agement along sound biological lines, the establishment of professional solidarity among conservation biologists and the maintenance of the highest possible professional standards.

An official organ, The Journal of Wildlife Management, to contribute to these ends, will be launched in 1937, probably as a quarterly, under the editorship of W. L. McAtee, U. S. Biological Survey, Washington, D. C.

The governing body of the society for the year 1937, consisting of the officers and six regionally representative councilors, includes:

- President, Rudolf Bennitt, associate professor of zoology, University of Missouri, Columbia, Mo.
- Vice-president, Joseph S. Dixon, field naturalist, National Park Service, San Francisco, Calif.
- Secretary, Victor H. Cahalane, assistant chief, Wildlife Division, National Park Service, Washington, D. C.
- Treasurer, Warren W. Chase, regional biologist, Soil Conservation Service, Des Moines, Iowa.

Councilors:

- For Region 1 (Northeast), Arthur A. Allen, professor of ornithology, Cornell University, Ithaca, N.Y.
- For Region 2 (Southeast), William J. Howard, regional wildlife technician, National Park Service, Richmond, Va.
- For Region 3 (North Central), Samuel A. Graham, professor of economic zoology, University of Michigan, Ann Arbor, Mich.
- For Region 4 (Northern Great Plains), Verne E. Davison, regional biologist, Soil Conservation Service, Rapid City, S. Dak.
- For Region 5 (Southwest) Walter P. Taylor, senior biologist, Bureau of Biological Survey, Texas A. and M. College, College Station, Texas.
- For Region 6 (West), E. Lowell Sumner, Jr., regional wildlife technician, National Park Service, San Francisco, Calif.

The following advisory committee also has been named by the president:

Aldo Leopold, University of Wisconsin, Madison, Wis. Herbert L. Stoddard, Thomasville, Ga.

Joseph Grinnell, University of California, Berkeley, Calif. Ralph T. King, University of Minnesota, St. Paul, Minn. (past president).

THE VICE-PRESIDENT OF THE UNIVERSITY OF CALIFORNIA AT LOS ANGELES

DR. EARLE RAYMOND HEDRICK, professor of mathematics, was named vice-president and provost of the University of California at Los Angeles at a special

meeting of the regents on March 10. The appointment was made on the recommendation of President Robert G. Sproul, the faculty at Los Angeles, the regents' committee of the University of California at Los Angeles and the Scripps Institution of Oceanography. The action of the regents was unanimous. Dr. Hedrick fills the vacancy caused by the retirement from administrative work on July 1 of Dr. Ernest Carroll Moore, now professor of education and philosophy at Los Angeles.

Dr. Hedrick was formally installed at the Charter Day exercises held on the Los Angeles campus on March 19. President Sproul presided at this meeting and made the formal installation. Dr. Hedrick delivered the annual Charter Day address in observance of the sixty-ninth anniversary of the founding of the University of California. He also spoke at the annual Charter Day dinner on March 23.

Dr. Hedrick, then of the University of Missouri, went to Los Angeles in 1924 as professor of mathematics and chairman of the department of mathematics. He was born at Union City, Indiana, on September 27, 1876. He received the degree of bachelor of arts from the University of Michigan in 1896, of master of arts from Harvard University in 1898 and of doctor of philosophy from the University of Göttingen in 1901. He was also a student at Ecole Normale Supérieure, Paris. The honorary degree of doctor of science was conferred on him by the University of Michigan in 1936.

Dr. Hedrick is a former president of the American Mathematical Society and of the Mathematical Association of America; he is a former vice-president of the American Association for the Advancement of Science, and is now secretary of the section of mathematics; he is a member of the American Society of Mechanical Engineers, of the American Institute of Electrical Engineers, of the Society for the Promotion of Engineering Education, of the National Education Association, of the Circolo Matematico di Palermo. Italv. and of the Société mathématique de France. He is also a member of the Council of Northern California Alumni of Phi Beta Kappa and of Sigma Xi.

Dr. Hedrick is a member of the American Engineering Standards Committee since 1927; a member of the Committee of the United Engineering Societies on Notation, and is chairman of the American Section of the International Commission on the Teaching of Mathematics. He has been editor of the Bulletin of the American Mathematical Society since 1921.

SCIENTIFIC NOTES AND NEWS

On the occasion of the International Symposium on Early Man, in celebration of the one hundred and twenty-fifth anniversary of the founding of the Acad-

emy of Natural Sciences of Philadelphia, the degree of doctor of science was conferred by the University of Pennsylvania on Dorothy Annie Elizabeth Garrod, of Newnham College, Cambridge, director of the joint expedition of the British School of Archeology in Jerusalem and the American School of Prehistoric Research; on Dr. Vere Gordon Childe, professor of prehistoric archeology at the University of Edinburgh, and on Dr. Kaj Birket-Smith, director of the National Museum in Copenhagen.

