by the American Association of Cereal Chemists, given by this society to scientists who have made outstanding contributions in the field of cereal chemistry.

Dr. Gortner was a scientist whose mind had no racial or international boundaries. He was especially sympathetic towards the work of scientists laboring under adverse conditions. His intensely vital personality was evidenced in the enthusiasm with which he read in every field of thought, in the keen pleasure he took in scientific debate, in his passion for photographing in color a beautiful sunset at his lake cottage, and in his hearty laugh, his pride in his family and his division and in his loyalty to those whom he loved and admired. Those who in turn loved and admired him can not understand the necessity for his removal. Science in general will miss him sorely.

L. S. PALMER

UNIVERSITY OF MINNESOTA

RECENT DEATHS

DR. SIGISMUND SCHULZ GOLDWATER, commissioner of hospitals of New York City from 1934 to 1940, an authority on the construction and administration of hospitals, died on October 23 at the age of sixty-nine years.

PROFESSOR ROBERT WILCOX SAYLES, since 1907 curator of the Geologic Museum of Harvard University, died on October 23. He was sixty-four years old.

DR. ALBERT HASSALL, bibliographer and formerly assistant chief of the Zoological Division, U. S. Bureau of Animal Industry, died on September 18 at the age of eighty-one years.

DR. GEORGE GERALD HENDERSON, emeritus professor of chemistry of the University of Glasgow, died on September 28 at the age of eighty years.

SCIENTIFIC EVENTS

THE JAMES F. LINCOLN ARC WELDING FOUNDATION

THE James F. Lincoln Arc Welding Foundation, Cleveland, Ohio, for two and a half years has been carrying on its second industrial study on arc welding, for which 408 awards amounting to $200,000 have been made.

Results of the study show that the war industries have only begun to gain the benefits of modern arc welding; that further application of the welding process will cut expenses by hundreds of millions of dollars from the United Nations' war bill and will cut by 30 per cent. the time required to produce ships and planes. Arc welding will save an average of 300 pounds out of every ton of steel going into war production.

Papers were submitted from 46 of the 48 states, by engineers, designers, architects, maintenance men and executives throughout the industrial field. Altogether, 408 awards were made to 458 recipients. The studies for which the awards were made, according to a letter from Dr. E. E. Dreese, head of the department of engineering of the Ohio State University, chairman of the Jury of Award, indicated that

> the figures, based on representative products and structures, show a possible annual cost saving of $1,825,000,000. This includes 7,000,000 tons of steel valued at $271,000,000 and 153,000,000 man-hours of labor. This $271,000,000 is a conservative figure calculated at base prices of $34 per ton for billets and slabs and $42 for plate.
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> One representative study in the Progress Program reported that caissons under construction and projected for naval drydocks can be built by arc welding in one third less time, at a saving of 9,000 tons of steel, $3,540,000 in cost, also allowing armor plating for bomb protection with no more steel tonnage than older construction.
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> Another study reported that arc welding of propeller blades alone would save the aircraft industry $50,000,000 annually.
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> Conservative estimates, based on the reports, indicate an annual saving of $100,000,000 in the vast machinery-manufacturing industry which is vital to our national security in war-time and indispensable to our way of life in times of peace.

Members of the Jury of Award were: Dr. Dreese, *chairman;* Assistant Professor R. W. Ahlquist, electrical engineering department, the Iowa State College; Associate Professor Paul Andersen, civil engineering department, the University of Minnesota; Professor Allison Butts, electrometallurgy department, Lehigh University; Professor R. L. Dowdell, metallography department, the University of Minnesota; R. G. Dukes, dean of the Graduate School, Purdue University; Professor Herbert B. Dwight, electrical engineering department, the Massachusetts Institute of Technology; Assistant Professor Fulton Holtby, foundry practice, the University of Minnesota; Professor C. A. Koepke, mechanical engineering department, the University of Minnesota; Professor Arthur F. Macconochie, mechanical engineering department, the University of Virginia; O. W. Muckenhirn, instructor of electrical engineering, the University of Minnesota; C. T. Morris, head of civil engineering, the Ohio State University; J. B. Taylor, head of the department of accounting, the Ohio State University; L. F. Van Hagan, chairman of the civil engineering department, the University of Wisconsin; Professor Chilton A. Wright, civil engineering department, Polytechnic Institute of Brooklyn.

