

## GEOLOGY.

The geology of Maryland as well as its physiography shows an intimate relationship to the adjacent areas upon the north and south, so that its complete interpretation can be gained only by taking into consideration the great eastern border region of which the state is not only geographically but geologically a part. Frequent reference will therefore be made in the succeeding pages to the general distribution and relations of the geological formations found represented within the limits of the state, although the detailed descriptions will be confined to those features more particularly characteristic of the Maryland area.

The state of Maryland is so situated as to display, in spite of its comparatively small size, less than 10,000 square miles of land area, a remarkable sequence of geological formations. The most ancient rocks which make up the earth's crust as well as those still in the process of deposition are here found, while between these wide limits there is hardly an important geological epoch which is not represented. It is doubtful whether another state in the Union contains a fuller history of the earth's past. To make the completeness of this record in Maryland somewhat more intelligible it is well to consider the basis on which geologists are able to determine the succession of deposits.

Geology in its broadest aspects must be regarded as the science of the earth from its very earliest beginnings down to the present day, and as such stands in close relationship to the science of astronomy in its study of the origin of the solar system. In the absence of a more satisfactory theory, most geologists to-day are prepared tentatively to accept the nebular hypothesis of Kant and Laplace as a starting point in earth evolution. This hypothesis supposes that the nebulous, gaseous mass out of which the planetary bodies were formed embraced the most distant orbit of the solar system. As condensation began, successive rings were thrown off, which by further condensation produced the several planets of our system. These in turn may also possess rings or satellites, as with Saturn, or these rings may condense to form a single satellite, as in the case of our Moon. The natural