

SCIENTIFIC EVENTS

INTERNATIONAL MAP OF THE ROMAN EMPIRE

THE *Geographical Journal* reports that at the International Geographical Congress at Cambridge last year the proposal, made in a paper read by Mr. O. G. S. Crawford, was adopted that a map should be published of the Roman Empire, based on the International 1/M map of the world. A special commission was appointed, with Brigadier Jack, director-general of the Ordnance Survey, as president, and Mr. O. G. S. Crawford as secretary. This commission held its first meeting in Florence on April 30 and May 1 this year. Representatives of Italy, Spain and Great Britain were present and the general character of the map was decided upon. A report of the conclusions reached has just been published. The first edition of the Ordnance Survey Map of Roman Britain was adopted as a general model. The area to be covered was fixed as that of the Roman Empire at the time of its greatest extent, the time ranging from the first appearance of the Romans in each region down to the fall of the Western Empire. In compiling the map the sheet of the 1/M map is to form the unit in each case, and the commission hopes to arrange for the printing and publication of each sheet by the government responsible for the corresponding 1/M sheet. A list of the 1/M sheets which will make up the map, with the name of the country whose government is responsible for their publication, is given in the report, as well as an index map.

The commission recognizes that many difficulties will arise in selecting the features to be shown on the map, but points out that it is of first importance to keep the map as clear and simple as possible. Further, the aim of the map is historical and not archaeological—to show the distribution and character of population, the names of towns and natural features and the economic and social conditions of the period. Only Roman remains will be shown, and of cities only those inhabited during the Roman period, as defined above, or during some portion of it. The inclusion or omission of any site, however, will have to be decided on individual merits and not by any hard-and-fast rules. In addition to the names of inhabited sites, the commission states that wherever possible the names of topographical features should also be shown. The ancient name will be engraved in characters based on those used on Trajan's column, and the modern name in italics beneath.

The commission hopes to have several sheets published before the next meeting of the International Geographical Union at Paris in 1931. Sheet North K 33, on which Rome appears, is already in prepara-

tion, and will be printed with other Italian sheets by General Vacchelli, director of the Istituto Geografico Militare at Florence, on behalf of the Italian government.

AEROLOGICAL RESULTS OF THE GREENLAND EXPEDITIONS OF THE UNIVERSITY OF MICHIGAN

THE aerological observatory of the University of Michigan, located at Mount Evans in southwest Greenland (Lat. $66^{\circ} 55'$ N. Long. $50^{\circ} 50'$ W.), was closed on the twenty-ninth of July, 1929, after being in continuous operation for a period of two years. The several buildings and nearly all the meteorological and wireless installation have been left intact with a view to a possible reopening later. The winter staff of three men bringing the observational data for the last thirteen months reached Copenhagen on August 19, and the aerological and meteorological data for the entire two years are now at Ann Arbor being reduced for early publication.

To the records from Mount Evans, which include one or more pilot balloon ascents for each clear day, are to be added ninety-four ascents which were carried out during the summer of 1926 at the provisional station of that year on the Maligiakfjord located about fifty kilometers east of Holstensborg and about midway between Mount Evans and the coast. The balloon runs carried out at Mount Evans during the first eleven months numbered 337 and these were followed to an average altitude of about 7,000 meters. For the last thirteen months they numbered 439, making 776 in all. Two exceptional runs were followed to altitudes of 27,000 and 29,000 meters, respectively.

The aerological work of 1926 was in charge of S. P. Fergusson, that at Mount Evans between July 21, 1927, and May 28, 1928, in charge of Clarence R. Kallquist (each man on leave at the time from the U. S. Weather Bureau), that from May 28 to July 10, 1928, in charge of William S. Carlson, and that from July 10, 1928, to July 21, 1929, in charge of Leonard R. Schneider.

S. P. Fergusson, who has acted throughout in an advisory capacity, has been made editor of the aerological and meteorological data and is now on leave directing the work at Ann Arbor. Dr. C. F. Marvin, chief of the U. S. Weather Bureau, has from the beginning cooperated in the loan of meteorological equipment and has now generously granted to Mr. Fergusson the leave to undertake this work.