The three principal awards were:

$13,700, First Grand Award, Captain C. A. Trexel and

A. Amirikian, director of planning and design and designing engineer, respectively, Bureau of Yards and Docks, Navy Department, Washington, D. C.: Caissons for naval dry docks. Net savings for arc-welded caissons built and under contract $1,652,000. Savings on projected construction in the immediate future $3,540,000. Savings in steel (projects built 4,200 tons) and (caissons projected) 9,000 tons.

$11,200, Second Grand Award, John L. Miller, chief metallurgist, Gun-Mount Division, The Firestone Tire and Rubber Company, Akron, Ohio: Welding the 40mm Bofors anti-aircraft gun and how various parts were changed from riveted to welded design. Cost per chassis, welded, was $76.80 less than riveted construction. The total saving with 35,000 units is estimated at $6,000,000.

$8,700, Third Grand Award, H. Thomasson, welding engineer, Canadian Westinghouse Company Limited, Hamilton, Ontario: A new type of large mercury-arc rectifier, called ignitron, which requires extremely high vacuum. On a number of items, an average of 47 per cent. was saved in cost by using arc welding instead of an alternate construction. This amounted to $63,000 per year for the company, which, at the same rate, would be $166,000 for the industry.

THE CONSERVATION OF FISHERIES IN THE GREAT LAKES

THE International Board of Inquiry of the United States and Canada which has studied for two years the conservation of fisheries in the Great Lakes, according to a special dispatch to *The New York Times,* recommended on October 20 that, based on the results of common studies of these fisheries, regulations for their management be formulated and tested by a joint agency of the two countries. The recommendations are as follows:

1. That there be common investigation of the fisheries of the Great Lakes.

2. That, in so far as investigation shows fisheries to be dependent upon a common stock or to have the same conditions, regulations for management of these fisheries be formulated and tested by a common or joint agency.

3. That where investigations are not conclusive such common regulations be applied and the results therefrom carefully determined until there is adequate proof of their effectiveness for the purpose.

4. That the attention of the agencies concerned be drawn to the need (a) for accurate statistics of the take and of the fishing effort, (b) for separate statistics for each species of fish and (c) for separate statistics for each of such districts as may be defined in common agreement.

5. That thorough tests be made of the effectiveness of planting fish in a lake or lakes in order to determine whether the present planting of fish should or should not be continued or altered.

In a supplemental report the United States members suggest a form of agreement which would vest control in established agencies in Canada and the United States, with regulation handled through the concurrent action of federal and state governments.

Members of the board were Herbert R. Gallagher, chairman, assistant director, Council of State Governments, Chicago; A. G. Huntsman, consulting director, Fisheries Research Board of Canada, Toronto; John Van Oosten, United States Fish and Wild Life Service, Ann Arbor, Mich., and D. J. Taylor, deputy minister, Game and Fisheries Department, Toronto.

The establishment of the board grew out of a series of interstate and international conferences during the past few years by the Council on State Governments for the conservation of the Great Lakes fisheries. The problem of conserving the fisheries had also long engaged the attention of the Governments of Canada and the United States, the Province of Ontario and the States bordering on the Great Lakes. The production of some species of Great Lakes fish had reached low levels.

BIOLOGICAL ABSTRACTS

Biological Abstracts announces the establishment of a seventh section, which will be devoted to "Specially Assembled Abstracts of Food and Nutrition Research" to be initiated in January, 1943. This section will consist of an assembly and reprinting of all abstracts that deal with human and animal nutrition and metabolism, vitamins, diet and diet-deficiency diseases, food composition and values, food processing and food microbiology, beverages, storage and conservation of foods, food spoilage, in short, all biological literature that pertains to foods and nutrition.

Biological Abstracts has covered this literature ever since its establishment in 1926. In previous volumes abstracts pertaining to foods and nutrition have been dispersed throughout the entire volume, hence those whose special interests lay in the foods-nutrition field were able to obtain them only through the purchase of the five original sections. The segregation of the foods and nutrition abstracts in the new section will provide an abstracting service at greatly reduced cost.

Every possible effort is being made to cover the literature completely. Efforts to obtain abstracts of publications from continental Europe, now mostly unavailable to workers in this country, are continuing. In spite of the restrictions affecting the diffusion of research information occasioned by the war more than 1,700 periodicals in the biological field are being abstracted. The new section will therefore from the beginning afford practically a complete survey of the literature.

Each volume will consist of ten issues; subscribers will receive the index to the complete edition of *Biological Abstracts.* Inquiries should be addressed to *Biological Abstracts,* University of Pennsylvania, Philadelphia, Pa.