

shown in a number of cases.<sup>2</sup> The behavior of the color pattern in successively regenerated feathers suggests, as a working hypothesis, that the pattern factor or gene is possibly represented in each follicle by a strictly limited amount of material, and that when this is used up the pattern is lost.

4. The secondary sexual feathers of the male, such as the saddle hangers, only appear as adult plumage. The same follicles which bear these feathers produce, as juvenile plumage, undifferentiated body feathers. The formation of these secondary sexual feathers is not necessarily dependent upon any normal moult. If the juvenile feather is removed from the follicle the next feather produced by that follicle will be the secondary sexual feather, and not a feather of the juvenile type. After that all further regenerations are of the sexually differentiated feather.

These investigations are being continued. A complete report, with illustrations, covering the progress of the work to date will shortly be published elsewhere.

RAYMOND PEARL,  
ALICE M. BORING

*THE AMERICAN SOCIETY FOR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS*

THE fifth annual meeting of the Pharmacological Society was held in Philadelphia on Monday and Tuesday, December 29 and 30, at Jefferson Medical College and the University of Pennsylvania. The scientific meetings were auspiciously inaugurated by a joint session of the three societies which form the Federation of American Societies for Experimental Biology, comprising the Physiological Society, the Society of Biological Chemists and the Pharmacological Society. The program of this joint meeting on Monday morning was opened by a short address of the president of the Physiological Society, Dr. S. J. Meltzer, as chairman of the federation. The title of his address was "Theories of Anesthesia."

The following papers were read and discussed: "Phlorhizin Glycosuria before and after Thyroidectomy," by Graham Lusk.

"Studies in Diabetes: (1) The Effect of Different Compounds of Glycogenesis; (2) The Mech-

<sup>2</sup> Some of which were shown in the charts used in connection with the reading of this paper.

anism of Antiketogenesis," by A. J. Ringer and E. M. Frankel (by invitation).

"Some Problems of Growth: (a) The Capacity to Grow; (b) The Role of Amino Acids in Growth," by L. B. Mendel and T. B. Osborne.

"Further Studies in the Comparative Biochemistry of Purine Metabolism," by Andrew Hunter.

"Changes in Fats during Absorption," by W. R. Bloor.

"Immunization against the Anti-coagulating Effect of Leech Extract," by Leo Loeb. (Read by title.)

"Anaphylaxis in the Cat and Opossum," by C. W. Edmunds.

"Vividiffusion; Report on Preliminary Results," by J. J. Abel, L. S. Rowntree and B. B. Turner.

"A Method of Dialyzing Normal Circulating Blood and Some of Its Applications," by C. L. V. Hess (by invitation) and H. McGuigan.

"A Biological Test for Iodine in the Blood," by A. Woelfel and A. L. Tatum (by invitation).

"Further Studies of the Excretion of Acids," by L. G. Henderson and W. W. Palmer (by invitation).

The second scientific session was also held at Jefferson Medical College on Monday, December 29, from 2 to 5 P.M., and the following papers were read:

"Uranium Glycosuria," by G. B. Wallace and H. B. Meyers.

"A Comparative Study of the Vascular Response of the Kidneys in Animals Nephritic from Uranium Nitrate," by W. deB. MacNider.

"The Production of Glycosuria by Zinc Salts," by W. Salant and M. Kahn.

"Further Observations on Caffeine Glycosuria," by W. Salant and M. Kahn.

"Studies upon the Long-continued Feeding of Saponin," by C. L. Alsberg and C. S. Smith.

"The Effect of the Inhalation of Ether upon the Irritability of the Voluntary Peripheral Motor Mechanism," by J. Auer and S. J. Meltzer.

"The Irritability of Muscle and Motor Nerve in Chloroform Anesthesia," by T. S. Githens and S. J. Meltzer.

"The Cessation of Respiration in Deep Ether Anesthesia and its Possible Relation to the Action of Ether upon the Peripheral Motor Mechanism," by T. S. Githens and S. J. Meltzer.

"The Anesthetic Tensions of Ether Vapor for Man," by W. M. Boothby (by invitation).

