

Animal and in the Vegetable Creation, and in the production of Hurricanes and Abnormal Atmospheric Vicissitudes." Particulars regarding the conditions of the contest may be secured from the secretary, Dr. J. S. Fowler, Edinburgh.

In honor of Dr. Charles Lester Leonard who died in 1913 a martyr to research with the roentgen ray, the American Roentgen Ray Society offers a \$1,000 prize for the best piece of original research in the field of roentgen ray, radium or radioactivity. The competition is open to any one living in the United States, or its possessions, Canada, Mexico, Central and South America and Cuba. The research work must be submitted in writing in the English language not later than July 1. The winner will read his paper at the annual meeting of the society in September. Dr. Henry K. Pancoast of the University Hospital is a member of the committee in charge of the competition.

THE COMMITTEE ON PHYSIOLOGICAL OPTICS OF THE NATIONAL RESEARCH COUNCIL

UNDER the auspices of the Division of Physical Sciences of the National Research Council, there has recently been formed a Committee on Physiological Optics consisting of

Professor Adelbert Ames, Dartmouth College,
Professor W. T. Bovie, Harvard University,
Dr. P. W. Cobb, Nela Research Laboratory,
Mr. L. A. Jones, Eastman Kodak Company,
Dr. W. B. Lancaster, Boston,
Dr. P. G. Nutting, Pittsburgh,
Dr. I. G. Priest, Bureau of Standards,
Professor J. P. C. Southall, Columbia University,
Dr. L. T. Troland, Emerson Hall, Harvard University, Cambridge, Mass.,
Professor F. K. Richtmyer, Cornell University,
Chairman.

This committee recently held a meeting in New York for the purpose of organization and discussion of the problems before it. The diversity of present theories of vision was thought to be due in large part to the circumstance that the workers in the sciences contributory to visual phenomena, such as physics, physiology and psychology, seldom,

if ever, get together to talk over problems of mutual interest and to get each other's viewpoint.

To facilitate an interchange of ideas among the various groups of workers, the committee voted to request the Optical Society of America to form a Section on Vision. Such a section has been authorized by the society and the first meeting will be held in Rochester in October, 1921. It is hoped that all those interested in the pure or applied science of vision, such as physicists, physiologists, psychologists, ophthalmologists, photochemists, illuminating engineers, etc., will join the new section and will take an active part in its work.

The committee will also immediately make a survey of present research in progress. Later will be issued a report on the present status of physiological optics with some outstanding problems for research.

SCIENTIFIC NOTES AND NEWS

AT the annual dinner of the National Academy of Sciences on April 26, the following medals were presented: To Dr. Charles D. Walcott, secretary of the Smithsonian Institution and president of the Academy, the first award of the Mary Clark Thompson Medal for distinguished achievement in geology and paleontology. To Albert I. Prince of Monaco, the Alexander Agassiz Gold Medal for contributions to the science of oceanography; to Dr. P. Zeeman, of Amsterdam, Holland, the Henry Draper Gold Medal for eminence in investigations in astronomical physics; to Rear Admiral C. D. Sigsbee, U. S. N., retired, the Agassiz Gold Medal, the same as the medal to the Prince but awarded one year later, for eminence in investigations in oceanography; to Dr. Robert Ridgway, the Daniel Giraud Elliot Gold Medal for his studies of the birds of North America, and especially in recognition of Part 8 of his "Birds of North and Middle America"; to Dr. C. W. Stiles, the Gold Medal for eminence in the application of science to the public welfare, in recognition of his work on the hook worm disease.

THE June issue of the *Medical Review of Reviews* will be a special radium number, dedicated to Mme. Curie. The issue will consist exclusively of articles on radium and its uses.

As Professor A. Netter of the University of Paris soon reaches the retirement age, his friends and pupils are planning to present him with a testimonial plate.

EIGHT professors of the College of Agriculture of Cornell University will be on sabbatic leave next year. They are Professors Herbert H. Whetzel, George W. Cavanaugh, Ralph S. Hosmer, Karl M. Wiegand, Arthur B. Recknagle, Blanche Hazard, Anna B. Comstock and Earl W. Benjamin. Professor Whetzel will organize a plant pathology service for the Bermuda Islands. Professor Hosmer will make a study of the forests of England, France, Switzerland, Sweden and Norway. Dr. Benjamin will act as general manager of a poultry-producing firm in New Jersey, making efficiency and cost studies.

