

SINGLE SPHERULE FROM IOWA RIVER OOLITE.

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| Silica, | 2.54 |
| Iron, | trace |
| Calcium carbonate, | 97.44 |
| | <hr/> |
| | 99.98 |

While traces are met with (the oolite being very variable in appearance and quality) at various points in the Chestnut Ridge country, the most frequent occurrence is marked by a line running northeast from Scotia and terminating two miles north northwest of State College, where the blocks are quite numerous and reach a weight of as much as four hundred pounds, and where all the finer specimens are obtained. Many of the pieces from this point are free enough from iron and cleavage to admit getting good cabinet specimens showing to perfection the wonderful regularity in the size of the spherules, the concentric lines, and, under the lens, when polished, the groups of interspherules. Occasionally the blocks contain cavities lined with quartz crystals. Sometimes a section shows a porous structure, the position of the spherules being occupied by spherical cavities lined with drusy quartz, presenting an appearance as of many minute quartz geodes broken open in matrix.

Examination with the microscope, and of mounted sections shows that the nuclei of the spherules are usually irregular quartz granules of crystalline structure, carrying liquid inclusions. It has been concluded from this that siliceous oolite, unlike the limestone oolites, is of inorganic origin.

It remains however to trace the manner of occurrence and connection with underlying rocks. These belong to the Canadian period. Higher, in the Siluro cambrian, a strata of silica lime oolite in which are imbedded masses of lime silica oolite, both of a peculiar structure, crops out on the college grounds. But no one has been able to say positively that this occurrence is even a neighbor to that of the silicious oolite. Probably, the siliceous oolite occurs imbedded in thin and irregular strata in the underlying rock,—there being

no evidence whatever of glacial transportation—and will sometime, when excavations happen to be made, be observed. Prof. W. S. Shaler says that every occurrence of oolite is of great interest to geographical geology as indicative of the presence and position of old shore lines.

It may be of interest to know what several eminent scientific men, among many others, have said of specimens of this oolite.

“It is a singular formation and I have never seen anything like it before.”

Prof. Samuel S. Penfield—Yale S. S. S.

“It is of great interest and not a common rock.”

Sir. J. W. Dawson, F. R. S.

G. R. W.

OHIO VS. INDIANA.

We hear recently from the newspapers of a discovery having been made that the boundary line, as now established between the States of Ohio and Indiana, is not a correct one—that the latter State has within her accepted territory a portion of the fair soil of her sister State. Some have asked, how is this to be remedied? Without attempting to answer this question definitely, I wish to refer to cases arising at the threshold of our life as a nation, the reference to which may be interesting and instructive. In the days of the Continental Congress, many were the disputes that arose between States as to territory and boundaries and between individuals claiming lands under grants from different States. Among these controversies were those between Pennsylvania and Connecticut; Pennsylvania and Virginia; New Jersey and Virginia; Massachusetts and New York; South Carolina and Georgia; New Hampshire, Vermont, New York and Massachusetts.

The Articles of Confederation provided that the United States in Congress assembled should be the last resort of appeal in all disputes and differences then subsisting, or that might arise thereafter, between two or more States concerning boundary, jurisdiction or any cause whatsoever,