of Minnesota. Lantern slides, specimens and motion pictures.

January 11. Pictures of Minnesota before the days of photography: EDWARD C. GALE. Lantern slides of historical interest. One reel of motion pictures.

January 18. Life and work of Charles Darwin: CHARLES P. SIGERFOOS, professor of zoology, University of Minnesota. Lecture illustrated by lantern slides and followed by motion pictures.

January 25. Spinners and weavers of the insect world: WILLIAM A. RILEY, professor of entomology and economic zoology and chief of division of entomology and economic zoology, College of Agriculture, University of Minnesota.

February 1. In Hawaiian waters: ROYAL N. CHAPMAN, associate professor of animal biology, University of Minnesota. Illustrated by a series of colored slides and motion pictures.

February 8. Among Hawaiian plants: J. ARTHUR HARRIS, professor of botany and head of the department of botany, University of Minnesota. Illustrated with a series of colored slides and motion pictures.

February 15. The forest as a plant community: BAPHAEL ZON, chief of Lake States Forest Experiment Station, University of Minnesota. Illustrated by a series of specially prepared slides and followed by motion pictures.

February 22. Some spineless denizens of the sea: DWIGHT E. MINNICH, assistant professor of animal biology, University of Minnesota. Illustrated by four reels of motion pictures recently acquired by the department of animal biology.

March 1. The river Jordan; adventures of a city man in the country: WILLIAM C. EDGAR, former editor of The Bellman and The Northwestern Miller. Illustrated by lantern slides and followed by motion pictures.

March 8. Birds of other lands in motion pictures. Films showing the bird life of the American Tropics and foreign countries secured for this occasion.

March 15. *Men of the Old Stone Age:* CHARLES A. ERDMAN, associate professor of anatomy, University of Minnesota. Illustrated by lantern slides and followed by motion pictures.

March 22. Wild flowers; where they grow and why: N. L. HUFF, assistant professor of botany, University of Minnesota. Illustrated by lantern slides and motion pictures.

March 29. Bird banding; history, object, methods and results: THOS. S. ROBERTS, director of the Zoological Museum, University of Minnesota. Illustrated by lantern slides and motion pictures.

SCIENTIFIC NOTES AND NEWS

THE Silliman Lectures at Yale University are being given by Dr. Thomas Hunt Morgan, professor of experimental zoology at Columbia University, on the afternoons of January 12, 16, 19, 23, 26 and 30, at 4:30. The subject of the lectures is "The theory of the gene."

DR. SIMON FLEXNER, director of the Rockefeller

Institute for Medical Research, will leave early in January for an extended trip to the Near East and Europe. He will be accompanied by his wife and joined later by his two sons. He returns to New York in September, 1925.

KNUD RASMUSSEN, the Danish explorer, has been awarded the Charles P. Daly Gold Medal of the American Geographical Society for 1924, for his explorations in Greenland and northern North America.

PROFESSOR C. VERNON BOYS has been awarded the second Duddell Memorial Medal by the Council of the Physical Society of London. According to the terms of the Duddell Memorial Trust, the award is "for the advancement of knowledge by the invention or design of scientific instruments or by the discovery of materials used in their construction."

PROFESSOR A. W. BICKERTON, of London, has been elected an honorary member of the New Zealand Astronomical Society in recognition of his work on cosmic evolution.

SIR JOSEPH THOMSON and Dr. W. C. Unwin have been elected honorary members of the Institution of Civil Engineers.

THE council of the Röntgen Society, England, has decided to present the Röntgen Award for the session 1923-1924 to L. H. Clark, of the department of physics, of Middlesex Hospital, for his papers (1) "A clinical x-ray balance radiometer," and (2) "On the measurement of x-ray intensity."

DR. E. F. ARMSTRONG, past president of the Society of Chemical Industry, has been elected president of the British Association of Chemists, succeeding Dr. Herbert Levinstein.

OSMOND CATTLIN, borough engineer of Lambeth, has been elected president of the Institution of Sanitary Engineers, England. He delivered his presidential address on January 12.

DR. ALEXANDER RUSSELL has been elected president of the Junior Institution of Engineers, England, for the session 1924–25. His inaugural address was delivered at the Royal Society of Arts on January 7.

