

tezalta Harris, *C. Texana* Heilp., *C. Trapaquara* Harris, *Astarte protracta* Meyer, *Astarte Smithvillensis* Harris, *Lucina Claibornensis* Conrad, *Pteropsis lapidosa* Conrad, *Corbula oniscus* var. *fossata* Ald., *Tellina Mooreana* Gabb, *Solen Lisbonensis* Aldrich, *Pholadomya Claibornensis* Aldrich, *Terebra Houstonia* Harris, *Pleurotoma beadata* Harris, *Pleurotoma Huppertzi* Harris, *Nassa Dalli* Aldrich, *Nassa scalata* Heilprin, *Phos Texanus* Gabb, *Distortrix septemdentata* Gabb, *Odontopolys compsorhytis* Gabb, *Volutilithes Haleanus* Whitfield, *Mazzalina pyrula* Conrad (typical), *Strepsidura ficus* Gabb, *Clavilithes Penrosei* Heilprin, *Neptunea enterogramma* Gabb, *Turricula polita* Gabb, *Borsonia biconica* Whitfield, *Mesalia Claibornensis* Con., *Turritella nasuta* Gabb, *Rimella Texana* Harris, *Ancilla ancillops* Heilp., *Cassidaria dubia*, *Natica recurva*, *Belosepia unguia* Gabb.

4. CLAIBORNE. — *Crassatella alta* Con., *Panopæa porrectoides* Ald., *Lutraria papyria* Con., *Arca inornata* Meyer, *Cytherea Mortoni* Con., *Cytherea æquorea* Con., *Corbis distans* Con., *Ringicula biplicata* Lea, *Rimella laqueata* Con., *Caricella doliata* Con., *C. Claibornensis* Har., *Clavilithes pachyleurus* Con., *Cerithium Claibornense* Con., *Mesalia obruta* Con., *M. vetusta* Con., *Turritella carinata* Lea.

5. JACKSON. — *Ostrea trigonalis* Con., *Pecten nuperus* Con., *Leda multilineata* Con., *Leda mater* Meyer, *Crassatella flexura* Con., *Tellina linifera* Con., *Bullinella Jacksonensis* Meyer, *Haminea grandis* Aldrich, *Pleurotoma Heilprini* Aldrich, *P. Americana* Aldrich, *P. perexilis* Aldrich, *Turricula Millingtoni* Con. (typical), *Conomitra Hamakeri* Har., *Clavilithes humerosus* Con., *Fusus pearlensis* Aldrich, *Conorbis alatoideus* Aldrich, *Cassidaria Petersoni* Con., *Turritella alveata* Con., *Turritella arenicola* Con. (typical), *Turritella perdita* Con., *Natica permunda* Con.

6. VICKSBURG. — *Ostrea Vicksburgensis* Con., *Pecten anatipes* Morton, *Pecten Poulsoni* Morton, *Byssarca protracta* Con., *Arca Mississippiensis* Con., *Pectunculus arctatus* Con., *Crassatella Mississippiensis* Con., *Cardium diversum* Con., *Cytherea sobrina* Con., *C. imitabilis* Con., *Dentalium Mississippiense* Con., *Pleurotoma congesta* Con., *P. tenella* Con., *P. cristata* Con., *P. rotædens* Con., *P. declivis* Con., *P. abundans* Con., *Mitra cellulifera* Con., *M. conquisita* Con., *Turbinella Wilsoni* Con., *Caricella demissa* Con., *Murex simplex* Aldrich, *Typhis curvirostratus* Con., *Oliva Mississippiensis* Con., *Fulgur spiniger* Con., *Chenopus liratus* Con., *Oniscia harpula* Con., *Lyria costata* Sow., *Melongena crassicornuta* Con., *Clavilithes Mississippiensis* Con., *Turritella cælatura* Con., *T. Mississippiensis* Con., *Solarium triliratum* Con., *Natica Mississippiensis* Con.

Ostrea Georgiana, Fig. 896, was originally described from Shell Bluff, Ga., of Lower Claiborne horizon. It is doubted whether it is rightly made a Vicksburg species.

A specimen containing Eocene fossils has been reported by Upham and Crosby from the drift of Cape Cod.

In California, in the Tejon group, occur, according to Gabb, *Ammonites* (*A. jugalis* Gabb), *Fusus*, *Surcula*, *Typhis*, *Tritonium*, *Nassa*, *Pseudoliva*, *Olivella*, *Fasciolaria*, *Mitra*, *Ficus*, *Natica*, *Lunatia*, *Neverita*, *Naticina*, *Scalaria*, *Terebra*, *Niso*, *Cerithiopsis*, *Architectonica*, *Conus*, *Rimella*, *Cypræa*, *Loxotrema*, *Turritella*, *Galerus*, *Nerita*, *Margaritella*, *Gadus*, *Bulla*, *Solen*, *Corbula*, *Neæra*, *Tellina*, *Donax*, *Venus*, *Meretrix*, *Dosinia*, *Tapes*, *Cardium*, *Cardita*, *Lucina*, *Crassatella* (*C. alta* Con.), *Mytilus*, *Modiola*, *Avicula*, *Arca*, *Azinæa*, *Pecten*, *Ostrea*, with the coral *Trochosmilium striata* Gabb.

MIOCENE.

1. CHATTAHOOCHEE. — *Orthaulax pugnax* Heilprin, *Pyrazisinus campanulatus* Heilp., *P. acutus* Heilp., *Cerithium Hillsboroense* Heilp., *Potamides transsectus* Dall, *Vasum subcapitellum* Heilp., *Coralliophila magna* Dall, *Ampullina solidula* Dall, *Turritella Tampa* Heilp. The fauna of the Chattahoochee deposits where typically exposed has not been carefully studied; the above-mentioned species are mainly from near Tampa.