

Pleistocene strata, they have been considered to represent the Pliocene, and thus to belong to the Neocene. Where they are exposed as a superficial covering at the higher levels the strata exhibit much more extensive changes than the Pleistocene deposits, so that it is probable that much time must have elapsed after the former were laid down before the deposition of the latter. The chronological determination of the Lafayette formation is based, therefore, upon geological rather than paleontological grounds.

THE PLEISTOCENE PERIOD.

Superficially overlying the other formations of the Coastal Plain are deposits of Pleistocene age, which with marked variation in thickness, composition and structure extend from the glacial accumulations of northern New Jersey through the southern Atlantic and Gulf states to the Mexican border. The deposits of the Pleistocene in Maryland have been grouped in a single division, known as the Columbia formation.

THE COLUMBIA FORMATION.—The Columbia formation, so called from its characteristic development in the District of Columbia, widely covers the other deposits of the Coastal Plain throughout the eastern and southern counties of the state, and at the border of that region extends far along the various stream channels which enter from the Piedmont Plateau. The higher area of the central and western portions of the Coastal Plain were apparently never reached by the Columbia seas.

The deposits of the Columbia formation consist of gravels, sands and clays, which differ from the preceding deposits of the Lafayette formation in containing much less decomposed materials and in having suffered far less denudation since they were deposited. The deposits are generally coarsely stratified, with frequent occurrence of cross-bedding.

The Columbia period is divisible into an earlier and a later subdivision, represented in deposits occupying high and low levels respectively. The *earlier* deposits are more nearly similar to those of the Lafayette in color and in the greater frequency of decomposed