

Were not the Cretaceous and Eocene strata so nearly horizontal, such exposures might indicate synclinal folding, but the very small dip of the strata precludes any such possibility.

The Trent formation is overlain by deposits belonging to the younger formations. In the vicinity of Wilmington the Trent dips beneath the Castle Hayne deposits, though there are no known exposures where the two are represented in the same section, and therefore no evidence has been obtained in this way to determine whether the Trent and Castle Hayne formations are conformable or not, in those regions where both are present, although the evidence secured from well borings makes it probable that they are. Between Pollokville and New Bern, in some places along the Trent River near Trenton, and also in the vicinity of Mount Olive, this formation is directly overlain by the Yorktown formation, while in the vicinity of Goldsboro it seems to pass beneath the St. Marys deposits. However, in almost all the places where the Trent strata are exposed the overlying material consists of sands, gravels, and clays of the Pleistocene, which form the surficial covering of the greater part of the Coastal Plain in this State. With the possible exception of the Castle Hayne formation, the Trent is known to be unconformable with every formation that overlies it.

Lithologic Characters.—The Trent formation consists of various kinds of materials in different portions of the State. Primarily the deposits consist of light-colored calcareous marl that is either loose or locally consolidated. This is well shown in the section exposed in the right bank of the Trent River at White Bank Landing about $1\frac{1}{2}$ miles below Trenton. In certain places the calcareous marl has been firmly indurated and forms a hard, compact limestone that, lithologically, closely resembles some of the Paleozoic limestones of the Appalachian region. This limestone usually contains many fossils, and in places the rock seems to have been largely formed of the shells of *mollusca*, *bryozoa*, and *echinoderms*. In certain places the shells are present, though in most places the shell particles have been entirely removed and the rock is either cavernous or contains many moulds or calcareous casts of the organisms that were originally present. Such limestones are exposed in many places along the Neuse and Trent rivers, but are particularly well developed at Spring Garden and Rock landings and in the Sarpony Hills on the Neuse River and at Rock Spring, White Rock Landing, in the vicinity of Trenton on the Trent River and at Jacksonville.

Near Olivers the limestone does not form a distinct bed, but there are irregular masses of limestone in a matrix of quartz sand, while at Biddle Landing on the Neuse River the limestone contains many fragments of shells mixed with considerable quartz sand.