the locality from which Clarke and Ruedemann reported the following faunule (quoted from Swartz and Swartz):

- *Dolichopterus ontosus*
- *Eurypterus maria*
- *Styloneurus cf. myops*
- *Hughmilleria shawangunk*
- *Plinygnathus cf. globiceps*

Near this same zone, but on the New Jersey side, Schuchert reported an occurrence of *Arthrophyteus allegheniensis*, but I have never had the good fortune to find this fossil on the Pennsylvania side of the river, nor do Swartz and Swartz record it. It should, however, be present, and is common farther west.

Continuing around the curve, the highway nearly follows a strike section for several hundred yards. Dip slope exposures of the Shawangunk are abundant; some show ripple marked surfaces. As we approach the next turn, right (toward the north), the higher, finer, greener beds of the Shawangunk are crossed, and soon after rounding this curve, we observe the first signs of red marking the base of the Bloomsburg formation.

The lower part of the Bloomsburg is peculiarly interesting with its alternation of red and greenish-gray strata. The change of color is usually strikingly abrupt, taking place as it does precisely at the bedding surfaces. Continuing north across the red beds, small local faulting and folding are observable and considerable shearing of the shallower beds as we cross the south limb of the Kemmererville anticycle. The Bloomsburg is splendidly exposed all along the highway and on the railroad, particularly in the vicinity of the foundation of the old Kittatinny House, burned a few years ago. A change to more massive, browner beds is observable as the road rises north of the hotel site, and as one descends again to Delaware Water Gap village, the upper part of the formation is crossed. Beds assigned to the Pocono Island formation are exposed along the west side of the principal street and in a railroad cut at the north end of the platform of Delaware Water Gap station.

**Wind Gap section.**—The next section west of the Delaware Water Gap that affords a fairly complete view of the sequence of formations is that at Wind Gap. There is little to be seen in the intervening region at Tott and Fox gaps or at the two offsets. Approaching Wind Gap from the south, no satisfactory exposures of the Martinsburg are recognized in the immediate vicinity. The branch line of the Lehigh & New England Railroad which climbs up to the gap from the south-