SCIENTIFIC NOTES AND NEWS

As has been fully reported in this journal, the American Association for the Advancement of Science and associated societies meet in Chicago from June 19 to 31. The Century of Progress Exposition has given the fundamental sciences the central place of honor, with the applied sciences radiating from it. The American Association and the societies devoted to the fundamental sciences will meet during the first week. These meetings will be followed by Engineering Week and the next week will be occupied by the National Education Association and its associated or-The full preliminary program of the ganizations. meeting of the American Association and associated societies will be found in the issue of Science for May 19. The foreign scientific men who will take part in the meeting of the American Association as guests of the association and the Century of Progress Exposition are as follows: Dr. Otto Appel, of Berlin, agriculture: Dr. F. W. Aston, of Cambridge, chemistry; Dr. G. A. Bagge, of Stockholm, economics; Dr. Joseph Barcroft, of Cambridge, physiology; Dr. A. Mendelssohn Bartholdy, of Hamburg, political science; Dr. Jakob Bjerknes, of Bergen, meteorology; Dr. Niels Bohr, of Copenhagen, physics; Dr. Filippo Bottazzi, of Naples, physiology; Dr. Ludwig Diels, of Berlin, botany; Dr. Jean Dufrénoy, of France, agriculture; Dr. Leopold Fejér, of Budapest, mathematics; Dr. Enrico Fermi, of Rome, physics; Dr. A. P. M. Fleming, of Manchester, engineering; Dr. R. Goldschmidt, of Berlin, zoology; Dr. Herbert J. Gough, of London, engineering; Sir Daniel Hall, of London, agriculture; Dr. A. V. Hill, of London, physiology; Dr. C. U. A. Kappers, of Amsterdam, anthropology; Dr. Wolfgang Köhler, of Berlin, psychology; Dr. August Krogh, of Copenhagen, physiology; Dr. Tullio Levi-Civita, of Rome, mathematics; Dr. Emilio Mira, of Barcelona, psychology; Dr. William Oualid, of Paris, political economy; Dr. Henri Piéron, of Paris, psychology; Dr. J. J. Sederholm, of Helsingfors, geology; Dr. Charles E. Spearman, of London, psychology; Dr. The. Svedberg, of Upsala, chemistry, and Dr. R. J. Tillyard, of Australia, entomology and paleontology.

The Royal Society, London, has elected as foreign members Professor Harvey Cushing, of the Harvard Medical School and the Peter Bent Brigham Hospital; Professor Peter Debye, director of the Institute of Physics at the University of Leipzig; Professor Friedrich August Ferdinand Christian Went, director of the Institute of Botany and of the Botanical Garden at the University of Utrecht, and Professor Vilhelm F. K. Bjerknes, professor of mechanics and mathematical physics at the University of Oslo.

DR. WILLEM DE SITTER, director of the Leiden Observatory, has been elected a correspondent of the French Academy of Sciences in the section for astronomy.

The doctorate of science was conferred on Dr. William Morton Wheeler, professor of entomology at Harvard University, at the recent commencement exercises of Columbia University.

NEW YORK UNIVERSITY conferred at its commencement on June 1 an honorary doctorate on Dr. Florence Rena Sabin, member of the Rockefeller Institute for Medical Research.

The University of Oxford will confer on June 21 the honorary degree of doctor of science on Dr. John Scott Haldane, fellow of New College and honorary professor and director of the mining research laboratory at the University of Birmingham.

The original building of the New York State College of Forestry, which was opened in 1917, has been named in honor of Dr. William L. Bray, professor of botany and dean of the Graduate School of Syracuse University, who was the first head in 1911 of the College of Forestry. This designation was recommended by the faculty and authorized by the Board of Trustees of the College of Forestry on June 1. Since the early days of the college when he gave the first courses in forestry at Syracuse, Dean Bray has conducted courses in botany at the summer camp of the college on Cranberry Lake.

Dr. OSWALD T. AVERY, of the Rockefeller Institute for Medical Research, has been elected president of the American Association of Pathologists and Bacteriologists.

LORD MELCHETT has been elected president of the British Science Guild, in succession to Sir Samuel Hoare, whose three-year term of office ends on June 19.

According to *Nature*, Professor A. N. St. G. H. Burkitt, Challis professor of anatomy in the University of Sydney, has been elected president of the Linnean Society of New South Wales.

