ment of deciduous fruits. The university has furnished 20 acres of land together with irrigation water free of charge, and on this plot the Bureau of Plant Industry of the Department of Agriculture, under the direction of W. F. Wight, is planting trees designed to be a basis of extensive experiments in the breeding, selection and domestication of various fruits for the purpose of developing varieties having greater disease resistance and better adapted for cultivation than those now grown.

Mr. Wight is in charge of the horticultural and pomological investigations of the Chico Experiment Station and cooperating with him as representative of the university is Professor Leroy Abrams of the department of botany of the university.

The Stanford campus was selected for an experiment station because the Santa Clara Valley supports a greater variety of deciduous fruits than any other place in the country, and also because Stanford will be the headquarters for the work in fruit classification studies for this part of the country, and perhaps ultimately for the Pacific Coast. The library facilities, as well as collections of the fruits to be studied, are necessary for the work.

The work carried on at Stanford will be of local value to the Santa Clara Valley on account of the attention that will be paid to the apricot and prune, but will be of wider scope. It is planned to make a study of the varieties of pears of high quality and resistance to pear blight. It is hoped that the work will be of value wherever deciduous fruits are grown in this country.

It is planned to carry on experiments through a period of at least ten years with the probability that they will be continued indefinitely. By the agreement between the government and the university, all plant material in the experiment station will be available to the department of botany of the university for study and investigation, provided such work does not interfere with the government's undertaking. The distribution of the material will probably be through state experiment stations, nurseries and to individual growers where the latter are in a position to grow a given variety on a commercial basis.

THE AMERICAN PHYSICAL SOCIETY

THE one hundred and fifteenth regular meeting of the American Physical Society will be held in Washington, at the Bureau of Standards, on Friday and Saturday, April 21 and 22, 1922. The first session will begin at 10 o'clock on Friday morning.

The Association of Scientific Apparatus Makers will hold meetings at the Bureau of Standards on the same days as will the American Physical Society. Arrangements have been made for a joint informal dinner on the evening of Friday, April 21. It is expected that addresses will be made by Dr. S. W. Stratton in behalf of the Bureau of Standards, by Professor F. K. Richtmyer, representing the Association of Apparatus Manufacturers, and by Professor R. A. Millikan, representing the American Physical Society. Arrangements are being made for an exhibit of scientific apparatus at the Bureau of Standards.

The other meetings for the calendar year will be as follows: The Thanksgiving meeting, on November 25, 1922, will be held at the University of Chicago. The annual meeting, beginning on December 26, will be held in Boston, in affiliation with the American Association for the Advancement of Science.

The Pacific Coast Section will hold a meeting at Salt Lake City, at the time of the meeting of the Pacific Division, A. A. S., on June 22, 23 and 24, 1922. Correspondence relating to this meeting should be addressed to the secretary of the Pacific Coast Section, Professor E. P. Lewis, University of California, Berkeley, California.

> DAYTON C. MILLER, Secretary

SCIENTIFIC NOTES AND NEWS

A CELEBRATION was held at Bryn Mawr College on April 11, in honor of Professor Charlotte Angus Scott, who has been head of the department of mathematics since the college opened in 1885. Professor Albert N. Whitehead, of the University of London, came to America to make the principal address. Among those who planned to be present were: Professors George David Birkoff, Harvard; Ernest William Brown, Yale; Emilie Norton Martin, Mt. Holyoke; Helen Abbot Merrill, Wellesley; Roland George Dwight Richardson, Brown; Oswald Veblen, Princeton; Henry Seely White, Vassar, and Ruth Goulding Wood, Smith.

A TESTIMONIAL dinner in honor of Dr. George E. de Schweinitz, president-elect of the American Medical Association, was held in Philadelphia, on April 4, under the auspices of the Philadelphia County Medical Society. Dr. Hobart A. Hare was toastmaster, and the speakers were: Dr. Hubert Work, president of the association and postmaster general of the United States; Dr. William C. Braisted, president of the Philadelphia College of Pharmacy; Dr. Ross V. Patterson, dean of the Jefferson Medical College, and Dr. John G. Clark, professor of gynecology in the Medical School of the University of Pennsylvania.

PRESIDENT PORRAS, of Panama, on April 7, tendered a reception to Dr. Richard P. Strong, professor of tropical medicine at Harvard University and director of the Gorgas Memorial Institute, recently founded there. Dr. Strong started on the following day on a tour of the interior.

