

"Technology and Material Progress": Dr. Willis R. Whitney, director of the Research Laboratory of the General Electric Company, Schenectady. (Introduced by Dr. Rice.)

SECTION II. TENDENCIES IN THE FIELD OF THE SOCIAL SCIENCES

"Economic Adjustment in a Machine Age": Ernest M. Patterson, professor and head of the Department of Economics, University of Pennsylvania. (Introduced by Dr. Johnson.)

"Communications and World Peace": Speaker to be announced.

"Unemployment and Its Social Significance": Arthur Woods, chairman of President Hoover's Emergency Committee for Employment. (Introduced by President Dercum.)

"Thou Shalt Not": James M. Beck, Member of Congress.

"Scientific Knowledge and Human Conduct": Speaker to be announced.

SECTION III. THE CHANGING WORLD

"Round Table Discussion and Recommendations": Edwin G. Conklin, professor of biology, Princeton University.

SCIENTIFIC NOTES AND NEWS

THE Executive Committee of the American Association for the Advancement of Science will hold its regular spring meeting at the Cosmos Club in Washington on Sunday, April 26, with a forenoon and an afternoon session. Business to come before the committee at this meeting should be in the permanent secretary's office, Smithsonian Institution Building, Washington, D. C., by April 20.

MAJOR GENERAL A. W. GREELY will observe his eighty-seventh birthday on March 27.

DR. ALEXIS CARREL, of the Rockefeller Institute for Medical Research, has been chosen as recipient of the Dr. Sofie A. Nordhoff-Jung prize for 1930 for his outstanding work in the field of cancer. Dr. Carrel will receive the diploma and a check for \$1,000 from Dr. Nordhoff-Jung at ceremonies at Georgetown University on March 28. Ambassador von Prittwitz, of Germany, will read the diploma. Ambassador Claudel, of France, Dr. Carrel's native land, will attend, and Dr. W. Coleman Nevils, president of Georgetown University, will preside. The citation reads: "Dr. Carrel has added new laurels to his great achievements in surgery by expanding the method of tissue culture, and by its objective application he has vastly aided in the elucidation of fundamental questions relating to morbid growth, especially the development of malignant tumors."

ON the occasion of the seventy-sixth birthday of Mr. Andrew W. Mellon, Secretary of the Treasury, on March 24, the American Institute of Chemists announced the award of its medal jointly to Mr. Andrew W. Mellon and Mr. Richard B. Mellon for distinguished service to the science and profession of chemistry. Dr. Frederick E. Breithut, president of the American Institute of Chemists and head of the department of chemistry at the Brooklyn College, in making the announcement, said: "The institute medal is awarded annually for distinguished and outstanding services to the science and profession of chemistry, thermal differences.

Mr. Andrew W. Mellon and Mr. Richard B. Mellon have contributed to the advancement of chemistry in its broadest aspects and have fostered the progress of industry by their far-seeing and unselfish efforts. Through the agency of the Mellon Institute of Industrial Research they have been leaders in the great forward march of the American chemical industry. This medal is awarded annually and usually to someone outside the chemical profession itself. In 1929, the award was made to Mr. and Mrs. Francis P. Garvan; in 1930, to Mr. George Eastman."

SIR JAMES HOPWOOD JEANS, who will receive a Franklin Medal from the Franklin Institute, Philadelphia, on May 20, will afterwards spend two weeks at the Mount Wilson Observatory.

DR. J. PLAYFAIR MCMURRICH, professor emeritus of anatomy at the University of Toronto, has been appointed a corresponding member of the Comité Internationale d'Histoire des Sciences of Paris.

DR. KONRAD E. BIRKHAUG, associate professor of bacteriology at the University of Rochester School of Medicine and Dentistry, has been elected a member of the Norwegian Academy of Sciences.

DR. ALBRECHT PENCK, of the University of Berlin, has been elected a corresponding member of the Geological Society of America.

DR. HANS WINKLER, professor of botany at Hamburg, has been elected a member of the Swedish Academy of Sciences.

DR. CARL CORRENS, professor of genetics at the University of Berlin, has been elected a member of the Academy of Sciences at Upsala.

THE National Geographical Society of Cuba, at its annual meeting on March 17, awarded its gold medal to M. Georges Claude, a member of the Paris Academy of Sciences, who has been using the waters of Matanzas Bay to generate electric current from

At the University of North Carolina Dr. Herman Glenn Baity, professor of sanitary and municipal engineering, has been appointed acting dean of the School of Engineering in the place of the late Dean G. M. Braune.

