CHAPTER III.

GEOLOGICAL FORMATIONS IN MARYLAND.

A prominent feature in our geology is that most of the formations exist in nearly parallel ranges whose course is about N. E. by N.; passing into Pennsylvania on the north and into Virginia on the south and west.

In the completed reports of the surveys of New York and Pennsylvania, different names have been adopted, but I do not feel disposed, at present, to commit myself fully by the adoption of either nomenclature.

The final report upon the Geology of Pennsylvania, with the large geological map, published eighteen months since, is highly creditable to that State, and also to Prof. H. D. Rogers, formerly of Harvard University, but now a Professor in the University of Glasgow.

The work was performed by that gentleman with an able corps of assistants.

Unwilling to accept the local names, adopted for what is called "The New York Geological System," or those of Europe, Prof. Rogers invented a new set of names for those in the subjoined table, numbered from 8 to 21 inclusive.

For the present, perhaps, it will be better to number our formations provisionally. But in order to facilitate comparisons with other systems, I add, in the annexed table, a column for that of Pennsylvania, one for the New York system, and a third for the nearest equivalents in Europe.

The names of those numbered from 1 to 6, inclusive, as well as No. 21, 23 and 24 are common, both to this country and Europe, and have therefore no synonyms. Formation No. 22 is believed to exist nowhere but in our State, and must in due time have a Maryland name.

Most of them, as is shown in the map, constitute narrow belts, and the sections will assist in showing why this is the case. They were doubtless deposited, one upon the other, in succession, and afterwards upheaved by forces from below, which appear to have acted, along lines, nearly coincident with their range or *strike* as it is usually termed.

These upheaving forces seem to have acted most frequently and with the greatest energy upon the metamorphic rocks, 5 and 6, and with somewhat less energy upon the formations numbered 8 to 12, which extend westward to the North Mountain. When we examine the stratification of the rocks from 13 and upwards, we have evidence of less disturbance as we proceed westward. Since the deposit of the coal formations westward of Dan's Mountain, the upheaval seems to