

SOCIETIES AND ACADEMIES.

THE NORTH CAROLINA ACADEMY OF SCIENCE.

THE fifth annual meeting of the North Carolina Academy of Science was held at West Raleigh, May 18 and 19. The following officers were elected for the ensuing year:

President—Dr. Collier Cobb, of the State University at Chapel Hill.

Vice-President—Professor J. L. Lake, of Wake Forest College.

Secretary-Treasurer—Dr. F. L. Stevens, A. and M. College, West Raleigh, N. C.

Members of the Executive Committee—Mr. Franklin Sherman, Jr.; Dr. W. C. Coker, of Chapel Hill, and Professor John F. Lanneau, of Wake Forest College.

The following papers were presented:

Autophytographs: COLLIER COBB.

Name suggested by C. H. White (*Am. Jour. Sci.*, March, 1905) for a plant record formed by the extraction of coloring matter through decay of plant, or a black deposit reproducing perfectly the leaves of plants, illustrated by specimens from the neighborhood of Wilkesboro, N. C., and elsewhere. Such records should also have been made in geological past, and Dr. Cobb reported fern autophytographs on Carboniferous rocks from near Pottsville, Pa., exhibiting two different specimens of the same.

Notes on the Variation in the Number of Eggs or Young produced by some American Snakes: C. S. BRIMLEY.

This paper gave the largest, smallest and average number of eggs or young produced, according to the author's experience, by the following species of North American snakes—*Eutænia sirtalis*, *Eutænia saurita*, *Natrix sipedon*, *Haldea striatula*, *Storeria dekayi*, *Storeria occipitomaculata*, *Virginia valeriae*, *Bascanium constrictor*, *Heterodon platyrhinus*, *Ophibolus getulus*, *Cyclophis æstivus*, *Coluber quadri vittatus*, *Carphophiops amœnus*, *Ancistrodon contortrix*, *Ancistrodon piscivorus*. Comments are also made on the confusion caused by the application locally of the same popular or local name to different species of

snakes in different places, and by different names being applied to the same species.

Dr. W. C. Coker explained with blackboard drawings the development and the nuclear changes within the embryo sac of the ordinary poplar tree, *Liriodendron*. The special point of interest was that though this tree is very ancient geologically, yet its embryo sac presents no unusual features.

Sugaring for Moths: C. S. BRIMLEY.

The author's experience in sugaring for moths in July, August and September, 1905, were given. Names the mixtures employed and how applied, and what species of moths and other insects were captured. Notes that a very large proportion of the attracted moths were species of economic importance, viz., the army-worm and cutworm moths, which do considerable injury to field and garden crops. Notes what insects were attracted to the sugared patches in the daytime and also that rough-barked trees were better to sugar than smooth-barked ones.

Rhætic Flora of Moncure Shales: COLLIER COBB.

Specimen of *Liriodendron*(?) reported from Deep River Trias in 1904 in association with *Macrotæniopteris*, and then regarded by speaker as Lower Trias, led to the tracing of this bed eight miles northeastward through Lockville to Moncure, and to the discovery of one nearly complete *Liriodendron* leaf and several fragments in association with lycopods, conifers and equisetaceæ, with many examples of more modern plants yet to be determined, constituting what is probably a transition flora. Many of the specimens were from a well recently dug by the Seaboard Air Line Railway.

The Influence of Citrous Stocks on Scions: Mr. C. F. REIMER.

An investigation was made in Florida to determine whether the stock influences the scion in any way. The following outline covers most of the work which was done:

1. Influence on rate of growth—(a) in diameter, (b) in height.
2. On shape of tree.

3. On hardiness.
4. On diseases.
5. On fruit—(a) amount, (b) quality, (c) season of ripening, (d) color, (e) dropping.

Interesting results were obtained which will appear in *SCIENCE* in full at a later date.

Mr. J. C. Temple discussed the bacterial flora of cow manure, showing the average number of germs present in fresh manure and in manure of different ages. The relation of these various germs to the nitrogenous material of the manure. He also presented important results concerning the distribution, abundance and variation of the colon bacillus.

A paper by Lewis T. Winston in his absence was presented by Dr. F. L. Stevens on 'Bacterial Analysis of the Various Lithia Waters,' in which it was stated that while most of the lithia waters are above reproach from a bacterial view point, some of them are of such condition that if submitted to the ordinary board of health analysis they would be condemned.

Dr. C. W. Coker discussed 'Types of Liverworts Especially Useful in Elementary Classes in Botany.'

Mr. W. C. Etheridge explained a series of tests which he had made concerning the various methods of analysis of milk, to determine the effects of various media, various ages of plate, different degrees of acidity, and effect of ventilation upon the bacterial count.

Mr. C. S. Brimley presented a paper on the 'Zoology of Lake Ellis, Craven County, N. C.'

Mr. W. C. Coker gave the results of his investigation upon the cytology of the endosperm of the Pontederiaceæ.

Food Adulteration: Mr. W. M. ALLEN.

This paper showed the great effect of the adulteration of human foods on mankind; how it effects both the health and the wealth.