THE Vega Gold Medal of the Royal Swedish Geographical Society has been awarded to Dr. Roy Chapman Andrews, director of the American Museum of Natural History, in recognition of his contributions to geographical and anthropological science. The formal presentation will be made on April 24, when the medal and the accompanying certificate will be given by Crown Prince Gustav Adolf of Sweden to Laurence A. Steinhardt, American minister to Sweden.

THE Hillebrand Prize for 1936 has been awarded by the Chemical Society of Washington to Dr. Vincent du Vigneaud, professor of biochemistry at the George Washington University Medical School. The award, which was presented to him on March 11, was made in recognition of his contributions to the chemistry of the biologically significant sulfur compounds and particularly for a paper on the synthesis of glutathione which was presented before the Chemical Society of Washington last October.

THE rank of Chevalier of the Legion of Honor has been conferred by the French Government on Dr. J. B. S. Haldane, professor of genetics at University College, London, in recognition of his scientific services to France.

TENNEY L. DAVIS, associate professor of organic chemistry at the Massachusetts Institute of Technology, has been elected a corresponding member of the Royal Society of Letters and Sciences of Bohemia.

At a commemorative dinner held on March 12, Professor Albert Johannsen was honored by the department of geology of the University of Chicago on the occasion of his retirement from teaching. A portrait, the gift of Kappa Epsilon Pi, graduate geological fraternity, was unveiled, and Dr. Johannsen was presented with a bound volume of letters from former students and colleagues. Plans were also announced for issuing a special supplement to *The Journal of Geology*, in commemoration of the event. Professor Edson S. Bastin, chairman of the department of geology, presided at the dinner, and Professor R. T. Chamberlin delivered an informal commemorative address.

HORACE M. ALBRIGHT, formerly director of the National Park Service, has been elected president of the American Planning and Civic Association, which is active in the federal program of land and water conservation and development. DR. CHARLES ROOT TURNER, dean of the Dental School of the University of Pennsylvania, was named president-elect of the American Association of Dental Schools at the recent convention in Baltimore.

THE following officers of the Royal Meteorological Society, London, have been elected: *President*, Dr. F. J. W. Whipple; *Treasurer*, W. M. Witchell; *Secretaries*, H. W. L. Absalom, W. Dunbar and E. L. Hawke; *Foreign Secretary*, J. F. Shipley; *New Members of Council*, Miss Ellen E. Austin and R. S. Read.

DR. LEWIS R. THOMPSON, assistant surgeon general, U. S. Public Health Service, has been made director of the National Institute of Health. From 1932 to 1934 he was a scientific director of the International Health Division of the Rockefeller Foundation and is now in charge of the division of scientific research of the Public Health Service.

DR. CHARLES MANNING CHILD, professor of zoology at the University of Chicago, has resigned after serving as a member of the faculty for forty-two years. Professor Child plans to live in Palo Alto and to continue his research work in the marine laboratories of Stanford University.

PROFESSOR LEE EDWARD TRAVIS has been appointed head of the department of psychology at the State University of Iowa to succeed Dean-Emeritus Carl E. Seashore on July 1. Professor Seashore will continue as research professor.

AT Columbia University, Professor Franz Schrader has been named head of the department of zoology, and Professor Joseph F. Ritt has become acting head of the department of mathematics.

DR. A. R. DAVIS, professor of plant physiology, has been named chairman of the department of botany of the University of California.

DR. ARTHUR G. NORMAN, of the Rothamsted Experimental Station, Harpenden, England, has been appointed professor of soil bacteriology in the department of agronomy of the Iowa State College and research professor of soil bacteriology in the Agricultural Experiment Station. Dr. Norman will go to Ames in September, filling the position formerly held by Dr. R. H. Walker.

DR. DANIEL J. POSIN, instructor in physics in the College of Pharmacy at the University of California, has accepted appointment as professor of physics at the University of Panama. He will sail for Panama in April.

DR. EDGAR DOUGLAS ADRIAN, fellow of Trinity College, has been elected to succeed Professor Sir Joseph Barcroft, fellow of King's College, in the chair of physiology at the University of Cambridge. MARCH 26, 1937

DR. JAMES GRAY, fellow of King's College and reader in experimental zoology in the University of Cambridge, has been elected to the professorship of zoology in succession to Professor J. Stanley Gardiner, fellow of Gonville and Caius College, who retires at the end of September, having occupied the chair of zoology since 1909.

