SCIENCE

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MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y.

PRE-CAMBRIAN SEDIMENTS IN THE ADIRON-DACKS.*

CONTENTS.

Introduction, the rise of stratigraphical geology. Its gradual application to the pre-Cambrian strata.

The Adirondacks outlined, geographically and geologically.

Work of C. H. Smyth, Jr., H. P. Cushing and the writer.

The Varieties of Sedimentary Rocks.

The Limestones.

The Quartzites.

Minor Associates of the Limestones.

The Sedimentary Gneisses.

General Distribution of the Metamorphosed Sediments. The Northwest.

The Eastern Side.

Resumé.

Typical Stratigraphical Cross-sections.

Catamount Mountain.

The Western Spur of Whiteface.

The Lewis Section of Quartzite.

Limekiln Mountain.

Styles Brook Section in Southern Jay.

The Significance of Graphite.

Conclusion.

Stratigraphical geology had its rise in those old mining regions of Germany, the

* Address of the Vice-President and Chairman of Section E of the American Association for the Advancement of Science, given at the New York meeting, June, 1900.

The field work on which the above paper is based was done under both the U. S. Geological Survey and the New York State Geological Survey. All the data under the authority of the latter and here drawn upon have been printed. For permission to use much unpublished matter belonging to the former acknowledgments are here respectfully made to the Hon. Charles D. Walcott, Director. JULY 20, 1900.]

so that it may be distributed to those most entitled to it, and placed on sale like other government publications.

E. W. Allen.

SCIENTIFIC JOURNALS AND ARTICLES.

THE American Journal of Science for July contains the following articles :

'Energy of the Cathode Rays,' by W. G. Cady.

'Volcanic Rocks from Temiscouata Lake,' Quebec, by H. E. Gregory.

'Interpretation of Mineral Analysis : a Criticism of recent Articles on the Constitution of Tourmaline,' by S. L. Penfield.

'Studies in the Cyperaceae, No. XIII,' by T. Holm.

'Titration of Mercury by Sodium Thiosulphate,' by J. T. Norton, Jr.

'Selenium Interference Rings,' by A. C. Longden. 'Carboniferous Bowlders from India,' by B. K. Emerson.

'New Bivalve from the Connecticut River Trias,' by B. K. Emerson.

'Statement of Rock Analyses,' by H. S. Washington.

'String Alternator,' by K. Honda and S. Shimizu. 'Action of Light on Magnetism,' by J. H. Hart.

THE June number of the Bulletin of the American Mathematical Society contains the following articles : 'Report of the April meeting of the Society,' by the Secretary ; ' Report of the April meeting of the Chicago Section,' by T. F. Holgate, Secretary of the Section; 'On the history of the extensions of the calculus,' by J. G. Hagen ; Burnside's 'Theory of groups,' by G. A. Miller; Shorter notices: D'Ocagne's 'Treatise on nomography,' by F. Morley; Barton's 'Theory of equations,' by J. Maclay; Rice's 'Theory and practice of interpolation,' by E. W. Brown; Braummühl's 'History of trigonometry,' and Boyer's 'History of mathematics,' by F. Cajori; and Frischauf's 'Series in circular and spherical functions,' by W. B. Ford; 'Notes'; 'New Publications.'

The July number, concluding Vol. VI. of the Bulletin, contains: 'Some remarks on tetrahedral geometry,' by H. E. Timerding; 'On singular transformations in real projective groups,' by H. B. Newson; 'On groups of order 8!/2, by Ida M. Schottenfels; Lobachevsky's Geometry' (second paper), by F. S. Woods; 'Burkhart's Elliptic functions,' by J. Pierpont; 'Erratum'; 'Notes'; 'New Publications'; 'Ninth annual list of papers read before the Society and subsequently published,' 'Index.'

DISCUSSION AND CORRESPONDENCE. THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.

TO THE EDITOR OF SCIENCE: The following criticism has been sent to me of the last schedule published by the Royal Society for the International Catalogue:

"Take for example, paleontology, the introduction states that the zoological subdivisions are identical with those of the zoological scheme, but so hasty is the compilation that the old scheme of three years ago has been republished quite forgetful of the fact that it was long since given up and replaced by a totally different one. Had one ever classified titles by this scheme, the complete want of accord would have at once appeared. On p. 14 of the zoological scheme is a half page of misprints, which could not have been overlooked had the scheme served for experiments, 'Fauna and Flora' stands as a division of human anatomy, evidently through some carelessness of copying; topics are wanting in abundance and the same topic recurs 3 or even 4 times. Indeed in spite of all the good counsel given and the two years that have been taken, these last schemes simply swarm with errors, from fundamental ones to mere careless misprints * * *."

It hardly seems possible that this schedule, so regardless of the best principles of bibliographical work, and so illogical in its classification can receive the general support which is necessary to make it a financial success. We all welcome the idea of international co-operation as the only means out of the *impasse* of over crowded literature, but before we can combine we must have put before us a scheme which is practicable.

HENRY F. OSBORN.

THE CALLOSITIES UPON HORSES' LEGS.

TO THE EDITOR OF SCIENCE: I shall feel very much obliged to any of your readers who will furnish me with any hypotheses concerning the origin of the callosities upon the legs of horses and mules, and upon the fore-legs of