

Heinrich Ries in his report on the geology of Orange county, N. Y.,<sup>1</sup> gives a concise description of the successive horizons with a few fossils from each. He notes the greater prominence of the cleavage in the higher beds, so that the "bedding is often totally obliterated."<sup>2</sup>

Besides the above, Beecher, Darton and Schuchert have done more or less work in reference to this region.

This mountain<sup>3</sup> which represents one limb of an anticline, is a typical monoclinial ridge of the Appalachian type. It is, however, not a simple ridge but is made up of many minor ridges, as the



Fig. 2 Complex monoclinial ridge (Rogers)

accompanying ideal figure will show [fig.2].<sup>4</sup> All those dipping in the same direction contribute to the making of the mountain. We have here, then, what Rogers called a complex monoclinial ridge.<sup>4</sup>

These minor ridges, locally termed hogbacks, are usually, if not always, capped by a harder or more resistant stratum than that immediately beneath and are the result of normal erosion. Attacked by atmospheric agencies and in certain instances at least aided during present and past times by running water, the weaker stratum is disintegrated and washed away. The upper resistant stratum, thus undermined, breaks off by its own weight and falling, lies as talus covering the southeast slope of the hogback. The angle of slope of this talus depends on the size of the fragments. The northwest slope conforms in a greater or less degree to the dip of the beds.

There is evidence, in a slight development of slickensides etc., of more or less disturbance in the region, which leads one to suspect the presence of faults. The great development of hogbacks, which

<sup>1</sup>N. Y. State Geol. 15th An. Rep't 1895. p.395-475.

<sup>2</sup>——— p. 429.

<sup>3</sup>In altitude it is only a hill as the highest elevation is only about 750 feet.

<sup>4</sup>Rogers, H. D. Geol. of Pa. 1858. v. 2, pt 2, p. 920.