse undulations; radii prominent, rounded, very irregular, interrupted, somewhat tuberculated; vertex central, spiral, somewhat prominent.

CLAVELLA, Swains. CLAVILITHES, Swains.

1. *C. humerosa*, Pl. xv., fig. 2.—Fusiform, volutions eight? rounded; body whorl and penultimate entire, the others with broad rounded ribs; whorls carinated below the suture and with revolving lines, most prominent towards the apex; body whorl and penultimate, channelled above and contracted near the summit; body whorl angulated inferiorly; beak long and straight.

2. *C. varicosa*, Pl. xvi., fig. 7.—Fusiform, spire and beak elongated; whorls nine, with distant, rounded, thick ribs and with revolving acute lines, which are obsolete or less prominent on the ventricose portion of the body whorl; papillated apex formed of three volutions; columella nearly straight, and with microscopic longitudinal lines.

C. Mississipiensis, Pl. xvii., fig. 8, is probably the same species.

MITRA, Humph. Lam.

Subgenus LAPPARIA, Conrad.

Short-fusiform, spinous; apex papillary; beak very short, thick, twisted; plaits as in Mitra.

M. (Lapparia) *dumosa*, Pl. xv., fig. 4.—Short-fusiform, volutions seven, direct, obliquely flattened above, with a series of transversely compressed, distant spines on the two largest whorls; on the contiguous whorl they become nodules; two whorls below the apex papillary, smooth; the next two longitudinally ribbed, and the others longitudinally striated or with prominent lines of growth; whole surface with revolving wrinkled lines; plaits four; beak profoundly ridged.

CONUS, Lin.

C. tortilis, Pl. xv., fig. 5.—Ovato-turbinata; spire obtusely conical with the apex exerted, acute; whorls obliquely flattened, with revolving impressed lines and transverse wrinkles, carinated near the base, direct between the carina and suture; lines of growth on body whorl profoundly curved; base with a profound thick fold.

Differs from *C. saurodocus*, Con., in having a more prominent and convex spire, in the large twisted callus at base, &c.

ROSTELLARIA, Lam.

1. *R. velata*, Con., Pl. xv. fig. 7. *R. Lamarckii*, Lea, Cont. fig. 164.

2. *R. staminea*, Pl. xvi. fig. 9.—Fusiform, spire elongated, subulate above; whorls fifteen; body whorl slightly concave with fine closely-arranged revolving lines, and obsolete longitudinal undulations; three upper whorls with curved longitudinal acute ribs; the remainder covered with a polished calcareous deposit, and excavated at the suture; body whorl angular on a line with the upper margin of the aperture; labrum thin; beak slightly curved.

This species occurs at Claiborne in great abundance.

VOLUTALITHES, Swains.

1. *V. symmetrica*, Pl. xv., fig. 8.—Subfusiform; with longitudinal acute ribs terminating above in short spines on the body whorl; volutions excavated above, where they are striated but not ribbed; body whorl with raised alternated revolving distinct lines; above the angle they become almost microscopic; suture margined below by a series of small points, and somewhat carinated; plaits three, slender.

Allied to *V. Sayana*, Con.

NATICA, Lam.

N. permunda, Pl. xvi., fig. 2.—Suborbicular; body whorl somewhat excavated near the suture; spire very short; umbilicus very long, profound, with a central broad rounded ridge, and the lower margin subcarinated; columella subrectilinear.

APORRHAI.

Subgenus PLATYOPTERA, Conrad.

Shell with a profoundly expanded labrum which is entire, or without a rostrum, and with the margin very thin and acute.

A. (*P.*) *extenta*, Pl. xvi., fig. 3.—Shell independent of labrum fusiform, with prominent revolving rounded lines and intermediate fine lines, from one to three, and longitudinal microscopic lines; volutions rounded, covered towards the apex with a polished calcareous deposit; labrum within with impressed radiating lines, becoming well marked furrows towards the base.

MITRA.

Subgenus FUSIMITRA, Conrad.

