OBITUARY

JAMES W. GLOVER

THE passing of James W. Glover, long identified in many ways with the University of Michigan, marks an era in American mathematics whose continuance gives promise to extend indefinitely into the future. Probably in a greater degree than to any other single individual, the present place of actuarial mathematics, with the mathematics of finance and of statistics, owes its prominence in American colleges to this Michigan man.

Under the stimulus of Dr. Glover's active interest, Michigan began in 1906 to give courses in the mathematics of finance and insurance. The peculiar merit of this development lies in the fact that the necessary mathematical courses supporting sound instruction in actuarial science were immediately developed at Michigan. Within a few years, so rapidly because of the multiplicity of insurance investigations in the public eye and mind at that time, students in large numbers desirous of serious preparation for the expanding insurance fields came to Michigan for instruction.

Even in the early period elementary statistical courses received some attention. However, a few years later with the arrival of Harry C. Carver (1916), further statistical courses and also casualty insurance courses were developed. This was made possible as the broad and scholarly foundation which had been prepared for the actuarial courses served also for the newer developments. In this program Professor Glover participated in every way.

As early as 1906 Dr. Glover was appointed as consulting actuary to the Wisconsin Legislative Investigation Committee, continuing in Wisconsin the following year with the Joint Committee on Banks and Insurance. In 1896 the Canadian Royal Commission on Insurance summoned Professor Glover as expert. The National Government employed the Michigan teacher as expert special agent in the U. S. Census Bureau (1910), where he served many years, editing United States Life Tables of 1890, 1901, 1910 and 1901–10, published by the Government Printing Office. Such books are equivalent in circulation, often, to "best sellers." Connections Professor Glover had also with the Departments of Agriculture and Labor and the Treasury (Advisory Board, War Risk Insurance).

The State of Michigan and the university both called frequently upon their expert for his technical assistance. Both the Michigan Teachers' Retirement Fund and the favorable provisions made by the regents of the university for faculty retirement owe much to the activity of Michigan's actuarial department.

This type of service in the public interest so well

represented by the life of James W. Glover indicates, in a way, the most vital success of a professor in a state university. Instruction is, of course, the primary public service, but a state employee is obligated to direct his activities to protecting the public interest in other ways when possible.

For many years examinations for admission to the actuarial societies were held in Ann Arbor. This was but one piece of evidence of the large and important group of Michigan-trained members. Upon the retirement of Professor Glover, at seventy as required at Michigan, these national societies tendered a testimonial dinner in Chicago given by Glover's former students. Some two hundred, including many executives of major companies, attended.

A fellowship in insurance was established at this meeting in the name of the Michigan teacher.

Dr. Glover's long connection as trustee, elected by the members, with the Teachers' Insurance and Annuity Association culminated in his appointment as president of the company, in which office he served for two years, 1930–1932.

In the department of mathematics at Michigan, Dr. Glover rose with some rapidity after eight years of service as instructor in mathematics, to the rank of professor of mathematics (1911–1938), later serving also as chairman of the department.

As a teacher and as an administrator at Michigan, Professor Glover was in the highest degree successful. As an administrator Dr. Glover was quick to follow words of praise by action with respect to the budget. In the matter of books, journals, technical equipment and even research assistants, Professor Glover was ever quick to seize any opportunity to be of service to the men at Michigan. The men brought into the department during this period were selected with great care for their academic promise, which has in extraordinary measure been justified by their subsequent publications.

In 1900 Dr. Glover married Miss Alice Durfee Webber, of Ann Arbor, who, with the son, James W. Glover, born in 1901, survives him.

Undoubtedly the most important literary activity of Professor Glover was that in connection with the U. S. Ćensus Life Tables (1890, 1901, 1910 and 1901–1910), published in Washington. In addition to many articles, Professor Glover (with Harry C. Carver) in 1921 issued tables of compound interest functions, still published by George Wahr in Ann Arbor. A number of other important sets of tables and statistics followed upon this. In 1935 (with Walter O. Menge) was published the "Mathematics of Life Insurance" (Macmillan Company).

