About 12 feet above the bed of the river the eye meets with a layer of greensand, embracing a black, charry substance, which, on examination, is found to be fossil wood, in the state of coarse coal. Here may be found by digging, the trunks, branches, and bark of trees, forming a kind of subterranean forest. In company with this stratum is found the copperas, more or less mixed with sand, from which it is easily separated by lixiviation, as ashes are lixiviated in making soap.

He states that these copperas deposits extend for more than 100 miles along the banks of the river.

In the same year Elisha Mitchell[3] described briefly an occurrence of blue marl on Northeast Cape Fear River at South Washington. This was later referred by Hodge to the "Secondary formation," and by Lyell to the Cretaceous of New Jersey.

In this same year also Lardner Vanuxem,[4] through Prof. S. G. Morton, proposed a classification of the Atlantic Coastal Plain deposits, dividing them into three major divisions, namely, in ascending order, the Secondary, Tertiary, and Alluvial formations. The only locality in North Carolina mentioned as belonging to the "Secondary formation" was near Ashwood on Cape Fear River. Doubtless this is the exposure described by Bartram in 1791.

No further contributions were made to the knowledge of the Cretaceous in this State until 1841, when James T. Hodge,[5] in the account of his travels in the Southern States, described briefly the marl locality at South Washington. He mentions the occurrence of *Exogyra costata, Belemnitella, Plagiostoma palagicum,* and *Anomia ephippium,* and on the evidence of these fossils correlates the rock with the "Secondary formation."

The following year the same locality was visited by Charles Lyell. In several publications appearing between the years 1842 and 1845[6] he correlated the marl definitely with the New Jersey Cretaceous marl and with the Cretaceous of Europe. A new species of oyster, *Ostrea subspatulata,* obtained by Lyell at this locality, was described and figured by Edward Forbes[7] in 1845.

The limestone and phosphate conglomerate in the vicinity of Wilmington, previously regarded by Hodge and others as an upper "Secondary" deposit or a deposit interposed between the Cretaceous and the Eocene, was referred by Lyell to the Eocene.

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[3]Geology of North Carolina, Pt. III, Raleigh, 1827, 27 pp. (especially p. 14).

[4]Acad. Nat. Sci., Philadelphia, Jour., vol. 6, 1827, pp. 59–71.

[5]Am. Jour. Sci., vol. 41, pp. 332–344, 1841.

[6]Geol. Soc., London, Proc., vol. 3, 1842, p. 736. Am. Jour. Sci., vol. 47, 1844, pp. 213-214. Travels in North America, etc., 2 vols., New York, 1845 (especially vol. 1, p. 156). Geol. Soc., London, Quart. Jour., vol. 1, 1845, pp. 55–60.

[7]Geol. Soc., London, Quart. Jour., vol. 1, 1845, pp. 61–62.