

plished by the Monocacy river and its numerous tributaries, the latter flowing in nearly parallel west and east courses from Parr's Ridge and the Catoctin Mountain. The deeper portions of the valley are considerably to the west of the centre of the district, and as a result the streams upon the east are longer and of greater volume than those upon the west. The water-ways at a distance from the main valley flow in marked channels, which are frequently deeply cut in the land.

THE APPALACHIAN REGION.

The Appalachian Region borders the Piedmont Plateau upon the west and extends to the western limits of the state. It comprises about 2000 square miles, or somewhat less than one-fourth of the area of the state and has a width of about 115 miles from east to west. It includes the western portion of Frederick and all of Washington, Allegany and Garrett counties. This region consists of a series of parallel mountain ranges with deep valleys which are cut, nearly at right angles, throughout much of the distance, by the Potomac river. Many of the ranges exceed 2000 feet, while some reach 3000 feet and more in the western portion of the mountainous area. The country illustrates in an exceptional manner the type of adjusted drainage. The Appalachian Region is divided into three distinct physiographic districts, based upon clearly defined geological differences, viz., an eastern (Blue Ridge and Great Valley), a central (Appalachian Mountains proper), and a western (Alleghany Mountains) division.

The *eastern division* comprises the area between the Catoctin and North Mountains and has a width of about 25 miles from east to west. Along the eastern border of this region the Catoctin Mountain extends from north to south, beginning in the highlands of Pennsylvania and reaching to the Potomac river at Point of Rocks. This range reaches an altitude of 1800 feet in Maryland. Succeeding the Catoctin Mountain upon the west is the Middletown Valley, with an elevation of 500 feet at Middletown. The valley drains southward into the Potomac river through the Catoctin creek and its tributaries, which receive their waters from the western flank of the Catoctin