

portions of the continental platforms, while those off the islands are growing upon submarine terrace flats which either stood above water level previous to the last submergence or which have undergone deeper submergence in Recent geologic time.

*The Distribution of Igneous Rocks in South America.* HENRY STEPHENS WASHINGTON.

The paper presented a very brief correlation between the distribution of petrographic provinces in North and South America. Our knowledge of the chemical petrography of the southern continent is very imperfect, but suffices to give some approximate ideas of some of the main features.

The lavas of the long line of huge Andean volcanoes belong, almost without exception, to very common and widely distributed types, dacites, andesites and basalts, which are, chemically, clustered around the average igneous rock, without prominent dominance of any one chemical constituent. These correspond to, and are a continuation of, the volcanic rocks of the Rocky Mountains and the Cordilleras, from Alaska to Panama. The central part of South America is scarcely known, but here, as in North America, there would seem to be few igneous rocks. Near the east coast, as in Brazil and Paraguay, are highly sodic rocks, corresponding to a similar zone parallel to the east coast of North America, from Ontario to Texas. There are also some indications in Brazil of rocks of a very distinct chemical type, like some found in Ellesmere Land, Ontario and New York. It would appear, therefore, that the two continents much resemble each other in the general distribution of the igneous rocks.

L. O. HOWARD,  
*Permanent Secretary*

# THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

THE third annual meeting of the Federation formed by the American Physiological Society, the American Society of Biological Chemists, the American Society for Pharmacology and Experimental Therapeutics and the American Society for Experimental Pathology, was held in laboratories of the Harvard Medical School, Boston, on December 27, 28 and 29, 1915.

Only two joint sessions could be arranged, the large number of papers offered and the limited time forbidding other combined meetings. The

first one was held on Monday morning, December 27, and this session opened the scientific meetings. The following papers were read and discussed:

Symposium: "Food Accessories." Discussion opened by T. B. Osborne and L. B. Mendel, E. V. McCollum, Carl Voegtlin.

"The Formation and Structure of the Fibrin-Gel," by W. H. Howell.

"Experiments on the Mechanism of Osmosis," by Jacques Loeb and Hardolph Wasteneys (by invitation).

"Further Observations on Over-activity of the Cervical Sympathetic," by W. B. Cannon and R. Fitz (by invitation).

"Some New Observations on the Uric Acid Content of the Blood," by Otto Folin and R. D. Beil (by invitation), with the assistance of G. Le B. Foster.

"On Continuous Insufflation Through the Humerus in Fowl," by A. L. Meyer (by invitation) and S. J. Meltzer.

"The Influence of the Adrenals on the Kidney," by E. K. Marshall and D. M. Davis (by invitation).

"Heredity and Internal Secretion in the Origin of Cancer in Mice," by Leo Loeb.

"The Effect of X-Rays on Cancer Immunity," by James B. Murphy.

"The Presence of Posterior Lobe Secretion in the Cerebro-spinal Fluid," by Harvey Cushing and Gilbert Horrax (by invitation).

The second joint session took place on Tuesday afternoon, December 27, and was devoted entirely to demonstrations. These demonstrations were given partly in a large amphitheater and partly in three laboratory rooms. The program was as follows:

## DEMONSTRATIONS

"Demonstration of the Agglutination of Bacteria in Vivo," by Carroll G. Bull (by invitation).

"A Method of Obtaining Suspensions of Living Somatic Cells of the Higher Animals," by Peyton Rous and F. S. Jones (by invitation).

"Analogous Antagonistic Effects Exerted by Electrolysis and Anesthetics on Physical Systems and Living Cells," by G. H. A. Clowes.

"The Action Current of Glands," by W. B. Cannon and McKeen Cattell (by invitation).

"A New Type of String Galvanometer and Accessory Apparatus," by Horatio B. Williams.

"Apparatus for the Investigation of Cardiodynamics," by Robert Gesell.

"A Circulation Model," by A. L. Prince (by invitation).

"An Improved Slide for Blood Counting," by Theodore Hough.