"Studies in the Absorption of Drugs," by R. A. Hatcher and Cary Eggleston.

"Fatal Action of Magnesium Sulphate by Absorption from the Intestines," by J. Auer and S. J. Meltzer.

"Liberation of Formaldehyde from Hexamethylenamine in Pathological Fluids," by P. Hanzlik.

The third scientific session was held on Tuesday, December 30, from 9 to 12 M., in the engineering building of the University of Pennsylvania, and the following papers were presented and discussed:

"On Certain Effects of Digitalis Administration on the Human Heart" (with lantern demonstration), by A. E. Cohn and F. R. Fraser (by invitation).

"Quantitative Studies of Vagus Stimulation and Atropin," by J. D. Pilcher.

"Experiments on the Cardiac Action of Camphor," by O. H. Plant.

"The Action of Sodium and Potassium Iodide on the Heart and Blood Vessels," by I. D. Macht (by invitation). (Read by title.)

"The Influence of Sodium Tartrate on the Circulation," by W. Salant and C. S. Smith.

"The Pharmacological Action of Tetra-methylammonium Chloride on the Circulation and Respiration," by A. S. Loevenhart.

"Two Types of Periodic Respiration Produced by Morphin," by H. G. Barbour.

"The Pharmacological Action of Certain Substances on the Lungs and Respiration," by D. E. Jackson.

"Some Further Observations on Trypan-red Iodine Compounds," by P. A. Lewis and R. B. Krauss.

"Clinical Studies with Caffein," by Lester Taylor (by invitation).

"Further Observations on the Action of Ergot," by W. Salant and S. Hecht.

"The Toxicity of Tin," by W. Salant and C. S. Smith.

On Tuesday afternoon, December 30, the three societies forming the federation held a joint meeting at the medical laboratories of the University of Pennsylvania. At this meeting only demonstrations were given and of these the demonstration of Drs. Abel, Rowntree and Turner was especially beautiful. The titles were as follows:

"The Influence of the Vagi on Renal Secretion," by R. G. Pearce.

"Stimulation of the Semi-circular Canals," by F. H. Pike.

"Demonstration of Vividiffusion," by J. J. Abel, L. G. Rowntree and B. B. Turner.

"The Determination of Blood Sugar," by P. A. Shaffer.

"Intestinal Peristalsis in Homarus," by F. R. Miller.

"Methods for Studying the Pharmacology of the Circulation," by C. Brooks.

"The Contour of the Intraventricular and the Pulmonary Arterial Pressure Curves by Two New Optically Recording Manometers," by C. J. Wiggers.

"Some Time-saving Laboratory Methods," by C. C. Guthrie.

"A Graphic Method for Recording the Coagulation of Blood," by W. B. Cannon and W. K. Mendenhall (by invitation).

"Some Mutual Relations of Oxalates, Salts of Magnesium and Calcium; Their Concurrent and Antagonistic Actions," by F. L. Gates and S. J. Meltzer.

"A Method for Obtaining Successive Contrast of the Sensations of Hunger and Appetite," by A. J. Carlson.

"Further Observations of the Pyramidal Tracts of the Raccoon and Porcupine," by S. Simpson.

"A New Apparatus for Demonstration of the Dioptrics of the Eye and the Principles of Ophthalmoscopy and Retinoscopy," by A. Woelfel.

"Simple Experiments on Respiration for the Use of Students," by Y. Henderson.

"Convenient Modification for Venous Pressure Determinations in Man," by R. D. Hooker.

"Device for Interrupting a Continuous Blast of Air, Designed Especially for Artificial Respiration," by R. A. Gesell and J. Erlanger.

"A Simple Liver Plethysmograph," by C. W. Edmunds.

"An Artificial Circulation Apparatus for Students," by W. P. Lombard.

"A Simplified and Inexpensive Oxidase Apparatus," by H. H. Bunzel.

"An Improved Form of Apparatus for Perfusion of the Excised Mammalian Heart," by M. Dressbach.