Elongate-fusiform, smooth and polished with impressed revolving lines; aperture narrow; plaits two prominent, and two obsolete, or much smaller than the others; beak elongated.

To this subgenus belongs *M. conquisita*, Con., *M. Mississippiensis*, and Con., of the Vicksburg deposit.

M. (Fusimitra) Mellingtoni, Pl. xvi. fig. 5.—Profoundly elongated, fusiform; volutions ten, convex, six of which towards the apex have revolving impressed lines, with the interstices transversely striated; in the contiguous whorl they are distant and obsolete, except near the summit, where there are two distinct impressed lines; on the penultimate whorl one distinct impressed line, and the summit of the body whorl obtusely carinated; spire longer than the aperture, which is narrow; plaits four, the two superior ones very prominent, robust.

Allied to *M. conquisita*, but much larger, proportionally longer, and with the striæ less deeply impressed. It may prove, however, to be the same when many specimens from the two localities can be compared. If it should be identical with the former it is the only species common to the Vicksburg and Jackson deposits out of 40 species of the latter and 100 of the former deposit.

CARICELLA, Con.

1. *C. subangulata*, Pl. xv. fig. 8.—Turbinate; labrum expanded; shoulder subangulated; body whorl flattened above; spire short, conical, consisting of $4\frac{1}{2}$ volutions, with microscopic revolving lines near the apex; columella with four remote plaits, the two inferior ones most oblique.

2. *C. polita*, Pl. xvi. fig. 4.—Fusiform; smooth and polished, with revolving lines inferiorly, and on two volutions of the spire; the whorl above is papillary and smooth; columella with closely arranged microscopic longitudinal lines; plaits four, slender, prominent, remote; beak slightly curved.

Allied to *C.* but proportionally shorter and very distinct.

SCALARIA, Lam.

S. nassula, Con., Pl. xvii. fig. 6.—Foss. Shells of Tert. Form.

This shell, though much larger than the Claiborne specimens, specifically agrees with them. Probably Lea's *S. planulata* is the same species.

ARCHITECTONICA, Bolton. SOLARIUM, Lam.

1. *A. acuta*, Pl. xvii. fig. 1.—Much depressed, very thin and acutely carinated on the margin; convex above, lower half of the whorls somewhat excavated; revolving striæ linear, crenulated, with a minute intermediate crenulated line, and a still finer line or two in some of the interstices; base convex, flattened and somewhat excavated towards the periphery, revolving striæ linear, alternated with a medial smaller line and two minute ones, nearly smooth, except four from the umbilical margin, which rapidly increase in size towards the inner margin; the marginal line profoundly crenulated; a carinated beaded line on the middle of each whorl within the umbilicus, which is profoundly scalariform.

2. *A. bellastrata*, Pl. xvii. fig. 2.—Discoidal, with radiating impressed lines, which frequently bifurcate and are most profound at the suture; whorls of the spire carinated below near the suture; periphery acutely carinated, margined above by two approximate raised lines, and below by a prominent line which is slightly marked by a microscopic impressed line; base with three impressed lines, that nearest the umbilicus profound; radiating striæ interrupted by the revolving lines; base convex towards the periphery and concave towards the umbilicus.

GASTRIDIDIUM, Sow.

G. vetustum, Con., Pl. xvii, fig. 4. Proceed. Acad. Nat. Sc., vol. 6, p. 321.

The Jackson specimens of this species, being more perfect than those of Claiborne, Alabama, exhibit six or seven denticulations below the tooth on the labrum, which denticle is very short; the base of the shell is carinated, and an acute carinated line runs within the umbilicus near the outer margin.

CYPRÆA, Lin.

1. *C. pinguis*, Pl. xvii., fig. 3.—Obtusely ovate, rounded at base, but obliquely flattened towards the aperture which is very narrow and denticulato-striate on both sides; columella deeply indented near the base, and a dentate line on the margin; labrum excavated towards the base.

Allied to *C. sphaeroides*, Con., of Vicksburg, but much less ventricose and very distinct.

Subgenus CYPRÆDIA, Swains.

