At the University of Pennsylvania Roland Morris, formerly U. S. Ambassador to Japan, will preside. The speakers will include Dr. Edward P. Cheyney, professor of history at the University of Pennsylvania; Dr. Marion Park, president of Bryn Mawr College, and Dr. E. G. Conklin, professor emeritus of zoology, Princeton University, and executive vice-president of the American Philosophical Society. In Boston, Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, will preside at a similar meeting, and at the University of Illinois, the meeting, sponsored by seven members of the National Academy of Sciences, will be presided over by Professor Roger Adams.

Plans are under way for meetings at the University of California, Stanford University, the University of Wisconsin, the University of Nebraska, the University of Oklahoma, Purdue University, the University of Kentucky, Miami University, the University of Virginia, Duke University, Connecticut State College, Dartmouth College, Syracuse University, the University of Pittsburgh and other institutions.

THE SECOND ANNUAL WILLIAM LOWELL PUTNAM MATHEMATICAL COMPETITION

PROFESSOR W. D. CAIRNS, secretary of the Mathematical Association of America, announces that the second annual William Lowell Putnam Mathematical Competition will be held on March 4, 1939. This competition was held for the first time last April, and aroused much interest among colleges and universities in the United States and Canada, sixty-seven of which entered one hundred and sixty-three competitors. At that time the University of Toronto won the $500 first prize, with the University of California and Columbia University winning the $300 second and $200 third prizes, respectively. Individual winners were scattered over the continent and were about evenly divided between colleges and universities.

Colleges and universities may enter teams of three or individual contestants; applications may be secured from the Secretary of the Mathematical Association of America and must be filed with him by February 15, 1939.

The competition consists of two three-hour examinations, constructed to test originality as well as technical competence. Questions will be taken from the fields of calculus (with applications to geometry and mechanics), higher algebra, elementary differential equations and geometry.

The first prize is $500 to the department of mathematics with the winning team; second and third prizes are $300 and $200, respectively. Each member of the three winning teams receives $50, $30 or $20 according to the standing of his team.

Each of the five highest-ranking individuals receives a prize of $50, and from this group is selected the one to receive the $1,000 William Lowell Putnam Prize Scholarship at Harvard University (or Radcliffe College, if the winner is a woman). Medals also are awarded to the five highest-ranking individuals as well as to the members of the three winning teams.

Honorable mention will be given this year to the three departments whose teams rank next after the winning three and to the five individuals ranking next after the winning five.

The competition, open to undergraduates in colleges and universities of the United States and Canada, is made possible by the trustees of the William Lowell Putnam Intercollegiate Memorial Fund, left by Mrs. Putnam in memory of her husband, a member of the Harvard Class of 1882. It is designed to stimulate a healthful rivalry in undergraduate work in mathematics.

Complete details concerning the rules of the competition will be found in the January, 1938, issue of the *American Mathematical Monthly* and in pamphlets being distributed to colleges and universities in the United States and Canada. All correspondence should be sent to W. D. Cairns, secretary of the Mathematical Association of America, Oberlin, Ohio.

AWARDS OF THE GEOLOGICAL SOCIETY, LONDON

THE Council of the Geological Society, London, has made the following awards:

The Wollaston Medal.—Frank Dawson Adams, emeritus professor of geology and paleontology in McGill University, for his researches on the pre-Cambrian rocks and on the influence of high temperatures and pressures on the properties of rocks at great depths in the earth's crust.

The Murchison Medal.—Harold Jeffreys, M.A., D.Sc., F.R.S., in recognition of the value of his researches on the constitution and physics of the earth's interior, and, in particular, of the deductions he has drawn from the analysis of records of distant earthquakes.

The Lyell Medal.—William Noel Benson, B.A., D.Sc., professor of geology in the University of Otago, N. Z., in recognition of the wide range and excellence of his geological researches, particularly in New Zealand.

The Prestwich Medal.—Samuel Hazzledine Warren, F.G.S., in recognition of his researches on the geology and archeology of East Anglia, particularly of the Lea Valley.

The Bigsby Medal.—Arthur E. Trueman, D.Sc., professor of geology in the University of Glasgow, in recognition of his outstanding contributions to the knowledge of paleontology and stratigraphy, particularly of the coal measures and the lias.

The Wollaston Donation Fund.—Ivan Sydney Double, M.Sc., for his work on the petrology of sedimentary rocks, especially the Tertiary rocks of the East of England, the glacial deposits, the chalk and the trias.

