metallurgist, was elected a foreign associate. Dr. Joseph S. Ames, provost of the Johns Hopkins University, treasurer of the academy; Dr. W. B. Cannon, of the Harvard University Medical School, and Dr. Gano Dunn, New York engineer, were elected to serve three years on the council. Dr. George K. Burgess, director of the U. S. Bureau of Standards, was elected chairman of the National Research Council, succeeding Dr. Gano Dunn.

At the annual dinner of the academy on April 24 medals were awarded as follows:

Agassiz Medal for Oceanography—awarded to V. Walfrid Ekman, University, Lund, Sweden, in recognition of his outstanding work in physical oceanography. Dr. Ekman being unable to be in this country at the time of the meeting, the medal was received for him by Minister Bostrom, of Sweden, to be transmitted to Dr. Ekman through diplomatic channels.

Henry Draper Medal—awarded to William Hammond Wright, Lick Observatory, Mt. Hamilton, California, a member of the National Academy of Sciences, for his researches on nebulae, new stars and planetary atmospheres.

Public Welfare Medal (medal for eminence in the application of science to the public welfare)—awarded to Charles V. Chapin, Health Department, Providence, R. I., for his contributions to public health and his work in the administrative control of disease.

Mary Clark Thompson Medal and honorarium of \$250.00—awarded to James Perrin Smith, Palo Alto, California, a member of the academy, in recognition of his accomplishment in paleontology of Triassic.

SCIENTIFIC NOTES AND NEWS

ELMER A. SPERRY, inventor and engineer, has been awarded the Holley medal by the American Society of Mechanical Engineers for his achievements in the invention of the gyroscope. Presentation of the medal will be made on May 16 at a dinner which is to be held during the spring meeting of the American Society of Mechanical Engineers in Pittsburgh.

Dr. Charles-Edward A. Winslow, Anna M. R. Lauder professor of public health in the Yale University School of Medicine, has been awarded the Ling medal by the Ling Foundation of Los Angeles in recognition of his "work in behalf of the health progress of school children."

THE Samuel Finley Breese Morse gold medal of the American Geographical Society has been voted to Captain George H. Wilkins by the board of directors of the society in recognition of his explorations in the Arctic, and particularly of his flight from Point Barrow to Spitzbergen. King George has approved the award of the Patrons royal medal of the Royal Geographical Society for this year to Captain Wilkins

Dr. Jonathan A. W. Zenneck, professor of experimental physics at Munich, has been awarded the medal of honor of the Institute of Radio Engineers, for his "contributions to original research in radio and his scientific and educational contributions to the literature of the pioneer radio art." The medal will be presented to Dr. Zenneck's representative in this country on June 6 at a meeting in the Engineering Societies Building, New York.

The Plummer medal for 1927, granted by the Engineering Institute of Canada, has been awarded to Dr. J. W. Shipley and Charles F. Goodeve, of the department of chemistry of the University of Manitoba, for their work on alternating current electrolysis. This is the second time that Dr. Shipley has received this award, his work in conjunction with W. Nelson Smith on corrosion of metals earning the award in 1922.

THE Faraday medal of the British Institution of Electrical Engineers was presented to Professor J. A. Fleming at the ordinary meeting of the institution held on April 19. The presentation preceded the nineteenth Kelvin lecture, by Sir Oliver Lodge, on "The Revolution in Physics."

THE University of Liverpool will celebrate the twenty-fifth anniversary of its charter on May 10 and 11. when honorary degrees, including the following, will be conferred: D.Sc.: Professor J. E. Littlewood, Rouse Ball professor of mathematics in the University of Cambridge, for distinguished contributions to mathematical science; Professor Robert Robinson, professor of organic chemistry in the University of Manchester, for eminence as an organic chemist. LL.D.: Professor J. W. Gregory, professor of geology in the University of Glasgow, for distinguished services to geology, geography and exploration. D.Eng.: Professor J. A. Fleming, emeritus professor of electrical engineering at University College, London, for distinguished services in the advance and application of electrical science.

Dr. Emil Abderhalden, professor of physiology in the University of Halle, has been made an honorary member of the Chinese Physiological Society, Peking.

Dr. Hideyo Noguchi, of the Rockefeller Institute for Medical Research, has been elected a foreign member of the Società Medica Chirurgica di Bologna.

