

Later in the same year, 1891, a Monographic study by McGee⁵ on the Lafayette formation appeared. Referring to North Carolina (pp. 485-486), he states that in areal distribution the formation extends from the fall line halfway to the coast. In stratigraphic position, it rests unconformably upon crystallines and various deposits of the Coastal Plain, up to and including the Miocene, and is overlain by sands of the Columbia group, which, however, are not well discriminated from it. The age of the formation is regarded as late Neocene. The deposits which McGee regarded as referable to this formation included not only the Lafayette formation as recognized by the present writer, but, in addition, probably all of the Coharie and Sunderland formations, and possibly a part of the Wicomico, Chowan, and Pamlico formations.

In 1893 J. A. Holmes⁶ described the character, stratigraphic relations, and age of the surficial deposits of the sand-hill country, which, in North Carolina, lies to the east of the Piedmont border in the southwestern part of the Coastal Plain. In this region these materials consist of loams and sands which he regards as referable in part to the Lafayette formation and in part to the Columbia. The former rests with marked unconformity upon Cretaceous, and, to a limited extent, upon Eocene beds, and the latter, as a thin surface mantle, rests upon Cretaceous, Eocene, and Lafayette beds.

In their text-book, which appeared in 1906, T. C. Chamberlin and R. D. Salisbury,⁷ discussing the origin of the Lafayette formation, conclude that the deposits representing the formation in the Atlantic Coastal Plain are largely of fluvial and subaërial origin.

Definition.—The deposits of this formation are distributed as a more or less discontinuous surface covering in a belt 10 to 30 or 40 miles in width lying along the northwestern border of the Coastal Plain region. The inner margin of the belt was not studied in detail during the course of the present investigations, and for this reason the northwestern boundary of the Coastal Plain as mapped by Kerr is here accepted, with a few modifications, as limiting the Lafayette formation in that direction. Scattered beds of cobbles and gravels of fluvial origin, probably synchronous at least in part with the Lafayette, occur in the Piedmont valleys far to the west of the main body of Coastal Plain deposits. The southeastern boundary of the Lafayette belt is marked by a seaward-facing slope or escarpment not everywhere sharply defined, which has not been traced in detail, but which has been recog-

⁵Lafayette Formation, U. S. G. S., Twelfth Ann. Rept., 1890-91, pt. 1, pp. 347-521.

⁶Geology of the Sand-hill Country of the Carolinas; Geol. Soc. Am. Bull., vol. 5, 1893, pp. 33-34.

⁷Geology, vol. 3, 1906, pp. 301-308.