cology of the School of Medicine of Marquette University, for a study of the problem of "the conversion of prothrombin to thrombin."

To the Medical School of the University of Minnesota, for an investigation to be made by Joseph T. King on the antagonistic effect of tissues on the action of sulfanilamide.

To Professor Edward S. West, of the Medical School of the University of Oregon, for an investigation of vesical calculi.

MONOGRAPHS OF THE IRON ALLOYS COMMITTEE OF THE ENGINEERING FOUNDATION

As the result of ten years of research by the Iron Alloys Committee of the Engineering Foundation and with the cooperation of eighty-eight manufacturers, research institutes, technical societies and federal bureaus, hitherto inaccessible information has been assembled from the scientific and technical literature of many nations. The cost of the investigation was $271,700.

This work is the first critical review of its kind ever attempted; approximately 10,000 papers have been read, and 20,000 abstracts have been prepared. Out of this mass of material, embracing international progress recorded since 1890, ten monographs containing 5,630 pages have been issued.

Of the 6,218 papers utilized in these publications, the United States contributed 2,708, or 43.5 per cent. Germany was second with 1,578, or 25.5 per cent.; England was third with 1,188, or 19.1 per cent.; France was fourth with 407, or 6.5 per cent., and Japan was fifth with 203, or 3.2 per cent. Sweden is credited with 71, or 1.1 per cent.; Russia with 24, or 0.4 per cent.; Italy with 23, or 0.4 per cent.; the Netherlands with 11, or 0.2 per cent. Five papers, or 0.1 per cent., originated in other countries.

There are nearly 2,000 publications in ten languages which contain frequent or occasional articles on ferrous metallurgy. Of these, approximately 150 contain important reports of metallurgical progress and research. All these journals have been searched completely from 1890 to date and have been abstracted in as much detail as necessary for the preparation of the monographs.

Four additional monographs are planned after the original program of the alloys of iron research is finished early in 1943. The committee recommends that thereafter an annual appropriation of about $15,000 be made so that the monographs may be revised and brought up to date at regular intervals.

The monographs were compiled under the direction of the twelve members of the Iron Alloys Committee, and of metallurgists and representatives of other technical fields. In addition, a large number of research workers supplied unpublished data. They include nearly two hundred Americans, eight Englishmen, seven Germans, two Czechs, two Japanese and two Swedes.

Monographs already available deal with alloys of iron and molybdenum, alloys of iron and silicon, alloys of iron and tungsten, alloys of iron and copper, principles of phase diagrams, the metal—iron, alloys of iron and carbon, alloys of iron and chromium, low-chromium alloys, alloys of iron and nickel, special-purpose alloys and high-chromium alloys.

Professor George B. Waterhouse, of the Massachusetts Institute of Technology, representing the American Institute of Mining and Metallurgical Engineers, is chairman and director of the committee. Other members are:

Lyman J. Briggs, director, National Bureau of Standards, represented by J. G. Thompson, senior metallurgist in the bureau; John W. Finch, director, United States Bureau of Mines, and R. S. Dean, chief engineer, Metallurgical Division, alternate; John Johnston, director of research, United States Steel Corporation, Kearney, N. J., representing the American Iron and Steel Institute; James T. Mackenzie, metallurgist and chief chemist, American Cast Iron Pipe Company, Birmingham, Ala., representing the American Foundrymen's Association; Dean Bradley Stoughton, of Lehigh University, representing the American Society for Metals; Jerome Strauss, vice-president of the Vanadium Corporation of America, Bridgeville, Pa., representing the American Society for Testing Materials; T. H. Wickenden, assistant manager, Development and Research, International Nickel Company, New York, representing the Society of Automotive Engineers; James H. Critchett, vice-president of the Union Carbide and Carbon Research Laboratories, New York, representing the American Electrochemical Society; Wilfred Sykes, director and assistant to the president of the Inland Steel Company, Chicago, member-at-large; Frank T. Sisco, metallurgist and editor; John S. Marsh, physical metallurgist and associate editor.

THE CINCINNATI MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE American Chemical Soicety will meet in Cincinnati from April 2 to 12. With the exception of the Division of Fertilizer Chemistry all divisions plan to present programs, including eight symposia, several of which will be held jointly by two of the divisions.

The programs of the divisions, as reported in *Chemical and Chemical Engineering News,* follow:

The Division of Agricultural and Food Chemistry has organized a Symposium on the Utilization of Agricultural Wastes, to which two sessions probably will be devoted. The Division of Biological Chemistry is joining in a Symposium on Sterols and Lipoids. Papers on miscellaneous agricultural and food subjects will be offered.

