leum, the results of which have been published in various journals.

Charles Allen Cary, physiological chemist, Research Laboratories, Bureau of Dairy Industry. Mr. Cary was elected to membership in recognition of his contributions to the knowledge of nutrition and particularly the protein metabolism of milking cows. He is the author of numerous papers on these subjects.

Henry B. Collins, Jr., assistant curator, Division of Ethnology, U. S. National Museum. His election to membership was in recognition of his archeological researches in the southeastern section of the United States and in Alaska, and his contributions to physical anthropology.

Dr. James Fitton Couch, chemist, Bureau of Animal Industry. Dr. Couch was elected to membership in recognition of his work on the active principles of stock-poisoning plants. The results of his work have been published in various journals and bulletins.

Dr. Carl S. Cragoe, physicist, Bureau of Standards. Dr. Cragoe was elected to membership in recognition of his work on the thermodynamic properties of ammonia and of petroleum products.

Dr. Leon Francis Curtiss, physicist, Bureau of Standards. Dr. Curtiss was elected to membership in recognition of his investigations in radioactivity and cosmic radiation.

Dr. Francis Marion Defandorf, physicist, Bureau of Standards. Dr. Defandorf was elected to membership in recognition of his contributions to the science of electrical measurements, particularly in the field of high voltage.

Herbert N. Eaton, acting chief of the hydraulic laboratory, Bureau of Standards. Mr. Eaton was elected to membership in recognition of his work in aeronautics and hydraulics. He has written numerous articles on aeronautic instruments.

## PRESENTATION TO PROFESSOR CONANT

The William H. Nichols Medal of the New York section of the American Chemical Society for 1932 was presented on March 1 to Professor James Bryant Conant, chairman of the division of chemistry at Harvard University, in recognition of his work in organic chemistry, particularly in the chemistry of chlorophyll.

Professor Arthur E. Hill, of New York University, made the presentation. Other speakers were Professor James F. Norris, of the Massachusetts Institute of Technology, who discussed Professor Conant's personal career, and Professor Hans T. Clarke, of the College of Physicians and Surgeons, Columbia University, who recounted his scientific accomplishments. Mr. Walter S. Landis, chairman of the New York Section of the American Chemical Society, presided.

The Nichols Medal, established in 1903, is one of the most distinguished honors in American chemical science. The award, made for the research published during the past year, which in the opinion of the jury is most original and stimulative to further research, was bestowed on Professor Conant for his work in organic chemistry, particularly in the chemistry of chlorophyll. The late Dr. Nichols, the donor, was chairman of the board of the Allied Chemical and Dye Corporation and a charter member of the American Chemical Society.

Past winners include Professor William Lloyd Evans, of the Ohio State University, who received it in 1929 in recognition of his research into the structure of the sugar molecule; Dr. Samuel Edward Sheppard, assistant director of the research department of the Eastman Kodak Company, who was medallist in 1930, for his work in the chemistry of photography, and Dr. John Arthur Wilson, of Milwaukee, honored in 1931 for achievement in colloid chemistry, applied particularly to leather and sanitation.

Professor Conant, who was born in Boston in 1893. is a graduate of Harvard University, where he received the A.B. in 1913 and the Ph.D. in 1916. He served during the war as lieutenant in the Sanitary Corps, and later became major in the research division of the Chemical Warfare Service. An assistant professor of chemistry at Harvard after the close of the war, he became associate professor in 1925, and full professor in 1927. He is a former chairman of the organic division of the American Chemical Society. He is the author of "Organic Chemistry," joint author of "Practical Chemistry," and editor-in-chief of Volumes II and IX of "Organic Syntheses." His research has included work in reduction and oxidation. hemoglobin, free radicals, a quantitative study of organic reactions, besides the chemistry of chlorophyll.

## SCIENTIFIC NOTES AND NEWS

APPOINTMENT of Dr. Vannevar Bush as vice-president of the Massachusetts Institute of Technology was announced by President Karl T. Compton following the regular meeting of the corporation on March 9. He has been a member of the faculty of electrical

engineering since 1923. Dr. Bush was also elected a member of the corporation and will be dean of engineering. Plans have been made for the subdivision into the School of Science, the School of Engineering, the School of Architecture, the Division of Humanities

and the Division of Industrial Cooperation. Dr. Samuel C. Prescott, head of the department of biology and public health, will be dean of science, and Professor William Emerson, head of the department of architecture, will be dean of architecture.