DR. HERBERT LIGHTFOOT EASON, vice-chancellor of the University of London, was appointed on March 17 principal of the university, to succeed the late Sir Edwin Deller, who had held the position since 1929. Dr. Eason was superintendent and senior ophthalmic surgeon of Guy's Hospital and is a former dean of the medical school.

M. FRÉDÉRIC JOLIOT has been appointed professor of chemistry in the Collège de France.

FRANCIS HEMING, of the British Museum (Natural History), has been appointed secretary of the International Commission on Zoological Nomenclature. He succeeds Dr. Ch. Wardell Stiles, who has been secretary of the commission since 1896.

DR. JESSE E. HUNTER, associate professor in charge of poultry nutrition in the department of agricultural and biological chemistry at the Pennsylvania State College, has resigned to accept a position with Allied Mills, Inc., at Peoria, Ill.

M. CH. MAURIN has been named the successor of the late M. Hamy as member of the Bureau of Longitude, Paris.

STEPHEN L. TYLER, for more than twenty years chemical engineer in the American branch of the Thermal Syndicate, Ltd., has been made executive secretary of the American Institute of Chemical Engineers, effective on April 1. He will fill the unexpired term of Frederic J. LeMaistre, who recently resigned. The office of the institute will be moved from Philadelphia to New York.

DR. STILLMAN WRIGHT, limnologist of the Fish Commission of northeast Brazil, has returned from a three months' leave of absence in Argentina, where he made a preliminary survey of some lakes for the government. He will continue work on the artificial lakes of northeast Brazil, making his headquarters in Fortaleza, Ceara.

DR. ISAIAH BOWMAN, president of the Johns Hopkins University, will deliver the Founder's Day address at the University of Virginia on April 13, the anniversary of the birth of Thomas Jefferson.

DR. J. B. SUMNER, of Cornell University, addressed a joint meeting of the Toronto Chemical Association and the Toronto Biochemical Society on the evening of March 18. His subject was "The Enzyme Urease." DR. VALY MENKIN, of the department of pathology of the Harvard Medical School, addressed the New York Pathological Society on February 25 on "Mechanisms of Inflammation."

DR. GEORGE H. PARKER, professor emeritus at Harvard University, gave the Mead-Swing Lecture at Oberlin College on March 12. His subject was "The Nature and Action of Neurohumors."

SIR HENRY DALE, director of the British National Institute for Medical Research, on May 18 will address the Academy of Medicine of Washington, D. C. He will speak on the chemical transmission of the nerve impulse from nerve to muscle.

THE American Association of Museums will meet at New Orleans on May 3, 4 and 5.

THE fifth annual meeting of the Society for Research on Meteorites will be held in conjunction with the one hundredth convention of the American Association for the Advancement of Science and its western Divisions at Denver, Colorado, on June 22 and 23. There will be two sessions a day, mainly for papers, one in the morning at ten o'clock and another in the afternoon at two o'clock. These sessions, which will be open to the public, will be held in the Colorado Museum of Natural History, the headquarters for the meeting.

APPLICATIONS for grants from the Cyrus M. Warren Fund of the American Academy of Arts and Sciences should be received by the chairman of the committee, Professor James F. Norris, the Massachusetts Institute of Technology, Cambridge, Mass., not later than May 1. Grants are made to assist research in the field of chemistry. On account of limited resources, grants to an individual are seldom made in excess of \$300. The application should be accompanied by an account of the research to be undertaken, a statement of the sum requested and the manner in which the money is to be expended.

A SPECIAL summer school with conferences on the strength of materials will be held at the Massachusetts Institute of Technology for four weeks beginning on June 21. The subject of "Creep" will be presented by Dr. A. Nadai, consulting engineer of the Westinghouse Electric and Manufacturing Company, East Pittsburgh, the last two lectures of this series being given by C. R. Soderberg, manager of the steam turbine department, Westinghouse Electric and Manufacturing Company. Lectures on fatigue will be given by Dr. H. J. Gouch, superintendent of the department of engineering of the National Physical Laboratory, England. Lectures on the strength of materials will be given by members of the institute staff. The laboratory exercises in the testing of metals will make use of the more modern measuring instruments and apparatus. Four seminars will be held to afford opportunity for the presentation of recent developments in allied fields of engineering mechanics. The course will be concluded by two all-day conferences on "Fatigue and Creep," at which various aspects of these two subjects will be discussed.

