

details of this section are given on p. 98. (See, also, Plate III, B, opposite p. 98.) The Black Creek materials here consist of dark to black laminated clay with partings and thin layers of fine, micaceous, slightly glauconitic sand, the whole more or less lignitic. Similar material appears in a section at the A. C. L. Railroad bridge $\frac{3}{4}$ mile below the preceding. (See section, p. 99.) Here, also, they rest upon the Patuxent formation. This is the last place at which the Patuxent formation appears above water level.

At milepost 93 a low-water stage reveals about 3 feet of laminated, lignitic sand and clay of the Black Creek formation. The thin sand partings contain grains of glauconite.

At milepost 92, $\frac{1}{8}$ mile above Arringtons Bridge, 6 feet of Black Creek materials similar to the preceding is exposed along the left bank. They contain lignite, grains of amber, and pyrites. In a lens of dark clay about 4 feet above the base the following plant species were collected:

Araucaria bladenensis Berry.

Araucaria Jeffreyi Berry.

Podozamites sp.

Sequoia Reichenbachii (Gein) Heer.

Associated with the plant remains were a few indeterminable casts of pelecypod shells.

Between the preceding and a point $87\frac{5}{8}$ miles above New Bern there are occasional exposures of characteristic Black Creek materials in most places rising only a few feet above low-water level. At several places the beds present a slightly more marine aspect than is exhibited by typical Black Creek materials, as shown by the occurrence of glauconite grains in the thin sand layers and partings. At the last-named point there is a 2-foot exposure of black clay with fine sand laminæ in which the writer collected a few leaf remains associated with poor casts of *Leda*, *Cardium*, etc. (U. S. G. S. Loc. No. 5350.) The plant species are as follows:

Araucaria bladenensis Berry.

Araucaria Jeffreyi Berry.

Ficus daphnogenoides (Heer) Berry.

A short distance below the preceding *Araucaria bladenensis* Berry and a large undetermined leaf were obtained.

Between the last-named locality and the Sarpony Hills, $83\frac{1}{4}$ miles above New Bern, there are several occurrences of Black Creek materials presenting no unusual characters.