and held it until 1905, when he was succeeded by Sir Joseph J. Thomson. The present professor, Lord Rutherford, took up the duties in 1921. The rules prescribed at the beginning of the institution for the election of professors are still followed, and thus it is that Lord Rutherford as an "elected" professor must seek the suffrages of the members every year, while Dewar's successor in the endowed Fullerian professorship of chemistry, the present resident professor, Sir William Bragg, does not do so.

THE STRATOSPHERE BALLOON OF THE NATIONAL GEOGRAPHIC SOCIETY AND THE U. S. ARMY CORPS

THE completion of the gondola for the flight to the stratosphere planned for June under the auspices of the National Geographic Society and the U. S. Army Air Corps has been announced.

The gondola, made in Midland, Michigan, of a magnesium alloy lighter than aluminum, has been shipped to Dayton, Ohio, where, at Wright Field, its equipment will be installed under the supervision of Captain Albert W. Stevens and Captain Orvil A. Anderson, the commander and pilot for the flight. The gondola will then be shipped to Rapid City, South Dakota, from the neighborhood of which the ascent into the upper atmosphere will be made.

The hollow metal ball is nine feet in diameter, the largest gondola yet designed for stratosphere exploration. Last year's gondola was eight feet, four inches in diameter. A level floor extends across the sphere a foot and a half above its lowest point; and on this the two balloonists will have ample room in which to move about and take care of their air-conditioned, floating laboratory.

The flight this year will make use of a balloon considerably larger than any heretofore built. The giant bag now under construction in Akron, Ohio, will have a capacity of 3,700,000 cubic feet of gas.

Utilizing the experience gained last year, when their 3,000,000 cubic-foot balloon developed a tear and crashed in southern Nebraska, the sponsors of the flight have incorporated many improvements. The most important difference will be the use of helium gas instead of hydrogen. Helium can neither burn nor explode. It is more expensive than hydrogen, however, and has never before been used in stratosphere exploration.

CONFERENCE ON SPECTROSCOPY AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

A THIRD special program on spectroscopy and its applications is to be held at the Massachusetts Institute of Technology this summer, culminating in a research conference to be held during the week of July 15 to 20. This conference, which is to be held in the George Eastman Research Laboratories, will comprise lectures and discussions on photographic photometry, absorption spectrophotometry, spectroscopic analysis of materials, biological and chemical effects of spectral radiation, spectroscopy of the extreme ultraviolet, and astronomical applications of spectroscopy. The meetings of the first day will be largely devoted to consideration of general spectroscopic problems of the metallurgist, chemist and biologist; on Tuesday and Wednesday the chief emphasis will be on specific applications of spectroscopy to biology and medicine. During the latter part of the week applications of spectroscopy to astronomy will be emphasized, a portion of the program being held in collaboration with the Harvard Observatory Summer School.

The research conference coincides with the conclusion of the summer school courses in practical spectroscopy and the meetings are open to all those interested. An invitation is being extended to all properly qualified investigators, to make use of the facilities of the laboratory of spectroscopy in connection with their researches during such portions of the summer months as they may desire. A bulletin giving further information regarding the entire summer program on spectroscopy can be obtained by addressing Professor G. R. Harrison, Department of Physics, Massachusetts Institute of Technology, Cambridge.

FELLOWSHIPS OF THE CHARLES A. COFFIN FOUNDATION

THE fellowships of the Charles A. Coffin Foundation of the General Electric Company have been awarded to eight college students from widely separated sections of the country to enable them to pursue studies and carry on research which, without such financial assistance, they would be unable to undertake in educational institutions of their choice. The fellowships are awarded annually to encourage and assist in the pursuit of research activities in the fields of electricity, physics and physical chemistry.

Fellowships have been granted by the Charles A. Coffin Foundation annually since 1922, when the foundation was created by the board of directors of the General Electric Company for the composite purpose of assisting deserving college graduates in postgraduate work, recognizing the achievements of electric power companies, and electric railway companies, and rewarding employees of the General Electric Company who each year advance the efficiency of the company or contribute by meritorious work to progress in the electrical arts. Since 1923, the foundation has made available a total of \$65,000 for fellowships. This year there were seventy-three students who submitted applications to the committee of award.

