

occur in all horizons but are specially characteristic of the Esopus, lends color to this supposition. These hogbacks, however, appear to be better explained as the result of differential erosion, as noted above. The more or less sudden rise and dying away of such a ridge in its northeast-southwest trend is apparently due to the greater or less development of certain cleavages; that is, where one of the characteristic cleavages at an angle to the bedding plane is well developed, erosion can most advantageously attack it.

The present paper gives a report on the succession of faunas in the strata of Trilobite mountain, from the Manlius to the Onondaga formation inclusive. Most of the field work was done during the summer of 1902, while the work on the collections was carried on during the summer and fall of 1903 in the laboratory of Columbia University. In the field work, great care was taken to distinguish between beds of varying lithic or faunal characters, by keeping separate the fossils collected from each, even though such differences were noted in a bed of less than an inch thick.

The accompanying map and sections were measured by pacing, and are subject to correction but in the acquisition

of the fossils great precaution was taken against mixing the collections from higher or lower beds.