of this union. Dr. Woodward's contributions to the various branches of geophysics, notably geodesy, are too well known to require enumeration here. He held positions of responsibility, both in governmental and university affairs, and was president of the Carnegie Institution of Washington from December, 1904, to January 1, 1921, when he voluntarily relinquished this position. He was the recipient of many honors, both from universities and learned academies. We cherish the memory of our late fellow member, not alone for his scientific achievements, but also for his sturdy philosophy and ever hopeful outlook.

Resolved, Further, that the secretary of the union be instructed to transmit a copy of this resolution to Mrs. Woodward and that it be spread on the minutes of the union.

LISTER MEMORIAL LECTURE[1]

THE first Lister Memorial Lecture was delivered by Sir W. Watson Cheyne, Bart., F.R.S., on May 14, at the Royal College of Surgeons. This lecture forms part of the memorial to Lord Lister which was decided upon so long ago as October, 1912. Part of the funds raised were devoted to placing a medallion in Westminster Abbey, part to the monument unveiled in Portland Place, London, in March, 1924 (see *Nature,* March 22, 1924, p. 430), and the remainder formed an International Lister Memorial Fund for the advancement of surgery. The Royal College of Surgeons of England became trustees for this latter fund, and it was resolved to award a bronze medal, with a sum of £500, every three years, in recognition of noteworthy contributions to surgery. Sir W. Watson Cheyne is the first recipient of the medal, and the award is particularly appropriate, apart from Sir William's scientific achievements, in that he was, with the late Sir Rickman Godlee, assistant to Lister in London. Sir William's lecture on the occasion of the presentation of the medal was a general account of Lister's aims and achievements, and the full and detailed story is promised in a forthcoming volume. Lister's early work at Glasgow is passed in review, leading up to the time when he learned of the work of Pasteur on fermentation and putrescence. The use which Lister made of this knowledge and the wonderful extensions of the work in surgery caused a revolution in surgical methods, for, as Sir William Cheyne says, "not only has his work led to the practical disappearance of septic diseases after operations, but it has enabled the surgeon to perform many operations which prolong life, restore movements, rectify deformities and add to the usefulness and comfort of mankind." The complete lecture appears in the *Lancet* of May 16.

[1] From *Nature.*

THE SEISMOLOGICAL SOCIETY OF AMERICA

THE directors of the Seismological Society of America, meeting in San Francisco on April 30, elected the following officers to serve during the succeeding twelve months: *President,* Dr. Bailey Willis; *First vice-president,* Mr. H. O. Wood; *Second vice-president,* Captain N. H. Heck; *Third vice-president,* Mr. M. Hall McAllister; *Secretary-Treasurer,* Dr. S. D. Townley. By request of the president, Dr. Arthur L. Day will continue to act as chairman of the scientific committee and Dr. Townley as chairman of the committee on publications. Since both the president and secretary are connected with Stanford University that institution remains the center of administration. The activity of earthquakes in California naturally focuses the work of investigation in that state. The society has, however, broader interests and affiliations with seismological research in general. Its activities are divided between two branches of the subject, scientific research, which it seeks to promote by the publication of the *Bulletin* of the society, and education toward safety, which it strives to advance through the study and discussion of practical measures for safeguarding communities against earthquake damage and conflagration. The membership is now about 650 and is widely distributed throughout the world. All who are interested in matters pertaining to earthquakes are eligible to membership.

S. D. TOWNLEY,
Secretary

STANFORD UNIVERSITY

TRANSFER OF THE BUREAU OF MINES TO THE DEPARTMENT OF COMMERCE

PRESIDENT COOLIDGE on June 4 by executive order transferred the Bureau of Mines from the Department of the Interior to the Department of Commerce, Attorney General Sargent having decided that the action was authorized by law. In furtherance of the same purpose the president some months ago transferred the Patent Office, and other bureaus will be similarly treated when the required legislation is obtained under the reorganization act. Two offices of the Bureau of Mines will remain under the Interior Department, those having to do with coal, oil and other mineral land leasing. These offices, not being engaged in scientific research, under the law can not be transferred.

Secretary Hoover, of the Department of Commerce, said that he soon would appoint a committee representative of organizations of mining engineers and the mining industry to study ways and means to increase the efficiency of the Bureau of Mines and divi-

sions of the Department of Commerce which do work of similar character.