Such is the record of an active life, enriched by

many enduring friendships, covering many important developments in America's mathematical history, in the formative days of fields now of the utmost importance. LOUIS C. KARPINSKI

SCIENTIFIC EVENTS

THE FEDERAL DEPARTMENT OF HEALTH OF BRAZIL

THE correspondent of the Journal of the American Medical Association at Rio de Janeiro writes: "President Getulio Vargas has signed a decree reorganizing the national department of health. This reorganization and enlargement emphasize the interest that the present government has taken in problems relating to public welfare and gives to the federal bureau of health a status near that of a ministry. All activities related to problems of health under the federal government, with the exception of those concerning the child, have been consolidated under a general director in the Ministry of Education and Health. Even the well-known Oswaldo Cruz Institute, which previously enjoyed the position of an independent institution of research and study in the general field of experimental medicine, has been included in the new organization. The decree states that the national department of health will promote surveys, research relating to health, sanitation and hygiene, the epidemiology of diseases and the methods of their control and treatment and will directly administer the activities connected with these problems and others related to health.

"Dr. J. de Barros Barreto, an able sanitarian and executive, has been appointed director general of the department.

"The national department of health is composed of several divisions: the division of public health organization, which cooperates with the states and counties to create and conduct local health units; the division of hospitals, which is intended to foster throughout the country the creation and improvement of hospitals, a matter in which Brazil is well below her necessities, and the division of tuberculosis and the division of leprosy. The federal government has already appropriated and paid to more than twelve of the twenty states of Brazil the means to build and equip sanatoriums, preventoriums and leprosariums. The division of yellow fever includes the well-known organization developed with the cooperation of the International Health Board of the Rockefeller Foundation. The work against Aedes in the cities, which have been practically free of the disease for several years, and the work against 'jungle yellow fever,' still prevailing in many rural communities, including the extensive use of viscerotomy and vaccination, is already being performed by Brazilian personnel. The Rockefeller Foundation

conducts the Yellow Fever Laboratory, built within the premises of the Oswaldo Cruz Institute, where research is carried on and the vaccine is prepared. The division of malaria is expected to expand the antimalarial work. The Federal Bureau of Health was already doing the work against malaria, especially in the Federal District (suburbs of Rio de Janiero City), in the neighboring state of Rio de Janeiro and in the Gambia infected northeast area (states of Ceara and Rio Grande do Norte), the latter area where the Rockefeller Foundation has cooperated extensively. Other divisions are devoted to mental diseases, health education, plague, vital statistics, maritime quarantine and the licensing of drugs.

"Among the new functions of the Oswaldo Cruz Institute is the education of public health medical specialists, as the course in hygiene and public health has been transferred from the medical school of the University of Rio de Janeiro to the institute."

GRANTS OF THE GEOLOGICAL SOCIETY OF AMERICA

Among the grants authorized in May by the council of the Geological Society of America are the following:

General, Geomorphology and Stratigraphy-\$3,624.50.

Fritiof M. Fryxell, Augustana College, will spend ten weeks, with Leland Horberg, University of Illinois, and two assistants, studying the structure, erosional history and glacial geology of the Teton Range, Wyoming. \$440.

Lewis B. Kellum, University of Michigan, will return to northern Mexico to complete the mapping of Sierra de Tlahualilo and Sierra del Rosario in further study of the Coahuila Peninsula and the position of the continental margin in Mesozoic time. The University of Michigan will contribute an equal sum. \$2,000.

L. L. Ray, Michigan State College, and J. Fred Smith, Jr., Texas Agricultural and Mechanical College, will spend ten weeks mapping the geology of the Cimarron Range, New Mexico, in continuation of their study of the structure, physiography and geologic history of the Sangre de Cristo Mountains. \$525.

H. T. U. Smith, University of Kansas, will study periglacial phenomena, particularly those related to intensified frost action, in the Blue Mounds, Baraboo and Trempealeau regions of the Driftless Area of Wisconsin. \$87.

Arthur N. Strahler, Columbia University, will spend six weeks in the east Kaibab monocline and adjacent parts of the Grand Canyon region completing a study of the geomorphic history of the region in which in 1939 and 1940 he had assisted Donald L. Babenroth, deceased. \$287.50.

J. Stewart Williams, Utah State Agricultural College,