2. *C. fenestralis*, Pl. xvii., fig. 5.—Ovate, ventricose, decussated with acute, prominent, distant lines, the transverse ones alternated in size; interstices with microscopic lines parallel to the transverse ones; aperture narrow, much curved above; columella with four or five plaits.

This beautiful species is nearly allied to *C. elegans*, Desh., but is much broader, and has microscopic regular lines which are not mentioned in the description of the former, and it is probably destitute of them. The plaits on the columella of the Jackson shell are much larger than in its European relative. These two shells are so different from any in the more recent formations that they appear to be entitled to a generic distinction, and they are peculiar to the Eocene period.

PHORUS, Mont.

P. reclusus, Pl. xvii., fig. 6.—Trochiform; whorls seven, obliquely flattened on the sides; base flattened, slightly excavated near the periphery, striated; lines profoundly curved, wrinkled, acute, many of them minutely beaded; base partially covered with a polished calcareous deposit.

GALEODIA, Link. CASSIDARIA, Lam.

G. Petersoni, Pl. xvii., fig. 9.—Obtusely ovate, spire short, scalariform; body whorl with three distant revolving lines much larger than the others, which are alternated, suture margined by a prominent acute line; inferiorly three revolving lines larger than the others; lower whorl of the spire carinated in the middle; longitudinal wrinkled lines very fine; labrum margin thickened, somewhat reflected; inner margin denticulato-striate, with a prominent tooth near the upper extremity; labrum reflected; columella striated, inferiorly tuberculato-striate.

Approaches *G. funiculosa* (*cassidaria*) Desh., but very distinct.

PAPILLINA, Con.

Pyriform; shoulder angular and spinous; beak long, with an obtuse fold on the columella; three volutions from the apex forming a papillated summit.

P. Mississippiensis, Pl. xvii., fig. 10.—Fusiform, with a series of distant, very prominent spines and longitudinal undulations; revolving lines prominent, alternated, wrinkled and undulated; three volutions from the apex entire, and forming the papillary top; fold on the columella obtuse; beak slightly tortuous.

In the geology of Mississippi where the shell is figured, I have incorrectly referred it to the genus *Clavelithes*. To this genus *Papillina* belongs the Eocene species, *Fusus papillatus*, Con., of Claiborne. I have never met with a species of this genus in the Mioene or more recent formation. It is probably most nearly related to *Turbinella*.

TURRITELLA, Lam.

T. alveata, Pl. xvii., fig. 7.—Elongated; whorls about nineteen; revolving lines prominent, about six in number alternated with a minute line; volutions excavated at base and minutely striated.

Allied to *T. obruta*, Con., (*T. lineata*, Lea,) of Claiborne, but greatly more elongated.

Polyparia.

ENDOPACHYS, Lonsdale.

1. *E. expansum*.—Cuneiform, dilated, much compressed on the sides; middle ventricose with two prominent ribs; end margins straight, direct, obliquely truncated inwards inferiorly; medial ridge tapering gradually to the base, which is thickened in the middle; surface regularly and beautifully granulated.

Locality. Jackson, Miss. Claiborne, Alabama.

2. *E. triangulare*.—Triangular; sides a little undulated on the margin and tapering towards the middle of the base, which is thickened, truncated and rounded, medial elevation very wide, rounded, with two prominent ribs; sides excavated and suddenly compressed near the margins, which are acute; granulations in form of radiating striæ.

Locality. Occurs with the preceding.

The sides between the ribs and the depression are convex, and when perfect have probably a rib on the middle.

3. *E. alticostatum*.—Cuneiform, subtriangular; medial elevation tapering gradually to the base, which is thick and irregularly rounded; ribs two, profoundly elevated, compressed; lateral depressions profound, margins acute, oblique; surface densely and minutely granulated; base truncated or obtusely rounded.

Locality. Claiborne, Alabama.

FLABELLUM, Les.

