		Feet.
35-39.	Light cream to light bluish-gray limestone rock, becoming very sandy in samples 37 and 38, containing fragments of shells and shell casts	190-215
40-47.	Light gray, very calcareous sand, with slightly indurated chunks in some samples, and in certain samples numerous fragments of fossils and fossil casts	215-265
Peedee:		
48-67.	Dark gray, very argillaceous, calcareous, fine-grained sand. (Could be classed as very arenaceous clay.) The different samples vary slightly in color, some having a bluish-gray tinge, and others a dark-brownish tinge. The lower samples become slightly less argillaceous. Finely comminuted shell fragments occur in sample No. 54	265-365
68-74.	Gray, calcareous, glauconitic sand, slightly argillaceous on upper samples, becoming coarser and very glauconitic in lower samples	365-400

MIOCENE.

ST. MARYS FORMATION.

Name.—The formation receives its name from the St. Marys River, Maryland, where its typical characteristics are well shown. The name was proposed in 1902 (Science, new ser., vol. 15, p. 906) by G. B. Shattuck.

Definition.—The St. Marys formation comprises the basal Miocene beds in North Carolina, which in some places rest upon the Eocene strata, but in other places are underlain by deposits belonging to the Cretaceous or to the crystalline rocks of the Piedmont Plateau. It is composed of unconsolidated deposits of sand, clay, and shell marls. The predominant material is a blue argillaceous sand which on weathering assumes a much lighter color. The St. Marys formation is found in the northeastern part of the State, where it forms almost continuous outcrops along the Meherrin, Roanoke, and Tar rivers. Along the Neuse River it is sparingly represented and south of the Neuse is only found in isolated patches of small areal extent.

The St. Marys formation, consisting of the lowest Miocene strata of the State, should be found normally overlying the Castle Hayne formation of the Eocene. It has not been found in contact with the Castle Hayne beds, however, for the reason that the area where that formation is now present is a region that has undoubtedly suffered much erosion since St. Marys time, and any St. Mary deposits that may have been laid down in that locality have been worn away. The St. Marys formation rests upon Trent, Cretaceous, or pre-Cambrian rocks wherever sections have been exposed within this State. Along a belt extending from