Dr. EDGAR ALLEN, professor of anatomy and dean of the University of Missouri School of Medicine, will succeed Dr. Harry Burr Ferris as professor of anatomy and head of the department of anatomy at the Yale University School of Medicine.

Dr. Augustus G. Pohlman has resigned as research professor of anatomy and dean of the University of South Dakota School of Medicine to accept an appointment as professor and head of the depart-

ment of anatomy at Creighton University School of Medicine, Omaha, Nebraska.

Professor G. Hadfield, professor of pathology in the University of London, has accepted an invitation to fill the chair of pathology at the University of Bristol to succeed Professor Walker Hall.

Dr. A. K. Kurtz, formerly of the U. S. Civil Service Commission, has joined the staff of the Industrial Relations Division of the Procter and Gamble Company as statistician.

Among those who will work during the coming year in the School of Mathematics of the Institute for Advanced Study at Princeton are: Drs. A. A. Albert, University of Chicago; K. Gödel, University of Vienna; Jessen, University of Copenhagen; L. S. Pontrjagin, University of Moscow; Meyer Salkover, University of Cincinnati; T. Y. Thomas, Princeton University; E. R. van Kampen, Johns Hopkins University; R. L. Wilder, University of Michigan, and W. E. Bleick, Johns Hopkins University.

Dr. Ralph W. Chaney, head of the department of paleontology at the University of California, has left for northeastern Asia, where he will spend several months. He will return for the fall semester opening in August.

Dr. J. Bjerknes, of the Geophysical Institute, Bergen, Norway, who is visiting the United States as the guest of the Century of Progress and the American Association for the Advancement of Science, addressed students of meteorology at the Massachusetts Institute of Technology and eastern Massachusetts members of the American Meteorological Society, June 9, on "The General Circulation of the Atmosphere." Several meteorologists took part in the discussion which followed.

SIR ALMROTH WRIGHT delivered the John Mallet Purser Lecture on "Immunization—the Old Doctrine and the New" at Trinity College, Dublin, on May 17.

THE first of a series of lectures, instituted by the British Science Guild for the purpose of directing attention to the importance of research—both purely scientific and technical—and the utilization of its results in the service of mankind, was given by Sir Harold Carpenter on May 16. The subject of the lecture was "Metals in the Service of Human Life and Industry."

DR. CHARLES F. BROOKS and Mr. S. P. Fergusson, of the Blue Hill Observatory, Harvard University, addressed the New Hampshire Academy of Science, at its annual meeting, June 3, on "Scientific Value of the Work of the Mt. Washington Observatory." Members of the academy drove up the mountain and inspected the observatory, which was established last

fall following a grant from the academy. Mr. Fergusson will spend two months this summer on the summit, flying kites and captive balloons carrying recording instruments to show the effect of the mountain on the local wind velocity, temperature and humidity.

RECEIPT of a fund of \$300 to pay for the first season of a new series of lectures at Northwestern University to be known as the U.S. Grant memorial lectures in honor of the late Professor U. S. Grant, who was head of the department of geology and geography, was recently announced by Dr. W. H. Haas, professor of geology and geography. The first lectures, probably next November, will be given by Dr. W. H. Collins, director of the Canadian Geological Survey. Dr. Collins has carried on work closely related to that of Professor Grant. The donor of the gift prefers to remain anonymous. It is a tribute from one scientific man to the memory of another. A gift of \$150, also anonymous, for a scholarship to be known as the Grant graduate scholarship in geology and geography has also been announced.

The annual initiation and banquet of the Michigan State College Chapter of the Society of the Sigma Xi was held at Michigan State College on June 1. Twenty-four new members were initiated. The public address was given by Dr. I. F. Huddleson on "Undulant Fever." The officers for the next academic year are: President, Dean R. C. Huston; Vice-president, Dean Marie Dye; Secretary, Professor V. G. Grove; Treasurer, Professor R. E. Marshall, who continues his office for another year.

THE Sigma Xi Club of Peking held its annual meeting and dinner on May 5. The speaker on the occasion was Dr. H. B. van Dyke, professor of pharmacology at the Peiping Union Medical College, who spoke on "Correlation among Glands of Internal Secretion." The officers elected for the coming year are: President, Dr. H. B. van Dyke; Vice-president, Dr. Toh Liu, dean of the College of Science, Normal University; Secretary-treasurer, Dr. Adam P. T. Sah, professor of physics, Tsing Hua University. The membership of the Sigma Xi Club in Peking has grown to over fifty. There is said to be evidence that the old capital, now called Peiping, is becoming increasingly important as a research center. Four universities, the Peiping Union Medical College (Rockefeller Foundation), the National Geological Survey and two research institutes are pursuing intensive scientific research programs. The local Sigma Xi membership, which is about one fourth American and three fourths Chinese, is distributed among these eight institutions.