THE Royal Geographical Society will award its medals and grants as follows: The Founder's Medal to Lieutenant Colonel C. K. Howard-Bury for his distinguished services in command of the Mount Everest Expedition of 1921; The Patron's Medal to Mr. Ernest de K. Leffingwell for his surveys and investigations on the coast of northern Alaska; The Victoria Medal to Mr. J. F. Baddeley for his work on the Historical Geography of Central Asia; The Murchison Grant to Mr. Charles Camsell for his explorations and surveys in northern Canada; The Back Grant to Khan Bahadur Sher Jang for his surveys on the Indian frontier: The Cuthbert Peek Grant to Mr. F. H. Melland for his explorations in northern Rhodesia; and The Gill Memorial to Mr. A. A. R. Boyce for his triangulations in the Sudan.

WE learn from *Nature* that the following were elected fellows of the Royal Society of Edinburgh at the meeting on March 6: Mr. C. L. Abernethy, Professor G. Barger, Sir Dugald Clerk, Dr. F. A. E. Crew, Dr. W. O. Greenwood, Mr. W. A. Guthrie, Professor R. K. Hannay, Professor E. Hindle, Dr. C. F. Juritz, Professor J. C. Meakins, Mr. M. Macgregor, Dr. Bijali Behari Sarkar, Professor H. W. Turnbull, Dr. J. Walker, Mr. J. Wilson, Mr. J. M. Wordie.

DR. O. STAPF, who has been keeper of the herbarium and library at the Royal Botanic Gardens, Kew, since 1908, has retired on reaching the age limit. He is succeeded as keeper by Mr. A. D. Cotton, formerly a member of the herbarium staff and lately mycologist to the Ministry of Agriculture and Fisheries.

The Engineering and Mining Journal and Mining and Scientific Press were consolidated on April 1, to form the Engineering and Mining Journal-Press, with Josiah Edward Spurr as editor.

A NEW major subdivision has been created in the United States Geological Survey by raising the division of Alaskan mineral resources to the status of a branch. The work will continue under the immediate direction of Colonel A. H. Brooks, whose title under the rearrangement is chief Alaskan geologist.

R. T. STULL, who for several years has been superintendent of the Columbus (Ohio) Experiment Station of the Bureau of Mines, has been appointed assistant chief of the bureau's mineral technology division. In that position he will have technical supervision over the work in non-metallics and in ceramics.

DURING the absence of Director Frank Schlesinger, who is attending the meeting of the International Astronomical Union in Rome and will be absent until the latter part of May, Professor Ernest W. Brown is to serve as acting director of the Yale Observatory. Mr. Carl L. Stearns, assistant at the observatory, with the rank of instructor, has been granted leave of absence for a year beginning July 1, 1922.

Following the return of Dr. H. H. Rusby, the scientific men who were members of the Mulford Expedition to South America, arrived in New York last week. They include Dr. W. M. Mann, assistant entomologist of the U. S. Department of Agriculture; Dr. Orlando E. White, assistant botanist of the Brooklyn Botanical Garden, and Dr. Everett Pearson, of the University of Indiana.

ON April 4, Professor W. H. Hobbs, of the University of Michigan, completed his lectures at the Technical High School of Delft in exchange with Professor Brouwer. On May 4, he will sail for the Windward Islands and the west coast of South America, returning to Ann Arbor on September 1.

THE National Research Council has appointed a committee to investigate the properties of ammonium nitrate. The personnel of the committee is as follows: C. E. Munroe, National Research Council, *Chairman*; S. P. Howell, representing the Bureau of Mines; R. C. Tolman, representing the Department of Agriculture; C. G. Storm, representing the Ordnance Department, United States Army; C. P. Beistle, representing the Bureau of Explosives of the American Railway Association; and C. A. Bigelow, representing the Institute of Makers of Explosives. It is expected that the Navy Department will also be represented on this committee.

THE spring meeting of the American Electrochemical Society will be held in Baltimore, beginning on April 27. The morning will be devoted to a symposium on electric cast iron in charge of A. P. Hinckley and Bradley Stoughton. In the evening Professor R. W. Wood, of Johns Hopkins University, will speak on the subject of fluorescence. Acheson Smith, the retiring president, will deliver the presidential address.

DR. HENDRIK ANTON LORENTZ, of the University of Leiden, has given, in the Jefferson Physical Laboratory at Harvard University, three lectures on mathematical physics. It will be remembered that Dr. Lorentz has been lecturing at the California Institute of Technology, Pasadena, whose invitation to deliver a special series of lectures was the occasion of his present visit to the United States. Before returning to the Netherlands on or about the first of May, he is visiting a number of American universities.

