tion he received the doctorate of science in 1897 after having spent two years at Berlin where he completed his first important piece of experimental work. Unlike the majority of foreign students in Berlin in those days, Nichols worked on a problem of his own devising. He appeared older and more experienced than most of his fellow students in the laboratory, though he was not yet twenty-five years old, and his assiduity and his patience in overcoming great experimental difficulties was amply rewarded by his producing a very fine piece of work. This first important research of his was the study of the optical properties of quartz in the infra-red region of the spectrum and the results which he obtained led directly to the perfection of the so-called method of residual rays which has been used with conspicuous success by Rubens and his fellow workers in investigating the extensive infra-red spectrum. Before he left Berlin at the end of his second year, Nichols had published important papers in collaboration with Rubens and he was regarded both in Europe and America as an experimental physicist of extraordinary ability. In the course of the next ten years he held successively the positions of professor of physics at Colgate, Dartmouth and Columbia, and during this period his research work was largely directed towards the experimental verification of certain predictions of the dominant electro-magnetic theory of light. One of these predictions, that a beam of light should exert a minute pressure on an object in its path, had been looked for without success until Nichols, in collaboration with Hull, in America, and Lebedew in Russia, independently discovered and measured this minute effect and found it to be in accord with the theory.

In 1909 he gave up for a period of seven years his chosen field of work to become president of Dartmouth College. Throughout this period, embracing as it did the best years of his professional life, he cherished the hope that he might return to the life of productive scholarship which he had had to abandon in assuming heavy administrative duties. In 1916 he went to Yale as professor of physics, but his hopes of leisure for research in pure science were not to be fulfilled, as the approaching entry of America into the world war made it necessary to organize the scientists of the country for research and invention along lines having immediate practical value in war. Dr. Nichols was among the first to offer his services to the government through the National Research Council which he had helped to organize, and he was an active member of the group engaged in the study of antisubmarine defense in the early part of the war and was connected with the department of Naval Ordnance during the entire period of America's participation in the war.

In 1920 he became the director of research in pure science in the laboratory of the National Lamp Works in Cleveland, a position which, but for a short period of time, he occupied until the time of his death. In 1921 he was inaugurated president of the Massachusetts Institute of Technology, but owing to serious ill health was unable to continue in office for more than a few months.

Of the thirty years between the publication of his first important paper and his death, about one third was devoted to purely administrative work and this period was that during which discoveries of the most far reaching importance to physics were being made. When Nichols returned to experimental investigation, he felt that he had almost to learn his own subject over again, and he told many of his friends that it seemed to him that he should never regain a firm grasp of it. He did this, however, in spite of delicate health, and in the end was contributing regularly to the physical journals and reading papers before the American Physical Society and the National Academy of Sciences. His modesty with regard to his own place in American science was so great that one wishes he might have known what was to happen at his death: that the most distinguished gathering of his fellow scientists of America were to stand uncovered, bowed and sorrowful, at the tragic loss of an honored colleague as his dead body was born through their ranks.

AUGUSTUS TROWBRIDGE

PRINCETON UNIVERSITY

SCIENTIFIC EVENTS

RESOLUTIONS IN MEMORY OF JOHN M. STILLMAN

THE California Section of the American Chemical Society has passed the following resolutions on the demise of John M. Stillman:

WHEREAS, In the death of John M. Stillman the California Section of the American Chemical Society has suffered the loss of a loyal, distinguished and much loved member, and

WHEREAS, The members of the section were for many years inspired by the messages that he conveyed to them in meetings of the society, and in the class-rooms of the University of California and of Stanford University, and

WHEREAS, The passing of Dr. Stillman has deprived our profession of an earnest and skilful worker and valued contributor to chemical literature, and

WHEREAS, We are deeply thankful that it has been our privilege to have known him as teacher, colleague and friend; therefore, be it

Resolved, That the California Section of the American Chemical Society share with the members of the family of Dr. Stillman their sorrow. The society extends to them heartfelt sympathy; and be it further

Resolved, That this resolution be spread upon the minutes of the John M. Stillman Memorial Meeting held on February 29, 1924, and that a copy be sent to the secretary of the society, Washington, D. C.