DR. MONT R. REID, who has been associate professor of surgery in the College of Medicine of the University of Cincinnati, has been appointed head of the department of surgery. Dr. Reid succeeds Dr. George J. Heuer, who leaves at the end of the academic year to become surgeon-in-chief of the New York Hospital and professor of surgery in Cornell University Medical School.

DR. GEORGE R. BANCROFT, of the school of medicine of the University of West Virginia, has been appointed professor of physiological chemistry at Jefferson Medical College, Philadelphia.

DR. JOHN P. NAFFÉ, professor of psychology at Clark University, has been appointed professor of psychology and head of the department at Washington University, St. Louis, effective on July 1, to succeed Dr. Edgar James Swift, head of the department since 1903, who is retiring.

DR. JEFFRIES WYMAN, JR., instructor in zoology at Harvard University, has been promoted to an assistant professorship.

MR. S. A. ROHWER, assistant chief of the Plant Quarantine and Control Administration of the U. S. Department of Agriculture, has been appointed assistant chief of the Bureau of Entomology, to succeed Mr. John E. Graf, now associate director of the U. S. National Museum. Mr. Frank H. Spencer, for the last six years administrative assistant to the Secretary of Agriculture, has been appointed chief of the division of administration in the bureau.

PROFESSOR HOMER G. TURNER has been appointed director of anthracite research for the Anthracite Institute of Lehigh University, and will devote much of his time for the next few years to that work.

MR. E. JACK COULSON, formerly of the department of chemistry of the Kansas State Agricultural College, has been appointed associate biochemist of the U. S. Bureau of Fisheries. He has been assigned to the laboratory of the South Carolina Food Research Commission at Charleston, to work upon the nutritive value of sea foods. The specific problem upon which Mr. Coulson is to be engaged at present deals with the mineral content of the oyster in relation to its value in nutritional anemia.

OFFICERS of the Columbia University Chapter of Sigma Xi elected at the recent meeting for a two-year term are: *President*, Professor Donald E. Lancefield, department of zoology; *Vice-president*, Professor

Jerome J. Jerome, department of chemical engineering; *Secretary-Treasurer*, Dr. G. Marshall Kay, department of geology.

At the meeting of the Pasteur Society of Central California on February 4, the following officers were elected for the present year: *President*, Dr. W. H. Manwaring, professor of bacteriology and experimental pathology, Stanford University; *Vice-president*, Dr. W. T. Cummins, pathologist, Southern Pacific Hospital, San Francisco; *Secretary-treasurer*, Miss Beatrice Howitt, associate in research medicine, Hooper Foundation, University of California; *Councillors*, Dr. C. M. Haring, professor of veterinary science, University of California; Dr. L. B. Taber, doctor of dental surgery, San Francisco. The speakers of the evening were: Mr. B. S. Henry, assistant in veterinary science, University of California, Berkeley, who presented a paper on "Bacterial Dissociation," illustrated with lantern slides, and Dr. J. N. Force, professor of epidemiology, who spoke on "Daniel Sutton and the Revival of Variolation."

At the request of the American Petroleum Institute, the Secretary of the Interior, Dr. Ray Lyman Wilbur, as chairman of the Federal Oil Conservation Board, has announced the appointment of a Voluntary Committee on Petroleum Economics to survey the supply and demand factors in the petroleum industry for the six-months period beginning April 1 and ending September 30. The committee consists of: E. B. Swanson, chief economist, U. S. Bureau of Mines, chairman; John W. Frey, Bureau of Foreign and Domestic Commerce; Martin Van Couvering, petroleum engineer, Los Angeles; Alfred G. White, National Industrial Conference Board, New York City, and Howard Bennette, Western Petroleum Refiners Association.

DR. O. E. BAKER, of the Bureau of Agricultural Economics, has been requested to assist with the work of the President's Committee on Recent Social Changes, of which Dr. Wesley Mitchell, of the National Bureau of Economic Research, is chairman. Dr. Baker, together with Dr. S. G. Tryon, of the Bureau of Mines, will prepare the portion of the report dealing with natural resources, the former preparing the part relating to land or agricultural resources, and the latter the part on mineral resources. Dr. Baker has been authorized to spend part of his time during the coming year on this work.

AN Associated Press dispatch reports that an investigation of the causes of the recurrence of malaria is planned at the Gorgas Memorial Institute of Tropical and Preventive Medicine at Panama. The tests will be conducted under the direction of Dr. W. H. Taliaferro, professor of parasitology at the University of Chicago.