THE department of medical zoology of the school of hygiene and public health of the Johns Hopkins University has recently arranged to send during the summer of 1921 an expedition to Porto Rico for the purpose of studying the malaria problem and other problems involving disease-producing protozoa and their vectors. Dr. R. W. Hegner will devote his time especially to the study of the malarial organism and other blood-inhabiting protozoa and to the intestinal protozoa, and Dr. F. M. Root, who will accompany him, will make a survey of the mosquitoes, fleas and other distributors of pathogenic microorganisms.

WALTER L. HOWARD, professor of pomology in the University of California, now in charge of the new Deciduous Fruit Experiment Station at Mountain View, California, has been granted a year's leave of absence to make a study of root stocks for deciduous fruits. Accompanied by his family, he will sail from New York to Europe on June 25, going direct to Angers, France. The field of study will include France, Italy, Spain and England.

UNDER the auspices of the General Electric Company and Union College, Professor F. K. Richtmyer, of the Department of Physics at Cornell University, has given in Schenectady, during the present academic year, a course of lectures on modern physical theories.

ON April 7, Professor Edward Kasner, of Columbia University, lectured on "Einstein's theory of gravitation" at the College of the City of New York. Professor Einstein attended and took part in the discussion.

DR. GEORGE H. PARKER, head of the department of zoology at Harvard University, is in residence at Pomona College as Harvard exchange professor, from April 11 to May 6, giving two courses of lectures, on "The origin of the nervous system" and "Smell, taste and allied senses."

PROFESSOR HARRIS J. RYAN, of Leland Stanford Junior University, spoke on April 20 before the Physics Club of the California Institute of Technology and the Mount Wilson Observatory on: "High voltage phenomena encountered in the study of the insulation requirements for the proposed 220,000 volt power transmission lines."

ON April 23 Dr. Dayton C. Miller, head of the department of physics, Case School of Applied Science, and secretary of the American Physical Society, gave an experimental lecture upon "Photographing and analyzing sound waves."

DR. HARVEY R. GAYLORD, director of the New York State Institute for Research in Malignant Diseases, and Dr. Charles Cary, of Buffalo, left for Germany on April 23 to investigate methods developed in Germany for applying X-rays to cancer.

JAMES ZETEK, formerly entomologist to the Panama Canal, has been appointed specialist in tropical insects with the Federal Horticultural Board, U. S. D. A., in charge of the temporary field station at Ancon, Canal Zone, Panama.

DR. PAUL E. KLOPSTEG, who has been connected with the sales and advertising department of Leeds and Northrup for several years,

has recently accepted a position with the Central Scientific Company of Chicago as manager of development and manufacturing.

PROFESSOR JAMES H. LEUBA, of Bryn Mawr College, who is to be abroad during the next academic year on sabbatical leave, has been invited to give five lectures at the Sorbonne in the Fall of 1921, under the auspices of the Institut de Psychologie. His subject will be the psychology of religious mysticism. He is also to deliver a series of lectures at Kings College, London.

THE Columbia Chapter of the Society of Sigma Xi announces a lecture on "Progress in physics in the last decade," by Michael Idvorsky Pupin, professor of electro-mechanics. This lecture which was given on the evening of May 4 is the first of a proposed series of annual lectures on the Progress of Science.

AN address on "The spirit and method of research in agriculture" was given by Dr. E. W. Allen, of the office of experiment stations, at the college of agriculture, at the Ohio State University, on April 15.

DR. ARTHUR GORDON WEBSTER, head of the department of physics at Clark University, will sail on May 28 for London, where he will deliver a lecture on "Researches on Sound," before the Royal Institution, on June 10.

DR. FRANK SCHLESINGER, director of the Yale Observatory, will deliver an address before the Yale chapter of Sigma Xi on "The distances of the stars," on May 10.

DR. C. G. ABBOT, assistant secretary of the Smithsonian Institution, delivered an address before the Washington Academy of Sciences on April 22 on "The solar constant observing stations of the Smithsonian Institution."

DR. GEORGE FREDERICK WRIGHT, known for his contributions to geology especially glacial period, and professor emeritus of the harmony of science and religion at Oberlin College, died at Oberlin on April 20, aged eighty-three years.

