

when conducting five years ago the Swiss Geological Society on the ground, expressed the opinion, then endorsed by Professor Gutzwiller and Professor Baltzer, that the pebbles, at least in part, came, on the contrary, from the south and were of Alpine origin;<sup>2</sup> and it may be well to recall that such was also Studer's opinion.<sup>3</sup> It would make the case very different, in so far as several of the paleo-geographical conclusions of Mr. Foerste are concerned.

#### INDIANA ACADEMY OF SCIENCE.

THE ninth annual meeting of the Indiana Academy of Science was held in the capitol at Indianapolis, Dec. 27 and 28, 1893, under the presidency of Dr. J. C. Arthur, of Purdue University. The morning of Wednesday was devoted to a discussion of the proposed biological survey of Indiana. The directors having the survey in charge first presented reports of their respective divisions. Dr. L. M. Underwood, Division of Botany; Dr. C. H. Eigenmann, Division of Zoölogy; Prof. V. F. Marsters, Division of Palæontology. For some time there has been under discussion a plan for several states to coöperate in the work of such a survey; This matter was taken up, and Dr. J. M. Coulter, of Lake Forest, Ill., spoke for that state. Prof. R. E. Call represented Kentucky. Several of the workers on the Indiana Survey spoke on various phases of the work. "Phænerogams," discussed by Prof. Stanley Coulter; "Fishes," Dr. C. H. Eigenmann; "Plans for Successful Work," Dr. J. M. Coulter; "What Can the High Schools Do to Help the Survey?" Prof. W. S. Blatchley. "Can the Common Schools Aid?" Prof. W. W. Norman; "Mollusks," Prof. R. E. Call; "Palæontology," Prof. V. F. Marsters; "Ornithology," A. W. Butler. The discussion occupied the full half-day.

In the afternoon the Academy met in two sections, one devoted to botany and zoölogy, the other to chemistry, physics and mathematics. In the former the following papers were presented: "An Alphabetical and Synonymical Catalogue of the Acrididæ of the United States," W. S. Blatchley; "On the Hibernation of Turtles," A. W. Butler; "Some Notes on a Variety of *Solanum Dulcamara*," R. Wes. McBride; "Indiana Fishes," C. H. Eigenmann; "Review of Botanical Work in Indiana with Bibliography," L. M. Underwood; "Notes on an Imbedding Material," John S. Wright; "Recent Notes on Indiana Birds," A. W. Butler; "The Distribution of Indiana Birds," A. W. Butler; "On the Occurrence of the Rarest of the Warblers (*Dendroica Kirtlandi*) in Indiana," A. B. Ulrey; "Histology of the Pontederiaceæ," E. W. Olive; "Growth in Length and Thickness of the Petiole of *Richardia*," Katherine E. Golden; "The Geographical and Hypsometrical Distribution of North American Viviparidæ," R. Ellsworth Call; "Recent Notes on Cacti," J. M. Coulter; "The Field Columbian Museum," J. M. Coulter.

In the physico-chemical section were presented: "Estimation of Organic Matter in Water by the Potassium Permanganate Method," Thos. C. Van Nuys and Sherman Davis; "1. 4. Di-amino-cyclo-hexane," W. A. Noyes and H. H. Ballard; "Preliminary Note on Variations of Strength of Timber in Different Parts of the Cross Section of the Tree," Thomas Gray; "A Method of Determining Traces of Cyanogen in Organic Matter," Sherman Davis; "Integration of a Linear Vector Differential Equation," A. S. Hathaway; "An Autographic Method of Testing the Magnetic Qualities of Iron," Thomas Gray; "A Case of Stereo-isomerism

in the Hydrazones of Benzoin," Alexander Smith; "Camphoric Acid," W. A. Noyes; "The Value of the Steam Pipe within the Smoke Box of a Locomotive, as a Means of Superheating," Wm. F. M. Goss; "An Experimental Study of the Action of the Counterbalance in Locomotive Drive-Wheels," Wm. F. M. Goss; "Methods of Starch Determination," W. E. Stone and D. B. Hoffman; "The Combustion Gases of the Locomotive," W. E. Stone.

Wednesday evening the Academy met in general session. The following officers were elected for the ensuing year: President, W. A. Noyes, Terre Haute; Vice President, A. W. Butler, Brookville; Secretary, C. A. Waldo, Greencastle; Assistant Secretary, W. W. Norman, Greencastle; Treasurer, W. P. Shannon, Greensburg. President Arthur then addressed the Academy on "The Special Senses of Plants."

Thursday morning the early part of the session was devoted to the reports of committees. A change was made in the constitution of the Academy providing for a body of fellows. The following papers were then presented: "Should the Study of Natural Science in the Lower Classes of the Public Schools be Encouraged?" W. W. Norman; "The Detection of Strychnine in an Exhumed Human Body," W. A. Noyes; "Absorption of Poisons by Animal Tissue After Death," P. S. Baker; "The Application of Graphical Methods to the Solution of Some Problems in Electrical Engineering," Harold B. Smith; "Induration of Certain Tertiary Rocks in Northeastern Arkansas," R. Ellsworth Call; "The Effect of Environment on the Mass of Local Species," C. H. Eigenmann.

At the afternoon session the following papers were offered: "The White Clays of Southern Indiana," A. W. Butler; "The Ash of Trees," Mason B. Thomas; "Poisonous Influence of *Cypripedium spectabile*," D. T. MacDougal; "Notes on the Biological Survey," Mason B. Thomas; "Notes on Sectioning Woody Tissues," John S. Wright; "The Stomates of Cycas," Mason B. Thomas; "Symbiosis in *Isopyrum Baternatum*," D. T. MacDougal; "Our Present Knowledge of the Distribution of Pteridophytes in Indiana," Lucien M. Underwood; "Concerning the Effect of Glycerine on Plants," John S. Wright; "The Adventitious Plants of Fayette County," Robert Hessler; "Bibliography of Indiana Ornithology," A. W. Butler; "Bibliography of the Batrachians and Reptiles of Indiana," O. P. Hay; "Bibliography of Indiana Mammals," A. W. Butler and B. W. Everman; "The Effect of Light on the Germinating Spores of Marine Algæ," Melvin A. Brannon; "Notes on Saprolegnia," George L. Roberts; "Contributions to the Life-History of *Notothylas*," D. M. Motter; "Some South American *Characinidæ*, with Six New Species," A. B. Ulrey.

The Academy decided to hold its next meeting in May at Rochester, Indiana, where, in connection with the meeting, an exploration of some of the beautiful lakes in that vicinity can be undertaken.

—Diana Clifford Kimber will soon publish a text-book on "Anatomy and Physiology for Nurses," in connection with Louise Darche. Miss Kimber's experience as assistant superintendent in both the New York City and the Illinois Training School for Nurses has led her to feel the need of such a manual and to undertake the work. It is designed to fill a middle place between the text-book written for medical students and that for use of children in schools. The subject is presented in a scientific manner, but the technicalities which discourage the average student have been, so far as possible, avoided.

<sup>2</sup>See *Eclogæ Geologicæ Helvetiæ*, 1888, No. III., p. 281.

<sup>3</sup>See L. Rollier, *Etude stratigraphique sur les terrains tertiaire du Jura Bernois* (Archives des Sc. Phys. et. Nat., March, 1892).