PROFESSOR YUKICHI OSAKA has retired from the chair of physical chemistry, which he has held for twenty-three years at the Kyoto Imperial University.

Four classes of the University and Bellevue Hospital Medical College (1928–1931) presented a bust of Dr. George David Stewart, who has been a member of the faculty for thirty years, to New York University at a ceremony on April 18.

A CAMPAIGN has been launched to raise \$200,000 for the endowment of a chair of operative dentistry in honor of Dr. Edwin Tyler Darby, who recently celebrated the fiftieth anniversary of his appointment to the University of Pennsylvania School of Dentistry.

Dr. Richard H. Jaffe, professor of pathology and bacteriology in the University of Illinois College of Medicine, has been named director of the new pathological and research laboratory of the Cook County Hospital.

PROFESSOR G. S. PARKS, of the department of chemistry at Stanford University, has been elected chairman of the California section of the American Chemical Society for 1928, in place of Professor W. H. Sloan, retiring chairman.

Dr. Linsly R. Williams, director of the New York Academy of Medicine and managing director, National Tuberculosis Association, has been appointed president of the New York Tuberculosis and Health Association, succeeding Dr. James A. Miller, who retired after nine years of service.

Dr. REGINALD S. CLAY, principal of the Northern Polytechnic Institute, London, was elected president of the British Optical Society at the annual general meeting on March 8.

Dr. Albert W. Herre, chief of the division of fisheries in the Philippine Bureau of Science, has been appointed curator of the museum of zoology at Stanford University.

T. SWANN HARDING has been appointed editor of scientific publications, office of information, U. S. Department of Agriculture, vice C. M. Arthur, who recently resigned to accept a position as technical editor at the Forest Products Laboratory at Madison, Wisconsin. Mr. Harding has been engaged in research in the Department of Agriculture for many years, first in the Bureau of Chemistry and later in the Bureau of Dairy Industry.

Dr. H. B. HUNGERFORD, of the University of Kansas, left on April 27 for eight months of research work in the museums of Europe. He will take with him specimens from the collections of the University of Kansas and the Smithsonian Institution, Washington, with which he is collaborating on the trip. Dr. Hungerford will spend most of the month of May in British museums, going later to Paris, Brussels, Ams-

terdam, Berlin, Halle, Copenhagen, Uppsala, Prague, Vienna and Budapest.

JOSEPH H. SINCLAIR, explorer and geologist, arrived in New York on April 24 after a five months' trip in Ecuador, which was made under the auspices of the American Geographical Society.

Professor Fred C. Sears, head of the department of pomology at the Massachusetts Agricultural College, plans to go to Labrador and Newfoundland this summer to make a survey of the horticultural and agricultural possibilities of the region.

Dr. HERMANN THOMS, professor of chemistry in the University of Berlin, has been invited to give a series of lectures in Buenos Aires.

Dr. S. C. Brooks, professor of zoology at the University of California, addressed a meeting of the University of California chapter of the Society of the Sigma Xi on April 11.

Dr. J. H. Moore, astronomer at Lick Observatory, will address the Astronomical Society of the Pacific in San Francisco on May 21.

At the twentieth annual meeting of the Undergraduate Medical Association of the University of Pennsylvania on April 26, Dr. Anton J. Carlson, University of Chicago, spoke on "Recent Studies on the Thyroid Gland"; Dr. Allen O. Whipple, professor of surgery, Columbia University College of Physicians and Surgeons, New York, on "Bacteriologic Problems in their Relation to the Surgical Service," and Dr. Chevalier Jackson on "The Relation of the Bronchoscope to Research."

SIR ST. CLAIR THOMSON, London, past-president of the Royal Society of Medicine, gave the annual William Potter Memorial Lecture at Jefferson Medical College on April 25, on "The Strenuous Life of a London Physician in the Eighteenth Century." The Journal of the American Medical Association states that the board of trustees of Jefferson has founded these lectures as a memorial to the late William Potter, and has appointed for life Dr. Chevalier Jackson as the William Potter Memorial lecturer to deliver to the senior class each year a series of lectures on bronchoscopy, esophagoscopy and gastroscopy, and to arrange one additional lecture each year to be given by some eminent authority in any branch of science.

Dr. VICTOR COFMAN, consultant to the research department of E. I. du Pont de Nemours and Company, lectured at Clemson College on "Colloids," on April 27 and 28.

