

FORMATION OF THE APPALACHIAN REGION. (Continued.)

	Formations of the Appalachian Region.
Silurian	Lewistown (Niagara—L. Helderberg). Rockwood (Clinton). Tuscarora (white Medina). Juniata (red Medina). Martinsburg (Hudson River). Shenandoah (upper part).
Cambrian	Shenandoah (lower part). Antietam. Harpers. Weverton. Loudoun.
ARCHEAN.	
Algonkian (?)	Granite. Basic Volcanics. Acid Volcanics.

THE ALGONKIAN PERIOD.

The rocks of supposed pre-Cambrian age occur only in the extreme eastern division of the Appalachian Region and are confined to the area of the Catoctin and Blue Ridge mountains, including the Middletown valley, which occupies the region between them. The rocks of this age, which are represented, are entirely of igneous origin, and attain sufficiently distinct development to warrant separate treatment. The Algonkian rocks here found may be classified under the head of the Acid Volcanics, the Basic Volcanics, and the Granites.

THE ACID VOLCANICS.—The acid volcanics in Maryland occupy an irregular area north and northeast of Middletown between the Blue Ridge and Catoctin mountains, and extend nearly to the state line, while to the northwest of this main body are a few outlying masses. These rocks are close-grained and are holocrystalline mixtures of quartz and feldspar, which often show characteristic flow, spherulitic and even lithophysal structures. It seems evident, therefore, that the rocks were formed by the eruption of a silicious magma which cooled at or near the surface under conditions not unlike those shown by the volcanic rocks of the Yellowstone National Park. During the long periods of time that have followed since this mass