

CLARK, WM. B.—*Results of a Recent Investigation of the Coastal Plain Formations in the Area between Massachusetts and North Carolina.* Bull. Geol. Soc. Amer., vol. 20, pp. 646-654, pl. 111. (Read December, 1909.)

Describes the Cretaceous formations of North Carolina and points out their relations to the Cretaceous deposits of the Northern Coastal Plain and of the Gulf. The question of their correlation is considered in much detail.

THE CRETACEOUS FORMATIONS.

BY L. W. STEPHENSON.

HISTORICAL REVIEW.

The earliest account of strata now classed as Cretaceous, in the State of North Carolina, was furnished by William Bartram¹ in 1791. In the course of his travels through the Southern States he came to Ashwood on Cape Fear River, situated 3 or 4 miles below Whitehall in Bladen County, the exact site of which is not at present known. A river bluff at this point attracted his attention, and in the published account of his travels he describes in considerable detail the materials therein exposed. On account of its historic interest the description is quoted (pp. 472-479), as follows:

This perpendicular bank of the river, by which the waters swiftly glide along, discovers at once the various strata of the earth of this low maritime country. For the most part, the upper stratum consists of a light, sandy, pale yellowish mould or loam, for 10 or 12 feet in depth * * *; this sandy mould or loam lays upon a deep bed of black or dark slate-colored saline and sulphureous earth, which is composed of horizontal thin flakes or laminae, separable by means of very thin, almost imperceptible veins or strata of fine micaceous particles * * *; other places present to view strata of heterogeneous matter, lying between the upper loamy stratum and the bed of black saline earth, consisting of various kinds of seashells, some whole, others broken to pieces, and even pulverized, which fill up the cavities of the entire shells, and the interstices betwixt them; at other places we observe, two or three feet below the surface or virgin mould, a stratum of four, five, or six feet in depth, of brownish marl, on a bed of testaceous rocks; a petrification composed, apparently, of various kinds of seashells, belemnites, sand, etc., combined or united with a calcareous cement; * * *. And again we observe shells, maracites, belemnites, dentes carchariae, with pieces of wood transmuted, black and hard as sea coal, singly interspersed in the black vitriolic strata of earth; * * *.

The next account of materials falling under this class was given by Denison Olmsted² in 1827. He describes a deposit of so-called copperas at Spring Bank, 7 miles below Waynesborough (Goldsboro of to-day) in Wayne County, as follows:

¹Travels through North and South Carolina, etc. Philadelphia, 1791; London, 1794.

²Geology of North Carolina, Pt. II, 1827, pp. 87-141 (especially pp. 98-99).