

dipped capsules are allowed to dry over night. Premature boiling causes the capsules to swell and burst due to the presence of ether and alcohol in the inner layers of the colloidin. They should not be boiled until they are odorless.

The colloidin capsules are removed from the glass rods by immersing them in boiling water for ten minutes using the glass rods to control the capsules. Leaks may be detected by blowing through the glass rods. If no leaks are detected the capsules can be easily removed from the glass when the gelatin has melted. The capsules generally contain gelatine which may be objectionable in some experiments. This may be removed by filling the capsules with water and boiling them briskly for one half hour. If any of the gelatin remains, the process must be repeated until all has been removed.

The finished capsules may be filled with bouillon, water or any liquid media and sterilized by intermittent sterilization, after which they may be inoculated by platinum needle, pipette or hypodermic syringe. Sealing is accomplished by placing a drop of thick colloidin in the neck of the capsule and allowing it to harden. Leaks may be detected by washing the capsule with sterilized water, after which it is dropped into a tube of sterilized broth and incubated twenty-four hours.

WILLIAM W. BROWNE,

DAVID SOLETSKY

THE COLLEGE OF THE CITY OF NEW YORK

#### SOCIETIES AND ACADEMIES

##### THE WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS

The academy in conjunction with the Wisconsin Archeological Society, the Wisconsin Audubon Society, the Madison Mycological Society, the Wisconsin Mycological Society and the Wisconsin Natural History Society, held its forty-fourth annual meeting at Milwaukee in the Public Museum, when the following program was presented:

##### First Session Thursday, April 9, at 9 o'clock

"Some Problems Involved in the Cultivation of Medicinal Plants," by Edward Kremers.

"The Garden City Movement in England and Germany," by L. S. Smith. (Illustrated.)

"The Significance of Highway Maintenance in the United States," by L. S. Smith. (By title.)

"A New Indicator for Acids and Alkalis," by A. F. Gilman.

"Origin of the Republican Party," by A. F. Gilman.

"Some Variations Noted in Gall Stones," by G. A. Talbert.

"Geologic Occurrence of Radium Ores," by Rufus Mather Bagg. (Illustrated.)

"The Relation of the Corpus Christi Procession to the Corpus Christi Play in England," by Merle Pierson.

"Some Versions of English Ballads Collected in Milton," by Mabel Maxson.

"William Gager and the Academic Drama at Oxford," by Karl Young. (By title.)

The second session was held on the evening of Thursday, April 9, at 7:30 o'clock, when Professor S. W. Williston, of the University of Chicago, delivered a lecture on "Early Land Animals of North America." This lecture was fully illustrated by many restorations of early extinct animals for the most part made by the lecturer. The lecture was well attended by the public, and was most interesting and valuable.

##### Third Session, Friday, April 10, at 9:30 o'clock

"The Climate of Madison, Wis. 1. A discussion of the observations of temperature, 1869 to 1913," by Eric R. Miller.

"The Approach to Popular Literature," by Arthur Beatty.

"A Method for Determining Approximate Metabolic Demands of Plants for Soil Water," by H. E. Pulling. (By title.)

"Physiological Changes Causing Black Heart in Potato Tubers," by E. T. Bartholomew. (By title.)

"Further Studies on Wisconsin Tremellinae," by E. M. Gilbert. (By title.)

"Successful Method for Growing *Clitocybe illudens* and *Armillaria mellea*," by V. H. Young. (By title.)

"The Effect of Lateral Pressure on the Formation and Direction of Growth of Plant Organs," by J. B. Overton. (By title.)

"The Development of Botanical Microtechnique," by Gilbert M. Smith. (By title.)

"The Reaction of Pigment Cells in the Trout to Chemical Stimuli," by John M. Loshinski.

"Fertilization in the Parasitic Copepoda, *Lernaeopoda Edwardsii* Olsson," by Nathan Fasten.

"Mutation and Atavism in Plants," by Howland Russell.

"Heat Budgets of European and American Lakes," by E. A. Birge.

"Physiological Age as Determined by Growth of Epiphysis of Wrist Bones," by A. H. Yoder.

"On Habits and Relationship of Some Muscoid Flies," by Sigmund Graenicher.

"Field Record of the Wisconsin Mycological Society for the Season of 1913," by Dr. Lewis Sherman.