#### *Business Meetings*

Executive sessions were held by the Pharmacological Society on Monday, December 29, at 5 P.M. and on Tuesday, December 31, at 12:30 P.M. The following officers were elected for the year 1914:

*President*—Dr. Torald Sollmann.

*Secretary*—Dr. John Auer.

*Treasurer*—Dr. William deB. MacNider.

*Additional members of the council*—Dr. John J. Abel, Dr. A. L. Loevenhart.

*Membership committee*—Dr. Reid Hunt (term expires 1916).

*Election of New Members.*—The names of the following candidates were sent to the council by the membership committee, recommended for election by the council and elected by the society: Dr. A. E. Cohn, Rockefeller Institute, New York City; Dr. H. F. Helmholtz, Sprague Memorial Institute, Chicago, Ill.; Dr. W. A. Jacobs, Rockefeller Institute, New York City; Dr. Hugh MacGuigan, Northwestern Medical School, Chicago, Ill.

*Federation News.*—A detailed statement of the developmental effect which this first meeting of the three societies has exerted upon the federation formed at present by these societies, will be given by the general secretary of the federation for the year 1913, Dr. A. J. Carlson. Only one action, that of the Pharmacological Society, need be reported here. It will be remembered that delegates from the Physiological, Biochemical and Pharmacological societies met in Cleveland last year (1912) to establish a federation of the American societies for experimental biology. Among the motions passed unanimously was one which provided for the shifting of papers, with the author's consent, from the program of one society to that of another, if it were considered advisable by the secretaries. In order to prevent a possible conflict with the spirit of Section 2, Article III, of the constitution of the Pharmacological Society, which states that no one shall be admitted to membership who is in the permanent employ of any drug firm, a motion was put and carried unanimously by the Pharmacological Society in its executive session, recommending that no paper should be transferred to the program of the Pharmacological Society without the explicit consent of its secretary. This was done in order to prevent as far as possible the appearance of any paper of a commercial nature on the programs of the Pharmacological Society, for the other two members of the federation do not have this clause which excludes from membership those in the employ of business concerns. It may be stated that the Pharmacological Society did not take this action because of any specific occurrence, but because the society deemed it proper at this time to again emphasize its individual position in the matter.

*Dinners and Smokers.*—Excellent subscription dinners of very moderate cost formed an enjoyable feature of the Philadelphia meetings and were at-

tended not only by the members of the federation, but also by the Naturalists, Zoologists and Pathologists. They were held on the evenings of December 29 and 30 at the Walton Hotel and Kugler's restaurant, respectively. There were only a few speeches; at the first dinner Drs. W. W. Keen and S. J. Meltzer spoke; at the second dinner the Naturalists presided and Dr. Raymond Pearl delivered a short address.

At the last executive session of the society a motion was passed unanimously to thank the local committee representing the University of Pennsylvania and Jefferson Medical College for the comprehensive and efficient way with which all arrangements for the meetings and the visitors' comfort were made. No names are mentioned in this expression of appreciation because the secretary is informed that practically every Philadelphia member of the three constituent societies labored on the local committee to make the first meeting of the federation as enjoyable as possible. It will be the opinion of every one present that their efforts were entirely successful, that the visitors attended with pleasure and left with regret.

JOHN AUER,  
*Secretary*

THE ROCKEFELLER INSTITUTE

### SOCIETIES AND ACADEMIES

#### THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

At a special meeting of the Society held on November 4, at the National Museum, Dr. John R. Swanton read a paper entitled, "The Indian Village." He stated that while it is a common notion that country life preceded urban life, this view is not absolutely correct, urban life in its germs going back almost as far as man himself. He then took up the various factors tending to produce the village, determine its character, and subsequently knit it together. These he found to be of three orders, material, social and religious. Among the first he enumerated material available for the construction of houses, position with reference to the food supply and fresh water, and occasionally also position with reference to the sun. Among social factors he treated trade, desire for exchange of ideas, need of mutual protection and relationship, especially in the peculiar form it assumed under totemism. Finally the growth of a village or town cult was traced from the practical independence of shamanism pure and simple to the complete town ritual, sometimes directly, sometimes through the fusion of clan ceremonies