the division of biology and agriculture of the National Research Council. From 1926 to 1933 he was research associate, with professorial rank in zoology, at the Johns Hopkins University. Thereafter, impaired health compelled retirement, with only occasional scientific effort. Many summers from 1890 until 1935 were spent at Woods Hole, at the U. S. Fisheries Station or at the Marine Biological Laboratory, of which he was trustee 1896 to 1932, and emeritus thereafter.

Metcalf's publications include more than 125 titles, besides two books and other extended treatises. His earlier research studies were concerned with gastropods and tunicates (24 papers); his later interest centered in the protozoa, with special emphasis on the Opalinids, on which a major comprehensive work is now being issued by the U. S. National Museum. His membership in national and philanthropic societies included twenty-eight American, three British and three French. His official responsibilities in several of these are listed in "Who's Who." He was a member of the Authors Club, London.

He is survived by his wife, Ella Wilder Metcalf, of the same college class; a daughter, Mrs. William P. Beetham, and three grandchildren, of Waban, Mass.; and by a brother, Dr. Wilmot V. Metcalf, formerly professor of physical sciences in Carleton College and Fisk University, now residing in Clinton, N. Y.

Few men indeed meet life with the degree of fascination with things serious, *e.g.*, science, politics, philosophy, religion; in enjoyment of beauty—either in nature or of human production; in good fun and sport (an ardent golfer), as did Maynard Metcalf. He was a man of severely discriminating judgment, of positive opinions, of uncompromising devotion to integrity; he called himself "frankly Christian," a fact which we may allow showed itself in his spontaneous sympathies, his chronic cheerfulness and in the generosity of his spirit.

ROBERT A. BUDINGTON

OBERLIN COLLEGE

RECENT DEATHS

DR. ALVIN SAWYER WHEELER, Kenan professor emeritus of organic chemistry at the University of North Carolina, died on May 12 in his seventy-fourth year.

LEWIS VAN CARPENTER, professor of sanitary engineering at the College of Engineering of New York University and director of the Sanitary Engineering Research Laboratory conducted jointly by the college and the city, died on May 10 in his forty-fifth year.

DR. HUNTER ROBB, professor of gynecology of the School of Medicine of Western Reserve University, died on May 15 at the age of seventy-seven years.

DR. CHARLES DAVISON, an authority on earthquakes, died in Cambridge, England, on April 29 at the age of eighty-one years.

SCIENTIFIC EVENTS

THE ANNUAL REPORT OF THE FIELD MUSEUM OF NATURAL HISTORY

THE annual report for 1939 of the Field Museum of Natural History, of which Dr. Clifford C. Gregg is director, has been issued. It states that gifts and bequests of funds amounting to more than $730,000 were received during the year. Dr. Gregg points out that "the steadily decreasing rates of return from investments, and some degree of fear for the future on the part of citizens resulting in fewer contributions, combine to make the financial administration of this museum and other institutions similarly supported an increasingly difficult problem. A recent decision of the Illinois Supreme Court made inoperative the so-called 'museums act,' which brought to this institution approximately $100,000 per year from taxes as a contribution toward its maintenance."

The report presents a detailed outline of the activities of the museum administration, the scientific departments, the educational departments and the various small divisions entrusted with special phases of museum activities.

Dr. Gregg states:

1,410,454 people visited the museum in 1939. Of these, 94.1 per cent. were admitted free, and only 5.9 per cent. paid the twenty-five cent admission fee charged on certain days of the week. More than 100,000 persons attended free lectures for adults and free motion picture programs for children in the James Simpson Theatre of the museum, and lecture tours and other special events. Contact was made with 186,677 children in their schools through lectures presented in classrooms and assemblies by members of the staff of a museum division known as the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures. Approximately 500,000 children were served by the natural history lessons presented in traveling exhibits circulated on a bi-weekly schedule in all of Chicago's public schools, and many parochial, private and special schools as well. This activity is carried out through the museum department known as the N. W. Harris Public School Extension.

Combining the total number of visitors to the museum with the total of the children reached outside the institution by the Raymond Foundation and the Harris Extension, it is found that the museum's cultural influence was again extended directly to more than two million persons. In addition, there are the usual further extensions to incalculable numbers reached through less direct media such

as radio programs, publications and leaflets, and articles in newspapers and magazines.