RETIRING after two years as president of the Anthropological Society of Washington, Neil M. Judd,

curator of American archeology in the U. S. National Museum, addressed the society at its annual meeting on April 17, on "The Present Status of Archeology in the United States."

GOVERNOR FULLER, of Massachusetts, observed Arbor Day by planting a white spruce tree on the state house grounds and dedicating it to the memory of the late Professor Charles Sprague Sargent, for fifty-four years director of the Arnold Arboretum.

The erection of memorials for Major-Generals Leonard Wood and George W. Goethals is called for in bills introduced by Representative Gifford, republican, of Massachusetts. The Wood memorial would be at Bourne, Massachusetts. That to General Goethals would be built at Tisbury, Massachusetts. Each of the measures would appropriate \$100,000.

As already recorded in Science a bust of Louis Agassiz, among others, will be unveiled in the hall of fame at New York University on May 10. Funds for this bust were given by the American Association for the Advancement of Science and an admirer of Agassiz. The presentation will be made by J. Walter Fewkes, of the Smithsonian Institution, pupil of Agassiz, and the unveiling by Dr. Anna Agassiz Prince, great-granddaughter of Agassiz. The principal speaker will be Dr. Henry Fairfield Osborn, president of the American Museum of Natural History, and president of the association.

ELIAS E. RIES, of New York, known for his inventions in the field of electrical engineering, died on April 20, aged sixty-five years.

G. CHISHOLM WILLIAMS, a distinguished pioneer in the medical use of X-rays, in England, died on April 10, aged sixty-three years.

PROFESSOR WILHELM VON BRANCA, emeritus professor of geology and paleontology in the University of Berlin, distinguished for his work on the evolutionary history of man and other animals, died on March 12, aged eighty-three years.

Dr. F. Ladislas Laskowski, formerly professor of human anatomy at Geneva University, died on April 16 at the age of eighty-seven years.

Professor Leon Guignard, director of the faculty of pharmacy in Paris, known for his work in microscopic botany, has died at the age of seventy-six years.

THE one hundred and fifty-second regular meeting of the American Physical Society will be held at Pomona, California, on June 15, in affiliation with the Pacific division of the American Association for the Advancement of Science. The morning session will

be a joint session with the Astronomical Society of the Pacific.

The annual meeting of the Wisconsin Academy of Sciences, Arts and Letters was held at Lawrence College, Appleton, on April 6 and 7. The Wisconsin Archeological Society and The Midwest Museums Conference joined with the academy in this meeting. President S. A. Barrett presided, and on Friday afternoon presented his lecture "Hawaii, the Paradise of the Pacific," which was illustrated with moving pictures. In all, thirty papers were presented at the sessions.

THE New York State Geological Association will hold its next field meet at Cornell University, Ithaca, N. Y., on May 11 and 12.

The tenth biennial convention of Alpha Chi Sigma, national chemical fraternity, will be held at the University of North Carolina, Chapel Hill, North Carolina, from June 16 to 20. At this time the "History of Alpha Chi Sigma," by Dr. Harry A. Curtis, head of the department of chemistry at Yale University, will be officially introduced to the fraternity.

THE ninety-sixth annual meeting of the British Medical Association will be held at Cardiff on July 20-28, under the presidency of Sir Ewen Maclean, who will deliver his address on the evening of July 24. According to Nature, the annual exhibition of surgical appliances, foods, drugs and books will be open from July 23 to 27. A pathological museum is also being arranged by Drs. J. B. Duguid and J. Mills, department of pathology and bacteriology. Welsh National School of Medicine. The following presidents of sections are announced in the provisional program: Sir Thomas Lewis (medicine), Professor A. W. Sheen (surgery), Dr. T. Watts Eden (obstetrics and gunecology), Professor E. H. Kettle (pathology and bacteriology), Dr. E. Goodall (mental diseases and neurology), Sir John Lynn-Thomas (orthopedics), Dr. A. Howell (diseases of children), F. P. S. Cresswell (ophthalmology), Dr. D. R. Paterson (laryngology and otology), Dr. H. M. Davies (tuberculosis), Dr. O. L. Rhys (radiology and physio-therapeutics), Dr. E. C. Williams (preventive medicine), R. M. F. Picken (public health), Dr. W. E. Thomas (medical sociology), Dr. Philip H. Manson-Bahr (tropical medicine), Walter G. Spencer (history of medicine), Dr. W. Langdon Brown (therapeutics and pharmacology), Sir Robert Bolam (dermatology).