It is stated in *Nature* that at the opening of the hundred and fifty-fourth session of the Royal Physical Society of Edinburgh, the following officers were elected: *President*, Dr. James Ritchie; *vice-presidents*, Dr. Marion Newbigin and Professor J. Arthur Thomson; *secretary*, Dr. H. M. Vickers; *assistant secretary*, Professor J. Russell Greig; *librarian*, Mr. J. Kirke Nash, and *councillors*, Professor D'Arcy W. Thompson, Principal O. Charnock Bradley, Professor J. H. Ashworth, Professor J. Graham Kerr, Dr. J. R. Henderson and Mr. Hugh Miller. H. L. HORNING, of Waukesha, Wis., has been elected president of the Society of Automotive Engineers to succeed H. M. Crane, of New York, at the annual dinner of the society in New York.

DR. GEORGE GRANT MACCURDY, of Yale University, was reelected director of the American School of Prehistoric Research in Europe at the annual meeting of the managing committee of the school held in Washington, D. C., on January 3.

DR. GEORGE F. WHITE, professor of organic and biological chemistry at Clark University, has resigned to take a position with Bauer and Black, Chicago, manufacturers of surgical supplies.

BRADFORD NOVES, JR., has accepted a position as physicist in the technical department, research division, of the Taylor Instrument Companies, Rochester, New York.

M. J. KIRWIN has resigned as superintendent of the United States Bureau of Mines Station, Bartlesville, Okla., to become production engineer for the Indian Territory Illuminating Oil Co.

DR. IRVINE MCQUARRIE has resigned his position in the department of pediatrics, Yale University, to become chief of the newly organized pediatric service at the Henry Ford Hospital, Detroit.

M. DOELLO-JURADO, professor at the University of Buenos Aires, was installed director of the National Museum of Natural History at Buenos Aires, on January 1, at the time of the celebration of the centenary of the museum.

DR. F. P. STOWELL, of the University of Liverpool, has been elected as the first aquarium research fellow of the Zoological Society of London. The fellowship has been established for the investigation of the conditions affecting aquatic life in fresh and salt water aquaria. In conjunction with the London School of Hygiene and Tropical Medicine, the Zoological Society has appointed Dr. H. H. Scott assistant-director in the department of helminthology in the tropical division of the school, as Milner research fellow in comparative pathology.

PROFESSOR A. FINDLAY, of the University of Aberdeen, has arrived in the United States, where he has come to act as substitute professor of chemistry at Leland Stanford University for the next nine months.

SIX European bacteriologists have been invited to the Rockefeller Institute for a three-months' study of the results of bacteriological experiments in epidemic influenza as follows: Dr. Ronald G. Canti, St. Bartholomew's Hospital, London; Dr. Louis Boez, Institute of Hygiene and Bacteriology, Strasbourg; Dr. Leon Muller, University of Liège, Belgium; Dr. Walter Levinthal, Robert Koch Institute, Berlin; Dr. Dino Nai, Milan, and Dr. Svend Ahrend Larsen, Statens Serum Institute, Copenhagen.

IT is reported that Professor Albert Einstein will leave for Buenos Aires on March 5, to deliver a series of lectures on the theory of relativity. He is making the trip upon the invitation of Argentine scientific institutions and societies.

D. A. MACINNES, of the department of chemistry, of the Massachusetts Institute of Technology, is in Europe visiting chemical laboratories in Zurich, Copenhagen and Cambridge.

DR. ALEXIS CARREL, of the Rockefeller Institute for Medical Research, sailed for Havre on December 10.

PROFESSOR EDWARD KASNER, professor of mathematics at Columbia University, spoke on "The mathematics of the Einstein theory," at the dinner of the chairmen of the departments of mathematics of the New York City high schools, Hotel Woodstock, on December 20.

DR. F. G. COTTRELL, director of the Fixed Nitrogen Research Laboratory, United States Department of Agriculture, gave a lecture at the Franklin Institute, Philadelphia, January 8, on "The future of nitrogen fixation."

DR. WILLIAM F. DURAND, recently elected president of the American Society of Mechanical Engineers, was the principal speaker at the meeting of the New York section of the American Institute of Mining and Metallurgical Engineers, held at the Harvard Club, on January 13.

ARTHUR D. LITTLE gave the Cyrus Fogg Brackett lecture at Princeton University on December 10. His subject was "The application of chemical research in industrial development."

DR. EDGAR T. WHERRY, of Washington, D. C., formerly professor at Lehigh University, spoke before the members of the Lehigh Valley Section of the American Chemical Society, December 12, on "Soil activity and its influence on plant growth."

HONORING Dr. Thomas C. Mendenhall, former chairman of the Board of Trustees, Ohio State University, whose death occurred last March, students at Salem High School have placed a bronze tablet, inscribed to his memory, in the entrance hall of the school. Dr. Mendenhall taught his first classes in the Salem schools.