THE establishment of the Chemical Warfare Service at Edgewood Arsenal, Edgewood,

Maryland, will appoint fifty chemists as soon as suitable men can be secured. The United States Civil Service Commission has announced that until further notice it will receive applications for these positions in the following grades: Chemist at \$3,000 to \$5,000 a year, associate chemist at \$2,000 to \$3,000 a year, and junior chemist at \$1,400 to \$2,000 a year. Promotion from the lower to the higher grades will depend upon demonstrated ability and the needs of the service. The examination announcement states that there are opportunities for employment in fifteen specialties of chemical science. Full information and application blanks may be obtained by communicating with the United States Civil Service Commission, Washington, D. C.

THE inadequacy of the appropriation to the Bureau of Fisheries for scientific work has made necessary a reduction in the number of projects to be pursued by that bureau during the next fiscal year and will necessitate keeping the Woods Hole, Massachusetts, laboratory closed during the summer. Therefore, no applications for the use of tables during the coming season can be approved.

A COMMUNICATION from J. Parke Channing of New York, chairman of the American Engineering Council's Committee on Public Affairs, has been placed before President Harding and representatives of the council have been advised that the president is considering the recommendation that an engineer be placed on the Interstate Commerce Commission with other recommendations for appointments to the three vacancies. A supplementary communication was also submitted to the president naming six engineers with qualifications for this appointment in the hope that such list would be useful to him. In representations to the president, the council is also acting for the American Society of Civil Engineers, the American Association of Engineers and the American Institute of Consulting Engineers. The American Engineering Council's Committee on Procedure has appointed L. W. Wallace, executive secretary of the council, as its representative on the U. S.

Board of Surveys and Maps. Mr. Wallace succeeds Alfred D. Flinn, secretary of Engineering Foundation, and has been assigned to the Committee on Cooperation. Members of the Advisory Council of the board have been urging the American Engineering Council to aid them in obtaining an adequate program involving a larger appropriation for topographic maps. Congress has asked for an outline of this program and as soon as this is completed the council will decide on the support that can be given.

THE prospect of large lumber operations in South America carried on by interests from the United States is opening a field of promising possibilities to the American forester, and this situation has caused the faculty of the New York State College of Forestry to consider the advisability of adding Spanish to the language requirements of the forestry course. The value of Spanish to the American forester is a reflection of the growing scarcity of forests in the United States and Canada. The consequential high prices of wood products make lumbering in distant countries profitable. South America, according to authorities of the college, presents a new sphere of discovery in wood utilization as there are many species of trees about which little is known regarding their applicability to commercial purposes. The pine forests of Chili and southern Brazil occupy vast areas. The Brazilian Parana pines are said to cover 260 million acres and will produce from five to ten thousand board feet per acre. Restrictive export duties and the lack of shipping facilities have prevented earlier exploitation of these natural resources of South America, but the prodigality of the United States in the use of its forests has overcome these obstacles.

UNIVERSITY AND EDUCATIONAL NOTES

THE College of Agriculture and the College of Veterinary Medicine of Cornell University will receive approximately \$1,350,000 from the State as a consequence of the appropria-

tion bill signed by Governor Miller. The College of Agriculture will receive, roughly, \$1,250,000, while the Veterinary College, it is estimated, will receive \$100,000, which is slightly less than last year's appropriation.

THE North Carolina Legislature has granted the University of North Carolina \$925,000 as a two-year maintenance fund and \$1,490,000 for permanent improvements for two years.

PROFESSOR GEORGE C. EMBODY has returned to Cornell after spending the period since last September establishing at the University of Washington the first college of fisheries in an American university.

DR. IRA M. HAWLEY, of Cornell University, has been appointed professor of zoology and entomology at the Utah Agricultural College and Entomologist for the Utah Agricultural Experiment Station. Sherwin Maeser, Ph.D., University of California, has been appointed associate professor of chemistry at the college.

DR. LEWIS KNUDSON, of the department of botany of Cornell University, has gone to Spain to assist in establishing departments of plant physiology in the Universities of Madrid and Barcelona.

DISCUSSION AND CORRESPONDENCE

PALEOBOTANY AS VIEWED BY TWO GEOLOGISTS

IN the current April *American Journal of Science* appear two papers reciting the larger stratigraphic and faunal evidence bearing on climate in time. Professor A. C. Coleman in the first of these lectures cites especially Dr. Knowlton's views of all-tropic ancient climates thus:

Part I. of Dr. Knowlton's paper rouses enthusiasm with its splendid array of forests mostly tropical from all parts of the world culminating in the Eocene flora. His account of the vegetation of the past confirms and heightens the impression left by paleozoology that during the greater part of the world's history temperatures have been genial even in the far north and far south where