William J. Warren, Arcata, California, at the University of Illinois.

Milton G. White, Sacramento, at the University of California.

The work mapped out by these fellowship recipients is in every case highly technical, and ranges from a study of the scattering of cosmic rays, to be carried on by Mr. Pickering under Dr. Robert A. Millikan, to the effects of the invisible corona on the electric properties of rubber-insulated cable, the problem which is to be attacked by Mr. Warren. The fellowship granted to Mr. Pickering is a renewal, the original having been awarded a year ago.

Such fellowships have been granted by the Charles A. Coffin Foundation annually since 1922, when the foundation was created by the board of directors of the company for the purpose of assisting deserving college graduates in post-graduate work, of recognizing the achievements of electric power and electric railway companies, and of rewarding employees of the General Electric Company who advance the efficiency of the company or contribute by meritorious work to progress in the electrical arts.

The committee which determined the awards comprised Gano Dunn, representing the National Academy of Sciences; R. A. Seaton, representing the Society for the Promotion of Engineering Education, and H. P. Charlesworth, representing the American Institute of Electrical Engineers. This committee was assisted by Dr. W. D. Coolidge, director of the General Electric Research Laboratory.

THE FOURTH CONGRESS OF THE INTERNATIONAL SOCIETY OF SUGAR CANE TECHNOLOGISTS

AS the name indicates, the International Society of Sugar Cane Technologists is an organization of those investigators in the different sciences who devote their attention to the advancement of that portion of the sugar industry which depends on sugar cane. The society was formed in Honolulu in 1924, and including the meeting there it has held four congresses at intervals of about three years. The other meeting places have been Havana, Cuba, 1927; Soerabaia, Java, 1929, and San Juan, Puerto Rico, 1932. The society now has 589 members.

The proceedings of the fourth congress have now been issued. The book is imposing in size and the size of the volume does not belie the importance of the papers found between the attractive gray covers. Every branch of the cane sugar industry is undoubtedly represented, and the papers come from tropical and subtropical countries the world around. Besides general sessions, there were held meetings of the five sections, which consist of "Diseases of Sugar Cane," "Agronomics," "Varieties," "Factory Operation and Chemical Control" and "Insect Pests." Many of the papers are illustrated.

The book is divided into two parts, "Proceedings" and "Communications to the Congress." The latter consists of the 129 papers or "bulletins" which were presented. Each has its individual pagination, which is unfortunately rather confusing, but there is a complete table of contents with headings such as "Virus Diseases," "Technique of Field Experiments," etc.

The volume is printed as a "House Document" of the Government of Puerto Rico. It is dedicated to the Commissioner of Agriculture and Commerce, the Honorable Edmundo D. Colón. It is edited by Dr. Jaime Bagué, of the Department of Agriculture and Commerce. Dr. F. W. Zerban, of the New York Sugar Trade Laboratory, was general chairman of the Puerto Rico congress, and Mr. A. H. Rosenfeld, now of the Egyptian Ministry of Agriculture, was general secretary. Mr. M. A. del Valle, of Central Constancia, was assistant secretary. The various persons responsible for this volume are to be congratulated on their excellent work.

One of the resolutions recorded in these proceedings is of general interest. This is that "sugar cane" should be spelled as two words, not as one word or as two words connected by a hyphen.—*T. E. Holloway.*

PROPOSED GRANTS FOR SCIENTIFIC RESEARCH FROM THE PUBLIC WORKS BOARD

IT is reported by Science Service that a share of the $3,300,000,000 public works fund is being sought by government bureaus in order that the harm to scientific research work from "economy" cuts may be mitigated. Secretary of Commerce Roper has announced applications for grants to the Public Works Board that include: for the Bureau of Standards, $450,000; the Bureau of Mines, $275,000; the Bureau of Fisheries, $1,072,474; the Coast and Geodetic Survey, $3,500,939, and the Bureau of Lighthouses, $2,355,068. These funds are sought for "new projects" and if obtained it is expected that members of the scientific personnel furloughed for reasons of budget bureau "economy" slashes will be put back to work.

It is unofficially estimated that about half the 380 employees of the Bureau of Standards whose pay stopped on July 1 might be allowed to continue their work if the appropriation of $450,000 is granted by the Public Works Board.

The Bureau of Standards was affected severely by deductions of the budget bureau from the appropriations of 1934, it being allowed only $1,363,000 instead of the sum of $2,000,000, approximately, which was appropriated by the Congress. The Bureau of Standards is expected to play an essential part in the public works construction program by testing the

materials purchased. If this work can not be done on account of lack of funds, there is the possibility that the government will lose millions of dollars due to inferior materials being used by contractors.

