education, with Dr. Abell and Dr. Morris Fishbein, editor of the Journal of the American Medical Association, Chicago, as the other members. Dr. Lewin is chairman of a committee on treatment of aftereffects; other members are: Drs. George E. Bennett, associate professor of orthopedic surgery, the Johns Hopkins University School of Medicine, Baltimore; Charles Le Roy Lowman, Los Angeles Orthopedic Hospital, Los Angeles; Leo Mayer, associate professor of clinical orthopedic surgery, Columbia University New York Post-Graduate Medical School, New York, and Frank R. Ober, assistant dean and clinical professor

of orthopedic surgery, Harvard University Medical School, Boston. The foundation has adopted the policy of assisting in study and research on the medical problem as a whole and not of giving individual care for those afflicted. It is felt that the problem of locating crippled children and providing medical, surgical, corrective and other services and care and facilities for diagnosis, hospitalization and after-care of the individual case is essentially a local problem and that the foundation must confine itself to aiding institutions and centers in which methods or procedures may be developed which will be of benefit to all the afflicted.

## SCIENTIFIC NOTES AND NEWS

At the opening ceremony of the fifteenth International Geographical Congress at Amsterdam on July 18, honorary memberships in the Royal Dutch Geographical Society were conferred on Dr. Elmer Drew Merrill, professor of botany and administrator of the botanical collections of Harvard University, in recognition of his work in botanical geography, and on Professor Carl Ortwin Sauer, professor of geography and chairman of the department, at the University of California, in recognition of his work in physical and social geography.

A TESTIMONIAL dinner was recently given by alumni of the University of Michigan to Dr. James W. Glover, James Olney professor of mathematics and chairman of the department, who retired from active teaching at the end of the academic year. In his honor the James W. Glover scholarship fund, made possible by contributions from his former students, was announced, and a check for \$800, as the nucleus of this fund, was presented to the university and was received by Vice-President Shirley W. Smith. There was also presented a volume containing many voluntary letters received by the committee, expressing admiration and affection for Dr. Glover.

Dr. A. W. Homberger, professor of chemistry and head of the department at the University of Louisville, was given at the close of the academic year a testimonial dinner sponsored by the Chemistry Club Alumni Association, in recognition of his twenty years' service to the university. The dinner was participated in by about one hundred and fifty of his colleagues, former students and friends. Dr. A. J. Miller, head of the department of pathology of the School of Medicine, acted as master of ceremonies. A silver tray with the insignia "H<sub>2</sub>O" engraved on it was presented to Dr. Homberger in token of appreciation by the Alumni Chemistry Club.

Nature writes: "Among the distinguished scientific men of science who have left Vienna since the An-

schluss is Professor Sigmund Freud, who has taken refuge in London. Professor Freud celebrated his eighty-second birthday on May 6 last. His name will always be associated with the development of psychoanalysis, and the significance of his contributions to psychology was acknowledged by his election in 1936 to foreign membership of the Royal Society, but Professor Freud had not hitherto been able to sign the roll of membership. Although now resident in London, Professor Freud was prevented by infirmity from attending the society's rooms for this purpose, and although the charter book is rarely removed from Burlington House except when it is taken to Buckingham Palace for the signature of the King as patron of the Society, it was decided to extend the privilege to Professor Freud. Accordingly, on June 23, Sir Albert Seward, foreign secretary, and Professor A. V. Hill, one of the secretaries, accompanied J. D. Griffith Davies, who as assistant secretary has custody of the charter book, to Professor Freud's residence, where the roll was duly signed by Professor Freud in the presence of his daughter, Dr. Anna Freud, and Princess Marie of Greece, who was a pupil of his and received him when he left Austria. On behalf of the Royal Society, Sir Albert Seward presented to Professor Freud an inscribed copy of a facsimilie of the society's charter book."

Two Rivers Memorial Medals for 1938 of the Royal Anthropological Institute, London, were presented at the recent annual meeting of the society to Professor A. R. Radcliffe Brown, for anthropological research in the Andaman Islands and Australia, and to Miss Dorothy Annie Elizabeth Garrod, for work in Gibraltar, Southern Kurdistan and Palestine. The Wellcome Gold Medal for 1937 for anthropological research was awarded to Dr. Meyer Fortes for a study of the "Marriage Law among the Tallensi."