Dr. Thomas Howell, superintendent of the New York Hospital since 1909, has been appointed assistant director of the New York Hospital-Cornell Medical College Association. The association is the coordinating agency which will open the new medical center of the two institutions, between Sixty-eighth and Seventy-first Streets, along the East River, on September 1. Dr. Howell will have charge of the general hospital activities, particularly of financial management.

Dr. Roland Thaxter, emeritus professor of cryptogamic botany, and honorary curator of the Farlow Herbarium at Harvard University, has been elected a corresponding member of the Bavarian Academy of Sciences in Munich.

M. Achard, professor of clinical medicine at Paris, and Dr. Rohmer, professor of pediatrics at Strasbourg, have been elected foreign corresponding members of the Belgian Royal Academy of Medicine.

Mr. Vernon Bailey, of the U. S. Biological Survey, was one of eight honored at the first presentation of the award of The Silver Beaver of the Boy Scouts of America, consisting of diploma and medal for "distinguished service to boyhood," conferred by the organization's national council upon the recommendation of the District of Columbia executive board. The citation was "Mr. Bailey, senior biologist of the U. S. Biological Survey, became a scoutmaster in 1912 and has continued with the scout movement in various leadership capacities ever since. He has made a large contribution to scouting, developing interest in biology through the troop and camp museum, in nature understanding and outdoor lore."

THE New York Endocrinological Society was organized by a group of physicians at the Town Hall Club, New York City, on January 29, and had its second meeting, February 26, at the same place. The following officers were elected: Dr. Walter Timme, president; Dr. Freeman Ward, vice-president, and Dr. Louis Berman, secretary-treasurer.

At the annual general meeting of the British Association of Economic Biologists held on February 26, the following were elected officers and council for 1932: President, Dr. W. B. Brierley; Vice-presidents, Dr. W. R. Thompson, Mr. A. D. Cotton; Honorary Treasurer, Dr. J. Henderson Smith; Honorary Editors, Dr. W. B. Brierley, Mr. D. Ward Cutler; Honorary Secretaries, Professor J. W. Munro, Professor

W. Brown; Council, Mr. W. Buddin, Mr. A. D. Cotton, Mr. C. T. Gimingham, Mr. K. St. J. Cartwright, Mr. A. M. Massee, Dr. J. N. Oldham, Mr. R. C. Woodward, Dr. R. N. Chrystal, Dr. W. R. Thompson, Dr. M. A. Tincker, Dr. W. M. Ware and Mr. E. R. Speyer.

Dr. John J. Kindred, a specialist in mental diseases and formerly for ten years member of the U.S. House of Representatives, has been appointed professor of medical jurisprudence in the law department of Stetson University, DeLand, Florida.

Dr. Hermann Rein, professor of physiology in the University of Freiburg in Breisgau, has been called to Göttingen.

The Council of the University of Melbourne has passed a resolution expressing to Mr. F. Chapman, Commonwealth paleontologist, on his retirement from the position of part-time lecturer in paleontology after twelve years' service, its thanks for the help which by his wide knowledge and great experience of paleontology he has rendered to the geological department of the university.

Mr. WILLIAM H. WHITE has been appointed leader of the division of truck-crop and garden insects in the Bureau of Entomology. He had been acting in charge of the division since Mr. J. E. Graf resigned in March, 1931, to become associate director of the U. S. National Museum. Mr. White has been associated with the bureau for more than fourteen years.

Mr. Inman F. Eldredge, for sixteen years in the Forest Service and for the last six years forest manager of a 200,000 acre private forest property in southeastern Georgia, on which he has been developing intensive forest management, has been appointed by the Forest Service director of the forest survey in the south, which is part of a nation-wide survey.

Mr. D. J. Mahony has been appointed director of the National Museum, Melbourne, Australia, in succession to James A. Kershaw, who retired last year.

Mr. Emanuel Fritz, associate professor of forestry, University of California, has been reelected editor-in-chief of the *Journal of Forestry*, the official organ of the Society of American Foresters.

The Sixth International Botanical Congress will be held at Amsterdam from September 9 to 14, 1935. An executive committee has been formed, the president of which is Professor Dr. F. A. F. C. Went (Utrecht), while Professor Dr. J. C. Schoute (Groningen) will act as vice-president, Dr. W. C. de Leeuw (Bilthoven) as treasurer and Dr. M. J. Sirks (Wageningen) as secretary.