"A Motor-driven Airblast Interruptor for Artificial Respiration," by W. B. Cannon.

"A Mine Rescue Breathing Apparatus," by Yandell Henderson.

"A Method of Studying Respiration in the Rat," by H. G. Barbour and L. L. Maurer (by invitation).

"Insufflation Through the Humerus in Fowl," by A. L. Meyer (by invitation), and S. J. Meltzer.

"A Simplified Procedure for the Determination of Carbon Dioxide Tension in the Alveolar Air," by W. McK. Marriott.

"A Quantitative Pump for Prolonged Intravenous Injections," by R. T. Woodyatt.

"Some New Apparatus," by D. E. Jackson.

"Apparatus for Recording Graphically the Movements of Melanophores," by Raymond Spaeth (by invitation).

"Further Studies on the Elective Localization of Streptococci," by Edward C. Rosenow.

"The Perfected 'Shadow Pupillometer,'" by George W. Fitz.

"A Simple Rheostat for Laboratory Use," by E. G. Martin.

"A Motor-driven Circuit Breaker," by E. G. Martin.

*Executive Committee for the Year 1916:* Chairman, Simon Flexner, secretary, Peyton Rous, for the Pathological Society; W. B. Cannon and C. W. Greene, the Physiological Society; Walter Jones and Stanley R. Benedict, the Biochemical Society; Reid Hunt and John Auer, the Pharmacological Society.

The next annual session of the Federation will be held in New York City, together with the American Association for the Advancement of Science.

J. AUER,

*Secretary of the Executive Committee, 1915*  
ROCKEFELLER INSTITUTE

### THE AMERICAN SOCIETY FOR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

THE seventh annual session of the Pharmacological Society was held in Boston at the Harvard Medical School on December 27, 28 and 29, 1915. Three sessions were independent and two were joint meetings with the other members of the federation.

The scientific sessions were opened on Monday morning, December 27, in accordance with custom, by a joint session of the four societies forming the federation. The papers read at this meeting will be found in the preceding account of the federation.

The first independent session was held on Monday afternoon and the following papers were read and discussed:

"The Effect of Drugs on Auricular Systole and Their Consequent Effect on Ventricular Efficiency," by C. J. Wiggers.

"A Study of the Potency of Digitalis Preparations," by J. H. Pratt and C. Wesselhoeft (by invitation).

"The Influence of Iodine on the Heart," by Wm. Salant and A. E. Livingston (by invitation). (Read by title.)

"The Effect of Certain Drugs on the Excised Uterus in Guinea-Pigs," by J. D. Pilcher.

"The Stability of the Growth-promoting Substance in Butter Fat," by Lafayette B. Mendel and T. B. Osborne.

"Studies on Lipoids," by W. H. Schultz. (Read by title.)

"Further Studies on Mustard Oil Inflammation," by S. Amberg, A. S. Loevenhart and W. B. McClure (by invitation).

"The Distribution of Trypan-red to the Tissues and Vessels of the Eye as Influenced by Congestion and Early Inflammation," by P. A. Lewis.

"Is the Pupil Dilatation from Adrenalin Following Gangliectomy Due to the Vasodilatation?" by T. S. Githens and S. J. Meltzer.

"The Absorption and Elimination of Different Dyes," by Wm. Salant and R. O. Bengis (by invitation). (Read by title.)

The second independent session was held on Tuesday morning, December 28, and the following papers were read and discussed:

"The Inhibition of the Toxicity of Anesthetics in the Nephropathic Kidney," by Wm. de B. MacNider.

"Morphological Changes in the Tissues of the Rabbit as a Result of Reduced Oxidations," by G. H. Martin (by invitation), C. H. Bunting and A. S. Loevenhart.

"Relation of the Hemolytic Power to the Surface Tension of Saponin Solutions," by E. Woodward (by invitation), and C. L. Alsberg. (Read by title.)

"Further Study of Nicotin Tolerance," by C. W. Edmunds and M. I. Smith (by invitation).