

INTRODUCTION

Trilobite mountain, which is situated 3 miles southeast of Port Jervis, Orange co. N. Y., is a ridge with a maximum height of about 750 feet, trending in a northeast-southwest direction. The ridge is about 2 miles long by 1 mile wide and is bounded on the northwest by the Neversink river and on the southeast by the marsh separating this ridge from Shawangunk mountain, which like all other of the Blue Ridge ranges trends from the northeast to the southwest.

Both the valley of the Neversink and that containing the marsh between the Shawangunk and Trilobite mountains are simple mon-

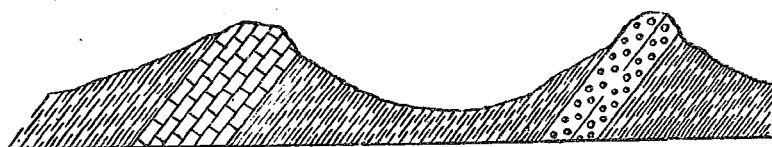


Fig. 1 Simple monoclinical valley (Rogers)

oclinical valleys [fig. 1]¹. The Onondaga and Marcellus formations underlie the former, the upper Medina to Manlius the latter valley.

Trilobite mountain, as noted by Dr Barrett², constitutes one of a series of anticlines extending in a northeast-southwest direction. In other words, this monocline is crossed by a "secondary system of flexures which cause the Helderberg Ridge to rise and sink in a succession of anticlinal and synclinal folds . . . The roads are in the synclinals and the limestone quarries are in the southeast fronts of the anticlinals . . . Bennett's quarry is in one of these; Nearpass's and Buckley's quarries lie south and north of it respectively." To the central one of these ridges Mather and Horton gave (about 1840) the name Trilobite mountain, from the great abundance of trilobites found here in the rocks of the Lower Oriskany.³

The first paper published in reference to the geology of this region was by Dr William Horton on the geology of Orange county. Dr Horton, who was a resident of Craigville, Orange co. and a well

¹Rogers, H. D. Geol. of Pa. 1858. v. 2, pt 2, p. 921.

²Am. Jour. Sci. Ser. 3. 1877. 13:385.

³Mather. Geol. N. Y. 1st dist. p. 333.