DR. SAMUEL H. WILLIAMS, professor of zoology at

the University of Pittsburgh, has been appointed a member of the Pennsylvania State Game Commission by Governor Pinchot.

SIR ROY LISTER ROBINSON, technical commissioner in the British Forestry Commission, has been appointed chairman of the commission, to succeed Sir John Stirling-Maxwell, who will retire this month.

THE Massey Scientific Research Fellowship of the value of £400 per annum, recently established at University College, Nottingham, for the purpose of promoting research on cancer by physical and chemical methods, has been awarded to Mr. L. A. Woodward.

In addition to the grants recorded in SCIENCE last week the Committee on Scientific Research of the American Medical Association has given a grant to Dr. D. W. Bronk, professor of biophysics in the School of Medicine, University of Pennsylvania, to aid him in his work on the nervous regulation of the circulation. Dr. Solomon Rosokoff with Wilson D. Langley, of the department of biological chemistry of the Medical School of the University of Buffalo, have received a grant to be used for the study of ketosis in the white rat.

Dr. John T. Gamble, professor of biology at Thiel College, has been selected as visiting professor of zoology at the University of Pittsburgh Lake Laboratory for the summer of 1932. Dr. Gamble takes the place of Professor Samuel H. Williams, associate director of the Lake Laboratory, who has been granted leave of absence.

Professor George C. Embody, professor of entomology in the New York State College of Agriculture at Cornell University, has left on a mission to California to study the problem of replenishing the game fisheries of that state in conference with Dr. J. O. Snyder, formerly of Stanford University, and Mr. John R. Farley, of the California Fish and Game Commission.

Dr. Esmond R. Long, professor of pathology, University of Chicago, delivered the annual lectures in pathology at the Ohio State University College of Medicine, on February 26. The first lecture was given before the faculty and student body on "A Survey of the Origins of Modern Pathology" and the second to the faculty, the students and the medical profession of Columbus on "The Exudative Phenomena in Tuberculosis."

DR. FREDERICK H. GETMAN, of Stamford, Connecticut, lectured on the Joseph H. Johnson Foundation at Pomona College, Claremont, California, during the month of February, giving five lectures on "Electrode Potentials" and two lectures on "Color Photography."

Dr. A. F. Blakeslee, of the department of genetics of the Carnegie Institution of Washington, lectured on February 16 before the students of the science departments of Barnard College on "Taste Worlds We Live In."

Dr. Carl J. Wiggers, head of the department of physiology of the School of Medicine of Western Reserve University, Cleveland, sailed from New York, March 10, by way of Panama Canal, for San Francisco, where he will address the meeting of the American College of Physicians on April 6. His subject will be "Arterial Sclerosis and Hypertension."

The forty-fourth annual meeting of the American Physiological Society will be held at the University of Pennsylvania from April 27 to 30. The first scientific session will be held on the morning of April 28, the previous day being devoted to informal meetings, council meetings and visits to the various medical schools and public institutions.

THE American Society of Agronomy and the American Society of Plant Physiologists will hold a joint meeting on July 11, 12 and 13 at the Wisconsin College of Agriculture.

The centenary meeting of the British Medical Association, under the presidency of Dr. William George Willoughby, of Eastbourne, will be held in London, beginning with the annual representative meeting on July 21. The annual general meeting will be held on July 25, and the incoming president, Lord Dawson of Penn, will give his inaugural address on July 26. The scientific sessions will be held from July 27 to 29. The centenary dinner of the association will take place July 28. There is to be a pilgrimage to Worcester on Sunday, July 24, to unveil memorials to Sir Charles Hastings, founder of the association.

The Woman's Medical College of Pennsylvania held an open scientific meeting at the college building, March 11, marking the eighty-second anniversary of its founding. Dr. Edward B. Meigs, Washington, D. C., was the speaker of the evening on "The Nutritive Value of Milk."

THE Society of Chemical Industry has formed a food group among the members of the society. For the present, at least, there is no additional subscription beyond the usual dues for membership in the society. Further information will be furnished on request to Foster D. Snell, honorary secretary of the American Section, 130 Clinton Street, Brooklyn, New York.

