sandstones forming the mountain dip to the northwest at angles varying from 30° to 60°. The Martinsburg shales beneath dip in the same direction, likewise at various angles. The contact between the two formations, seldom observable on account of the hillside talus, is generally about half way up the southern slope.

The crowding of the contours shown on the map indicates the steepness of the slopes. They can be climbed by the pedestrian only with considerable difficulty. The five roads that cross the mountain between the Delaware Water Gap and the Lehigh Gap all do so by diagonal or zigzag courses and finally cross the crest in notches or minor gaps. No tributary stream crosses the ridge between the Delaware and Lehigh rivers although each of these major streams receives numerous tributaries from either side both to the north and the south of the mountain. With the exception of two flexures in the rocks of the mountain known as the Big Offset and the Little Offset, the mountain is a single ridge with a remarkably straight trend to the west-southwest. Although the general appearance of the mountain on the skyline is that of a straight line, closer inspection and the examination of the map shows considerable variation in elevations. Ignoring the gaps or notches, the crest varies from 1,400 to 1,665 feet above sea level. Some persons have been inclined to suggest two levels of different altitude but since there is no marked separation between the two, it seems preferable to regard these varying elevations as due either to crustal warping or to varying amounts of erosional degradation.

Kittatinny Mountain may be said to typify what is regarded as a peneplain remnant, the remaining portion of an extensive plane of erosion that at one time extended throughout the entire Appalachian region. It was once believed that during Cretaceous time the tops of the folded Appalachians were worn down to base level. More recently the date for this leveling has been placed in middle or late Tertiary time. Subsequent elevation has permitted the removal of the softer, less resistant rocks on both sides, as discussed more fully on a later page. Other similar ridges lie to the northwest of Kittatinny Mountain in adjoining counties. In some places there are several parallel ridges separated by steep-sided valleys. In every case the ridges are composed of hard resistant rocks and the valleys cut in shales or in a few places in limestones. Along the Susquehanna River the continuation of Kittatinny Mountain is called First Mountain and is followed northwestward by Second and Third mountains.

Slate (Slate) Region.—The concordant tops of the stream divides in the slate belt are noted by the traveler. If the narrow stream valleys could be filled, the region would appear as an unusually well-