ONE fourteenth of the total population of the United States, or 9,929,432 people, visited the 134 national parks and monuments in 1936, a gain of more than four million over 1935, and a gain of more than six million over the depression year 1931, when only 3,-619,900 persons visited the areas. 1,772,338 people visited the parks in private cars during 1936 as against 1,217,054 in 1935. The newly established Shenandoah National Park, Virginia, dedicated on July 3, 1936, was visited by nearly 700,000 people; the Great Smoky Mountains National Park, on the border of North Carolina and Tennessee, by 602,222; Acadia National Park, Maine, by 340,393, and Mammoth Cave National Park, Kentucky, by 57,775. In the West, Rocky Mountain National Park, Colorado, reports 550,496 visitors; Yellowstone National Park, Wyoming, 432,-570; Yosemite National Park, California, 431,192; Mount McKinley National Park, Alaska, 1,073.

A 2,200 acre wildlife refuge will be established by the U. S. Biological Survey in the Patuxent River valley section of Maryland. It has been named the Patuxent Research Refuge. The refuge, part of the National Agricultural Research Center of the Department of Agriculture at Beltsville, is about fifteen miles northeast of Washington. Wild turkeys, ruffed grouse, white-tailed deer, beavers, muskrat and other wildlife, once abundant in this section, are to be restocked on the refuge. Certain areas of the refuge will also be set apart for demonstrating wildlife management practices. On these tracts the Biological Survey will show how the latest facts found through research and experiment can be applied. Snowden Hall, an old-time southern mansion, is located on the refuge. It is to be reconditioned for the refuge headquarters, and other necessary buildings will be provided. A new laboratory building will be one story and basement. It will contain an office, three biological laboratory rooms, a room for housing wild birds and animals infected with disease, another for healthy animals and birds, and rooms for examining and storing specimens.

A PLAN to establish Pan-American postgraduate schools and hospitals in all the large cities of Central and South America was discussed recently, at a meeting of physicians at the Metropolitan Club, New York City, by Professor José Arcé, dean of the University of Buenos Aires. Professor Arcé, who is president of the Argentine Chapter of the Pan-American Medical Association, was the guest of honor at a dinner of the New York Chapter of the association. Speakers for the United States were Dr. Charles Gordon Hevd, president of the American Medical Association; Dr. James Ewing, of Memorial Hospital, and Dr. Dean Lewis, of the Johns Hopkins University. The plan announced by Professor Arcé is for the establishment throughout the republics of Central and South America of medical centers similar to the one proposed recently for New York City.

DISCUSSION

THE "PRIMARY CHANGE" IN ADRENAL INSUFFICIENCY¹

IN his communication to SCIENCE entitled "The Significance of the Adrenals for Adaptation," Selye² makes the following statement. "It seems quite likely that the loss of sodium which is the basic change according to those who believe in the sodium deficiency theory (Loeb, *et al.*) or the increase in potassium (Zwemer) . . . all of which have been considered to be the primary change—are also symptoms rather than the cause of adrenal insufficiency." We have consistently avoided any expression which would suggest that we believe in a "sodium deficiency theory" or any other theory assigning a single function to the adrenal cortex. Furthermore, it is our opinion that the promulgation of any unitarian hypothesis concerning the function of the adrenal cortex tends, at this

¹ From the Department of Medicine, College of Physicians and Surgeons, Columbia University, and the Presbyterian Hospital, New York City.

² H. Selye, Science, 85: 247, 1937.

time, to inhibit the advance of physiological knowledge in this field.

It is indisputable that the regulatory effect of the adrenal cortex upon sodium metabolism is *one* of its important functions. The very fact that the single procedure of sodium withdrawal will induce acute adrenal insufficiency in the Addisonian patient³ and the adrenalectomized dog is of obvious significance. Moreover, Harrop⁴ has shown that totally adrenalectomized dogs will live for months without cortical extract if sodium salts are ingested in sufficient quantities.

On the other hand, we wish, in view of Selye's statement, to emphasize here, as we have in other publications, that the physiological activities of the adrenal cortex are varied and complex. In 1934,⁵ we stated

⁸ R. F. Loeb, *Proc. Soc. Exp. Biol. Med.*, 30: 808, 1933. ⁴ G. A. Harrop, L. J. Soffer, W. M. Nicholson and M. Strauss, *Jour. Exp. Med.*, 61: 839, 1935.

⁵ R. F. Loeb and D. W. Atchley, Med. Clin. of North America, Vol. 17, New York Number, No. 5, 1317, 1934.