OBITUARY

LOUIS WINSLOW AUSTIN

Dr. Louis Winslow Austin, a member of the staff of the National Bureau of Standards and an international authority on radio transmission, died in Washington on June 27, 1932, following a serious operation. He had been in poor health for some time.

Dr. Austin was born on October 30, 1867, in Orwell, Vermont, not far from Middlebury College, where he graduated in 1889. During the next four years he studied at Clark and at the University of Strasburg, where he received his doctorate. In 1893 he went to Wisconsin as a member of the physics staff of the university, and there he met Miss Laura A. Osborne, of La Crosse, whom he married in 1898.

Impressed with the spirit of German research, Dr. Austin returned to Germany in 1902, where he spent two years as a member of the staff of the Physikalisch-Technische Reichsanstalt at Charlottenburg. During these earlier years his interests were catholic, and his published papers of this period include a wide variety of subjects; but after 1904, when he was called to the Bureau of Standards, he devoted his energies almost wholly to a long series of radio researches, which brought him international recognition. From 1908 to 1923 he was in charge of the naval radio-telegraphic research laboratory at the Bureau of Standards, affording him unusual opportunities for long-range experiments. In collaboration with Dr. Louis Cohen he determined experimentally the relationship between the strength of transmitted and of received signals for distances up to 1,000 miles at sea, which formed the basis for the Austin-Cohen formula. now widely used in determining the service areas of transmitting stations. In recent years his work was confined largely to a study of the causes of vagaries in the strength of radio signals, a subject which had fascinated him from the beginning.

Dr. Austin was chairman of the American section of the International Scientific Radio Union and past president of the Institute of Radio Engineers. The medal of the institute was awarded him in 1927. Middlebury College conferred upon him the honorary degree of doctor of science in 1920. His confrères the world over recently bestowed upon him the greatest honor at their command by nominating him unanimously for the presidency of the International Scientific Radio Union.

Dr. Austin's gentle kindliness will linger in the memory of all who knew him. He was warm-hearted, modest, quiet, beloved by his friends. His devotion to his work speaks for itself in a last treasured note: "I am going into the hospital tomorrow, and if things

should go wrong, I most earnestly beg of you to see to it that the Bureau continues my signal measurement work, at least until such a time as all workers are agreed that other observations such as those on Kennelly-Heaviside heights can take the place of signal intensity measurements for correlation purposes."

His work is going on.

LYMAN J. BRIGGS

DR. HERMANN VON WECHLINGER SCHULTE 1876-1932

Dr. HERMANN VON WECHLINGER SCHULTE, professor of anatomy, and dean of the Creighton University School of Medicine, died at the age of fifty-five years on July 13 in Omaha, Nebraska. Dr. Schulte, the only child of an Episcopal clergyman, was born in Utica, New York, on August 9, 1876. He was educated at Trinity College, Connecticut, where he received his A.B. degree in 1897. Possessing a splendid training in the classical studies, he was eminently fitted to follow his father's course in the ministry, but chose instead a career in medicine. He was graduated with high honors as doctor of medicine at Columbia University in 1902. After his interneship he, under the able and inspiring leadership of Dr. G. S. Huntington, taught anatomy and did brilliant research at Columbia from 1904-17. The older anatomists well remember the chivalry and intellectual perspicuity displayed by Dr. Schulte during his discussion of anatomical papers at the yearly meetings of the American Association of Anatomists.

In 1917, Dr. Schulte accepted the professorship of anatomy at Creighton University. Two years later he was appointed dean of the medical school. It was at Creighton University that Dr. Schulte demonstrated his leadership in medical education. example and exhortation, he imparted to the minds of students, graduates and faculty members the conviction that the justification and purpose of a medical school was not only its artistry and science but primarily its service and benefit to the community. Much as he relished anatomic research, he purposely caused it to be supervened by research in the social sciences because he felt that they could most effectively give to the medical profession its necessary sociologic consciousness and adjust it to the ever-changing conditions of practice.

Because of his exceptional mastery of all branches of anatomy, Dr. Schulte's didactic lectures were highly informative, inspirational and provocative to independent thinking and study. As dean, Dr. Schulte excelled in pedagogy and psychology. He

loved students and was loved by them, for he believed in youth, despite its present veneer of cynicism and sophistication.

Dr. Schulte's scientific achievements in anatomical research, much of which was linked with the American Museum of Natural History, constitute outstanding contributions in the annals of American anatomy. His publications comprise such diverse subjects as the anatomy of whales, the lumbar vertebrae of Scutisorex, the venous system of marsupials and monotremes, the development of the neuraxis, fusion of cardiac anlages and formation of the cardiac loop, the development of the great veins and the hepatic circulation in the cat and the histogenesis of the salivary glands. His largest work is a monograph on the anatomy of the Sei whale (Balaenoptera borealis), a foetus specimen of which was taken by Roy C. Andrews at Aikawa, Japan, in 1910.

As a man of letters, Dr. Schulte was preeminently a philosopher and as such was highly honored in his community. In his passing medical education has lost an efficient leader, while philosophy has been deprived of a mind that should have recorded its struggles and triumphs and its ingenious welding of human adversities.

NICHOLAS A. MICHELS

RECENT DEATHS

Dr. J. Paul Goode, professor emeritus of geography at the University of Chicago, died on August 5, in his seventieth year.

MISS CAROLYN GESLER, assistant at the Yale Observatory since 1923, was killed in an automobile accident in Alabama on July 26.

SIR WILLIAM WILLCOCKS, British engineer, projector and designer of the Egyptian Assouan Dam, died on June 28, at the age of eighty years.

M. Alberto Santos-Dumont, the aeronautical inventor and pioneer, died at São Paulo on July 23, at the age of fifty-nine years.

Dr. Fran Jesenko, professor of botany at the University of Ljubljana, Jugo-Slavia, died in an Alpine accident on July 14. He was fifty-seven years old.

SCIENTIFIC EVENTS

THE VIENNA ACADEMY OF SCIENCES

AT meetings of the Vienna Academy of Sciences held on May 30 and 31, according to a report in Nature, Dr. Hans Molisch, emeritus professor of plant anatomy and physiology in the University of Vienna, was elected a vice-president, and Dr. Anton Eiselsberg, emeritus professor of surgery in the University of Vienna, was made an honorary member. In addition to various Austrian members, the following foreign elections were made: Dr. Franz Kossmat, professor of geology in the University of Leipzig; Dr. E. B. Wilson, professor of biology at Columbia University; Dr. Michael Rostovtzeff, professor of ancient history and classical archeology at Yale University; Dr. Hugo Obermaier, professor of ancient history at the University of Madrid, and Dr. Norbert Krebs, professor of geography at the University of Berlin, to be corresponding foreign members; and Dr. Friedrich Meinecke, professor of history at the University of Berlin; Dr. Eduard Schwartz, professor of classical philology at the University of Munich, and Dr. Jakob Wackernagel, professor of classical philology at the University of Basle, to be honorary foreign members. The following awards of prizes were also announced: The Ignaz L. Lieben prize, jointly to Dr. Georg Koller for his work on the acids of lichens and Dr. Alois Zincke for his researches on perylene; the Haitinger prize to Dr. Otto Redlich for his investigations on the constitution of

water and aqueous solutions; the Hansgirg prize to Dr. Hans Krumpholz for his determinations of the positions of double stars and comets; the Rudolph Wegscheider prize to Dr. Fritz Wessely for his work on glucosides, flavones and natural coumarins; and the Fritz Pregl prize to Dr. Moriz Niessner for his micro-analytical investigations on alloys.

THE JOURNAL OF CHEMICAL PHYSICS

As a part of its comprehensive program of physics publications, the recently formed American Institute of Physics has announced that it will shortly commence a new publication to be called the *Journal of Chemical Physics*.

The journal will be edited by Professor Harold C. Urey, of Columbia University, who is at present forming a group of associate editors to assist in reviewing contributed manuscripts. Among those who have allied themselves with Dr. Urey are Dr. Donald H. Andrews, of the Johns Hopkins University; Dr. E. U. Condon, of Princeton University; Dr. Wheeler P. Davey, of the Pennsylvania State College; Dr. David M. Dennison, of the University of Michigan; Dr. Karl F. Herzfeld, of the Johns Hopkins University; Dr. T. R. Hogness, of the University of Chicago; Dr. Eric R. Jette, of Columbia University; Dr. Frederick G. Keyes, of the Massachusetts Institute of Technology; Dr. G. B. Kistiakowsky, of Harvard University; Dr. E. O. Kraemer of E. I. du Pont de