## SCIENTIFIC NOTES AND NEWS

THE Langley Medal for aerodromics of the Smithsonian Institution was presented on May 21 to Dr. Joseph S. Ames, retiring president of the Johns Hopkins University, chairman of the National Advisory Committee for Aeronautics. The presentation was made by Chief Justice Charles E. Hughes, chancellor of the institution, in accordance with a vote of the Board of Regents at their annual meeting in January. The award, as stated in the resolution accompanying the medal, was "in recognition of the surpassing improvement of the performance, efficiency and safety of American aircraft resulting from the fundamental scientific researches conducted by the National Advisory Committee for Aeronautics under the leadership of Dr. Ames."

THE Chalmers Medal of the Royal Society of Tropical Medicine and Hygiene has been awarded to Professor William H. Taliaferro, head of the department of hygiene and bacteriology of the University of Chicago, "in recognition of his valuable contributions to knowledge of the subject of animal immunity." The Chalmers Medal is granted every two years to a man under forty-five years of age who has "contributed signally" to research in tropical medicine.

THE American Section of the Society of Chemical Industry announces that the Chemical Industry Medal for 1935 has been awarded to Dr. Edward R. Weidlein, director of the Mellon Institute of Industrial Research at Pittsburgh, Pa. This award is made annually to a person who has made a valuable application of chemical research to industry, primary consideration being given to applications in the public interest. Presentation of the medal will be made at a meeting of the Society of Chemical Industry in the fall.

THE Schoellkopf Medal for 1935 was presented on May 7 at the meeting of the Western New York Section of the American Chemical Society to F. A. Lidbury, president and general manager of the Oldbury Electro-Chemical Co., Niagara Falls, N. Y., for his "contributions to the science of electrochemistry and his many-sided activities, both as chemist and executive, in the service of the American chemical industry."

THE Leslie Dana Gold Medal of the National Society for the Prevention of Blindness was presented to Dr. William H. Wilder, emeritus professor of ophthalmology, Rush Medical College, Chicago, at ceremonies in St. Louis on May 18. Dr. Wilder was selected for the award, in recognition of his work in the conservation of vision, by the national society in cooperation with the St. Louis society.

A TESTIMONIAL dinner was given recently by former students and members of his department to Dr. John E. Ostrander, retiring head of the department of mathematics of the Massachusetts State College. He was presented with a bound volume of letters from students whom he had taught during the thirty-seven years of his professorship. Dr. Clarence E. Gordon, head of the division of physical and biological sciences, acted as toastmaster. Among those who spoke were: Dr. Hugh P. Baker, president of the college; Philip F. Whitmore, of Sunderland, member of the Board of Trustees; Dixon R. Fox, president of Union College, of which Dr. Ostrander is an alumnus; Dr. Joseph B. Lindsey, emeritus professor of chemistry; Professor Thomas Esty, of the department of mathematics. Amherst College; Dr. Sidney B. Haskell, president of Synthetic Nitrogen Products Company of New York. until 1927 director of the Massachusetts Experiment Station, and Professor Frank C. Moore, associate professor of mathematics.

DR. CHARLES EDWARD COATES, dean of the College of Pure and Applied Science, received the degree of doctor of laws at the diamond jubilee celebration of the Louisiana State University. The degree was awarded "in recognition of long years of distinguished services in teaching and research, loyal devotion to the university and to the cause of science, faithful efforts to advance the cultural and industrial interests of southern life, contributions through Louisiana State University to the world community; teacher, scholar, scientist, friend of learning and of men."

DR. FRANCIS E. LLOYD, professor of botany emeritus at McGill University, has been elected an honorary fellow of the Botanical Society of Edinburgh.

DR. A. C. SEWARD, professor of botany at the University of Cambridge, has been elected a member of the Norwegian Academy of Science and Letters.

DR. EDWIN G. CONKLIN, professor emeritus of biology, was elected president of the Princeton chapter of Sigma Xi, at the annual meeting of the chapter held on May 17. The principal address was made by Professor Henry Norris Russell, retiring president of the society, on "The Origin of the Planets—an Unsolved Mystery." Other officers for next year will be Professor Luther P. Eisenhart, vice-president; Professor Louis A. Turner, secretary; Professor Erling Dorf, treasurer, and Professor George E. Beggs, committeeman.