LEAVE of absence has been granted for the first semester of the years 1931-1932 to Professor William H. Hobbs, of the University of Michigan, who expects to attend the International Geographical Congress to be held in Paris in September of this year and who will carry out certain field studies in geology in addition to completing a book on glaciers which he expects to publish in the near future.

PROFESSOR GEORGE D. HUBBARD, head of the department of geology and geography of Oberlin College, is continuing his work in Europe. He has spent the three winter months in the Balkans and Near East. Maps, photographs and specimens are being collected and sent home for further study and as helps in teaching.

THE HONORABLE S. F. MARKHAM, secretary of the Museums Association of Great Britain, is now in the United States. He plans to visit the larger museums in the eastern part of the United States and Canada.

DR. JOHN C. MERRIAM, president of the Carnegie Institution of Washington, delivered an address on March 19 before the Washington Academy of Sciences on "The Unity of Nature as Illustrated by the Grand Canyon."

DR. FREDERICK G. NOVY, professor of bacteriology in the University of Michigan Medical School, will deliver the annual Kober Lecture at Gaston Hall, Georgetown University, on March 28. Dr. Novy's subject will be "Respiration of Micro-Organisms."

DR. KARL F. MEYER, director of the George Williams Hooper Foundation for Medical Research, University of California, will deliver the seventh Ludvig Hektoen Lecture of the Billings Foundation before the Institute of Medicine of Chicago on April 24. Dr. Meyer will speak on "The Animal Kingdom—A Reservoir of Disease."

DR. HERBERT A. EVANS, of the University of California Medical School, will give the annual Charles Sumner Bacon Lectures at the University of Illinois College of Medicine. The first lecture on March 31 will be on "The Hormones of the Hypophysis," and the second on April 1, on "The Relation of the Hypophysis to the Reproductive System."

THE *Journal* of the American Medical Association reports that Dr. Alfred F. Hess, New York, delivered the Frederick A. Packard Memorial Lecture before the Philadelphia Pediatric Society on March 10, on "Ultraviolet Irradiated Ergosterol and Irradiated Foods," and on March 12 Dr. Warren H. Lewis, Baltimore, presented a motion picture of tissue cultures of human and mammalian tumor cells before the Pathological Society of Philadelphia.

DR. T. A. KIESSELBACH, professor of agronomy in

the College of Agriculture, of the University of Nebraska, gave the second series of annual lectures under the Frank Azor Spragg Memorial Fund, early in March, at Michigan State College. This memorial is in honor of Professor F. A. Spragg, who was in charge of plant breeding work at the Michigan Agricultural Experiment Station from 1906 until his death in 1924.

THE Michigan Academy of Science, Arts and Letters held its thirty-sixth annual meeting in Ann Arbor, on March 19, 20 and 21. An extensive program comprising two hundred addresses and papers had been prepared. Professor Edwin G. Conklin, of Princeton, addressed the members on "Fitness the Greatest Problem of Biology"; Professor Leroy Waterman, director of the Michigan-Toledo-Cleveland Expedition in the Near East, spoke on "The Fourth Season at Seleucia on the Tigris." Dr. Eugene S. McCartney, of the University Graduate School, gave the presidential address on "Folklore Heirlooms."

THE 1931 meetings of the American Society of Ichthyologists and Herpetologists will be held at the Academy of Natural Sciences of Philadelphia, from May 11 to 13. The arrangements are in charge of a local committee, consisting of Messrs. Fowler, Dunn and Green. In the business meeting, called for 10 A. M. on Monday, May 11, there will come up for discussion the matter of the support of the *Biological Abstracts* and the *Zoological Record* and other items. Sessions for the reading of papers will be held on Monday and Tuesday. In addition there will be papers of interest to aquarists and an exhibit by Philadelphia fish fanciers. An excursion to the Philadelphia Aquarium and the Philadelphia Zoological Gardens is proposed. Those intending to address the meeting are requested to send titles to Dr. E. R. Dunn, Haverford College, Haverford, Pennsylvania, before May 1.

RECENT meetings of the Toronto center of the Royal Astronomical Society of Canada have included the following lectures: "Star Clusters: Recent Investigations with Reference to Their Bearing on Stellar Evolution," Dr. R. K. Young, Toronto; "Recent Geophysical Investigations in Mineralized Regions," by Professor Lachlan Gilchrist, Toronto, and A. H. Miller, Dominion Observatory, Ottawa; "Telescopes for Amateurs, and How to Use Them," by John A. Marsh, Hamilton, Ontario; "The Sun as a Source of Energy," by Professor D. S. Ainslie, Toronto. The program for March and April includes the following papers: March 24—"The Stars in Navigation," by Commander J. M. de Marbois; April 14—"Some Mathematical Paradoxes," by Professor E. Beatty; April 28—"The Nebulae Outside the Galactic System," by Dr. H. H. Plaskett, Victoria.