At the annual commemoration ceremony on May 14, the third Farrer Memorial Medal was presented to Dr. W. L. Waterhouse, acting dean of the faculty of agriculture of the University of Sydney.

The degree of doctor of science has been conferred by Washington University on Oakes Ames, research professor of botany and director of the Botanical Museum, Harvard University. The citation made by Dr. George T. Moore, director of the Henry Shaw School of Botany, follows: "He calls the orchids by name in order that others may likewise know them. Final authority, whose published works, illumined by the accurate, artistic skill of Blanche Ames, his wife, are at once the admiration and envy of the botanical world."

The doctorate of engineering was conferred by the University of Michigan at commencement on Dr. Stephen Timoshenko, formerly professor of mechanical engineering, who was recently called to Stanford University.

Wesley P. Sykes, research metallurgist at the Cleveland Wire Works of the General Electric Company, was awarded the honorary degree of doctor of engineering at the fifty-fourth annual commencement exercises of the Case School of Applied Science.

COLONEL CHARLES FRANKLIN CRAIG, Medical Corps, U. S. Army, retired, will retire as professor of tropical medicine and head of the department at the Medical School of Tulane University of Louisiana on September 1. He has been appointed emeritus professor of tropical medicine.

Dr. Ralph E. Cleland, professor of biology at Goucher College, has been appointed head of the department of botany at Indiana University.

Dr. William M. Hale, assistant professor at the Yale University School of Medicine, has been appointed professor and head of the department of bacteriology of the College of Medicine of the State University of Iowa.

Dr. WILLIAM LINDSAY MALCOLM, professor of municipal engineering in Queens University, Canada, has been appointed director of the School of Civil Engineering in the College of Engineering of Cornell University.

At Lehigh University, Professor Hale Sutherland, head of the department of civil engineering, has been appointed director of the Fritz Laboratory. Dr. Bruce Gilbert Johnston, of Columbia University, has been appointed assistant professor of civil engineering and assistant director of the laboratory. He succeeds Dr. Inge Lyse, who resigned recently to accept a professorship in the Institute of Technology of Norway.

AT Northwestern University, John Fyfer Calvert

has been appointed professor of electrical engineering; L. T. Wyly, assistant professor of civil engineering, and Paul D. Parker, assistant professor of mechanical engineering. The appointments are part of the enlarged teaching and research program for the School of Engineering which has been developed in cooperation with the Engineers' Council for Professional Development.

Dr. Willard Z. Park, of the department of anthropology of Northwestern University, has been made head of the combined departments of sociology and anthropology at the University of Oklahoma; Dr. Donald B. McMullen, formerly head of the department of biology at Monmouth College, has been appointed assistant professor of bacteriology, in charge of the division of parasitology at the Medical School.

The J. T. Baker Chemical Company research fellowship in analytical chemistry, Eastern Division, has been awarded for the academic year 1938–1939 to C. J. Barton, who will work at the University of Virginia under the direction of Professor J. H. Yoe in the field of photoelectric colorimetry. Members of the committee making the award are: Professors G. P. Baxter (Harvard), H. A. Fales (Columbia), C. W. Mason (Cornell), J. H. Yoe (Virginia), and N. H. Furman (Princeton), chairman.

Dr. ALEXANDER R. TODD, of the Lister Institute of Preventive Medicine, London, has been appointed to succeed Dr. I. M. Heilbron as Sir Samuel Hall professor of chemistry and director of the Chemical Laboratories of the University of Manchester.

Dr. STANLEY PATRICK DAVIDSON, Regius professor of medicine in the University of Aberdeen, has been appointed to the chair of medicine at the University of Edinburgh in succession to Professor W. T. Ritchie.

Grants have been made by the Committee on Scientific Research of the American Medical Association as follows: To the medical department of the School of Medicine and Dentistry of the University of Rochester for work dealing with agranulocytosis in the cat to be carried out under the direction of Dr. John S. Lawrence; to Dr. Roe E. Remington, professor of chemistry and director of the Food Research Laboratory of the South Carolina Food Research Commission, for work on iodine metabolism in the rat; to Dr. Joseph H. Roe, professor of biochemistry in the School of Medicine of the George Washington University, for work upon the specificity of methods for the determination of ascorbic acid in plant, animal and tumor tissues; to Dr. Louis N. Katz, director of cardiovascular research, the Michael Reese Hospital, Chicago, for studying factors influencing the activities of the heart to be carried out in the isolated heart preparation; to Dr. Maurice Barnes Woodhall, Duke Hospital, Durham, N. C., for a further study of the reaction of central nervous system tissue to transplanted rabbit papilloma, and to Dr. Charles W. Turner, professor of dairy husbandry at the University of Missouri, for work on the relation of thyrotropic hormone of the anterior pituitary to pregnancy and lactation.

