Little Gap.—An examination of the Mauch Chunk topographic map shows Wild and Hunter creeks north of the mountain flowing south-southeast and in line with Little Gap and on the south side of the mountain with Indian Creek. The alignment is so perfect that there seems little doubt but that the three creeks at one time constituted a single stream that flowed through Little Gap.

The diversion or bheading of this stream was accomplished by the growing headward of Aquashicola Creek which empties into the Lehigh River just above the Lehigh Gap. It was cutting in the red shales, and regardless of the fact that it had less water and few cutting tools it was able to keep pace with the downward cutting of the Lehigh River which was filing its way through the hard rocks of the mountain. On the other hand the Wild-Hunter-Indian Creek with little water was cutting its way slowly through the mountain. When the Aquashicola was extended back to this creek it was at a lower level. Consequently all the upper portion of the Hunter-Indian was captured and led directly into the Lehigh by a shorter course and Little Gap was left unoccupied. The notch or Little Gap is over 300 feet deep. It is clogged with boulders of decomposition so that it has considerably changed since the stream departed. The slopes have decreased but the floor has probably been lowered very little. Indian Creek, now confined entirely to the region south of Kittatinny Mountain, has become merely a tributary of Hokendauqua Creek.

Pen Argyl Wind Gap.—The story of the Pen Argyl Wind Gap is little more than the repetition of the origin of Little Gap. The only difference is that it is not so easy to determine the particular stream that was mainly responsible for the diversion.

A topographic map of the region shows McMichael Creek and Lake Creek north of Kittatinny Mountain in rather close alignment with the Wind Gap and with Bushkill Creek south of the mountain. Lake Creek now shows a reversed course. It is presumed that these three creeks at one time constituted a single stream which flowed through the present streamless gap. In this case tributary streams from both the Lehigh and Delaware rivers were pushing their ways headward in shale until they finally reached the McMichael-Lake-Bushkill Creek. Perhaps a tributary of the Delaware River, the present McMichael Creek below Sciota, was the first stream to effect dismemberment and cut off the upper part of the combined creek.

Cherry Creek, another tributary of the Delaware, and Buckwha and Aquashicola creeks, tributaries of the Lehigh, have also extended their headwaters into the same region and they have probably all been factors in the stream piracy. Ross Common Creek, a tributary of the