in gases and vapors, to be pursued at Princeton. Lloyd P. Smith will study at Princeton during the coming year, and has taken the broad field of ionization as his subject. James E. Taylor, assistant professor at Wittenberg College, will engage in research work at Ohio State University, and will attempt a partial resolution of the isotopes of lead. Harold N. Rowe, who has for the past year been working at the University of Chicago under this foundation, has been granted a continuation of his fellowship for another year. During the forthcoming year he will engage in a test of the quantum theory of X-radiation. Warren F. Busse has been appointed an alternate. Mr. Busse is at present a research assistant at the University of Wisconsin, and proposes to study the relation of the chemical effect produced by the cathode rays outside the tube to the ionization produced.

GIFTS TO THE CASE SCHOOL OF APPLIED SCIENCE

DR. CHARLES S. HOWE, president of the Case School of Applied Science, has announced details of the progress of the campaign to raise funds for a new mechanical building and for additional endowment for the school.

An original gift of $500,000 was made on condition that the alumni raise $300,000, which with another gift of $200,000 would make a grand total of $1,000,000. Half of this amount was to go to the building of a new mechanical building and the other half for endowment. The campaign opened April 9 and ended April 16. Case School of Applied Science has roughly twenty-three hundred alumni. To date fifteen hundred and five subscriptions from the alumni, which means that more than sixty per cent. have already subscribed, have been received—subscriptions are still coming in. Instead of raising $300,000 the alumni have raised to date $404,000.

The original gift of $500,000 was given by Charles W. Bingham and when his name was announced an additional gift of $500,000 from his son, Charles W. Bingham, II, was also announced. The grand total to date therefore is approximately $1,625,000. The school will proceed immediately with the erection of the new mechanical building and undertake some other projects of progress which this gift has made possible.

THE NEW SOLAR OBSERVATORY IN SOUTHWEST AFRICA

WITHIN a few months the Smithsonian Institution expects, for the first time in history, to receive daily reports on solar radiation from the Eastern Hemisphere as a result of the establishment of a new solar observatory in Southwest Africa by the National Geographic Society's expedition headed by Dr. Charles G. Abbot, the solar expert of the Smithsonian Institution, who has just returned to Washington.

Construction on this new sun observation post, which is to operate in conjunction with other solar observatories in taking daily measurements of the solar constant, in an attempt to obtain data for long-range weather forecasting, has begun on the arid mountain of Brukkaros, in the center of a Hottentot reservation, with the assistance of the Public Works Department of the government of Southwest Africa.

The observatory and living quarters for the scientists are being built in natural caves, enlarged and improved, to obviate heating in winter and obtain cool rooms in summer. A reservoir of nearly 3,000 gallons capacity is being built to catch the infrequent rains in that part of Africa.

The two American scientific men who will be stationed on Brukkaros will have no easy access to their observatory. The nearest spot to which they will be able to take their supply automobile will be an hour's walk from the mountain.

The outstanding merit of Brukkaros as an observatory site is the clearness of the atmosphere. The place is seven miles north of Berseba, a Hottentot village with a white population of two persons.

Daily communication of solar radiation values probably will be by radio signals to Berseba, whence they will be relayed to Keetmanshoop and cabled to the Smithsonian Institution at Washington.

THE MILLS COLLEGE MEETING OF THE PACIFIC DIVISION, AMERICAN ASSOCIATION

THE tenth annual meeting of the Pacific Division of the American Association for the Advancement of Science will be held June 16 to 19, 1926, at Mills College, California. In accepting the invitation of Mills College to hold the 1926 meeting there the executive committee have been governed by the fact of its central location with respect to the large membership in the San Francisco Bay region and by its desire to recognize the outstanding character of Mills College, which has achieved notable importance on the Pacific Coast and now ranks among the best institutions of its class in the country.

Ample accommodations are assured and in the delightful surroundings of the college guests will find much of interest for the employment of their time between sessions. Mills College is within the city limits of Oakland about five miles from the city hall. It may be reached from San Francisco in one hour and a quarter and from Berkeley and the University of California in a half hour.

