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