Dr. Hugh S. Cumming, formerly surgeon general of the U. S. Public Health Service, has returned to the United States. He attended a meeting of the Committee of the National Health Office in Paris on April 9 and a meeting in Geneva on June 30 of the League of Nations Health Office.

DR. Henry Teuscher, superintendent and chief horticulturist of the Botanical Garden of Montreal, has left to visit the botanical gardens and the main horticultural centers of Europe. He will study the construction of large greenhouses in view of the plans for the greenhouses to be constructed next winter at the Montreal Botanical Garden. The work at the garden is progressing actively. About two hundred and fifty acres are now in course of development.

The Society of American Bacteriologists will hold its fortieth general meeting on August 30, 31 and September 1, in San Francisco, Calif., at the Hotel Fairmont, under the presidency of Dr. Paul F. Clark, of the University of Wisconsin. The program includes groups of papers in the fields of general, medical, agricultural and industrial bacteriology. Symposia have been arranged on the subjects of nitrogenfixation, metabolism, filterable viruses and immunity. A joint meeting of all the sections of the society will consider the subject of enzymes in relation to bacteriology. Round-table discussions on the following topics will be held: staphylococci, spirochetes and spirochetal diseases, non-symbiotic nitrogen-fixation and the cross-inoculation of leguminous plants.

THE Massachusetts Institute of Technology announces a conference to be held on September 8 and 9, under the direction of the department of mathematics and the department of economics and social science, on the application of statistical methods to industrial

and engineering problems. Addresses and discussions will include a résumé of certain statistical technique needed for effective handling of industrial data, successful applications of statistical methods in the fields of engineering and quality control, contemporary developments in industrial and engineering statistics. Among those who will address the conference are L. H. C. Tippett, of the British Cotton Industry Research Association; Dr. Walter A. Shewhart, of the Bell Telephone Laboratories; and Dr. S. S. Wilks, professor of statistics at Princeton University. The evening of September 9 will be devoted to applications of statistical methods in the fields of biology and medicine. All correspondence should be addressed to the Secretary, Conference on Engineering and Industrial Statistics, Massachusetts Institute of Technology, Cambridge, Massachusetts.

THE International Congress on Rheumatism will meet in New York in June, 1940. Dr. Ralph Pemberton, of Philadelphia, is president. Subjects to be discussed will be the role of infection in rheumatic diseases, nutrition in rheumatism and the social significance of orthopedic work in rheumatic diseases. A symposium on therapy in rheumatism will be arranged.

THE Sheffield Scientific School of Yale University has received bequests amounting to more than a million dollars. They are a residue interest in the estate of Frederick W. Vanderbilt, '76, of New York City, and \$664,749 from the estate of Miss Marie Oakes Hotchkiss, of East River, Conn.

Lord Nuffield has offered to give £60,000 to the University of Birmingham for the extension of the department of physics. Of this a sum of £40,000 is to be used for the building, the remainder being reserved for equipment and maintenance and for the foundation of a research scholarship. The plans for the new block provide for a professor's room and secretary's office, a staff room and library. The central part is a research hall for high-voltage work, this being flanked by eight research rooms, each about 16 feet by 14 feet. There are to be also a machine-room and workshop, two dark rooms and a basement room for high-energy x-ray work.

## DISCUSSION

## CHEMICAL CONTROL OF STARFISH1

The common starfish, Asterias forbesi, is the most destructive enemy of the oyster along the North Atlantic Coast. Efforts have been made to eradicate it for at least a century, but these attempts have been largely unavailing. The method in present use by

<sup>1</sup> Published with permission of the U.S. Bureau of Fisheries.

oystermen consists in gathering the starfish from the bottom by the use of dredges and special starfish mops and destroying the captured animals by immersion in hot water. This method is slow, however, and the unabated depredations of starfish on the oyster beds attest its inefficiency.

Experiments looking toward the development of a method of chemical control have been carried on by