SIGMA XI grants for research for 1928-29, available for workers in all fields of science, will be awarded by the middle of May. There are no restrictions as to the university or the country in which

the holder is permitted to work. Applications should be made before May 10. Blanks may be obtained from Dean Edward Ellery, Union College, Schenectady, N. Y.

The board of the University of Michigan Medical School has accepted two gifts of the fellowship corporation of Battle Creek, one of \$20,000 to be paid in \$1,500 instalments quarterly for studying problems of metabolism, the other of \$2,500 for the investigation of bran as an article of diet. Dr. Louis H. Newburgh is to carry on the work in connection with these grants.

THE United States Shellac Importers' Association has founded a research fellowship in shellac, known as the shellac research bureau, at the Brooklyn Polytechnic Institute. The work will be done under the direction of J. C. Olsen and W. F. Whitmore.

On the ten-acre plot of the Dominion Experimental Farm in Ottawa the government will erect the first unit of a national laboratory to be devoted to scientific and industrial research work and a central power plant. An appropriation of \$750,000 has been made for the first year's work.

THE cornerstone of the new \$150,000 testing laboratory of the American Gas Association, at Cleveland, Ohio, was laid on March 15. R. W. Gallagher, chairman of the managing committee of the laboratory, spoke on the steps taken to bring the laboratory to Cleveland and to make it a permanent institution. Since the temporary quarters were established in May, 1925, more than 7,300 appliances have been tested and approved for public use. The new building will make available about 30,000 square feet of space.

At a meeting of the council of the American Chemical Society at the recent St. Louis meeting applications for granting charters for new sections with headquarters at Bozeman, Mont., Manhattan, Kans., and Pullman, Wash., were approved, all requirements having been met. Dr. Guy, of Atlanta, extended an invitation for the society to hold the spring meeting of 1930 in Atlanta, and the invitation was unanimously accepted. Reference was also made to an invitation from Omaha that the fall meeting of 1930 be held in that city. The invitation was placed on file for consideration at the appropriate time, together with one previously received from Cincinnati.

According to Industrial and Engineering Chemistry some eight months ago, the British secretary of state for the colonies appointed a committee to investigate the question of the creation of a Colonial

Agricultural Scientific and Research Service. scheme aims at the establishment of a research department which will undertake work, the results of which will be available to the whole Colonial Empire, it being proposed to investigate such special problems as would be regularly submitted by any of the colonies. The committee has now reported and estimates the cost of an agricultural wing at \$283,000. and a specialist wing at \$171,000; in addition, \$68,-000 will be required for an advisory council and \$98.-000 for one central research station. The total estimated cost is thus \$620,000. The fact is stressed by the committee that adequate salaries must be paid to the scientists to be employed by this scheme in order to attract distinguished men of proved ability. It is proposed to pay the chief adviser, who must have marked administrative and organizing ability, a salary of about \$12,000 per annum. He would be provided with an assistant at about \$9.800 per annum. The committee state definitely that, though the scales suggested might at first sight appear to be high, they are "convinced of the absolute necessity of framing them on bold, simple lines."

UNIVERSITY AND EDUCATIONAL NOTES

THE corner-stone of Du Pont hall at Hampton Institute was laid on April 26. The building is the gift of Senator T. Coleman du Pont, of Delaware, who gave \$250,000 to the institute, with the provision that a hall of science should be erected with a part of the fund and other sums retained for the upkeep of the work.

THE new medical school building of Howard University was formally opened on April 9 and 10, when there were clinics and demonstrations and all laboratories were open for inspection.

Dr. E. V. Cowdry, of the Rockefeller Institute for Medical Research, has been appointed professor of cytology in the department of anatomy of Washington University, St. Louis. The reorganized department includes all the anatomical sciences. Professor Robert J. Terry is chairman of the department and in charge of gross anatomy; Professor Cowdry will direct the microscopical work.

AT Columbia University the following have been promoted to full professorships: Dr. Robert H. Bowen in zoology, Dr. Clifford D. Carpenter and Dr. Arthur W. Thomas in chemistry, Dr. Colin G. Fink in chemical engineering, Dr. Selig Hecht in biochemistry, Dr. Harry L. Parr and Dr. Edward D. Thurston, Jr., in