turbed by faulting, the Jacksonburg now appears at the surface between the Beckmantown dolomitic limestones and the Martinsburg shales. A few miles beyond the county borders to the west and to the south, the Jacksonburg is missing at places where its presence is expectable, and nowhere else does it attain the thickness or continuity developed in Northampton County.

**Lithologic characteristics.**—The Jacksonburg is lithologically distinctive, and is usually easily recognizable in the field. Two facies of the Jacksonburg are developed and are mapped separately over most of the county. The lower part of the formation, the cement limestone facies, is a fossiliferous high-grade, non-dolomitic limestone which varies in color from dark gray to black. It is normally crystalline, the crystals ranging in size up to about three millimeters. In places, however, the texture is so fine that the individual crystals cannot be distinguished with the unaided eye. The bedding of the cement limestone in unweathered exposures is massive, visible bedding planes being spaced from one foot to as much as fifteen feet apart. In weathered exposures, however, solution has emphasized the presence of minor or incipient bedding planes, so that the beds may be as thin as an inch. The cement limestone is relatively competent as contrasted with the overlying cement rock. Mountain-building stresses, to which the region has been subjected, have produced complex folds but un-accompanied by much flowage, shearing, or intricate, small scale distortion. The fossils in the cement limestone are normally visible only on weathered surfaces, but they are not distorted beyond recognition as they commonly are in the cement rock.

The cement limestone is readily dissolved by meteoric waters, so that very few cobbles or fragments of it are to be found in the surface soils. Clay pockets are visible in some of the quarries. The upper rock surface is an irregular solution surface, but solution and weathering do not progress to depths exceeding a few feet, except along major joint and bedding planes.

Overlying the cement limestone facies in all except the northeastern localities, is a more argillaceous facies of the Jacksonburg, to which the name cement rock facies has been applied. The gradation from the cement limestone to the cement rock is by means of intercalation. Argillaceous limestone beds become more abundant in the upper part of the crystalline cement limestone until they exceed the crystalline beds in quantity and thickness. In some of the cement quarries, the transition is quite abrupt so that it is possible to select by eye an exact horizon below which the cement limestone facies is clearly dominant and above which the cement rock facies prevails. This situation exists