The museum had ten expeditions in operation in the United States and foreign countries during 1939, and considerable field work on a smaller scale was also conducted. This extension of activity became possible only through the generosity of patrons who sponsored the most important expeditions. Without such assistance, the museum would have been unable to allocate adequate funds for this purpose.

The expeditions included one, sponsored by Stanley Field and led by Dr. Wilfred H. Osgood, chief curator of zoology, to collect specimens of the fauna of Peru, Bolivia, Chile and the shores of the Straits of Magellan; the Field Museum Archeological Expedition to the Southwest, also sponsored by Stanley Field, which excavated prehistoric American Indian sites in New Mexico under the direction of Dr. Paul S. Martin, chief curator of anthropology; botanical expeditions to Guatemala, the southwestern United States and Mexico; a zoological expedition to British Guiana; an ornithological expedition to the Yucatan Peninsula; paleontological expeditions to Colorado, South Dakota and Nebraska, and an expedition to collect and study the marine fauna along the Atlantic and Gulf coasts of Florida. A project for the making of photographs of type specimens of plants in the leading herbaria of Europe, conducted steadily since 1929 by J. Francis Macbride, associate curator of the herbarium, was continued through most of 1939.

Twenty-eight technical scientific publications, circulated internationally among museums, libraries, other institutions and individual scientists, were issued by Field Museum Press. The museum became a member of the University Broadcasting Council, to participate in educational work by radio; and, in cooperation with the Zenith Radio Corporation, presented experimental programs by television.

It is stated that the Works Progress Administration has taken an active part in the work of the museum. More than 262,000 hours of work were done by a force of from 125 to 219 persons.

THE STRUCTURAL STEEL WELDING RESEARCH COMMITTEE OF THE ENGINEERING FOUNDATION

THE formation of a Structural Steel Welding Research Committee to study problems of design and fabrication in the building field is announced by the Engineering Foundation.

Leon S. Moisseiff, New York consulting engineer and designer of the George Washington and Triboro bridges in New York and the Golden Gate and San Francisco-Oakland Bay bridges, has been chosen chairman. Other members are: F. H. Frankland, technical director of the American Institute of Steel Construction, New York; Jonathan Jones, chief engineer of Fabrication Division, Bethlehem Steel Corporation, Bethlehem, Pa.; C. H. Goodrich, chief engineer of the American Bridge Company, Pittsburgh, Pa.; A. S. Low, vice-president of the Austin Company, Cleveland, Ohio; Commander C. A. Trexel, design manager, Bureau of Yards and Docks, United States Navy, Washington, D. C.; La Motte Grover, engineer, Air Reduction Sales Company, New York; Professor Bruce Johnston, of Lehigh University. H. W. Lawson, engineer, Bethlehem Steel Corporation, and F. H. Dill, engineer, American Bridge Company, have been named alternates.

The program includes the establishment of research fellowships in American universities. The first fellowship goes to Lehigh University for a two-year period and carries with it an annual stipend of $1,100. Other fellowships will be established as soon as the committee maps a complete program of research projects. The investigations at Lehigh will be directed toward developing a satisfactory design procedure for beam-to-girder and beam-to-column connections for all kinds of welded building construction. The official statement points out:

> The work of the committee, in general, will be to secure basic data which will enable fabricators to apply welding in building with greater safety and with greater economy. By obtaining full information on the effects of varying loads on all classifications of welded connections, the committee hopes to perform a service for building engineers and aid them in setting up different formulas which will be applicable in each type of construction. At present there is a wide diversity of opinion regarding the best designs for various welded connections.
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> It is important that engineers have at least one continuing body from which the results of research in this field can be obtained. Formation of the committee will also assist the engineering profession in seeing to it that the development of structural welding is scientific and sound.

The Committee was organized by the Welding Research Committee of the Engineering Foundation, working in cooperation with the American Institute of Steel Construction. It is proposed that the research work of the new group should tie in with the studies in welding literature, the fundamental research investigations now underway in various universities, and the projects of the Industrial Research Division, all of which are sponsored by the Welding Research Committee.

The first Structural Steel Research Committee was established about fifteen years ago, but was discharged in 1938 after having exhausted its funds and completed the work originally outlined. The outstanding contribution of the body was the formulation of the Amer-