THE Baskerville Chemical Society, of the College of the City of New York, has presented to the college a portrait of the late Professor Charles Baskerville, former head of the department of chemistry. The portrait, hung in the chemistry lecture room, was accepted in behalf of the department by Professor H. R. Moody, Professor Baskerville's successor. DR. JOHN MARSHALL, emeritus professor of chemistry and toxicology in the University of Pennsylvania, died on January 5, aged sixty-nine years.

DR. GEORGE A. BATES, professor of histology at Tufts College, has died, aged seventy-seven years.

DR. ERNEST JEROME WINTER, consulting chemical engineer of New York City and an authority on the subject of distillation, died on November 23, aged forty-five years.

DURING the past week two French radiologists have died from the effects of injuries received in the pioneer days of X-ray and radium experimentation. Professor Bergonie, of Bordeaux, died on January 2, and Dr. M. Demenitroux, of Paris, died on January 3.

DR. ERNEST HEDINGER, professor of pathology at Zurich University, has died at the age of fifty-two years.

DR. FELIX TANNHAUSER, extra-ordinary professor of mineralogy and geology at the Technische Hochschule and the University of Berlin, died on December 2.

DR. CARLO DE STEFANI, professor of geology and physical geography in the Royal University of Florence, died on December 12.

IN addition to the election of Professor James F. Norris, professor of chemistry at the Massachusetts Institute of Technology, to be president of the American Chemical Society for 1925, other officers chosen are as follows: Directors: Professor E. C. Franklin, of Leland Stanford University, and Dr. W. D. Bigelow, director of the research laboratories of the National Canners Association, Washington, D. C.; Councillors-at-large: Professor T. B. Johnson, Yale University; Dr. A. M. Comey, Cambridge, Mass.; Professor W. Lee Lewis, Northwestern University, and Edward Mallinckrodt, Jr., manufacturer of St. Louis, Mo.

O. W. STOREY, chemical engineer with the C. F. Burgess Laboratories of Madison, was the speaker of the evening at the 137th regular meeting of the Wisconsin Section of the American Chemical Society. The title of his address was "The corrosion of iron and steel: Theory versus practice." At this meeting, which was the annual meeting of the section, the following officers were elected to serve for the year 1925: A. W. Schorger, of the Burgess Laboratories, chairman; L. F. Hawley, of the U. S. Forest Products Laboratory, vice-chairman, and H. N. Calderwood, secretary-treasurer. Victor Lenher and J. H. Walton, councillors, and H. A. Schuette, editor, all of the University of Wisconsin.

ALCOHOL in all its phases was the subject of a sym-

posium conducted at the intersectional meeting of the American Chemical Society on January 10, at Boston University. Among the speakers were Kenneth M. Ware, of the Massachusetts Department of Public Health; Dr. Francis G. Benedict, director of the nutrition laboratory, Carnegie Institute; Dr. Reid Hunt, of the Harvard Medical School, and Dr. George Burgess Magrath, instructor in pathology at the Harvard Medical School.

THE Chicago Section of the Association of Iron and Steel Electrical Engineers will hold a joint meeting with the Chicago Section of the American Institute of Electrical Engineers and the Electrical Section of the Western Society of Engineers at the Atlantic Hotel, Chicago, on January 26.

THE Chicago Section of The American Society of Mechanical Engineers held their second Annual Power Meeting in the LaSalle Hotel, Chicago, on January 14 and 15. The first day was devoted to technical sessions for the presentation of papers. On the second day power plants were visited.

THE United States Geodetic Survey and the Carnegie Institution of Washington will cooperate with Cornell University in occupying a station at Ithaca for magnetic and atmospheric electric observations at the time of the eclipse on January 24. Professor Ernest Merritt, of Cornell, is interesting himself in the proposed cooperation. With observations on the eastern end of Long Island by the Carnegie Institution of Washington, and at Hamilton and Toronto by the Canadian Government, the three stations will lie at such intervals along the path of the eclipse that valuable indications may be obtained in regard to the time of occurrence of any phenomena that may be observed.

WE learn from *The Geographical Journal* that Lauge Koch is planning a new expedition for research in the Arctic. Its objects will be mainly geographical and cartographical, and the field of work will be Grant Land and other parts of Arctic Canada, where the explorer proposes to investigate and map the mountain range which he regards as the continuation of those explored in Northern Greenland, these being in turn, geologically, a section of a great are running thither from Wales through Scotland, the Shetland Isles and Spitsbergen. Mr. Koch expects that the working up the results of his recent expedition will occupy a considerable time, so that his plans for the new expedition are still in the preliminary stage only.

