A census was taken of the Guadalupe elephant seal by Mr. Crocker and Captain D. Rotch. In the large herd on the west side of the island near Elephant Rock approximately 900 individuals were counted, of which about one third were males. On a small beach on the east side of the island, near the Northeast Anchorage, 27 seals were numbered. At neither of these beaches was any seen dead, and the general condition of the animals seemed to be good. The valuable data and collections made on this expedition to Guadalupe Island make it very gratifying to know that a business man of Mr. Crocker's prominence has shown such a keen interest in the pursuit of scientific field studies.

JOHN THOMAS HOWELL
CALIFORNIA ACADEMY OF SCIENCES

PROFESSORSHIPS AT YALE UNIVERSITY IN MEMORY OF GIBBS AND SUMNER

THE memory of two distinguished professors of Yale University, Josiah Willard Gibbs and William Graham Sumner, has been perpetuated by the establishment at the university of the Josiah Willard Gibbs professorship of mathematics and the William Graham Sumner professorship of the science of society, both made possible by funds pledged in 1927 as a part of the Yale Endowment Fund and now paid to the university for this purpose.

Two members of the Yale faculty have been appointed to these professorships. The first Gibbs professor of mathematics is Dr. Ernest William Brown, previously Sterling professor of mathematics; the first Sumner professor of the science of society is Dr. Albert Galloway Keller, now professor of this subject.

Professor Brown, who has been a professor at Yale since 1907, is an authority on celestial and especially lunar mechanics. A graduate of Cambridge University (Christ's College), he has won the Royal Medal of the Royal Society, of which he is a fellow; the gold medal of the Royal Astronomical Society, and the Bruce Medal of the Astronomical Society in this country. He is a member of the National Academy of Sciences, a fellow of the American Academy of Arts and Sciences, and is a former president of the American Mathematical Society. Professor Keller has been a member of the Yale faculty since 1899. He is the author of several authoritative works in the field of social science. Professor Sumner had spent his later years collecting material for a monumental work to be known as "The Science of Society." On his death, his successor at Yale, Professor Keller, took up the work, and after twenty-five years of preparation, published four volumes under this title in 1927 through the Yale University Press which had previously issued four volumes of Sumner's collected essays under the editorship of Professor Keller.

The announcement from the office of the secretary of Yale University characterizes the work of Gibbs as follows:

Professor Josiah Willard Gibbs, who has been called "the first physical chemist," graduated from Yale College in 1858. He received the doctorate from Yale in 1863, and after tutoring at the university for one term, spent three years in Europe. In 1871 he was appointed professor of mathematical physics at Yale, a position which he held until his death in 1903. Many honors and degrees and medals came to him, among these being the Rumford Medal from the American Academy and the Copley Medal from the Royal Society of London. Although he was not in the strictest sense of the word a chemist, Professor Gibbs is generally considered to have made the greatest single contribution to theoretical chemistry made by an American. In 1876–78 he published a series of papers on "The Equilibrium of Heterogeneous Substances." Because of the strictly mathematical treatment of the subject and the prevailing lack of familiarity of chemists with higher mathematics, its value was not recognized, nor was the great principle involved used by chemists for several years.

The great value of the "Phase Rule," a principle evolved from Professor Gibbs' mathematical discussion, is now acknowledged by all working in the field of theoretical chemistry. The layman, however, does not realize the great practical use which is made of this principle first developed by Gibbs. The familiar carbon-iron diagram, which is the basis of the metallurgy of steel, is based upon it. The whole subject of alloys and the science of metallography is founded on it. The work which has explained the constitution of portland cement was only possible through this rule. These are but a few examples of its value and versatility.

AWARD OF THE FIRST RICHARDS GOLD MEDAL TO PROFESSOR ARTHUR A. NOYES

THE Richards Gold Medal for conspicuous achievement in chemistry has been awarded by the Northeastern Section of the American Chemical Society to Professor Arthur A. Noyes, director of the Gates Chemical Laboratory of the California Institute of Technology, Pasadena, according to an announcement made by Professor William P. Ryan, chairman of the section. The medal will be presented at the time of the annual meeting early next May.

The Richards Medal was established by the Northeastern Section in 1929 to commemorate the many fundamental contributions made to chemistry by the late Theodore William Richards, who was professor of chemistry in Harvard University for over twenty-five years and the only American chemist to receive the Nobel prize. He was a member of the Northeastern Section for thirty years. A trust fund of $10,000 to endow the medal has been raised by a committee consisting of Drs. Lyman C. Newell, Ar-

thur D. Little and James F. Norris. The medal was designed by Mr. Cyrus E. Dallin, who was an intimate friend of Professor Richards.