The Division of Biological Chemistry is also joining

with the Division of Medicinal Chemistry in a Symposium on Sulfanilamide and Related Derivatives. Time will be provided for sessions of general papers within the field of the division.

The Division of Cellulose Chemistry and the Division of Paint and Varnish Chemistry are sponsoring jointly a Symposium on Cellulose Plastics. Two sessions will be devoted to general divisional papers.

The Division of Chemical Education is again organizing a student program. In addition, the customary student breakfast will be held. The division will conduct a panel discussion on The Future of Chemistry as a Specialized Science in the High School Curriculum. It also plans two sessions for miscellaneous papers within its field. The usual luncheon will be held.

The Division of Colloid Chemistry will meet for one session of miscellaneous papers.

The Division of Gas and Fuel Chemistry is proposing to continue in Cincinnati the discussion of the papers which formed the Symposium on the Combustion of Solid Fuels given at the Boston meeting. Time will be provided for presentation of papers on miscellaneous subjects relating to fuel chemistry.

The Division of the History of Chemistry plans one session of miscellaneous papers at Cincinnati.

General papers will fill one day's program for the *Division of Industrial and Engineering Chemistry*. Also, it will sponsor a Symposium on Chemistry of Electrical Insulation.

The Division of Medicinal Chemistry, in addition to the joint symposium with the Division of Biological Chemistry, will hold two sessions for the presentation of miscellaneous papers on medicinal chemistry. A divisional luncheon will be held on Wednesday.

The Division of Microchemistry will meet for two sessions of miscellaneous papers.

The Division of Organic Chemistry will offer six sessions of papers.

The Division of Paint and Varnish Chemistry, in addition to a symposium with the Division of Cellulose Chemistry, is arranging for four sessions devoted to papers dealing with organic plastic coatings. Half a day will be taken up by papers presented by members of the Plastics Group.

The Division of Petroleum Chemistry will sponsor a Symposium on Fundamental Chemical Thermodynamics of Hydrocarbons and Their Derivatives under the chairmanship of F. D. Rossini. Time will also be available for other papers within the field of the division. The customary dinner will be held.

The Division of Physical and Inorganic Chemistry has organized symposia on the Application of Mathematics to Chemistry and on Phase Transitions. Sessions will be available for papers on physical, inorganic and analytical chemistry. The division will meet for dinner.

The Division of Rubber Chemistry plans to meet on Thursday and Friday for a program of papers on general subjects pertaining to rubber chemistry and technology.

The Division of Sugar Chemistry and Technology will present a program of miscellaneous papers in two sessions.

The Division of Water, Sewage and Sanitation Chemistry will have three general sessions. An inspection trip and divisional dinner also are scheduled.

SCIENTIFIC NOTES AND NEWS

THE diploma and medal symbolizing the awarding of the Nobel Prize in physics for the year 1939 were presented to Dr. Ernest Orlando Lawrence, head of the Radiation Laboratory of the University of California, on the evening of February 29. The presentation was made by the Hon. Carl Edward Wallerstedt, consul general of Sweden in San Francisco. Dr. Robert Gordon Sproul, president of the University of California, presided, and an address reviewing Dr. Lawrence's work and achievements was made by Dr. Raymond T. Birge, chairman of the department of physics. Dr. Lawrence closed the program with a speech of acceptance. The scroll of achievement as a "modern pioneer of science" of the National Manufacturers Association in recognition of his invention of the cyclotron was presented to Dr. Lawrence on February 23.

THE Leon P. Smith award for "outstanding service as a teacher" was presented to Dr. Stephen L. Taber, head of the department of geology of the University of South Carolina, at a dinner held recently at Wesleyan College, Macon, Ga. The Smith award, consisting of a gold medallion, was established two years ago by the Crucible Club, to be presented annually to the teacher of chemistry or geology "who has, through years of devotion to his chosen profession, exerted a real and significant influence upon the lives and thought of students of the Southeast." The first recipient of the award was Dr. E. Emmet Reid, professor emeritus of chemistry at the Johns Hopkins University, who is now engaged in directing the research work of students at the University of South Carolina and at other Southern institutions.

THE Lamme Medal of the American Institute of Electrical Engineers for 1939 has been awarded to Dr. Norman W. Storer, retired consulting railway engineer of the Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa., "for pioneering development and application of equipment for electrical traction." The medal and certificate will be presented to him at the annual summer convention of the institute, which is to be held in Swampscott, Mass., from June 24 to 28.

THE Carlos Manuel de Cespedes decoration of Cuba, commander grade, was conferred at Havana on Feb-