Secretary Work, of the Department of the Interior, in a statement relative to the transfer, said:

The change is one of the reorganization plans approved by the Joint Congressional Committee. The President has a limited authority under the organic act creating the Department of Commerce to make such shifts. It does not apply to other departmental changes which must await Congressional authority.

The primary objects of such segregation are, of course, to secure economy in administration and more efficient relationship with the public.

The Department of Commerce contains a division for service in domestic distribution and foreign trade in mineral products, the Bureau of Mines carried on work of economic character of much the same implication. The Department of Commerce provides statistics of mineral production every ten years—whereas the Department of the Interior provides statistics of mineral production every year and in many cases every month. The Department of Commerce recruits statistics on production of explosives every two years, while the Bureau of Mines procures statistics on their production at regular intervals.

The Department of Commerce carries on research into the strength of wire rope generally for all industries, whereas the Bureau of Mines investigates the strength of wire ropes for the mining industry. The Department of Commerce maintains economic research in use of raw materials for manufacture, a large portion of which are minerals, while the Bureau of Mines investigates the production of raw materials for manufacturing purposes.

Our investigations show that the laboratories of the Department of Commerce carry on scientific research in the use of gasoline and lubricating oils in gas engines, while the Bureau of Mines carried on research generally into gasoline and petroleum products. The research laboratories in the Department of Commerce carry on investigations into the quality of materials for manufacture of porcelain, whereas the Bureau of Mines laboratories carry on research into raw materials for porcelain manufacture. The Department of Commerce laboratories carry on investigation into the qualities of fuel, whereas the Bureau of Mines laboratories tested fuel as to its qualities.

While by constant adjustment, conferences and the appointment of cooperative committees a considerable amount of the actual duplication has been eliminated during the last four years, nevertheless such duplications can not be altogether eliminated and the confusion of citizens in dealing with different government departments for different purposes can not be avoided unless single-headed authority is given for functions having the same general major purpose.

FELLOWSHIPS AWARDED BY THE JOHN SIMON GUGGENHEIM MEMORIAL FOUNDATION

THE John Simon Guggenheim Memorial Foundation, endowed with $3,000,000 by former Senator Simon Guggenheim and Mrs. Guggenheim to furnish funds to prosecute investigation in any field to advanced students of science and learning, has awarded fifteen fellowships. Forty or fifty additional fellowships will be announced next spring. An allowance usually of $2,500 a year during the period of the research goes with each fund. Appointments in the sciences are as follows:

Professor John Robert Kline, of the University of Pennsylvania, for study of the mathematical problem of the "Analysis situs of three dimensions from a point set standpoint," principally at the University of Göttingen.

Dr. Gerhard Krohn Rollefson, of the University of California, for work on the application of the methods of physics to the study of chemical phenomena, principally with Professor Franck, of the University of Göttingen.

Dr. Percival Bailey, of Peter Bent Brigham Hospital, Boston, Massachusetts, and the Harvard Medical School, for research in diseases of the nervous system, principally in the clinic of M. le Professor Claude, at the Asile of Ste. Anne, Paris, and the Laboratory of Dijerine, University of Paris.

Dr. Edwin W. Schultz, of Stanford University, Calif., for a study of the phenomenon of bacteriophagy, principally under Dr. F. d'Herelle, director of the Laboratory of the International Sanitary Council at Alexandria, Egypt.

Professor Coleman R. Griffith, of the University of Illinois, for research in child psychology, principally at the University of Giessen.

INSTITUTE FOR BIOLOGICAL RESEARCH AT THE JOHNS HOPKINS UNIVERSITY

THE Rockefeller Foundation, through its Division of Studies, has appropriated a substantial sum to aid in the establishment, and support for a period of five years, of an Institute for Biological Research at the Johns Hopkins University. This institute will be closely affiliated with the Schools of Medicine and of Hygiene and Public Health of the University. Dr. Raymond Pearl has been appointed director. He will retain a connection with the department of biometry and vital statistics of the School of Hygiene, as research professor in this subject, and will continue as profesor of biology in the Medical School. Dr. Lowell J. Reed becomes professor of biometry and vital statistics and head of the department in the School of Hygiene.

At the outstart the Institute for Biological Research will occupy one floor of the new Hunterian Laboratory of the Medical School. The whole time of the staff, which is now being chosen, will be devoted to research on general problems of biology, but with especial attention to the biology of life duration and its control, and to the experimental study of the population problem.