It seems that the greatest danger to health lies in the use of chemical preservatives in fresh meats and sausages by butchers and meat men, often ignorant, having no conception of what they are dispensing to their customers.

The meeting was well attended and an interest was manifest. It is probable that the

next meeting will be held at Chapel Hill one year from the present date.

F. L. STEVENS,
Secretary.

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON.

The society has had a very successful year under the presidency of Dr. George M. Kober, whose address, 'The Health of the City of Washington,' was a striking exposition of the value of practical anthropology in vital questions.

The following is a list of papers read:

'The Mound Builders of Eastern Mexico,' Dr. J. Walter Fewkes; 'The Work of Blind Indians,' Dr. A. Hrdlicka; 'Coins and Coinage,' Colonel Paul Beckwith; 'The Development of the Talking Machine and its Utilization in Anthropology,' George C. Maynard; 'Mechanical Aids to the Study and Recording of Language,' Dr. P. E. Goddard; 'The Naming of Specimens in American Archeology,' C. Peabody and K. Moorehead; 'Diseases of the Indians, more especially of the Southwest United States and Northern Mexico,' Dr. A. Hrdlicka; 'The Introduction of Reindeer among the Natives of Alaska,' Dr. Sheldon Jackson; 'Archeological Explorations on the San Francisco River, Arizona and New Mexico,' by the general secretary; 'Helen Keller, her Life, Associates and Achievements,' John Hitz; 'A Native Moxa (Cautery) among the Klamath Indians,' F. V. Coville; 'Anatomical Vestiges in Human Organisms,' Dr. D. S. Lamb; 'The Babylonian Code of Laws or Hammurabi and the Laws of Moses,' I. M. Casanowicz; 'Existing Shadows of Primitive Conditions,' C. H. Robinson; 'Recent Archeological Investigations on the Pajarito Plateau,' Professor E. L. Hewett; 'The Family in Social Organization,' J. N. B. Hewitt; 'Critical Remarks on Social Organization,' Dr. John R. Swanton; 'The Remains of Prehistoric Man in North Dakota,' Professor Henry Montgomery; 'The People of the Philippines,' Dr. Albert E. Jenks; 'The Igorote of Luzon,' W. E. Safford; 'The History of Anthropology in the District of Columbia,' Professor O. T. Mason; 'The Interrelations of the Sciences,' Dr. Max West;

Fragments of Californian Ethnology: 'A Mortuary Ceremony and other Matters,' Dr. C. Hart Merriam; 'Human Illusions,' A. R. Spofford. At the closing meeting for the year, obituary notices of deceased members were read as follows:

Dr. Washington Matthews, by James Mooney.

Dr. Swan M. Burnett, by Dr. D. S. Lamb.

Col. Weston Flint, by J. D. McGuire.

Mrs. Hannah L. Bartlett, by Mrs. Marianna P. Seaman.

Mr. S. H. Kauffmann, by Professor W. H. Holmes.

Mr. W. H. Pulsifer, by the general secretary.

The society proceeded to the election of officers, with the following results:

President—Mr. J. D. McGuire.

Vice-presidents—(a, somatology), Dr. A. Hrdlicka; (b, psychology), Dr. J. Walter Fewkes; (c, esthetology), Professor W. H. Holmes; (d, technology), Dr. Walter Hough; (e, sociology), Mr. James Mooney; (f, philology), Mr. J. N. B. Hewett; (g, sophiology), Miss Alice C. Fletcher.

General Secretary—Dr. Walter Hough.

Secretary to the Board of Managers—Dr. John R. Swanton.

Treasurer—Mr. George C. Maynard.

Curator—Mrs. Marianna P. Seaman.

Councilors—F. W. Hodge, J. R. Swanton, J. W. Fewkes, I. M. Casanowicz, Paul Beckwith, J. B. Nichols, J. N. B. Hewett, James Mooney, W. E. Safford and Mrs. Sarah S. James.

WALTER HOUGH,
General Secretary.

THE AMERICAN CHEMICAL SOCIETY. NEW YORK SECTION.

THE eighth regular meeting of the New York Section was held Friday evening, May 11, at the Chemists' Club, Dr. F. D. Dodge presiding. The following papers were read:

The Insoluble Chromi-Cyanides: F. V. D. CRUSER and E. H. MILLER.

The paper reviews the work done many years ago on the chromi-cyanides, gives an improved method for the preparation of potassium chromi-cyanide and describes the properties and analysis of this salt. The only insoluble chromi-cyanides are those of silver, cadmium, mercurous mercury, nickel, cobalt, cupric and cuprous copper, zinc, manganese

and ferrous iron. These precipitates were found to have the normal composition whether $\text{Cr}(\text{CN})_6$ or cathion was in excess.

The Dissociation of Water Vapor and Carbon Dioxide at High Temperatures: IRVING LANGMUIR.

