

- K. F. Herzfeld, the Johns Hopkins University, "Surface Properties of Crystals."
- Wesley G. France, the Ohio State University, "Crystal Structure and Adsorption from Solution."
- A. Frumkin, Karpow Chemical Institute, Moscow, "Theory of Electrocapillarity."
- James W. McBain and Robert C. Williams, Stanford University, "A Determination of the Number of Free Electric Charges on Air Bubbles and Oil Droplets Dispersed in Water Containing a Small Amount of Cetyl Sulfonic Acid."
- H. B. Bull, the University of Rochester, "The Electrostatics of Flotation."
- Donald H. Andrews, the Johns Hopkins University, "Some Evidence on the Nature of Extra Molecular Forces."
- W. A. Patrick, the Johns Hopkins University, "The Adsorption of Vapors."
- F. E. Bartell and Ying Fu, the University of Michigan, "The Specific Surface Area of Activated Carbon and Silica."
- Wilder D. Baneroff, C. E. Barnett and B. S. Belden, Cornell University, "Compound Formation with a Volatile Base or Acid."
- Otto Reinmuth, University of Maryland, and Neil E. Gordon, the Johns Hopkins University, "Nature of Interaction between Hydrous Oxides and Mordant Dyes."
- Frank K. Cameron and R. A. Lineberry, the University of North Carolina, "Apparent Specific Gravity and Moisture Content of Clays."
- Edgar T. Wherry, Clarence S. Ross and Paul F. Kerr, Bureau of Chemistry and Soils, U. S. Department of Agriculture, "Progress in the Study of the Clay Minerals."
- K. D. Jacob, W. L. Hill and R. S. Holmes, Bureau of Chemistry and Soils, U. S. Department of Agriculture, "Some Colloidal Properties of Finely Divided Natural Phosphates."
- Eugene C. Bingham, Lafayette College, "The Nature of the Different Types of Plastic Flow."
- Harry N. Holmes and C. J. B. Thor, Oberlin College, "Adsorption of Fats."
- E. S. Paine, Bureau of Chemistry and Soils, U. S. Department of Agriculture, "The Colloids of the Sugar Liquors."
- Treat B. Johnson, Yale University, "The Chemistry of Bacteria and the Development of a Practical Technique for the Chemical Analysis of Cells."
- S. DeW. Ludlum, A. E. Taft and R. L. Nugent, the Gladwyne Research Laboratory, "Human Blood Serum as a Colloidal System."
- J. E. Sweet, Cornell University Medical College, "The Liesegang Phenomenon in Gall Stones."
- J. C. W. Frazer, the Johns Hopkins University, "A Study of the Porous Disc Method of Measuring Osmotic Pressures in Aqueous Solutions."
- Harry B. Weiser, The Rice Institute, "Adsorption and the Permeability of Membranes."

THE EARLIEST MOTION PICTURES

ON May 8, Stanford University held a semi-centennial celebration in commemoration of the motion picture research conducted by Leland Stanford at his Palo Alto stock farm in 1878 and 1879 with the assistance of Eadweard J. Muybridge and John D. Isaacs. It is believed that this is the first investigation to make use of consecutive instantaneous pictures and, therefore, lies at the basis of the photographic analysis of motion and also the portrayal of movement through the motion picture. Something over two thousand such pictures were taken by Muybridge. Many of those that had to do with the locomotion of the horse were later analyzed by Dr. J. D. B. Stillman, whose book, "The Horse in Motion," was published in 1882. Official delegates from the Academy of Motion Picture Arts and Sciences took part in the exercises. Tablets commemorating the Stanford-Muybridge research were unveiled, one in Memorial Court at the main quadrangle of the university and the other, a duplicate, near the site of the Muybridge studio. Dr. Walter R. Miles, professor of experimental psychology at Stanford University, gave two addresses, "The Stanford-Muybridge Research on the Portrayal of Motion" and "Technique and Results of the Palo Alto Experiments." Other speakers and addresses were as follows: Louis B. Mayer, vice-president of the Metro-Goldwyn-Mayer Corporation, "The Debt of Motion Pictures to the Early Researcher"; Louis H. Tolhurst, motion picture technician, Hollywood, "Evolution of the Motion Picture"; Dr. Alonzo E. Taylor, director of the Food Research Institute, Stanford University, "The Cost and Value of Research"; William C. De Mille, vice-president of the Academy of Motion Picture Arts and Sciences, "The University of the Future of Motion Pictures"; Dr. Robert E. Swain, acting president of Stanford University, "The Relation of the University to Industrial Progress." A talking picture address by the Honorable Ray Lyman Wilbur was made possible through a portable outfit recently developed in the Bell Telephone Laboratories. This address for a specific occasion and presented in a college banquet hall marks an advance in motion pictures that is of much educational significance.