Essential safety work and fundamental research for the mining industry of the Bureau of Mines will be rescued if the funds are granted to that bureau. Similarly, it is contemplated that the coastal mapping and triangulation work of the Coast and Geodetic Survey can be speeded up with employment of engineers and other technical men now out of work owing to the depression. The Bureau of Fisheries sees possibilities of serving the public good by expansion of its fisheries conservation and propagation work.

Applications have also been filed by Secretary Roper for public-works funds for reconditioning projects: Aeronautics, $487,500; the Coast and Geodetic Survey, $79,200; the Bureau of Fisheries, $230,000; the Bureau of Lighthouses, $2,283,920; navigation and steamboat inspection, $30,000; the Bureau of Standards, $148,500. These funds will be for repairing and modernizing buildings and equipment and are not expected to aid materially in salvaging scientific research.

Although no formal applications have been made by Secretary of the Interior Ickes for public works funds for carrying on some of the curtailed activities of the Geological Survey, such grants may be sought. Secretary Ickes has announced his determination to attempt to secure work for furloughed employees of his department with some of the new agencies of the government.

The effect of the economy program on the many research projects of the Department of Agriculture is not yet known. Changes are being made slowly and it may be several weeks before the details will be known. It is known that Secretary Wallace is determined that the scientific research of the department shall not be disrupted.

THE CHICAGO MEETING OF THE AMERICAN CHEMICAL SOCIETY

AT the meeting of the American Chemical Society, which opens on September 10 at the Chicago world's fair, there will be a banquet to honor those who attended the chemical meeting in 1893. *Industrial and Engineering Chemistry* points out that it is notable that those whose careers began at an American Chemical Society meeting at a world's fair forty years ago, when chemistry was but meagerly represented, can again gather at a world's fair where science is the keynote, and where the gains of forty years in chemical science and in chemical appreciation are so unmistakably shown by the character of the exhibits and by the place of honor given this branch of knowledge.

The following men now living are known to have attended the meeting of the American Chemical Society in 1893: W. D. Bigelow, A. W. Burwell, Pontius Conradson, F. B. Dains, Moses Gomberg, G. A. Goodell, C. H. Herty, William Hoskins, H. A. Huston, Louis Kahlenberg, J. B. Lindsey, K. P. McElroy, C. E. Munroe, W. A. Noyes, C. L. Parsons, C. L. Reese, George W. Rolfe, Ludwig Saarbach, A. H. Sabin, F. T. Shutt, H. E. Smith, Alfred Springer, Julius Stieglitz, A. L. Winton.

Should there be omissions from this list it is requested that Gustav Egloff, 2120 Straus Building, Chicago, be notified. The veterans of 1893 will be the guests of the Chicago Section on this occasion.

Four distinguished chemists from abroad will be guests of the society during its meeting. *Industrial and Engineering Chemistry* gives brief sketches of these men, directing attention to their principal interests and achievements:

GEORGE BARGER is fifty-five years of age and is the first occupant of a chair of medical chemistry in the University of Edinburgh. This chair was founded in 1919. He is an organic chemist who has devoted himself especially to the study of substances of biological and pharmacological interest. He prefers clear-cut results to speculation, and is most interested in the determination of the constitution of natural substances, and its confirmation by synthesis (of late years thyroxine, methionine, various alkaloids). Professor Barger is a corresponding member of various European academies, chemical and biological societies, and has received several honorary degrees including an M.D. degree from the University of Heidelberg.

J. N. BRØNSTED, professor of physical chemistry at the Physical-Chemical Institute of the University of Copenhagen, Denmark, is interested at present in problems having to do with the theory of acids and bases, and acid and basic catalysis, as well as the general theory of solutions.

PAUL KARRER, of Zurich, has confined his research during recent years chiefly to the pigments of plants and the vitamins. In connection with his work on the carotinoids he took up the question of the purification and constitution of vitamin A, and succeeded in preparing it in a highly purified state and also in elucidating its chemical constitution to a considerable extent. He has recently started some investigations on vitamin C.

RICHARD WILLSTÄTTER, formerly professor of chemistry at the University of Munich, is now carrying on private research in the laboratories of the Bayerische Akademie der Wissenschaften at Munich. He was Nobel Prize Laureate in chemistry in 1925. He celebrated his sixtieth birthday in 1932. From 1893 to 1910 Dr. Willstätter worked upon alkaloids, from 1904 to 1910 on quinones, later on the benzene theory, catalytic hydrogenation using