A. Bone on "The Photographic Analysis of Explosion Flames," Sir Peter Chalmers Mitchell on "Zoos and National Parks," Sir Arthur Keith on "The Construction of Man's Family Tree," Sir Oliver Lodge on "A Retrospect of Wireless Communications," Sir James Jeans on "Beyond the Milky Way," and Dr. S. Kemp on "Oceanography in the Antarctic."

A public lecture, non-members included, will be given by Mr. Angus Macrae on "Guidance in the Choice of an Occupation," at 3:30 P. M. on Monday, September 28, in the London School of Economics. Other public lectures will be arranged in several of the polytechnic institutions.

Receptions will be given as follows: At the National Physical Laboratory, Teddington, in connection with the visit on Thursday afternoon, September 24; at Bedford College for Women, Regent's Park, N.W.1, on Thursday afternoon, September 24, from 4 to 6 P. M.; by the Royal Society to invited delegates, in connection with the Faraday Centenary Celebration, on Thursday evening, September 24; by H. M. Government in the Imperial Institute on Friday evening, September 25, beginning at 9 P. M.; by the founder and director of the Wellcome Historical Medical Museum on Friday evening, September 25, beginning at 8:30 P. M.; at the Hampton Court Palace on Saturday afternoon, September 26; in the Court and the Senate of the University of London and at the Wellcome Historical Medical Museum on Monday evening, September 28; at the Forum Women's Club, on Tuesday afternoon, September 29; by the Right Honorable the Lord Mayor and Corporation of the City of London, on Wednesday evening, September 30, at Guildhall.

The reception of members has also been arranged in connection with many other excursions and visits.

An invited party will visit York, the birthplace of the association, on Saturday and Sunday, September 26 and 27. Down House, the home of Darwin, now held by the association in custody for the nation, will be open to members throughout the meeting.

Interesting exhibits of importance have been arranged at various institutions during the meetings.

THE INTERNATIONAL CONVENTION OF THE ELECTROCHEMICAL SOCIETY

PROFESSOR JOHN A. FULTON, director of the Mackay School of Mines, Reno, Nevada, invited authorities on silver to present their views at a luncheon and round table discussion, held at the Hotel Utah, on Thursday, September 3, in connection with the international convention of the Electrochemical Society meeting from September 2 to 5 in Salt Lake City. The state of Utah is the largest silver-producing state in the union, furnishing over 25 per cent. of the total production in the United States. Mining, metallurgy and the utilization of silver were carefully considered.

On Wednesday, September 2, an entire session was devoted to cyanides in metallurgy, which has an important bearing on the gold situation. Due to many improvements made in the cyanide process, gold can to-day be recovered from ores which were formerly considered worthless. Dr. Dorsey A. Lyon, of the University of Utah, presided.

A session on miscellaneous electrochemical papers took place on Thursday, September 3. Professor Jean Billiter, of the University of Vienna, Austria, described his new electrical apparatus for the purification of drinking water. Dr. M. Sem, of Oslo, Norway, presented data on the new Soderberg electrode. This electrode is from four to five feet in diameter and has been used with success in the production of carbide. Mr. W. E. Moore, well-known furnace expert of Pittsburgh, reported on the latest developments in electric furnace design.

The Edward Goodrich Acheson Medal was presented to Dr. Edwin Fitch Northrup, vice-president of the Electrothermic Corporation, of Trenton, New Jersey, on September 3. An award of $1,000 in cash accompanies the medal. Dr. Northrup is well known for his work in electric furnace design. After the award of the medal, Dr. Northrup addressed the members and guests on "What is Electricity?"

Flotation, the process by which valuable metals in any ore can be readily and cheaply segregated, is the subject of the symposium, to be held on Saturday, September 5. Professor A. M. Gaudin, of the Montana School of Mines, will preside. This metallurgical process was invented by Miss Carrie J. Everson, of Denver, Colorado. The introduction of flotation has completely revolutionized mining and metallurgy within the last ten years. Among those who will participate in the symposium are Professor Herbert Freundlich, of Berlin; Dr. Oliver C. Ralston, of the United Verde Copper Company; Dr. Edmund S. Leaver, of the U. S. Bureau of Mines, and four engineers of the American Cyanamid Company.

THE AWARD OF THE PRIZE OF THE RESEARCH CORPORATION

DR. ANDREW ELLICOTT DOUGLASS has received the $2,500 prize of the Research Corporation through the Smithsonian Institution for his work in establishing the date of the construction of Pueblo Bonito in Northern Mexico by the measurement of tree rings. The field work was done on the pre-Columbian Beam Research Expedition of the National Geographic Society of which Dr. Douglass was leader.