A special committee has been appointed to provide entertainment for visiting ladies who may not

wish to give all their time to attendance at the scientific meetings. The splendid Art Gallery recently established will be opened, musical programs will be presented and other entertainment provided.

GENERAL SESSIONS

The general sessions will open at the luncheon hour on Wednesday, June 16, 1926, when the usual research conference will be held. The subject "What can the Colleges Contribute to Scientific Research?" will be discussed under the leadership of Professor Howard E. McMinn, department of botany, Mills College. Particularly it is proposed to consider methods of inciting interest in research work among undergraduates and providing special training with this objective. Members are invited to participate in the discussion.

On Wednesday afternoon, June 16, in Lisser Hall, a symposium on "The Constitution of Matter" will be presented. The remarkable results of recent research into the nature and structure of the atom will be given in somewhat popular form by specialists in their respective topics. The symposium is arranged as follows:

The Elements and their Composition: DR. T. R. HOGNESS, of the department of chemistry at the University of California.

Atomic and Molecular Structure: DR. HERTHA SPONER, of the physical institute of the University of Göttingen, Germany.

The Nature of the Atom as Explaining and as Exhibited by the Lines in the Stellar and Solar Spectra: DR. H. H. PLASKETT, of the Dominion Astrophysical Observatory, British Columbia.

The Structure of Matter as Elucidated by X-Rays: MAURICE L. HUGGINS, of the department of chemistry at Stanford University.

On Wednesday evening at eight o'clock in Lisser Hall the address of the President of the Pacific Division will be given. Following an address of welcome by the president of Mills College, Dr. Aurelia Henry Reinhardt, and a response by Dr. J. H. Hildebrand, chairman of the executive committee, the retiring president of the Pacific Division, Dr. Robert G. Aitken, will speak on "The Solar System; Some Unsolved Problems." The address will be illustrated with stereopticon.

Immediately following the address of the president adjournment will be taken to Alumnae Hall where a public reception will be held.

The annual dinner has been arranged for Thursday evening, June 17, at 6:30, for all members and visiting guests. After dining the members will adjourn to Lisser Hall, where Dr. L. O. Howard, chief of the U. S. Bureau of Entomology, will deliver an address on "Insects and Human Progress."

The general sessions will close Friday evening, June 18, with an address by Dr. W. F. Durand, president of the American Society of Mechanical Engineers, on the subject of "Science and Civilization."

Fifteen affiliated societies have signified their intention of holding meetings at Mills College under the auspices of the Pacific Division, as follows:

American Association of Economic Entomologists, Pacific Slope Branch
American Meteorological Society
American Physical Society
American Phytopathological Society, Pacific Division
Astronomical Society of the Pacific
Botanical Society of America, Physiological Section
Cooper Ornithological Club
The Ecological Society of America
Pacific Coast Entomological Society
San Francisco Aquarium Society
Seismological Society of America
Society of American Foresters: California Section, North Pacific Section
Society of Experimental Biology and Medicine, Pacific Coast Branch
Western Psychological Association
Western Society of Naturalists
Western Society of Soil Science

SCIENTIFIC NOTES AND NEWS

AT the dinner of the National Academy of Sciences at Washington on April 27 the Agassiz Medal was presented to Dr. Vilhelm Bjerknes, of Bergen, Norway, for outstanding contributions to oceanography, and the Henry Draper Medal to Professor Harlow Shapley, of Harvard University, for distinguished contributions to astrophysics. Presentation of the Agassiz Medal was made by Dr. T. Wayland Vaughan and was received for Dr. Bjerknes by the minister of Norway. The Henry Draper Medal was presented by Dr. Henry Norris Russell and, in Dr. Shapley's absence in Europe as exchange professor to Belgium, was received by Professor Frank Schlesinger.

THE National Academy of Sciences has elected the following foreign associates: Jacques Hadamard, professor of analytical and cosmic mechanics at the École Polytechnique, Paris, and professor of mathematics at the Sorbonne; Richard Willstätter, formerly professor of chemistry at the University of Munich; Sir Frank Watson Dyson, director of the Royal Observatory of Great Britain; Max Planck, director of the Institute of Theoretical Physics at the University of Berlin. No members were elected this year. Dr. Robert A. Millikan, of the California Institute of Technology, Pasa-