It is reported by the General Electric Company that sixty per cent. of those men who five years or more ago received Charles A. Coffin fellowships already have achieved a reputation for distinct contributions to science. Of the 45 men to whom these fellowships were awarded during the period 1923–1929, the names of 27 men are listed in the latest edition of "American Men of Science." At least ten of the group have attained national reputations, and some of them are already known internationally. At least three quarters of the group of seventy-two who received awards during the period 1923 to 1933 are now associated with universities or industrial organizations, carrying on research investigations. Charles A. Coffin was one of the founders of the company, serving as its head for thirty years as its first president and as chairman of its board of directors. He died in 1926.

The committee on awards consisted of Dr. Bergen Davis, of the National Academy of Sciences, C. C. Williams, of the Society for Promotion of Engineering Education, and J. Allen Johnson, of the American Institute of Electrical Engineers. The committee was assisted by Dr. William D. Coolidge and Dr. Saul Dushman, both of the General Electric Research Laboratory.

SCIENTIFIC NOTES AND NEWS

DR. FRANK DAWSON ADAMS, from 1894 to 1931 Logan professor of geology at McGill University, now emeritus professor and vice-principal, has been elected an honorary fellow of the Geological Society of Edinburgh.

THE medal and certificate of award of the St. Louis Medical Society has been presented to Dr. Edward A. Doisy, professor of biochemistry at the St. Louis University School of Medicine, in recognition of his work on the estrogenic hormones and for the isolation and preparation of theelin. Dr. Philip Shaffer, professor of biological chemistry at the Washington University School of Medicine, made the presentation address.

SAMUEL LOUIS HILTON, retail pharmacist of Washington, D. C., has been awarded the Remington Honor Medal for 1935 in recognition of his many years of service to the profession which culminated this year with the completion of the American Institute of Pharmacy, national headquarters of the profession in Washington. Mr. Hilton has served as president of the American Pharmaceutical Association and chairman of the council and has been a member of the revision committee of the United States Pharmacopoeia and at present is treasurer of the pharmacopoeial convention.

RAYMOND E. DAVIS, professor of civil engineering at the University of California, was recently awarded for the second time in four years the Wason Medal given by the American Concrete Institute. This award is made annually for the best paper on concrete presented to the institute during the year.

DR. FRANK B. JEWETT, president of the Bell Telephone Laboratories, was guest of honor at the annual meeting on April 9 of the New York Chapter of the Alumni Association of the Carnegie Institute of Technology. He spoke on the work of the Board of Trustess of the institute, of which he is a member.

DR. HUGH S. CUMMING, surgeon-general of the

United States Public Health Service, is among the alumni elected to membership in the Chapter of Sigma Xi of the University of Virginia. Formal initiation ceremonies for the new members will be held on April 24, when Dr. Ernest O. Lawrence, professor of physics and director of the radiation laboratory at the University of California, will give the annual Sigma Xi address.

THE William Mackenzie Medal for 1935 "for original contributions to ophthalmology of outstanding merit," has been awarded by the custodians, the Glasgow Eye Infirmary, to Dr. Ida C. Mann. The medal will be presented on June 7, when Dr. Mann will describe her work.

Nature reports that at the meeting of the Australian National Research Council at Melbourne, the first award of the Lyle Medal was made, the recipient being Professor J. R. Wilton, Elder professor of mathematics in the University of Adelaide. This medal is to be awarded, at intervals of two years, to workers in Australia for such researches in mathematics or physics as may appear to the council most deserving of such honor, the period covered being the five years preceding each award.

AT a recent meeting the Cleveland Academy of Medicine has awarded the title of honorary secretary for life to Dr. Jacob Edward Tuckerman in recognition of thirty-three years of continuous service to the academy in various capacities. Dr. Howard Lester Taylor, president, presented to Dr. Tuckerman an illuminated parchment on which was inscribed the action of the society, and Dr. George E. Follansbee paid tribute to his long service.

THE University of Cincinnati Section of Sigma Xi has elected the following officers: *President*, Dr. Charles N. Moore, professor of mathematics; *vicepresident*, Dr. John H. Hoskins, associate professor of botany; *secretary-treasurer*, Dr. Saul B. Arenson, associate professor of chemistry.