

Fayetteville on Cape Fear River are regarded as Potomac. Special mention is made of the clays at Prospect Hall Bluff, an analysis of which is given. The clays occurring in the cuts at Spout Springs in Harnett County are erroneously referred to the Eocene, while those between Spout Springs and Fayetteville are regarded as of uncertain age, either Eocene or Cretaceous.

He describes the occurrence of clays in the Lafayette and Pleistocene formations and gives specific localities in various counties (pp. 102-138).

1898.

WOOLMAN, LEWIS.—*Fossil Mollusks and Diatoms from the Dismal Swamp, Virginia and North Carolina*; indication of the geological age of the deposits; with notes on the diatoms by Charles C. Boyer. Proc. Phila. Acad. Nat. Sci., 1898, pp. 414-424, 1898.

Fossils from the Dismal Swamp Canal, near Lilly, are described and the strata containing them referred to the late Pliocene or possibly the Pleistocene. They are correlated with the fossiliferous strata, near Croatan, N. C.

1899.

GLENN, L. C.—*The Hatteras Axis in Triassic and in Miocene Time*. Amer. Geol., vol. 23, pp. 375-379, 1899.

The writer believes that during both the Triassic and Miocene periods the central portion of the State of North Carolina was a region of much greater stability than the regions on either side, and that a line or belt extending from Cape Hatteras westward served as an axis, so that when the region to the north was depressed the region to the south was uplifted, and *vice versa*. The reason for this belief is the dissimilarity of the Triassic and Tertiary deposits of Virginia, Maryland, and New Jersey when compared with those of South Carolina and the Gulf States.

He asserts that the region of the so-called "Hatteras Axis" has been one of minimum movement since the beginning of Lafayette time.

1900.

HOLMES, J. A.—*The Cretaceous and Tertiary Section Between Cape Fear and Fayetteville, N. C.* Abstract, Science, new series, vol. 11, p. 143, 1900.

Brief mention is made of the great unconformity between the Cretaceous and the Tertiary, and the erosion intervals at the close of the Eocene and Lafayette.

HOLMES, J. A.—*The Deep Well at Wilmington, N. C.* Science, n. s., vol. 11, 1900, pp. 128-130.

Describes the character of the materials and the nature of the water encountered in this well. A thickness of 1,109 feet of Upper Cretaceous sediments was penetrated, at the base of which granite was encountered. On the basis of the contained fossils, Dr. Stanton, who identified them, classes the upper 720 feet of materials as Ripley and the remainder of the strata down to the granite as Eutaw. Potomac equivalents are absent.