F. Waillesii.—Triangular or cuneiform, concentrically somewhat undulated; periphery irregularly subcarinated, sides plano-convex, subcostate, with impressed radiating lines, many of them bifurcated; lamellæ unequal, three smaller between each of the larger ones; sides with longitudinal tuberculated striæ.

Locality. Jackson, Miss.

OSTEODES, Conrad.

Form of *Turbinolia*; transversely oval; lamellæ numerous, anastomosing or branched; centre composed of small, angular cells; submargin with similar but smaller cells; cellular or bone-like structure characterising the sides beneath the surface.

Very distinct from *Turbinolia* or *Turbinolopsis*. To this genus belong my *Turb. cyanthus*, from near City Point, Virginia, in the older Eocene; and *T. caulifera*, newer Eocene, Vicksburg.

O. irroratus.—Conical, sometimes elongated, recurved, transversely oval; sides with closely arranged, acute, prominent, densely-granulated striæ; lamellæ numerous and finely granulated.

Locality. Occurs with the preceding.

TURBINOLIA.

T. lunulitiiformis.—Obtusely conical, with acute, prominent, densely granulated ribs; lamellæ numerous, unequal, finely granulated, three smaller between the larger ones; periphery profoundly indented by the prominence of the ribs.

Locality. Occurs with the preceding.

The Corresponding Secretary read his report for Dec. 1854, and Jan., 1855, which was adopted.

The Society then proceeded to an election for Standing Committees for 1855, with the following result:

Ethnology, John S. Phillips, B. H. Coates, J. Aitken Meigs; *Comparative Anatomy and General Zoology*, Joseph Leidy, Edward Hallowell, Jno. H. Brinton; *Mammalogy*, John Le Conte, James C. Fisher, Jno. L. Le Conte; *Ornithology*, John Cassin, Edward Harris, Geo. A. McCall; *Herpetology and Ichthyology*, Edward Hallowell, John Cassin, Gavin Watson; *Conchology*, T. A. Conrad, T. B. Wilson, Chas. E. Smith; *Entomology and Crustacea*, Wm. S. Zantzinger, R. Bridges, John A. Guex; *Botany*, R. Bridges, Wm. S. Zantzinger, Elias Durand; *Geology*, Isaac Lea, Chas. E. Smith, Jno. L. Le Conte; *Mineralogy*, Wm. S. Vaux, S. Ashmead, F. A. Genth; *Palæontology*, Thomas B. Wilson, Joseph Leidy, Aubrey H. Smith; *Physics*, James C. Fisher, B. H. Rand, Fairman Rogers; *Library*, R. Pearsall, S. Weir Mitchell, H. C. Hanson; *Com. on Proceedings*, Wm. S. Zantzinger, Joseph Leidy, Geo. A. McCall.

ELECTION.

Dr. William Hunt, of Philadelphia, was elected a *Member* of the Academy.

February 6th.

Vice-President BRIDGES in the Chair.

The following paper, intended for publication in the *Journal*, was presented:—"Notice of Fossils from the Carboniferous Series of the Western States, belonging to the genera *Spirifer*, *Bellerophon*, *Pleurotomaria*, *Macrocheilus*, *Natica* and *Loxomena*, with descriptions of eight new characteristic species: by Joseph G. Norwood and Henry Pratten, of the Illinois Geological Survey." Referred to Dr. Leidy, Mr. Isaac Lea, and Dr. Wilson.

February 13th.

Vice-President BRIDGES in the Chair.

A letter was read from Dr. Henry G. Dalton, dated Georgetown, Demerara, British Guiana, Dec. 28th, 1854, transmitting a copy of his recent work on that country.

Also, a letter from the Zoological Society of London, dated 31st October, 1854, acknowledging the receipt of the *Journal* and *Proceedings* of the Academy.

Mr. Conrad presented for publication in the *Proceedings* three papers severally entitled "Descriptions of eighteen new Cretaceous and Tertiary Fossils," "Descriptions of eight new species of Cretaceous Shells from Texas, in the collection of Major Emory," and "Description of a new species of *Melania*;" which were referred to Mr. Cassin, Dr. Carson and Mr. Foulke.