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,

will spend three months correlating the Carboniferous rocks of the Wasatch with those of the Uinta Mountains and those of southeastern Idaho. \$285.

Geochemistry-\$8,450.

Esper S. Larsen, Harvard University, will continue with the spectrographic determination of the rarer elements in groups of rocks from petrographic provinces. This work was begun under a previous grant from the society. \$2,250.

W. J. Mead, the Massachusetts Institute of Technology, in cooperation with Robley D. Evans, directing the work of Clark Goodman and Patrick Hurley, will conclude the investigation of the determination of the age of rocks by the helium method. \$6,000.

O. B. Muench, New Mexico Highlands University, will continue his investigation of the age of rocks and minerals by lead-uranium method by careful analysis of the minerals for lead, uranium and thorium. \$200. *Geophysics*—\$3,400.

Rev. Daniel Linchan, S.J., Weston College, Massachusetts, will conduct a series of seismic surveys in the Triassic formations of the Connecticut Valley to determine their depths and the characteristics of the major faults. \$400.

George P. Woollard, Princeton, N. J., is to make an areal gravitational and magnetic survey in the Atlantic Coastal Plain and Piedmont provinces from New Jersey at least through Virginia. Marked anomalies are known in the area, elevation data are largely available, and the geology is well enough known to play its vital role in interpretation. \$3,000.

Glacial-\$2,700.

J. Harlen Bretz and W. D. Jones, University of Chicago, will go to Alberta to map glacial moraines, correlate soil profiles with moraines and associated till sheets and study the relation of continental ice sheet moraines to the Cordilleran valley moraines in the latitude of Edmonton. \$450.

Max Demorest, Yale University, will complete his program of laboratory research on the physics and deformation of ice. \$100.

Hellmut de Terra, New School for Social Research, is to make a field study of late Quaternary glaciation in the Uinta Mountains in an effort to date certain Stone Age cultures discovered near Fort Bridger, Wyoming. \$375.

Chauncey D. Holmes, University of Missouri, will devote eight weeks to mapping the boundary between the Nebraskan and Kansan drift sheets in Missouri. He will also endeavor to obtain data on direction of ice movement through study of preferred long-axis directions of embedded stones. \$300.

Paul Mac Clintock, Princeton University, and Earl T. Apfel, Syracuse University, will work for ten weeks in the Salamanca re-entrant where the moraines of the Mississippi Valley region meet those of Pennsylvania and New Jersey. They are to correlate the Wisconsin drifts on the two sides of the re-entrant. \$600.

Hakon Wadell, University of Chicago, will make a comprehensive survey of the esker problem. \$600.

George W. White, University of New Hampshire, will study the drift border in eastern Ohio to determine whether there is more than one drift, the exact location of the drift limits and the mode of retreat of the last ice sheet. \$275.

THE ANNUAL REPORT OF THE DIRECTOR OF FIELD MUSEUM OF NATURAL HISTORY

THE annual report of Dr. Clifford C. Gregg, director of Field Museum of Natural History, a book of more than 150 pages illustrated with ten collotype plates, appeared on August 6. The report is several months later than usual due to unusual conditions in the division of printing.

It is recorded that Marshall Field, a member of the board of trustees, made gifts to the museum amounting to \$284,680. From Stanley Field, president of the museum, contributions totaling \$22,700 were received. Mrs. James Nelson Raymond, founder of the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures, which provides special museum services, provided \$6,000 to be used toward the operating expenses of the foundation. This foundation was established and endowed by Mrs. Raymond in 1925. Among other contributors are: Charles H. Schweppe, Chicago, \$2,500; Mrs. Clarence C. Prentice, Chicago, \$1,000; the Rockefeller Foundation, \$1,000. Legacies received during the year include \$10,000 from the late Frederick T. Haskell, and \$8,000 from the late William B. Storey.

The General Electric X-ray Corporation, Chicago, presented to the museum an x-ray apparatus, fluoroscopic screens, mechanical devices for automatic control and timing and all other accessories for an exhibit in which an Egyptian mummy is shown intermittently with the projection of the x-ray image of its skeleton. Additions were made to the collection of Chinese ivory objects through a bequest of the late Louis L. Valentine. Large and unusual specimens of game fishes were presented by Michael Lerner, of New York.

In the introduction to his report, Major Gregg states:

Again I am privileged to report substantial success in many lines of activity. Perhaps the principal emphasis has been placed upon the rehabilitation of the building itself. For several years financial conditions and the pressure of new construction and expansion have interfered to some extent with both ordinary and extraordinary maintenance of the splendid structure housing our collections. During the past year . . . necessary repairs have been made or are well under way.

The principal exhibition feature of note was the opening of the new Hall of Babylonian Archeology bringing to a culmination the work of about seventeen years, beginning with the Field Museum-Oxford University Expedition to Kish (1923-33).