"Species of *Clitocybe* in the Region of the Great Lakes," by Edward T. Harper. (By title.)  
 "Notes on Parasitic Fungi in Wisconsin," by J. J. Davis. (By title.)

"American Water-mites of the Genus *Atrac-tides*," by Ruth Marshall. (By title.)

"The Land Vertebrates of Ridgeway Bog, Wisconsin; their Ecological Succession and Source of Ingression," by Hartley H. T. Jackson. (By title.)

*Fourth Session, Friday, April 10, at 2 o'clock*

"A Wisconsin Collection of Native Copper Im-plements," by H. P. Hamilton.

"Indian Earthworks and Sites in Adams County," by H. E. Cole.

"Archeological Researches in Western Wisconsin," by George H. Squier. (By title.)

"The Fond du Lac Cache of Copper Im-plements," by W. A. Titus. (Read by C. E. Brown.)

"Cairns and Garden Beds in Winnebago County," by George R. Fox.

"The Racial Characteristics of Wisconsin's Population," by Ellis B. Usher.

"Picture Writing by the Esquimaux," by George A. West.

"Archeological Evidences in Door County," by J. P. Schumacher. (By title.)

"Investigation of the Antiquities of Juneau County," by Ira M. Buell. (By title.)

"Archeological Researches in the Northwest Wisconsin Counties," by Charles E. Brown. (By title.)

"Survey of the Antiquities of the Green Lake Region," by Towne L. Miller. (By title.)

"Extension of the Range of Indian Garden Beds and Corn Fields in Wisconsin," by Charles E. Brown.

"Some Problems in Bird Protection," by Victor Kutchin. (By title.)

"Vanishing Horse-sense," by Victor Kutchin. (By title.)

"The Struggle for Game Conservation and Game Breeding Foci," by A. C. Burrill.

"Enforcement of the McLean Law for a Protection of Migratory Birds, etc.," by E. A. Cleasby. (By title.)

Papers 42 and 43 were not read, as Mr. Victor Kutchin was prevented by illness from being present.

Paper 45 was not presented, as Mr. E. A. Cleasby could not leave Iowa at this time because his presence was necessary to provide for the adequate protection of birds. In his absence, Mr. A. C. Burrill read a letter from Mr. Cleasby, gave an explanation of the present situation in Iowa, and presented in some detail the national work for the protection of birds which is being done by Mr. Cleasby.

The academy then adjourned. Next year the annual meeting will be held at Madison, when officers will be elected for the succeeding three years. At that time, the forty-fifth anniversary

of the founding of the academy will be observed.

The present officers are:

*President*, Professor Dana C. Munro.

*Secretary and Treasurer*, Professor Arthur Beatty.

*Librarian*, Walter M. Smith.

ARTHUR BEATTY,  
*Secretary*

THE KENTUCKY ACADEMY OF SCIENCE

The Kentucky Academy of Science was organized on May 8, 1914, at a meeting held at State University, Lexington, Ky.

Sixty members were enrolled, and the following were elected as officers: *President*, J. H. Kastle; *Vice-president*, N. F. Smith; *Secretary*, Garnett Ryland; *Treasurer*, W. N. Anderson. Papers and addresses were delivered as follows:

"Some Features of the Ossification of Bones," by J. W. Pryor.

"Work of the U. S. Bureau of Mines," by Van H. Manning, of Washington, D. C.

"The Work of the Experiment Station and the Agricultural Prosperity of Kentucky," by Jos. H. Kastle.

"Science and the State," by Stanley Coulter, of Purdue University.

GARNETT RYLAND,  
*Secretary*

June 30, 1914

NEW ORLEANS ACADEMY OF SCIENCES

The regular monthly meeting of the New Orleans Academy of Sciences was held in Stanley Thomas Hall, Tulane University, on Tuesday, May 19. President W. B. Gregory presided with a large attendance of fellows and members. The program of the evening was a paper by Dr. R. B. Bean on "The Time of Eruption and Extent of Decay of the Permanent Teeth in Relation to Race, Sex, Stature, Morphologic Form, School Grade and Development of the Individual." The speaker called attention to the racial differences between Filipino, German and American children in these respects. There was considerable discussion of the paper by Dr. A. G. Friedrichs and other dentists and doctors. After the close of the discussion and adjournment refreshments were served to the fellows and members. The next meeting of the academy will not be held until October.

R. S. COCKS,  
*Secretary*