

One of the most noticeable differences between the upper Siluric and lower Devonian formations of New York and Maryland is the greater development of limestones with the corresponding less development of shales in the latter region. In Maryland the clear water condition allowing the deposition of limestone began in the Salina and was continued almost without interruption to the Oriskany.¹ The *Manlius* fauna entered at the close of the Salina and continued during a deposit of over a hundred feet of strata; the land was, as during the Coeymans, at a considerable distance from the present exposed strata. During at least the upper New Scotland times, land was not far distant from any of the five sections, but it either soon sank again or a deflection of currents carried the muddy waters in another direction, allowing the deposition of the Becraft. In northwestern New Jersey and eastern New York, this was followed by a return of the New Scotland conditions, during which the Port Ewen was laid down.

During the Oriskany the shore line was again nearer, so that the deposit throughout the whole extent from Becraft mountain to western Maryland is a silicious limestone. At the close of this period the land rose both to the south and north. From the middle of Pennsylvania southward through western Maryland, land conditions existed, for the *Marcellus* rests on the eroded Oriskany;² but in New Jersey and New York the shore line after remaining near during a deposition of from 300 to 500 feet of the arenaceous shales of the *Esopus*, again retired to some distance, producing clear water, during which the heavily bedded Onondaga limestones were deposited. That this submergence took place slowly is indicated by the very gradual change from the *Esopus* to the Onondaga.

It is interesting to note that chert is prominently developed in the Coeymans and New Scotland in each of the five sections, i. e. from Becraft mountain in eastern New York to western Maryland.

Evidence of migration of faunas

Favosites helderbergiae praecedens occurs in the lowest *Manlius* of western Maryland. In New York and New

¹Schuchert. On the Lower Devonian and Ontaric Formations of Maryland. U. S. Nat. Mus. Proc. 26:413-24.

²— 1903. p.414.