THE Central New York and Central Pennsylvania branches of the Society of American Bacteriologists will hold a combined meeting at Cornell University, DR. JAMES F. COUCH, chemist of the Bureau of Animal Industry of the Department of Agriculture and professor of historical science at the National University, has been elected president of the Chemical Society of Washington, D. C.

VINCENT P. GIANELLA has been advanced from associate professor to full professor and head of the department of geology in the Mackay School of Mines of the University of Nevada. Dr. Harry E. Wheeler has been appointed instructor in the department, succeeding Dr. Thomas P. Thayer.

AT Harvard University, Professor Frederick L. Hisaw, of the University of Wisconsin, has been appointed professor of zoology, and Dr. Harry L. Fevold, who has been associated with him at Wisconsin, has been appointed assistant professor of biological chemistry. Dr. Abraham Myerson, of Boston, has been appointed clinical professor of psychiatry.

DR. EARL H. HERRICK, head of the department of biology of the Louisiana State Normal College, has been appointed associate professor of zoology and agricultural experiment station mammalogist in the Kansas State College, to succeed the late Dr. George E. Johnson.

DR. FREDERICK L. HOFFMAN, Philadelphia, consulting statistician of the Prudential Life Insurance Company since 1894, retired from active duty on May 1, at the age of seventy years.

DR. HOWARD B. LEWIS, director of the College of Pharmacy of the University of Michigan and professor of physiological chemistry in the Medical School, has been elected a member of the National Board of Medical Examiners of the United States, to succeed the late Professor Otto Folin, of Harvard University.

DR. GREGORY D. MAHAR, a member of the staff of the Syracuse Department of Health since 1923, has been appointed health commissioner of the city, to succeed Dr. George C. Ruhland, who recently became health commissioner of the District of Columbia.

DR. WALLACE RUDDELL AYKROYD has been appointed by the Governing Body of the Indian Research Fund Association to the post of director of nutritional research under that association.

SIR HENRY LYONS has been appointed chairman of the Advisory Council of the Science Museum, London. He succeeds Sir Richard Glazebrook, formerly chairman, who has resigned.

DR. GEORGE A. HULETT, professor of physical chemistry at Princeton University, was the representative of the American Chemical Society to the fifth National Meeting of Pure and Applied Chemistry, held in Sardinia from May 1 to 7. Dr. William F. Zimmerli, head of the foreign relations department of E. I. du Pont de Nemours and Company, will represent the society at the fifteenth Congress of Industrial Chemistry, which will be held in Brussels, from September 22 to 28.

DR. WILLIAM AUSTIN CANNON, of the department of botany, of Stanford University, is spending the year in Europe. He will visit the leading botanical gardens and laboratories and will be a delegate from Stanford University to the Botanical Congress to be held at Amsterdam in September.

HARRY C. RAVEN, associate curator of comparative and human anatomy at the American Museum of Natural History, has returned from an expedition in Malaya.

AN expedition for the Academy of Natural Sciences of Philadelphia, led by R. R. N. Carpenter, a trustee of the academy, will leave Philadelphia early in June for a six weeks' cruise on the yacht *Westward*, among the islands of southern Alaska, with the object of studying the animals and birds of that region.

DR. IRVING LANGMUIR, director of the Research Laboratory of the General Electric Company, gave a lecture at The Johns Hopkins University on "New Work on Monatomic and Multimolecular Films," on May 10 under the A. R. L. Dohme lectureship in chemistry.

DR. HUGH M. SMITH, who recently returned to the United States after having served for ten years as biological adviser to the Siamese Government, gave a lecture on May 4 before the Washington Biological Society on Siamese zoology. Dr. Maurice C. Hall, of the Bureau of Animal Industry, spoke at the same meeting on "The Application of Military Principles to the Control of Animal Parasites."

PROFESSOR L. B. AREY, of the Northwestern University Medical School, delivered the annual William Snow Miller lecture at the University of Wisconsin on May 2. The title of the address was "Factors that Influence the Course of Wound Healing."

DR. DONALD H. MENZEL, of the Harvard Observatory, spoke before the Richmond (Virginia) Section of the American Chemical Society on April 19 on the subject "Cosmic Chemistry"; on April 22 at Goucher College in Baltimore, and on April 24 at Foxcroft School, Middlebury, Va., he lectured on "Exploring the Universe." At the Leander McCormick Observatory on April 25 he gave a colloquium on "Recent Advances in our Knowledge of the Solar Chromosphere."