Nature reports that in view of the present situation, and the recent appointment of Dr. C. P. Blacker as general secretary of the Eugenics Society, the salaried appointment of Mrs. C. B. S. Hodson will terminate next August. Mrs. Hodson is to continue to work in close association with the society as a member of the council, and so secure the continuation of the eugenic work already begun in different parts of Great Britain. This arrangement leaves unaffected Mrs. Hodson's position as honorary administrative secretary to the International Federation of Eugenic Organizations.

THE lighting research laboratory of the General Electric Company and the department of research in physiological optics of the Dartmouth Medical School were awarded gold medals on March 8 by the Distinguished Service Foundation of Optometry for separate outstanding achievements in eye research. Dr. Karl Compton, president of the Massachusetts Institute of Technology, presented the medals on behalf of the foundation. The awards were made as a part of the convention of the New England Council of Optometrists. Investigations by Dr. M. Luckiesh, director of the Nela Research Laboratory at Cleveland, and his colleague, Frank K. Moss, related to the part proper illumination plays in conserving human eyesight and resulted in the creation of a new science of seeing, a combination of lighting and optics scientifically applied. The Dartmouth department was awarded a medal for its discovery of a hitherto unrecognized type of eye defect, due to small differences in the size and shape of ocular images, and the development of apparatus and lenses to detect and remedy such defect. The previously unrecognized type of eye defect was found to be an unsuspected cause of headaches, eye strain and various systemic disturbances not relieved by any retractive correction.

THE Storrow Fellowships, under the division of geology and geography of the National Research Council, are to be continued during the coming year through a personal gift of funds to Mr. Arthur Keith. The fellowships are intended primarily to assist students of promise in fitting themselves for a career of research in geology or geography, and particularly in the later stages of their preparation which might otherwise be beyond their reach. Applications for fellowships should be addressed to Mr. Arthur Keith, U. S. Geological Survey, Washington, D. C., who is chairman of the fellowship committee, and should reach him on or before the end of March. Letters in support of an application should also be furnished by persons who are acquainted with the character, record or plans of the applicant.

THE main laboratory of the Dominion Biological Station was destroyed by fire of undetermined origin on March 9. Valuable equipment and records were housed in the laboratory, which was located in Brandy

Cove, near Joe's Point, a considerable distance from the main section of St. Andrews. Its value was estimated at \$80,000.

According to an Associated Press dispatch the Senate moved on March 10 to pave the way for acceptance of a \$4,000,000 gift from Mr. John D. Rockefeller, Jr., for roads in the Acadia National Park in Maine by adding to the Interior Department appropriation bill \$250,000 for moving the Otter Cliffs Naval Radio Station, which now blocks the route. The amendment was sponsored by Senator Porter Hale, Republican, of Maine, who announced that Mr. Rockefeller had offered the sum.

Science Service reports that Delegate to Congress, Victor Houston, of Hawaii, has called attention to the fact that a reduction of \$11,000 in the appropriation for the volcanology work in Hawaii and Alaska in the Geological Survey of the Interior Department will mean the dismissal of an associate topographic and geodetic engineer and an assistant geologist, who were added to the pay roll in 1932, also two local observers or field assistants in Alaska who look after the seismographs there. T. A. Jaggar, volcanologist in charge of the work in these two outposts of the United States, wrote that the increase of funds in 1932 from \$21,000 to \$32,000, allowed a complete reorganization of both the work and the staff, so that now "five higher officers are resident here (Hawaii), four with their own homes, and the janitor and mechanic in addition." Under present plans, two of these higher officers will have to give up their jobs.

ONE of the first shells that fell in Shanghai destroyed maps and charts compiled by Dr. George B. Cressey, professor of geology at Syracuse University, who spent seven years and traveled 30,000 miles in Manchuria and in twenty-four of the twenty-eight provinces of China, gathering material for a geological survey. The documents were stored in the building of the Commercial Press.

The directors of the Textile Foundation, Washington, D. C., recently made an allocation of \$100,000 to be spent during the course of the next two years for fellowships and scholarships in scientific research for the benefit of the textile industries. These fellowships are: Senior fellowships. For those who hold a doctorate degree or who have had equivalent training. The normal stipend is, unmarried, first appointment, \$2,000; reappointment, \$2,200. Married, first appointment, \$2,400; reappointment, \$2,700. Junior fellowships. For those who hold a bachelor's degree or who have had equivalent training. The normal stipend is, unmarried, \$1,000; married, \$1,200. Scholarships. Available to seniors in good standing. The normal stipend is \$750. In addition to the sti-

pend, customary tuition and laboratory fees will be paid by the foundation. Conditional upon satisfactory service, the term of the senior or junior fellowship is for twelve months subject to renewal. Thirty days vacation will be allowed. Conditional upon satisfactory service, the term of the scholarship is for the academic year. All communications should be addressed to Edward T. Pickard, Secretary, The Textile Foundation, Commerce Building, Washington, D. C.

