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