It is shown that, when carbon dioxide or steam is passed slowly over glowing platinum wires, these gases are dissociated to an extent corresponding to the true chemical equilibrium at the temperature of the wire. The degree of dissociation was determined with considerable accuracy for temperatures ranging from $1,000^\circ$ to $1,300^\circ$, and was found to agree closely with the van't Hoff formula. The temperature was determined from the change of electric resistance of the glowing wire, the temperature coefficient having been determined in an electric furnace.

The Condensation of 4-Nitro Acetantranil with Diamines: W. KLABER and M. T. BOGERT.

4-nitro acetantranil can be prepared rapidly and readily, in any desired amount, from o-toluidine. It was condensed with hydrazine hydrate, ethylene diamine hydrate, and with guanidine. With hydrazine, both amino quinazoline and diquinazolyl were obtained. With ethylene diamine and guanidine, various quinazolines and intermediate amides were isolated.

The Synthesis of 6-Nitro-2-Methyl-4-Ketodihydroquinazolines from 5-Nitro Acetantranil: E. P. COOK and M. T. BOGERT.

The authors prepared 5-nitro acetantranil from 5-nitro acetantranilic acid, and, by condensing this anthranil with various amines, obtained the 6-nitro-2-methyl-4-ketodihydroquinazoline, together with its 3-methyl, 3-ethyl, 3-phenyl and 3-amino derivatives, as well as the diquinazolyl corresponding to the latter. Both the amino quinazoline and the diquinazolyl carry acetic acid of crystallization.

On the Alkyl Oxygen Ethers of Alpha Oxyquinazolines and the Isomeric 3-(N)-Alkyl Derivatives of the Corresponding Alpha Quinazolones: H. A. SEIL and M. T. BOGERT.
On treating various alpha oxyquinazolines

with alkali and methyl iodide, the N-methyl derivative resulted in every case. With ethyl iodide, both O- and N-derivatives were obtained, while with the higher iodides the O-compound was the chief product. The pure N-alkyl compounds were prepared from the acyl anthranils, and the pure O-compounds from the corresponding chlorine derivatives and sodium alcholates. A large number of isomers were prepared and examined, both of nitrated and unnitrated quinazolines.

F. H. POUGH,
Secretary.

THE TORREY BOTANICAL CLUB.

THE meeting of May 8, 1906, was held at the American Museum of Natural History at 8 P.M., with President Rusby in the chair.

The scientific program was an illustrated lecture by Dr. Grace E. Cooley on 'Forestry.'

The lecture considered the relation of forests and forest products to man, and the consequent importance of an intelligent comprehension of the principles and economic bearings of forestry. The nature of various important species of trees was treated of from the standpoint of silviculture, treating the tree as an individual plant; forestry, considering tree groups, or forests; physiography, discussing the relation of trees to the landscape and physiographic processes, and also from the point of view of economics and esthetics. The historical development of the U. S. Bureau of Forestry was briefly traced from the early beginning when a few interested persons met regularly at the home of Mr. Gifford Pinchot for discussion and instruction until the present organization of the national forest service. Forestry in other countries was also alluded to, and its long recognition and advanced stage of perfection abroad, standing in contrast to its rather tardy development in the United States.

C. STUART GAGER,
Secretary.

THE CALIFORNIA BRANCH OF THE AMERICAN FOLK-LORE SOCIETY.

THE eighth meeting of the California Branch of the American Folk-Lore Society

was held at Cloyne Court, Berkeley, Tuesday, April 17, 1906, at 8 P.M. Mr. Charles Keeler presided. The minutes of the last meeting were read and approved. Dr. J. W. Hudson, having been approved by the council, was elected to membership in the society. On motion, Charles Keeler, A. H. Allen and P. E. Goddard, previously appointed by the Berkeley Folk-Lore Club as a committee to report on the feasibility of making a special study of the folk-lore of Berkeley and vicinity, were elected to represent the California Branch and to secure the cooperation of the two societies in the undertaking. A report reviewing the work of the society during the first year of its activity, which closed with this meeting, was read by the secretary. Dr. H. du R. Phelan, captain U. S. Volunteers, gave the address of the evening on 'The Peoples of the Philippine Islands,' based on a sojourn of several years in different parts of the archipelago and illustrated with numerous ethnological specimens. At its conclusion Dr. Phelan's talk was discussed by the members. The acting president thereupon announced the conclusion of the first year of the society's existence and the meeting was adjourned. Forty-five persons attended the meeting.

A. L. KROEBER,
Secretary.

DISCUSSION AND CORRESPONDENCE.

FACTS AND THEORIES IN EVOLUTION.

WITH reference to the writings of Weismann, I wrote in 1896,¹ that he has constantly mixed up the origin of species and variations, and the origin of adaptive characters. This holds good also at the present time, and may be said of other writers. The confusion is partly due to Darwin's phrase: origin of species, which was intended to include the whole process of evolution; but we must bear in mind that the latter is composed of several distinct processes.

In a recent article in *SCIENCE*,² Dr. F. Wayland Vaughan gives a review of de Vries's

¹ *Pr. Am. Philos. Soc.*, 35, 1896, p. 191.

² *SCIENCE*, May 4, 1906, p. 681.