Dr. C. E. McClung, professor of zoology at the

University of Pennsylvania, and managing editor of the Journal of Morphology, who, as previously announced, is spending next year in Japan, requests that during his absence manuscripts for the Journal, until further notice, be sent directly to the Wistar Institute, Philadelphia.

The South Carolina Legislature, in an act approved on May 13 and effective on that date, provided that "the property and duties of the State Food Research Laboratory at Charleston shall be associated with the State Medical College." The trustees of the Medical College have announced that, due to heavily reduced appropriations, it will be impossible to continue the laboratory, which has been engaged for some years on investigations in foods and nutrition. Present members of the laboratory staff are Drs. Roe E. Remington and Harold Levine, and Messrs. Harry von Kolnitz and F. Bartow Culp.

The 150-foot ship that will carry Lincoln Ellsworth to the Antarctic is being prepared for its departure from Norway about the first of August for New Zealand. The ship is to leave New Zealand for the Bay of Wales about November 1, and will arrive at its base about December 15. The expedition is planning a 3,000 mile round trip non-stop flight over the Antarctic Continent.

The California Institute of Technology has recently named a room in honor of Dr. Leon L. Watters, of New York. The room is in the Norman Bridge Laboratory of Physics and bears the following inscription: "The Watters Generator: The equipment in this room is the gift of Dr. Leon L. Watters, of New York, to the atomic structure research of the California Institute of Technology. It is designed to facilitate the generation of a steady potential of 300 KV, an energy available for x-rays ten times greater than any other equipment up to the present date." The apparatus will be employed to further the work begun by Dr. DuMond regarding which both Professor Einstein and Professor Millikan predict results of great importance.

THE Santa Barbara Museum of Natural History is building a children's loggia in memory of the former director, Ralph Hoffman. It is an addition to the east and south sides of the seismographic building, open in summer and glass-enclosed in winter,

equipped with shelves and lockers and with water for modelling work. The design is by Carleton Winslow.

The Journal of the American Medical Association states that negotiations for the organization of a school for public health nurses in Prague to be opened in 1934 have been completed. Construction is to start immediately. The preliminary education required for admission is to be graduation from a secondary school. Training in bedside nursing will be included in the two years course as well as a knowledge of social legislation applicable to field work. Half the cost of the construction of the school was promised to the Czechoslovakian government by the Rockefeller Foundation. The school will be erected on the grounds of the state institute of public hygiene in Prague. Bedside nursing will be practised in the near-by state hospital. Another feature of the school is that it will be for pupils both of the Czech and of the German language. The practical training in the field will be done for the Czech candidates in one of the demonstration districts of Prague, the one for German candidates in a demonstration district in northern Bohemia. The school will accommodate 100 pupils in its dormitory. It is hoped that it will create a type of field worker having the advantages of a trained nurse and at the same time knowledge necessary to understand social problems.

THE Institute of Medicine of Chicago offers a prize of \$500 for the most meritorious investigation in medicine or in the specialties of medicine. The investigation may be also in the fundamental sciences, provided the work has a definite bearing on some medical problem. Competition is open to graduates of Chicago medical schools who have received the degree of M.D. during the year 1931 or thereafter. Manuscripts must be submitted to the secretary of the Institute of Medicine of Chicago, 122 South Michigan Boulevard, Chicago, not later than December 31, 1933. In the case of a paper submitted by more than one author, it is stipulated that all the authors must qualify, and that the prize paper be published under the same authorship as that under which it was submitted. The winner of the prize will be expected to present the results of his investigation before the institute at some meeting in 1934, the time to be designated later. If no paper presented is deemed worthy of the prize, the award may be withheld at the discretion of the Board of Governors.

DISCUSSION

THE PROBLEM OF TWISTED TREES

Surveying the various contributions to this subject, which have recently appeared in Science, the *Journal*

of Heredity, Journal of the New York Botanical Garden and Nature, we find fair accord on the following essential points: (1) The wide distribution of