A comparative study of weather records has been undertaken on the basis of a secondary station established and maintained by the expedition since the summer of 1927 at Holstensborg in the same latitude

but on the coast. The records made there will be compared with those taken at Mount Evans and with others taken in a tent station upon the ice-cap about thirty miles east of Mount Evans during a period of fifty days in the months of January, February and March, 1928. This comparative study, which is of great importance in view of the peculiarly local character of Greenland weather observations, is in charge of Dr. J. E. Church, Jr., a member of two of the expeditions and the companion of Helge Bangsted in the winter ice-cap expedition of 1928. The first volume ("Aerology") will include the tabulated aerological observations with accompanying graphs.

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CHEMICAL EDUCATION AT THE JOHNS HOPKINS UNIVERSITY

As has been recorded here the Francis P. Garvan Chair of Chemical Education was dedicated at the Johns Hopkins University on October 11. An article in *Industrial and Engineering Chemistry* reports that the dedication took place with due ceremony in the main auditorium of Remsen Hall at Homewood, the dedicatory address being given by Dr. Joseph S. Ames, president of the university. In response an address prepared by Mr. Garvan was read. Dr. John J. Abel and Dr. Irving Langmuir spoke on "The Education of the Superior Student," and in the afternoon a conference on "The Selection and Training of the Superior Student" was held, attended by the donors of fellowships and by distinguished guest chemists and educators, as well as officials and chemistry faculty of the university.

In the evening Dr. C. E. K. Mees, director of research of the Eastman Kodak Company, gave a popular illustrated lecture on "The Formation of the Photographic Image." This was the first of a series of public lectures to be given at the Johns Hopkins University during the academic year under the newly established A. R. L. Dohme lectureship. The lecturers announced in addition to Dr. Mees include the following: Max Bodenstein, Frederick George Donnan, R. A. Millikan, F. O. Clements, F. G. Cottrell, C. M. A. Stine, W. B. Brockway, John J. Abel, F. C. Frary and N. A. Shepard.

The new plan for the selection and training of superior students in chemistry, recently formulated at the Johns Hopkins University, was initiated simultaneously with the dedication. In all, nineteen fellowships have been established on this plan, each providing \$1,000 annually for four years, continuance from year to year depending on a satisfactory record. Nine holders of fellowships have already enrolled. The donors and the states from which the students will come are as follows:

Eli Lilly Co., Indiana.
 Firestone Tire and Rubber Co., Ohio.
 J. T. Baker Chemical Co., New Jersey.
 H. A. B. Dunning, Maryland.
 Bill Raskob Foundation, Delaware.
 Brown Co., Maine and New Hampshire.
 Kewaunee Mfg. Co., Wisconsin.
 General Motors Corp., Michigan.
 Carbide and Carbon Chemicals Corp., West Virginia.
 William S. Speed, Kentucky.
 Fleischmann Co., Washington.
 Francis P. Garvan, New York. One for New York State, one in honor of his mother, Mary Carroll Garvan, and one in honor of his father, Patrick Garvan, of Connecticut.
 John Wiley & Sons, Pennsylvania.
 U. S. Industrial Alcohol Co., Louisiana.
 Hormel Foundation, Minnesota.
 E. I. du Pont de Nemours & Co., Inc., Virginia.

FORESTRY EDUCATION

PLANS for an investigation of the problems of forest education are being sponsored by the Society of American Foresters, with Dr. Henry S. Graves, dean of the Yale School of Forestry, as director. The inquiry has been made possible by a grant of \$30,000 by the Carnegie Corporation of New York.

The responsibility for the conduct of the inquiry has been delegated to Dean Graves, *director*; C. H. Guise, assistant professor of forest management at Cornell University, *assistant director*; Dr. George A. Works, president of the Connecticut Agricultural College, adviser in the field of education, and Dr. E. J. Kraus, professor of botany at the University of Chicago, adviser in the general field of science. The inquiry will first secure information about forestry as an occupation, about institutions now teaching forestry and about the success and shortcomings of the present systems of forest education. The information will then be analyzed and a solution to educational problems will be attempted. Information will be sought as to the number of trained men who may be absorbed in each type of occupation in forestry, the opportunities for advancement, compensation, living conditions and opportunities for creative work and community service. A comparative study of forest education in foreign countries will be made. A large amount of information has already been obtained from the National Academy of Sciences. Special attention will be given to the systems of forestry in Canada, Europe and the Orient.

The special committee of the Society of American Foresters, which will assist in the inquiry and which may be enlarged later, includes Robert Y. Stuart, chief forester, U. S. Forest Service, *chairman*; Irving W. Bailey, professor of plant anatomy, Harvard University; Earl H. Clapp, chief of the branch of re-