Dr. Arthur Amos Noyes, the first recipient of the Richards Medal, was born at Newburyport, Massachusetts, in 1866. After graduation from the Massachusetts Institute of Technology he studied in Leipzig, where he received the degree of Ph.D. in 1890. He taught at the institute from 1890 to 1919, and was acting president 1907–1909. He went to the California Institute of Technology in 1915 to assist in its organization and took up permanent residence there as professor of chemistry in 1919. In recognition of his contributions to chemistry he has been elected to numerous scientific societies, has received many honorary degrees and has been awarded several medals including the Davy medal of the Royal Society of London. He is the author of books in qualitative analysis, organic chemistry and physical chemistry, and has published a large number of articles on his original researches in theoretical, analytical and organic chemistry in American and foreign journals. Professor Noyes was a charter member of the Northeastern Section of the American Chemical Society.

SCIENTIFIC NOTES AND NEWS

IN the British New Year honor list science is recognized in knighthoods conferred on Mr. George Buckston Browne, the donor of Darwin's house at Down to the British Association and of generous gifts to medical research; Dr. H. H. Dale, secretary of the Royal Society and director-in-chief of the National Institute for Medical Research; Dr. Patrick Geddes, late professor of botany at St. Andrews and professor of sociology and civics at Bombay, and Mr. H. S. Wellcome, the founder of the Wellcome Research Institution and the Wellcome Tropical Research Laboratories at Khartum.

PROFESSOR CHARLES RICHET, the physiologist, has been elected vice-president of the Paris Academy of Sciences for 1932 and will become president in 1933.

DR. HUGO ECKENER, commander of the dirigible *Graf Zeppelin,* received on January 16 the award of the 1931 medal of the International Aeronautic Federation.

M. LUCIEN CUÉNOT, professor of zoology at the University of Nancy, who in 1918 was elected a correspondent of the Paris Academy of Sciences, has now been elected a non-resident member to succeed the late M. Cosserat.

PROFESSOR E. L. NICHOLS, of the department of physics of Cornell University, has been elected an honorary member of the Association des Ingenieurs de l'Eclairage, Paris.

AT a special meeting held at the St. Louis Medical Society, by friends of Dr. Amand N. Ravold in recognition of his completion of fifty years in the practice of medicine, a plaque was presented to him by Mr. Victor Holm. Dr. Augustus G. Pohlman, Washington University School of Medicine, extended greetings; Professor Arthur I. Kendall, of the department of research bacteriology, Northwestern University Medical School, Chicago, gave an address on "Fifty Golden Years"; Dr. William W. Graves, "Amand Ravold the Builder," and Dr. Joseph Grindon, "Amand Ravold the Man."

MR. WILLIAM S. LEE, of Charlotte, North Carolina, known for his work on high-tension hydro-electric power development and transmission, has been elected president of the American Engineering Council. He is president of the W. S. Lee Engineering Corporation and vice-chairman of the Duke Endowment.

DR. SCOTT TURNER, chief of the U. S. Bureau of Mines, has been nominated for the presidency of the American Institute of Mining and Metallurgical Engineers for 1932.

OFFICERS elected at the twenty-fourth annual meeting at Atlantic City of the American Institute of Chemical Engineers were as follows: J. V. N. Dorr, *president;* A. E. Marshall, *vice-president;* F. J. LeMaistre, *secretary;* Martin H. Ittner, *treasurer;* David Wesson, *auditor,* and H. C. Parmelee, Willard Dow, J. G. Vail and R. T. Haslam, *directors.*

DR. R. S. BASSLER, since 1929 head curator at the U. S. National Museum and professor of geology at George Washington University, was elected president of the Paleontological Society of America and vice-president of the Geological Society of America at the recent meetings at Tulsa, Oklahoma.

AT the annual meeting of the Mineralogical Society of America, held at Tulsa, from December 29 to 31, the following officers and fellows were elected: *President,* Alexander N. Winchell, University of Wisconsin; *Vice-president,* Joseph L. Gillson, E. I. du Pont de Nemours and Company, Delaware; *Treasurer,* Waldemar T. Schaller, U. S. Geological Survey; *Secretary,* Frank R. Van Horn, Case School of Applied Science; *Editor,* Walter F. Hunt, University of Michigan; *Councilor,* 1932–1935, William J. McCaughey, the Ohio State University. The following fellows were elected: Dr. Olaf Anderson, Research Laboratory, United States Steel Corporation, Kearny,