EXPEDITION TO MEXICO OF THE NATIONAL GEOGRAPHIC SOCIETY

THE National Geographical Society will send an expedition to Mexico to uncover the oldest structure yet found on the American continent. The ruins of Cuicuilco, south of Mexico City, have been called the Pompeii of the Western World. They have disclosed an artificial mound 412 feet in diameter and 52 feet high, according to observations made by Professor Byron Cummings, leader of the present expedition. Skeleton remains of the Americans of 7,000 years ago, specimens of their emblems and idols and pieces of their earthenware were found at Cuicuilco by Dr. Cummings.

The mound was sealed and preserved by lava from the Crater Xitli. The Aztecs of Mexico were preceded by the Toltecs, and the Toltecs were preceded by a primitive people whose traces were embalmed in lava. But the volcanic forces in the Valley of Mexico have performed a more amazing feat of preservation than did Vesuvius at Pompeii, for under the present surface blanket of lava, known as the Pedregal, there is another and much earlier lava blanket. It is this earlier lava flow which encases the relics of Americans of 8,000 years ago, and which, it is hoped, will disclose remains of a civilization that existed even before the primitive predecessors of the Toltecs invaded the historic valley. The lava-covered plain known as the Pedregal, or Stony Place, is 15 miles in length and about 3 miles wide.

The expedition will begin work early in June, with the aid of three assistants, and peon laborers provided by the Mexican government. Nelson H. Darton, of the U. S. Geological Survey, will join the party later to make a special study of the lava flow and thus determine the precise age of the ruins.

ACTIVITIES OF THE ROCKEFELLER FOUNDATION

ACCORDING to a summary issued by the Foundation during the year 1923 the International Health Board, the China Medical Board and the Division of Medical Education of the Rockefeller Foundation:

Supplied fellowship funds for 636 individuals in 29 different countries;

Supported through the League of Nations interchange institutes for 54 public health officers from 27 nations;

Arranged international visits of one commission and of 24 visiting professors;

Furnished emergency relief in the form of medical literature or laboratory equipment and supplies to institutions in 15 European countries;

Sent scientific materials to Japan after the earthquake and invited a group of Japanese medical scientists to use the laboratories of the Peking Union Medical College as guests of the institution;

Continued to contribute to schools or institutes of hygiene at Harvard, London, Prague, Warsaw and Sao Paulo, Brazil;

Cooperated in nurse training at Yale University and in France, Belgium, Brazil, China and the Philippines;

Accepted an invitation from Brazil to participate in a comprehensive attack upon yellow fever;

Had a share in demonstrations of malaria control in 12 American States and conducted malaria surveys or studies in the United States, Brazil, Australia, Nicaragua, Porto Rico, Salvador, the Philippine Islands and Palestine;

Either continued or began antihookworm work in conjunction with 20 governments in various parts of the world;

Contributed to 183 county health organizations in the United States, New Brunswick (Canada) and Brazil;

Continued a study of the medical schools of the world by visits to Belgium, Austria, Czechoslovakia, Germany, Hungary, Poland, Turkey, Hongkong, the Straits Settlements, Siam, Canada, England, Scotland, Wales, the Netherlands, Mexico and Colombia;

Offered to contribute 280,750 pounds sterling to the development of medical education in certain universities in the British Isles;

Gave $500,000 to the University of Alberta, and pledged $250,000 to the University of Pennsylvania toward buildings for anatomy and physiological chemistry;

Continued to support a modern medical school and teaching hospital in Peking;

Aided two other medical schools and 25 hospitals in China;

Assisted premedical education in several institutions in China and agreed to do this also in Bangkok, Siam;

Lent representatives to governments and institutions for various types of counsel and service;

Continued to support a disease reporting service of the Health Section of the League of Nations;

Contributed to mental hygiene projects, demonstrations in dispensary administration, organization of dispensary work in France, and to other undertakings in the fields of public health and medical education.

THE PENNSYLVANIA ACADEMY OF SCIENCE

THE Pennsylvania Academy of Science was organized at a meeting held in Harrisburg on April 18. Representatives of the faculties of various universities and colleges, officials of certain state departments and high-school instructors adopted a temporary constitution and elected officers for the current year. The aim of the organization, according to the constitution, is to "promote scientific research and the diffusion of