

Patuxent formation, overlain by 10 feet of Pleistocene sand, with a band of gravel containing crystalline boulders at base.

At milepost 105, the river cuts into the upland and an interesting section is revealed which shows the contact of the Patuxent and Black Creek formations. The relations of the formations exposed are shown graphically in Fig. 5.

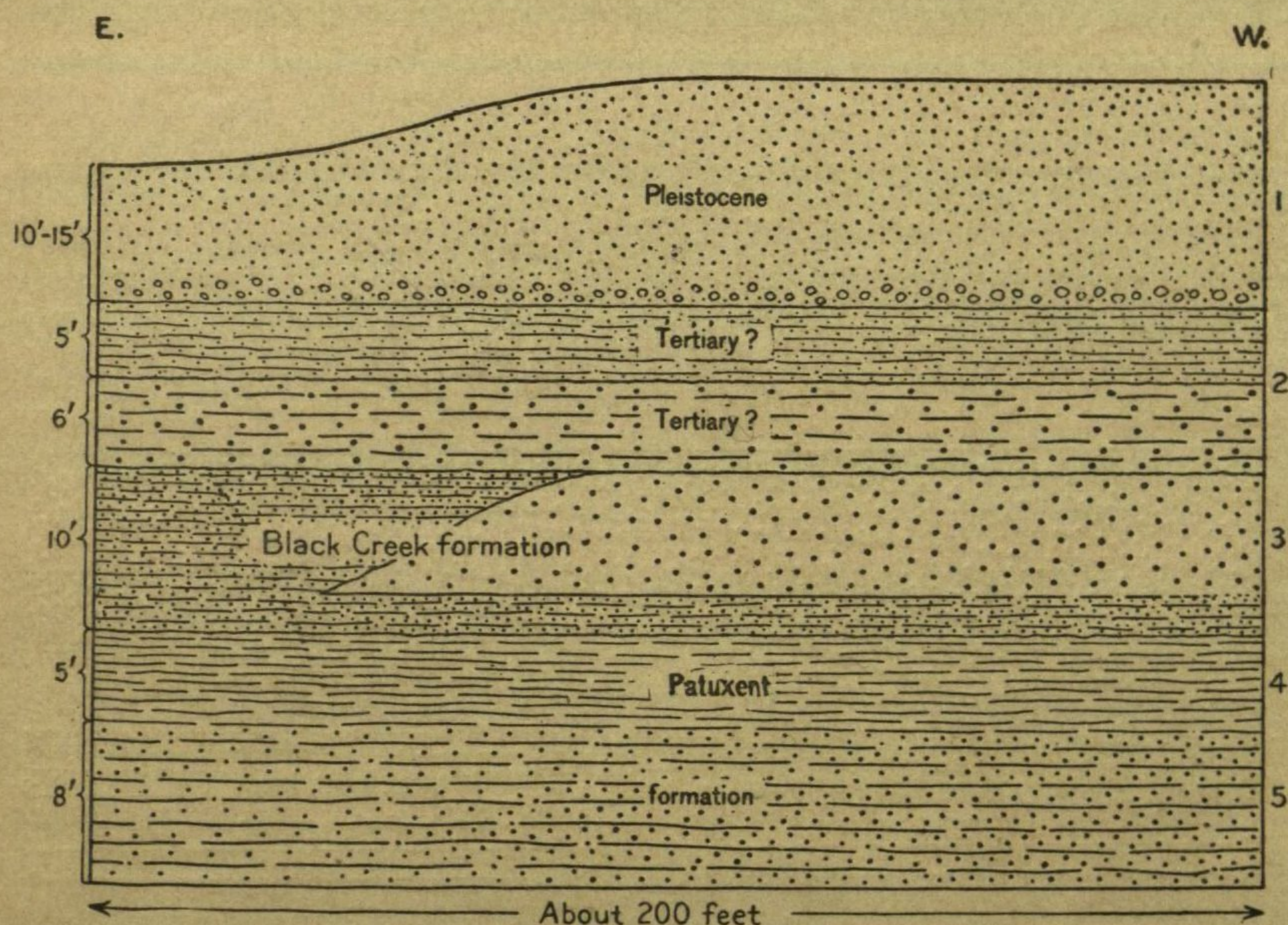


FIG. 5.—Sketch showing the relation of the Patuxent formation to the Black Creek formation, and the relation of the latter to post-Cretaceous deposits, Neuse River, milepost 105.

SECTION AT MILEPOST 105, RIGHT BANK.

|                                                                                                                                                                                                                                                                                           | FEET. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <i>Pleistocene:</i>                                                                                                                                                                                                                                                                       |       |
| 1. Coarse sand with gravel at base.....                                                                                                                                                                                                                                                   | 10-15 |
| (Unconformity.)                                                                                                                                                                                                                                                                           |       |
| <i>Tertiary:</i>                                                                                                                                                                                                                                                                          |       |
| 2. Light-gray, micaceous sand, interstratified with thin layers of light-drab plastic clay and layers of clay pellets of the same nature, the sand in places indurated to an iron stone.....                                                                                              | 6     |
| (Unconformity.)                                                                                                                                                                                                                                                                           |       |
| <i>Cretaceous:</i>                                                                                                                                                                                                                                                                        |       |
| Black Creek formation:                                                                                                                                                                                                                                                                    |       |
| 3. Dark drab, thinly laminated sandy clay with partings of fine micaceous sand, containing some small pieces of lignite. These materials are replaced in part a short distance away at the same level by a large lens of yellowish, stratified sand 7 or 8 feet in maximum thickness..... | 10    |
| (Unconformity.)                                                                                                                                                                                                                                                                           |       |