THE INAUGURATION OF RESEARCH BY THE CARNEGIE INSTITUTION OF WASHINGTON

ON May 31, at Cold Spring Harbor, Long Island, the Department of Genetics of the Carnegie Institution of Washington was "at home" to invited guests. The reception was held in celebration of the conclusion of the first quarter century of the work of the institution founded by Andrew Carnegie for the conduct

of research. Representatives of some sixty institutions, organizations and departments of research were among the two hundred or more guests who accepted the invitations of the president and trustees of the institution.

At eleven o'clock the guests assembled in a tent erected on the grounds. Addresses were given by General John J. Carty, representing the trustees; by Dr. E. G. Conklin, head of the department of biology, Princeton University, representing scientific men, and by Dr. John C. Merriam, president of the Carnegie Institution, representing the staff. Dr. Henry S. Pritchett, vice-chairman of the board of trustees, presided.

The remainder of the day was spent in talking with the investigators and in inspecting the exhibits which the staff had prepared to illustrate their methods of investigation and somewhat of the results that have obtained. These exhibits were open to public inspection on June 1 and 2.

The station for experimental evolution, now the department of genetics, was formally opened on June 11, 1904. It was established under the direction of Dr. Charles B. Davenport. The eugenics record office was founded in 1910 by Mrs. E. H. Harriman and transferred eight years later to the institution, with an endowment. In 1921 a reorganization of the department was effected, by which the work of experimental evolution and human heredity was combined into a department of genetics, Dr. Davenport continuing as director.

SCIENTIFIC NOTES AND NEWS

DR. L. R. JONES, professor of plant pathology at the University of Wisconsin, has been invited to act as president of the section of mycology and plant pathology of the Fifth International Botanical Congress to be held in Cambridge in 1930. Dr. E. D. Merrill, dean of the college of agriculture of the University of California, will be a vice-president of the section on taxonomy.

DR. FRANCIS G. BENEDICT, director of the nutrition laboratory of the Carnegie Institution of Washington, Boston, on May 6, following a lecture before the medical faculty of the University of Hamburg, was presented by the dean, Professor Paul Sudeck, the eminent surgeon, with the gold honor medal of the university "in recognition of his successful work in metabolism and physiology."

CHARLES M. ALLEN, professor of hydraulics at the Worcester Polytechnic Institute, will receive the degree of doctor of engineering at the commencement exercises on June 14.

A DINNER in honor of Dr. Aven Nelson, professor of botany and president emeritus of the University of Wyoming, was tendered on May 13 by his colleagues of the board of trustees, of the university faculty and of the administrative staff on the occasion of the completion of his seventieth year of life and forty-second in the service of the university.

A PORTRAIT painted by Boris Luban of Henry Hurd Rusby, dean of the college of pharmacy of Columbia University, who for forty-one years has served as professor of botany, physiology and materia medica, was presented to him by the student body on June 3, in the presence of pharmacists from all over the country, as part of the college centennial and commencement exercises.

ON April 5, Dr. E. P. Mathewson, past-president of the American Institute of Mining and Metallurgical Engineers and professor of administration of mineral industries at the University of Arizona, was made "a member with distinction" in Tau Beta Pi. The initiation took place at the university and was followed by a dinner.

DR. W. REID BLAIR, director of the New York Zoological Park and professor in New York University, was recently elected a resident member of the Authors' Club, New York.

THE council of the Royal Meteorological Society, as reported in *Nature*, has sent a message of congratulation and good wishes to the society's honorary member, Professor Hugo Hergesell, director of the Lindenberg Observatory, on the occasion of his seventieth birthday which occurred on May 29. Addresses of congratulation were presented to him by learned societies and official bodies in Germany in recognition of his services to meteorological science and its application to aviation.

THE honors awarded on the occasion of the birthday of King George of England include a knighthood conferred on Dr. Peter Chalmers Mitchell, F.R.S., secretary of the Royal Zoological Society.

DR. W. A. JOLLY has been elected president of the Royal Society of South Africa.

DR. G. CANBY ROBINSON, director of the New York Hospital-Cornell Medical College Association, has been elected president of the Harvey Society for the ensuing year.

THE fourth annual meeting of the Hawaiian Academy of Science was held at Honolulu from May 9 to 11. Officers for the coming year are as follows: *President*, Dr. Harold S. Palmer; *vice-president*, Dr. Harold L. Lyon; *secretary-treasurer*, Mr. E. L. Caum, and *councilor*, Mr. R. T. Aitken.