The State University of New Jersey, now operated in conjunction with Rutgers College, at New Brunswick, is the ultimate beneficiary of the bulk of a \$128,000 estate left by Edward Randolph Wood, lawyer and business man, who died on February 14 in his ninety-second year. Mrs. Wood receives the income from the estate during her lifetime. Mr. Wood suggested that it be devoted "to the study of the elimination and destruction of animal and vegetable pests." Red Oaks, the Wood summer home at Richland, N. J., near Vineland, is to be held "as a residential, social and educational center or home" for officers, faculty members, students or others connected with the university.

THE annual exhibition of current developments and

activities in the field of mechanical and electrical engineering given jointly by the Yale Branch of the American Institute of Electrical Engineers and the Yale Branch of the American Society of Mechanical Engineers was held on March 7. The exhibition, staged entirely by students in the Sheffield Scientific School, gave a comprehensive survey of the part played by the mechanical and electrical engineer in modern civilization. Many of the exhibits were so arranged that the internal operation of the apparatus could be seen. The use and working principle of new machinery was explained by students; public utilities, such as a gas manufacturing plant, was shown working in miniature. Various movements in the development of machinery was illustrated by models; industrial and remote control systems were in operation in various parts of the exposition demonstrating their uses and conveniences. All the exhibits were in operation.

The will of the late Dr. William H. Nichols has been appraised, and it is announced that half the residuary estate (less certain legacies) bequeathed to New York University, amounts to \$3,670,401. Other bequests, amounting to \$795,000, include \$250,000 to the Polytechnic Institute, Brooklyn, and \$50,000 to the American Chemical Society.

## DISCUSSION

## THE CONTROL OF INJURIOUS ANIMALS

Under the caption "The Control of Predatory Mammals," Mr. H. E. Anthony¹ expresses strong disapproval of the injurious-animal control activities of the Biological Survey, U. S. Department of Agriculture. He refers to organized propaganda carried on for several years by a small group, obviously seeking to discredit and obstruct the work.

Some of the opponents of the injurious-animal control policy of the survey are men of high attainment in their professions. Their sincerity and motives are beyond question. Most amazing to me, therefore, has been the apparent willingness of men, who I supposed were trained in the application of the scientific method, to accept as factual evidence misleading half truths and irresponsible criticisms. The attack, with its emotional appeal, is based mainly upon misdirected sentiment and distorted concepts of wild life in relation to human welfare. Its unscientific basis is shown by the absence of evidence that the value of injurious-animal control has been given any serious consideration by the opposition.

Mr. Anthony mentions the appointment by the American Society of Mammalogists at the New York meeting of May, 1930, of a committee, of which he is chairman, on the problems of predatory-animal control, instructed, he states, "to attempt a critical inves-

1 SCIENCE, 74: pp. 288-290, Sept. 18, 1931.

tigation of actual conditions in the field." The report of the committee as read by him at the Philadelphia meeting of May, 1931, consists of sweeping denunciation of the predatory-animal control work of the survey, without presenting any definite evidence obtained either by members of the committee or by its field investigators upon which such drastic conclusions could properly be based. There was an exchange of field reports, and since Anthony has used parts of survey reports that suited his purpose, it is only fair to quote from that of the only committee member who undertook extensive field studies.

Dr. C. T. Vorhies, an experienced field naturalist of the University of Arizona, designated to study field conditions in Arizona, New Mexico and Texas, approached the subject in a scientific spirit and submitted a report of 140 pages, embracing a fair review of the situation. His report was mildly critical of some features of the survey's control work and highly commendatory of others. He says:

several weeks, I may say frankly that I sincerely wish that all other members might have had the opportunity I have had for field observation in this particular line [italics his]. After more than twenty years in the West, and a considerable experience in the field, this was an eye opener for me! One's personal insight into the whole of the problem is so enlarged (perhaps modified)