A TEN-YEAR program, under which \$40,000,000 would be appropriated for purchase of forest land and for forest conservation under the Clarke-McNary act and other conservation measures, would be authorized under a bill recently introduced in the Senate and in the House. Purchase of about 8.000,000 acres would be made, principally in the eastern and Great Lakes watershed territories. The American Forestry Association, sponsoring the measure, suggested that the funds be expended in speeding up forest purchases in the White Mountains, the Appalachians and the Pine regions of the Southern and lake States. About 3,000,000 additional acres are necessary for proper conservation and protection of timber in the White and Appalachian Mountains. Association officials declared that under careful management the proposed federal timber areas, in addition to producing lumber and pulpwood and protecting stream flow, would furnish recreation spaces for three fourths of the nation's population.

AFTER having heard representatives of the Geological Survey, the Bureau of Soils and others concerned, the Committee on Mines and Mining of the House of Representatives is expected to report favorably the Shepperd bill, which authorizes the expenditure of \$500,000 for prospecting and research looking to the development of domestic potash resources. The Shepperd bill has already been passed by the Senate. While it is probable that the larger proportion of the appropriation would be expended in prospecting operations with core drills in the southwest, where thin beds of potash have already been found, there also would be extensive work on the recovery of potash from blast-furnace, cement mill, sugar mill and distillery operations. Among those testifying were Dr. George Otis Smith, director of the Geological Survey; George R. Mansfield, potash specialist of the survey, and Dr. J. W. Turrentine, of the Bureau of Soils.

WE learn from Nature that the National Research Council of Japan has initiated an active program of scientific publication, in several series of "Japanese Journals" under the separate headings of chemistry, physics, geology and geography, botany, zoology, medical sciences, engineering, mathematics and astronomy and geophysics. The first two of these journals each appear in ten numbers annually, the third appears quarterly, while the remainder are occasional publications. The second part of Volume II of the Japanese Journal of Astronomy and Geophysics has just been issued, and contains six memoirs, occupying about sixty octavo pages. The papers cover a wide range of interests-precise levelling, theory of monsoon rainfalls, gravitational fields, thermal expansion of rocks and tidal undulations-and in some cases originate from research institutes, independent or connected with universities or colleges. They indicate a highly satisfactory state of activity and interest in geophysical research in Japan. All the papers are in English.

THE compilation of the proposed list of the insects

of New York State is now to be completed. Dr. M. D. Leonard, who was appointed editor-in-chief while acting state entomologist of New York, returned to the department of entomology at Cornell University. in December, to again take charge of the project. His entire time will be devoted to the completion of this list and the New York State College of Agriculture has definitely promised publication, provided the manuscript is ready by June 1, 1925. It is estimated that over 16,000 species will be listed as definitely occurring in New York, together with as complete distribution data within the state as is known for each species. Several orders are already practically completed. Over one hundred of the leading specialists are actively cooperating. The editor of the list will appreciate definite New York State records in all groups and will see that full credit is given to every cooperator.

To allow greater time for the assimilation and consideration of data bearing on scientific advances in fighting cancer, the commission of award of the prize for cancer research, founded by Dr. Sofie A. Nordhoff-Jung, a resident of Washington, has decided to distribute the prize every two years, rather than every year, and to make the biennial award of \$1,000 in lieu of the \$500 annual prize. In December, 1923, the award was given to Dr. Johannes Fibiger, professor of pathological anatomy at the University of Copenhagen.

THE Benning National Forest, near Columbus, Ga., has been formally created by proclamation of the President. The forest is located within the area embraced by the Fort Benning Military Reservation, the forest boundaries including about 80 per cent. of the military reservation, or 78,500 acres. An excellent stand of Southern pine timber is on the Benning area and the Forest Service expects to harvest forest products both for military use and for sale. One fourth of the receipts from the Benning National Forest will be turned back to the counties in which the forest is situated for school and road funds.

AN expedition into the Kalahari Desert has been organized by the South African government to discover the breeding places of the locusts that come forth in the summer and swarm over the farms of South Africa, destroying everything in their wake. It is hoped eventually to send a small army into this desert, armed with sprayers and all the paraphernalia for killing the pest.

THE Missouri Botanical Garden has acquired recently the private herbarium and botanical library of the late Rev. John Davis, of Hannibal, Missouri. The collection of plants consists of approximately 20,000 specimens representing principally the flora of Missouri, Illinois and South Carolina.