

our coast survey was his compatriot, but in any case he succeeded in gathering a considerable mass of material about a man who contributed notably to the scientific work of America. The same spirit of careful research showed itself in his study of the history of limits and fluxions in England and in the investigation of the early mathematical sciences in the New World. By far his best work, however, is his "History of Mathematical Notations," a worthy culmination of his career as a historian. While it is greatly to be regretted that he did not live to publish his edition of the "Principia," he had the satisfaction of seeing this treatise on notations appear in a worthy form and of knowing that the scientific world fully recognized its merits.

His work was not by any means limited to his published books, however. He was a prolific contributor to a large number of scientific journals such as the *Bulletin* of the American Mathematical Society, *SCIENCE*, the *American Mathematical Monthly*, the *American Journal of Mathematics*, *Schlömilch's Zeitschrift*, *Silliman's Journal*, *The Scientific Monthly*, *Popular Astronomy*, the *Archivio di Storia della Scienza*, Loria's *Bollettino*, *Scientia*, *Bibliotheca Mathematica*, *Isis*, *Mathematical Gazette*, *Popular Science Monthly*, *School Science and Mathematics* and the *Publications* of the University of California and those of Colorado College. During his years at the University of California he contributed no less than 140 articles and reviews, all of high rank, to these and other periodicals.

His work was duly recognized by learned societies and by various colleges and universities. He was a member of the American Mathematical Society, the Mathematical Association of America, the Deutsche Mathematiker-Vereinigung, the Mathematical Association (England), the American Academy of Arts and Sciences and the American Association for the Advancement of Science, holding offices in at least two of these societies. He was honored by the degrees of Ph.D. (Tulane, 1894), LL.D. (University of California, 1912, and Colorado College, 1913) and Sc.D. (Wisconsin, 1913). As the leading historian of mathematics in this country, his loss will be deeply felt by all who have an interest in this important field of learning.

DAVID EUGENE SMITH

RECENT DEATHS

MR. MICHAEL B. RICH, president of the board of directors of Williamsport-Dickinson Seminary, Pa., was killed in an automobile accident on August 8.

FATHER JOHN GEORGE HAGEN, S.J., director of the Vatican Observatory, died in Rome on September 6 at the age of 83. He was formerly director of the astronomical observatory at Georgetown University.

WILLIAM NELSON REID, for several years metallurgist in charge of the heat treating department of the International Motor Company at Plainfield, N. J., died on September 3.

THE *Electrical World* reports the death in Milan of Professor Francesco Grassi, Italian electrical engineer, at the age of 78. Professor Grassi was one of the Italian delegates to the International Electro-technical Congress in Chicago in 1893.

Nature reports the following deaths: Dr. Henry Fraser, formerly director of the Institute for Medical Research, Federated Malay States, when he made valuable contributions to our knowledge of beri-beri, bacillary dysentery and leprosy, on July 17, aged fifty-seven years; Mrs. Albert Howard, second imperial economic botanist to the Government of India, who was associated with her husband in the work of the Institute of Plant Industry, Indore, on August 18, aged fifty-three years; His Grace the Duke of Northumberland, K.G., president of the Royal Institution and chancellor of the University of Durham, on August 23, aged fifty years; Professor Conrad von Seelhorst, professor of agriculture in the University of Göttingen, author of "Handbuch der Moorkultur," on July 6, aged seventy-seven years.

MEMORIALS

ON August 17 in the presence of the immediate family of the late Rear Admiral Robert Edwin Peary, U. S. N., and a large number of interested spectators, a boulder, bearing a bronze tablet describing the meridian line marked by Admiral Peary while a resident of Fryeburg, Maine, was unveiled with appropriate ceremony. The meridian has been used by surveyors since then, and is recognized by the United States topographical authorities for its accuracy. The principal speaker was Professor Alfred E. Burton, of Carmel, California, formerly dean of the Massachusetts Institute of Technology. Mrs. Peary unveiled the memorial, and Robert E. Peary, 2nd, spoke of his father.

SCIENTIFIC EVENTS

THE HARVARD SCHOOL OF GEOGRAPHY

ANNOUNCEMENT was made on September 14 by officials of Harvard University of the establishment of a

school of geography under the terms of a gift from a Harvard graduate, Dr. Alexander Hamilton Rice, of Newport, R. I., who is an amateur of the geographical

sciences and will serve as the first director of the institution, according to a report in the *New York Herald Tribune*.