THE forty-third annual meeting of the American

Psychological Association will be held from September 4 to 7 at the University of Michigan.

THE summer convention of the American Institute of Electrical Engineers will be held at Cornell University from June 24 to 28.

THE first Congress on Undulant Fever in Men and Animals will be held at Avignon on June 11, 12 and 13. Further information can be obtained from the general secretary, Dr. Joseph Jullien, Joyeuse, Ardèche, France.

Industrial and Engineering Chemistry states that the tentative program of the fifteenth Congress of Industrial Chemistry, to be held in Brussels from September 22 to 28, has been announced. Committees have been appointed and the congress organized in seven groups, which will have to do with organization of factory and laboratory; fuels; mineral and metallurgical industries, materials of construction, glass, ceramics; organic industries (dyes, pharmaceuticals, photographic products, resins, textiles, fats, tanning, etc.); agricultural industries and industrial hygiene. Two prizes are to be offered, of 5,000 Belgian francs each: one for the best paper presented, and the second for the best paper presented by a Belgian author. Full information regarding the congress may be obtained by addressing the Secretary, 132a Boulevard Maurice Lemonnier, Brussels, Belgium. Papers must be received before July 15, and hotel reservations should be made before June 1.

THE sixth lecture in the Smith-Reed-Russell Series for this year at the George Washington University School of Medicine was given on May 14. Dr. Karl F. Meyer, of the George Williams Hooper Foundation, and professor of bacteriology at the University of California, was the guest speaker. The subject of his lecture, which was illustrated with motion pictures, was "Selvatic Plague." In the afternoon the department of bacteriology held a tea and seminar, to which members of the faculty of the Medical School and guests from near-by colleges were invited. Dr. Meyer spoke on "Psittacosis," and again illustrated his talk with motion pictures.

AT the annual meeting of the American Association of Pathologists and Bacteriologists held in New York, the following officers were elected: *President*, Dr. S. B. Wolbach, Boston; *Vice-president*, Dr. N. C. Foot, New York; *Treasurer*, Dr. F. B. Mallory, Boston; *Secretary*, Dr. H. T. Karsner, Cleveland; *Incoming Member of Council*, Dr. C. V. Weller, Ann Arbor. The symposium for the next annual meeting, to be held on April 9 and 10, 1936, in Boston, Mass., in joint session with the American Association of Immunologists, is on "Inflammation." Dr. Arnold R. Rich, of Baltimore, was selected as referee for this symposium. The gold-headed cane of the association was awarded to Dr. Frank Burr Mallory, of Boston.

THE eleventh annual meeting of the New York State Geological Association, held in Utica, N. Y., on May 10 and 11, was attended by one hundred and seventy geologists and advanced students from New York, New Jersey, Pennsylvania, Massachusetts and New Hampshire. At the business meeting, which followed the banquet on the evening of May 10, the following officers were elected: *President*, Professor H. Ries, and *Secretary*, Dr. J. D. Burfoot, both of Cornell University. At the same meeting the association voted to accept the invitation extended by the Pennsylvania Association to meet with them in 1936, somewhere in the anthracite coal district, probably in the vicinity of Scranton, Pa.

## DISCUSSION

## DIFFERENCE BETWEEN ARITHMETIC AND ALGEBRA

UNDER the term "algebra" in the recently published Webster's "New International Dictionary," second edition, 1935, it is stated that "The essential difference between arithmetic and algebra is that the former deals with concrete quantities, while the latter deals with symbols whose values may be any out of a given number field." Those who are at first inclined to adopt the explanations which appear in such widely used and glowingly advertised works of reference as this dictionary will find it difficult to harmonize this quotation with the well-known fact that such numbers as 1, 2, 3, etc., are abstract, while such numbers as 2 men, 3 horses, etc., are concrete. In particular, our common multiplication tables, which belong to the early part of arithmetic, relate entirely to abstract numbers. The symbols which appear on blocks for children and represent natural numbers relate to just as abstract ideas as those which represent the numbers of a field.

One of the chief objectives of pre-Grecian mathematics was the study of the number field composed of the rational numbers. The difference between algebra and arithmetic noted in the given quotation does not relate to the supposed fact that arithmetic deals with concrete quantities, while algebra deals with symbols representing numbers, but to the fact that algebra deals with symbols which may represent more general