

Patuxent formation:	FEET.
4. Greenish gray, compact, arkosic, sandy clay, with irregular lenses of light-drab clay. The dark clay is filled with small dark particles which under the microscope appear to be partially decomposed marcassite.....	5
5. Coarse, gray, compact arkosic, somewhat argillaceous sand....	8

Between the preceding locality and the county bridge none but Black Creek or supposed Black Creek beds are exposed in the river banks, the Patuxent-Black Creek contact being below water level.

At the county bridge, however, 2 miles southwest of Goldsboro and $94\frac{3}{4}$ miles above New Bern, right bank, the Patuxent beds again appear unconformably overlain by beds of the Black Creek formation, as shown in the following graphic section, Fig. 6. (See, also, Plate III, B.)

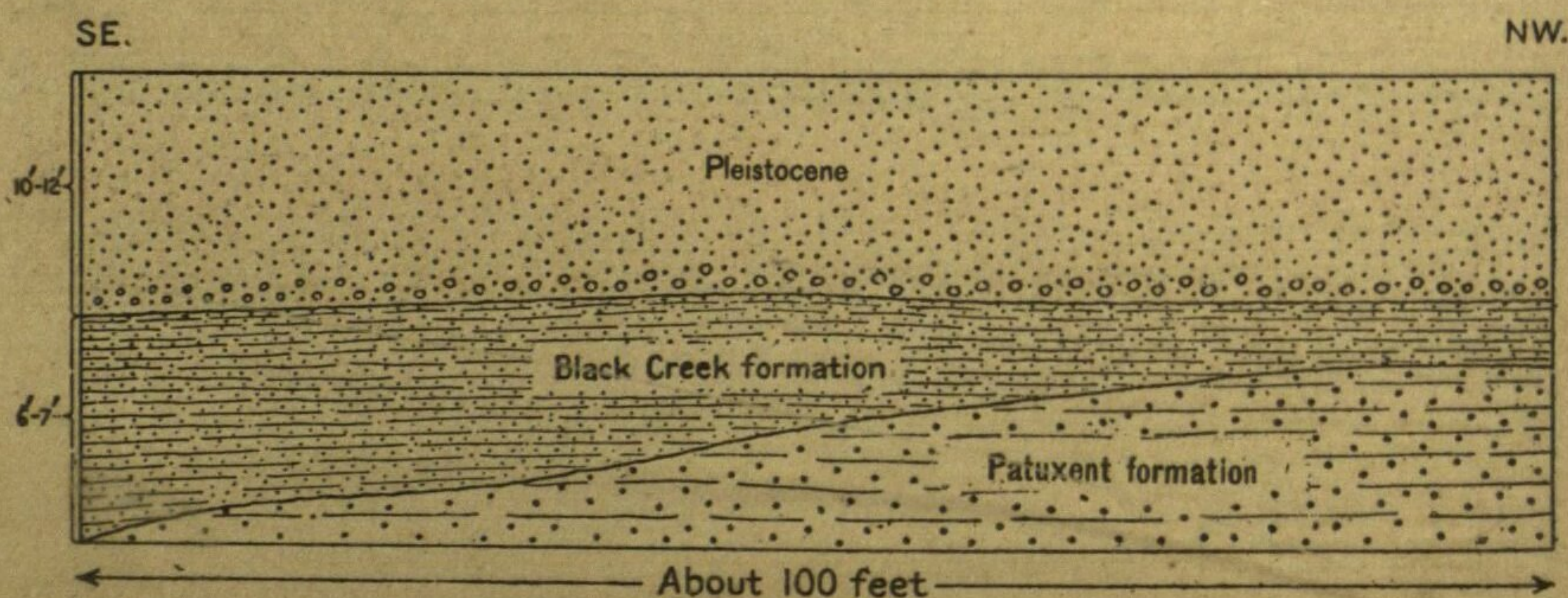


FIG. 6.—Sketch showing the relation of the Patuxent formation to the Black Creek formation, and of the latter to overlying Pleistocene deposits; Neuse River, at the county bridge, 2 miles southwest of Goldsboro, N. C.

EXPLANATION OF SECTION.

1. *Pleistocene*.—Yellow clay loam, grading down into coarse gravelly sand with gravel band at base, containing boulders of crystalline rocks.
2. *Black Creek formation*.—Dark to black, laminated clay with partings and thin layers of fine micaceous, slightly glauconitic sand, the whole more or less lignitic and containing numerous concretions of iron sulphide. The lignite occurs in the form of large and small pieces and in seams of comminuted particles. Fragments of wood remains which resemble charred wood are present in considerable numbers.
3. *Patuxent formation*.—Very compact, drab clay and coarse arkosic micaceous sand.

The last appearance of the Patuxent formation above water level is at the A. C. L. R. R. bridge $\frac{3}{4}$ mile below the preceding, where the following section is exposed: