limb of the fold. The trip ended at Ohiopyle, where the curious physiographic relations of the Youghiogheny River were observed. Exposures of the Allegheny series were seen. These rocks contain many plant impressions, and at one point a pothole six feet in diameter in them is exposed.

A complimentary smoker was given the conference by the Gulf Companies in their Pittsburgh laboratory on Friday evening, and the annual dinner was held at the Carnegie Inn on Saturday evening. During the smoker a short business session was held. It was unanimously voted to hold the 1935 meeting in or near Philadelphia since several invitations from geologists and institutions in that part of the state had been received. The advisability of holding the 1936 meeting jointly with the New York State Geological Association somewhere in the anthracite fields was favorably discussed, but no final action was taken.

Bradford Willard, Secretary-treasurer

PARTICIPATION OF AMERICAN CHEMISTS IN THE NINTH INTERNATIONAL CON-GRESS OF PURE AND APPLIED CHEMISTRY

THE Ninth International Congress of Pure and Applied Chemistry, the first world congress of chemistry to be held since that of New York in 1912, met at Madrid from April 5 to 11.

According to Industrial and Engineering Chemistry, from which the following facts are taken, the congress was a brilliant success. More than six hundred representatives, from some twenty-five countries, were in attendance with an equal number of chemists from Spain. The official delegation from the United States consisted of A. K. Balls, Edward Bartow, chairman, J. V. N. Dorr, Raleigh Gilchrist, L. W. Jones, G. N. Lewis, Atherton Seidell, Alexander Silverman, R. E. Swain and J. W. Turrentine. Harry N. Holmes and Burrows Morey were also officially delegated, but were unable to attend. Other American members in attendance included M. L. Crossley, R. K. Strong and A. Terry, Jr.

The provisions of the Spanish organizing committee for the scientific program were carefully made and the entertainment features and hospitality were lavish.

At the opening session the President of the Spanish Republic presided and the principal address was that by O. Ferandez, president of the congress, who spoke upon "The Evolution of Chemistry since the Last Congress in 1912."

There were four principal addresses.

- G. B. Bonino, of Bologna, "The Raman Spectra and New Ideas upon the Constitution of Aromatic Nuclei."
- R. Kuhn, of Heidelberg, "Flavine, a New Class of Natural Coloring Matters."

- A. de Galvez-Cañero, of Madrid, "The Metallurgy of Silver and Mercury." A historical paper.
- G. N. Lewis, of California, "Different Kinds of Water."

These were followed by twenty-one introductory addresses by leading chemists from all countries. In addition, some 250 papers were presented in the twelve different sections. Besides the introductory address on the isolation of the antineuritic vitamin, by Dr. Atherton Seidell, the following papers were presented by members of the American delegation:

Edward Bartow, "Glutamic Acid."

- R. Gilchrist, "A New System of Analytical Chemistry for the Platinum Metals."
- A. K. Balls and W. S. Hale, "Darkening of Apples."
- J. V. N. Dorr, "Chemical and Mechanical Aspects of Sewage Disposal Practise."

Dr. P. Walden, who was present at the eighth International Congress of Pure and Applied Chemistry in Washington and New York in 1912, and who at that time was chosen president of the conference to be held in St. Petersburg, in 1915, was present at Madrid. He presided at the closing session of the congress.

The next meeting of the International Chemical Union, to which the United States may send fifteen delegates, will be held in Zurich during the summer of 1936, whereas the International Congress of Chemistry, to which American chemists are invited, will meet in Rome in 1938. The following officers were elected by the International Union: President, N. Parravano, Italy; Vice-presidents, Edward Bartow, United States; M. Bodenstein, Germany; M. F. Fichter, Switzerland; K. Matsubara, Japan; E. Moles, Spain. The holdovers are: M. Delépine, France; R. H. Kruyt, Netherlands; J. F. Thorpe, England.

The decoration of Commander of the Spanish Republic was bestowed upon one representative from each of eleven countries, one coming to Dr. Atherton Seidell for the United States. Representatives of ten different countries were made corresponding members of the Spanish Academy of Science. Among these were Professor Edward Bartow, of the State University of Iowa. Honorary degrees were conferred by the University of Madrid on eight individuals, one from each country, and in this group is Professor Gilbert N. Lewis, of the University of California.

Messrs. Bartow, Jones, Lewis, Silverman, Swain and Turrentine were members of the council of the union at the Madrid meeting.

During their stay in Madrid the American delegates were informally received by Ambassador Claude H. Bowers, and the American Club at Madrid gave a luncheon at which the Ambassador and the delegation were guests of honor. On this occasion Dr. Bartow

introduced the members of the delegation and J. V. N. Dorr and Robert E. Swain made brief addresses.

ENGINEERING AND AGRICULTURE AT THE BERKELEY MEETING OF THE AMER-ICAN ASSOCIATION

At the meeting of the American Association for the Advancement of Science to be held in Berkeley from June 18 to 23, joint sessions will be sponsored by the Institute of the Aeronautical Sciences and the American Society of Mechanical Engineers. Cooperating with these groups are the Section of Hydrology of the American Geophysical Union, the Pacific Coast Section of the Society of Agricultural Engineers and the Western Inter-State Snow Survey Conference.

Subjects to be discussed will include various phases of fluid mechanics, structures of aircrafts, transport and management problems in aviation, engines and propellers. The meetings will cover three days, June 19, 20 and 21. At a dinner meeting on June 20, presentation of the Daniel Guggenheim Medal will be made by Major E. E. Aldrin, president of the Daniel Guggenheim Medal Fund.

With the exception of one session, all meetings will be held at the University of California. The section on engines and propellers will be held at Stanford University. The program also includes an inspection trip to Sunnyvale Air Base.

Institutions and organizations represented in the

meetings by papers and discussions include: University of California; California Institute of Technology; Columbia University; United States Bureau of Agricultural Engineering; Byron-Jackson Company; Worthington Pump and Machinery Company; California Farm Bureau Federation; Oregon State Agricultural College; University of Illinois; Standard Oil Company; Pacific Gas and Electric Company; Stanford University; Douglas Aircraft Company; Sperry Products, Incorporated; University of Washington; Boeing School of Aeronautics; United States Navy; Townsend Corporation; Nevada Agricultural Experiment Station; Washington Water Power Company.

Plans have been made for a three-day conference on land-use planning with Dr. Laurence Dudley Stamp, of the University of London, director of the land utilization survey of Great Britain, as one of the principal speakers. Dr. Stamp will speak on the opening day of the conference on "Land Utilization Survey of Britain, Its Aims, Methods of Work and Progress, and the International Significance of Some of the Problems Involved."

Other speakers on the tentative program include: Dr. L. C. Gray, U. S. Department of Agriculture; President H. L. Shantz, of the University of Arizona; Dr. C. L. Alsberg, of Stanford University; Paul Eke, of the University of Idaho; Rex Willard, Washington State College, and a number of representatives of the University of California.

SCIENTIFIC NOTES AND NEWS

A MEMORIAL meeting in honor of the late Dr. William H. Welch will be held in connection with the Berkeley meeting of the American Association for the Advancement of Science. The principal address will be made by Dr. Ray Lyman Wilbur, president of Stanford University and formerly dean of its medical school. Dr. Welch was president of the association in 1906.

On the occasion of the celebration of the sixty-ninth birthday of King George, the knighthood of the Order of the British Empire was conferred on Dr. Frederick Grant Banting, professor of medical research at the University of Toronto, and on Dr. Charles Edward Saunders, who served the Dominion Government for twenty years in the Experimental Farms Branch.

Dr. Hans Zinsser, professor of bacteriology and immunology at the Harvard Medical School, will go to the University of Paris for the second half of the academic year, 1934–35, as exchange professor from Harvard University. Dr. Jules Blache, professor of physical geography at the University of Grenoble,

will be exchange professor from France at Harvard for either the first or the second half of the year.

THE University of Wisconsin will confer at commencement an honorary degree on Dr. Karl Taylor Compton, president of the Massachusetts Institute of Technology.

McGill University conferred on May 29 the degree of doctor of laws on Dr. Frederick M. Becket, of New York, president of the Electro-Metallurgical Company and of the Union Carbide Company.

The degree of doctor of science was conferred on May 16 by the University of Manchester on Dr. Archibald V. Hill, since 1926 Foulerton research professor of the Royal Society. Dr. Hill was formerly professor of physiology at the university.

The doctorate of science was conferred upon Dr. R. B. Teusler, director of Saint Luke's International Medical Center, Tokyo, Japan, at the commencement exercises of the Medical College of Virginia on May 27. Dr. Teusler is an alumnus of the college.