The school is the second of its kind in the United States, and its building, which is in process of construction in Divinity Avenue, Cambridge, near the Semitic and University Museums and the University Press, is to be in Georgian style to harmonize with other Harvard structures. The roof will contain a chart house and will be flat to facilitate instruction and practice in field work and surveying. A library with stack rooms for 80,000 volumes, instrument room, drafting room, map room, wireless department and quarters for mathematical and physical geography are included in the plans.

The main objective of the school will be the teaching of the fundamentals of geographical science, with particular emphasis on the position of geography as a science concerned with the study of life and mankind. It will also be occupied with the correlation of the sciences of the biological group, for instructional purposes, with topography and regional geography and the principles of geographical description.

Instruction will be offered in the new auxiliary method of exploration and survey—photography from the air—together with the most approved and up-to-date methods of survey and field astronomy employed in work of an exploratory nature in regional geography. It is planned that the school shall take an active part in geographical exploration on various lines similar to that carried on at the English universities of Cambridge and Oxford.

Harvard officials point out that Cambridge is a particularly favorable location for the institution, since its quarters will be in the center of Harvard's scientific departments, from which every year numbers of expeditions go out to many parts of the earth in search of new material for study.

Dr. Rice has had extensive training and experience in the field of geographical exploration. In addition to his degrees from Harvard College and the Harvard Medical School he has received the diploma of the school of geographical surveying and field astronomy of the Royal Geographical Society and an honorary A.M. degree from Harvard University. He has organized and conducted seven expeditions into tropical South America and has explored, mapped and described an area of more than 500,000 square miles of the Colombian Caqueta, the Brazilian Amazonas and the Venezuelan Guayana.

Dr. Rice is vice-president of the American Geographical Society from which he received the David Livingstone centenary medal in 1920. He is also an honorary corresponding fellow of the Royal Geographical Society, which awarded him in 1914 its

Patron's gold medal, and he holds life memberships in numerous scientific and geographical societies of London, Paris, Rome and Madrid.

FALL MEETING OF THE AMERICAN ELECTROCHEMICAL SOCIETY

THE fifty-eighth meeting of the American Electrochemical Society will be held in Detroit, Michigan, from September 25 to 27, 1930, with headquarters and registration bureau at the Hotel Statler.

Registration will begin in the evening of September 24, on the ballroom floor of the Hotel Statler, where the registrar will receive arriving members and guests, distribute badges and programs, and give detailed information. Guests should be introduced by members and when registered may attend the sessions and receive such other courtesies as may be extended to them by the local committee or the officers of the society. Local members of other scientific societies, such as the Associated Technical Societies, the Society of Automotive Engineers, the American Chemical Society, the American Institute of Mining and Metallurgical Engineers, the American Electroplaters' Society and the American Institutes of Electrical Engineers and Chemical Engineers, are invited to register as guests without formal introduction.

All scientific and technical sessions will be held in the small banquet room on the ballroom floor of the Hotel Statler. The informal round table discussion on electric furnace gray iron will be held Friday noon, in the large banquet hall. Dr. Richard Moldenke, noted iron metallurgist, will open the discussion.

The electrochemists will visit the plants of the Ford Motor Company, Parke, Davis and Company, Champion Porcelain Company, Hoskins Manufacturing Company, Ternstedt Manufacturing Company and the General Motors Research Laboratories. By special invitation from Mr. Henry Ford, they will have an opportunity to inspect the Ford Village with its unique collection of old machinery and equipment of great historical interest. Leaving the village, they will adjourn to the airport to witness special stunt flying.

At noon, Thursday, there will be an informal luncheon in the large banquet hall in the Hotel Statler and in the evening there will be a theater party. On Friday evening there will be an entertainment on the Canadian shore.

The following persons will present papers in the order given:

Karl Pitschner, Firestone Steel Products Company; D. L. Hippensteel and C. W. Borgmann, Bell Telephone Laboratories; O. W. Storey, C. F. Burgess Laboratories; E. Newberry, University of Cape Town,