The Murchison Geological Fund.—Arthur Lennox Coulson, D.Sc., in recognition of his geological work in India, especially that concerned with earthquakes and meteorites and the survey of Rajputana.

A Moiety of the Lyell Geological Fund.—William Quarrier Kennedy, D.Sc., for his petrological work, especially in connection with the Tertiary complexes of the Hebrides and the metamorphic rocks of the Western Highlands.

A Second Moiety of the Lyell Fund.—Arthur Raistrick, Ph.D., M.Sc., for his researches on the minute structure and constitution of coal and on the past floras of Britain, as revealed by the study of peats.

SCIENTIFIC NOTES AND NEWS

AT a dinner of the Board of Directors of the Research Corporation of New York, held on February 2 at the Faculty Club, Columbia University, awards of $2,500 each for distinguished scientific achievement were made to Dr. Vannevar Bush, president of the Carnegie Institution of Washington, and to Professor Hugh S. Taylor, head of the department of chemistry of Princeton University. The award to Dr. Bush was in recognition of his invention of mathematical computing machines, and that to Dr. Taylor was in recognition of his research in the field of catalysis. The presentations were made by Dean J. W. Barker, of the School of Engineering of Columbia University. Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, introduced Dr. Bush, and Professor Harold C. Urey presented Dr. Taylor.

THE 1939 William Freeman Snow Medal of the American Social Hygiene Association has been awarded to Dr. Thomas Parran, surgeon general of the U. S. Public Health Service, "for his great contribution to the health and happiness of the American people through his persistent efforts against syphilis and the conditions which favor its spread." Presentation of the medal was made by Dr. Livingston Farrand as part of the National Social Hygiene Day program at the Hotel Mayflower, Washington, D. C., on February 1. Mrs. Franklin D. Roosevelt and Dr. Parran were the principal speakers.

MISS ALICE EASTWOOD, curator of botany in the California Academy of Sciences since 1892, was guest of honor at a luncheon at the Fairmont Hotel, San Francisco, on the occasion of her eightieth birthday on January 19. A correspondent writes: "The luncheon, attended by more than four hundred persons, partook of the nature of a civic event, and represented a spontaneous expression of admiration and esteem seldom accorded a scientific worker during his lifetime. Felicitations were read from scientific institutions and individual scientists in various parts of the world. Special recognition was given Miss Eastwood's historic action in rescuing the plant types and the records of the academy from the San Francisco disaster of 1906 (*cf.* SCIENCE, n.s., vol. 23, p. 834) and her subsequent energetic rebuilding of the herbarium to its present size of over 275,000 specimens. Miss Eastwood engages extensively in field collecting in addition to laboratory and administrative work, and it was pointed out at the luncheon that the growth of the herbarium

during 1938, the forty-seventh year of her curatorship, has been the greatest in the history of the academy."

THE gold medal of the Royal Astronomical Society, London, has been awarded to M. Bernard Lyot, of the Meudon Observatory, France, for his observations and photography of the solar corona in the absence of a total eclipse.

DR. F. M. BURNET, of the Walter and Eliza Hall Institute of Research in Pathology and Medicine, Melbourne, has been awarded the Walter Burfitt Prize, 1938, by the council of the Royal Society of New South Wales, for his work on virus diseases in man and animals.

THE Academy of Sciences of the U.S.S.R. has awarded the I. P. Pavlov Prize for 1938 to "Honored Worker in Science" I. S. Beritashvili, professor of physiology at Tbilisi University. Professor Beritashvili is the author of works on the physiology of the central nervous system, published in Russian and in other languages.

A RAMAN JUBILEE VOLUME has been published by the Indian Academy of Sciences to commemorate the fiftieth birthday of Sir C. V. Raman, president of the academy, and the completion of ten years of research on the Raman Effect. The volume contains thirty-eight original papers by distinguished men of science from many countries.

THE honorary degree of doctor of engineering was conferred on former President Herbert Hoover at the thirty-sixth annual dinner of the alumni of Stevens Institute of Technology, which was held at the Hotel Astor on February 3.

PROFESSOR GRIFFITH C. EVANS, of the department of mathematics of the University of California, was elected president of the American Mathematical Society at the recent annual meeting at Williamsburg, Va.

PROFESSOR WALTER MULFORD, head of the department of forestry of the College of Agriculture of the University of California, has been elected a fellow of the Society of American Foresters. There are only eighteen fellows of the society, which has a membership of 4,500.

AT the forty-first annual meeting of the Washington Academy of Sciences on January 19, the election of the following officers for 1939 was announced: *President,*