the Neuse River, about 16½ miles above New Bern. At that point the Trent is well exposed along the river bank overlain by a thin layer of Pleistocene, while a few rods away, along a small tributary stream, the Yorktown Miocene is well developed and shows its usual lithologic characteristics.

The Yorktown formation is overlain by Pleistocene deposits wherever sections have been exposed to view, but there are, no doubt, beneath the Pleistocene covering, many places where the Pliocene beds are in immediate contact with the Yorktown strata.

In North Carolina the Yorktown is unconformable with all the strata with which it is in contact, both the older and the younger formations. On this basis alone it could be separated from all of the other formations of the State. Its lithologic and paleontologic characters, however, are also diagnostic.

The Yorktown strata were deposited in marine waters that were mainly of very shallow depth. The formation consists principally of sands and shell marls with slight admixtures of clay and occasional clay laminæ. The marl beds can usually be distinguished from the marl beds of the St. Marys formation by the presence of large quantities of shell fragments. These fragmentary shell beds are best developed at Yorktown, Virginia, though they are also seen in a number of places in North Carolina, particularly at Tar Ferry on Wiccacon Creek in Hertford County and at Rock Landing on the Neuse River in Craven County. In certain places these fragmentary shell deposits closely resemble the beach materials present on some of the coral islands of the West Indies. Associated with these fragmentary shells are many more or less perfect shells, some of which show evidence of having been worn by the water, while in others there is no indication of their having been moved after the death of the animal. Some of the most perfect fossils are the shells of boring *Mollusca* that had evidently buried themselves in the bottom of the shallow water. Specimens of *Panopea* are found upright in these deposits in a perfect state of preservation. The shell marls of the Yorktown formation are usually loose, though occasionally they have been cemented by percolating waters and form a rather firm fragmental limestone not unlike coquina rock. The marls of the Yorktown formation are rich in lime and have been quarried for fertilizing purposes in a number of localities throughout the State. Old marl pits in this formation are numerous in Hertford, Martin, Beaufort, and Craven counties.

Besides the marl deposits, the Yorktown formation contains much sand that is usually light colored and fine grained. In some localities the sand when fresh is bluish-gray in color, but on weathering loses its original color and becomes light gray to buff.