Industrial and Engineering Chemistry reports that the British Institute of Metals and the Iron and Steel Institute have been invited by the American Institute of Mining and Metallurgical Engineers to hold their respective autumn meetings in New York in September, 1932, the meetings to be followed by a tour in the United States and Canada. The detailed program for these joint meetings has now been issued. The sessions will begin Monday, September 12, 1932, in the Engineering Societies Building, New York, and the tour of industrial cities will end in Montreal on September 29. The English party will sail from that port on September 30.

THE *Journal* of the American Medical Association reports that the Rockefeller Foundation has offered to assist in the establishment of a School of Hygiene and Public Health in Tokyo. It is said that buildings will be erected at a cost of \$5,000,000. The Japanese government has nominated a special committee on organization which consists of Dr. Hayashi, dean of the medical department of the Tokyo Imperial University; Dr. Kitajima, dean of the Keio Medical College, and Dr. Teusler, chief of St. Luke's International Hospital; Chairman, Mr. Akagi, chief of the Sanitary Bureau; Commissioners, Drs. Nagayo and Miyagawa, of the Imperial University of Tokyo and the government Institute for the Study of Infectious Diseases; Drs. Miyajima and Hata, of the Keio Medical College and the Kitasato Institute; Dr. Sato, of St. Luke's International Hospital, and Drs. Kusama and Noheji, of the Sanitary Bureau of the Home Ministry.

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reports that the Southern Pacific Company recently offered the use of a completely equipped laboratory on wheels to the University of California Hooper Foundation for Medical Research to assist in answering emergency calls throughout the state for help in fighting epidemics. The car has been rebuilt to fill the needs of a staff of public health workers, either for emergencies or for routine examinations and educational programs, and is available at any time for use anywhere along the railroad's lines. It has a well-equipped bacteriologic and chemical laboratory, an x-ray room with facilities for developing films, a waiting room, examining room, quarters for two physicians and a technician, a galley and combination dining and record room, and quarters for a crew of two. Dr. Karl F. Meyer and Dr. Jacob C. Geiger, of the foundation, have already made use of the car in demonstrations before various medical associations.

LEGISLATIVE appropriations for the support of Kansas State College of Agriculture and Applied Science for the two years beginning July 1, 1931, amount to \$2,751,000. They include \$40,000 for research on animal diseases, \$40,000 for laboratory equipment, \$10,000 for continuing the soil survey, \$120,000 for branch experiment stations, \$44,000 for soil and crop experiment fields and \$20,000 for completing the equipment of the college library.

THE bill extending the Adirondack Park to an area of 4,604,000 acres and making it the largest public park in the United States has become law. The park area will now take in 1,550,000 acres, of which 1,201,000 are privately owned and 349,000 state owned. Within the greater park there will be 2,636,000 acres of privately owned and 1,968,000 of state-owned lands.

DISCUSSION

THE IMPORTANCE OF GIVING PAGE REFERENCES IN DESCRIPTIONS OF PLATES

It may fairly be assumed that it is the desire and intent of authors and editors of scientific publications to render their work as complete and readily usable to the scientific public as possible. There is, however, one point that is too generally overlooked that is believed to be of very essential importance to one who is reading or otherwise making use of a scientific publication. This point is the matter of giving page references in the description of plates. When the paper is a small one, it is of little importance, or even quite unnecessary, but in large papers or monographs the lack of page citations in descriptions of plates entails some, even considerable effort on the part of the reader. If a paper, zoological or botanical, is a systematic one, it may be assumed that the sequence

of plates corresponds fairly closely with that of the text. Even then, however, exigencies of the size or character of figures often require considerable irregularity in their order.

When a reader sees a figure on a plate and wishes to consult the text where the figure is described, if no page reference is given, the quickest method usually is to refer to the index. In very many publications, however, no index is given. Lacking an index, the reader must then turn the pages of the text in quest of the desired description of the said figure. If it is a systematic paper on a subject with which the reader is familiar, the required page can usually be found after a moderate search. If, however, it is not a systematic paper but, for example, morphological, then without a page reference or index it may become a serious, even a difficult matter to find the place in the text where a given figure is described.