In the report of his work to the National Geographic Society Dr. Douglass wrote:

By translating the story told by tree rings we have pushed back the horizons of history in the United States for nearly eight centuries before Columbus reached the shores of the New World, and we have established in our Southwest a chronology for that period more accurate than if human hands had written down the major events as they occurred.

We are now able definitely to announce the important dates in the history of Pueblo Bonito, oldest and largest of the great Indian communities, in Chaco Canyon, New Mexico.

Furthermore, we can now date nearly forty prehistoric ruins in the Southwest and reconstruct there a succession of major events through which Indian settlements rose, passed their heyday and disappeared.

Just as the far-famed Rosetta Stone provided the key to the written mysteries of ancient Egypt, so the collection of an unbroken series of tree rings has made clear the chronology of the Southwest.

Through this work we have learned of some outstanding events in America which were contemporaneous with the conquest of Spain by the Moors, and we know that certain Pueblo Indian settlements were enjoying their golden ages when William the Conqueror faced Harold the Saxon at the battle of Hastings.

These researches have carried the calendar back to A. D. 700 in the Southwest, and they have provided the beginnings of a continuous weather chart for 1,200 years.

The earliest beam we recovered from Pueblo Bonito was cut A. D. 919 from a tree that was 219 years old when cut. Pueblo Bonito had reached its golden age in 1067 and was still occupied in 1127.

The method which we have used in extending the historical calendar of the Southwest is the outcome of a long attempt to read the diaries of trees. Every year the trees in our forests show the swing of time's pendulum and put down a mark. They are chronographs, recording clocks, by which the succeeding seasons are set down through definite imprints. Every year each pine adds a layer of new wood over its entire living surface of trunk and branches.

If every year were exactly the same, growth rings would tell the age of the tree and little more. Only in rare cases would they record exceptional events of any interest to us.

But a tree is not a mechanical robot; it is a living thing, and its food supply and adventures through life all enter into its diary. A flash of lightning, a forest fire, insect pests or a falling neighbor may make strong impressions on its life and go into its diary.

But in the arid regions of our Southwest, where trees are few and other vegetation scarce, the most important thing to man and trees is rainfall. This fact has helped vastly in our dating work, for certain sequences of years become easily recognized from tree to tree, county to county, even from state to state.

THE PROPOSED SURGICAL BUILDING FOR YALE UNIVERSITY

A FUND of $1,100,000 for a surgical building for Yale University at the New Haven Hospital is provided by the bequest of Mrs. Sarah Wey Tompkins, whose father, Dr. William C. Wey, served the community of Elmira, New York, for half a century as a leading physician and surgeon. Mrs. Tompkins during her lifetime gave to the university the tract of land near the Yale Bowl, now known as the Ray Tompkins Memorial, in memory of her husband. In her will, she made a bequest to Yale which has proved sufficient to enable the university now to proceed in accordance with the wishes expressed by the donor prior to her death. Work on the new building, to be known as the Sarah Wey Tompkins Memorial, will soon be begun.

The erection of this unit brings near to completion the modernization of the entire physical plant of the New Haven Hospital, in accordance with a plan adopted five years ago. Three sections of the hospital must still be provided. These are the pavilion for contagious diseases, an addition to the private pavilion for persons of moderate means and a women's pavilion. The completed plant will then represent an investment of $8,000,000 in buildings, of which approximately $6,500,000 has now been obtained.

The new building will have five hospital floors, and a ground floor for "out-patient," or dispensary, service. On the ground floor will be the examining and treatment rooms for surgery, including orthopedics, urology, physical therapy and accident and emergency units. The first floor will have 27 beds for male surgical patients; the second floor, 27 beds for women requiring general surgical treatment; the third floor, 24 beds for gynecological patients; the fourth floor, a nursery and 20 beds for obstetrical cases, and the fifth floor, 27 beds for eye, ear, nose and throat cases.

Each of the ward floors will have a treatment room, diet kitchen, doctors' room, nurses' room, solarium and open air balconies, and will thus have practically all facilities required for a hospital, with the exception of operating rooms, which have been placed in the Farnam building adjoining. There will be twelve single-bed rooms on each floor, one eight-bed room, and several two-bed and three-bed rooms.

Staff members in the department of surgery and the department of obstetrics and gynecology have their offices and research and teaching facilities in the Farnam Memorial Building, to which the new surgical pavilion will be connected on every level. Similar facilities for members of the department of internal medicine are provided in the new medical and pediatric laboratory building, with which the Raleigh Fitkin Memorial Pavilion and the proposed pavilion for infectious diseases will be connected. This arrangement will bring all the required facilities close together.