DR. E. W. WASHBURN, of the department of ceramics of the University of Illinois, lectured on April 6 before the Franklin Institute on "Physical chemistry and ceramics." On April 13 a lecture on "The physics of the threeelectrode bulb" was given by Professor K. T. Compton, of Princeton University. On April 19, Professor William D. Harkins lectured before the institute on "The structure and building of atom nuclei."

Professor Charles R. Stockard, of the department of anatomy, Cornell University Medical College, delivered a lecture on heredity at the meeting of the Philadelphia Pediatric Society, on March 14.

PROFESSOR J. PAUL GOODE, of the University of Chicago, gave an address at the annual meeting of the Cleveland Chamber of Commerce on March 21 on the subject, "American opportunity in world trade." On March 22 he spoke at Georgetown University, Washington, on "America as a world power," and on March 24 he lectured on "Industrial Japan" for the National Geographic Society at Washington.

DR. CHARLES W. ELIOT, president emeritus of Harvard University, spoke on "Prevention of disease through animal experimentation," at a public health conference in Boston, on March 29, under the auspices of the Massachusetts State Federation of Women's Clubs.

THE Bakerian lecture of the Royal Society will be delivered on March 9 by Professor T. R. Merton and Mr. S. Barratt on "The spectrum of hydrogen."

DR. HARRIS GRAHAM, for thirty years professor of pathology and practice of medicine in the American University of Beirut, died in his sixtieth year on February 27, at Beirut, Syria.

SIR PATRICK MANSON, distinguished for his work on malaria and tropical diseases, died on April 8 at the age of seventy-six years.

DR. J. T. MERZ, author of The History of European Thought in the Nineteenth Century, died on March 21 at the age of eighty-two years.

THE death, on March 24, at fifty-eight years of age, is announced of Professor W. B. Bottomley, professor of botany at King's College, London, from 1893 to 1921. THE John Macoun Memorial Committee of the Ottawa Field Naturalist's Club announces that, as the number of copies to be issued of the autobiography of the late Professor John Macoun, naturalist to the Geological Survey of Canada, is limited, orders, with or without the subscription price of \$3, should be sent in by May 15, addressed to Mr. Arthur Gibson, treasurer, John Macoun Memorial Committee, Birks Building, Ottawa, Canada.

DR. GEZA HORVATH, director of the section of Zoology of the Hungarian National Museum in Budapest, writes that the price of the complete series of the Annales historico-naturales Musei Nationalis Hungarici (Volumes I to XVIII) has been reduced from \$108 to \$58. It is the hope of the administration of the museum that, through the sale of sets of these important Annals, they will be able to add to the funds needed to pay the present exorbitant charges for the publication of current and future volumes.

THE Royal Academy of Belgium announces that a triennial prize of 2,500 francs, to be known as the Prix Joseph Schepkens, for the best experimental work on plant genetics, has been established.

THE German Congress of Surgery will be held at Berlin, under the presidency of Professor Hildebrand, from April 19 to April 22, when the following subjects will be discussed: The experimental principles of wound injection, introduced by Professor Neufeld, of Berlin; general surgical infection, introduced by Professor Lesser, of Freiburg; operative transplantation of muscles, introduced by Professor Wullstein, of Essen, and the importance of histological examination of the blood, introduced by Professor Stahl, of Berlin.

UNIVERSITY AND EDUCATIONAL NOTES

THE University of Missouri, Columbia, Mo., will erect a new chemistry building to cost \$125,000.

MISS KATE C. GARRICK, daughter of the late Sir James Francis Garrick, for ten years agentgeneral in London for Queensland, has by her will bequeathed £10,000 to the University of Queensland to found a James Francis Garrick professorship of either law or medicine, as may seem best to the university, in memory of her father.

DR. EDWIN B. WILSON, professor of mathematical physics in charge of the department of physics at the Massachusetts Institute of Technology and a member of the administrative committee of the institute, has been appointed professor of vital statistics at Harvard University. He has also been appointed a member of the administrative board of the School of Public Health, the other members being David L. Edsall, chairman, Milton J. Rosenau, Roger I. Lee and Cecil K. Drinker.

THE following promotions to associate professorships have been made at Yale University: Dr. Francis Kovarik and Horace Scudder Uhler, in physics; Herbert L. Seward, in mechanical engineering; Charles S. Farnham, in civil engineering, and Richard S. Kirby, in engineering drawing. Dr. Arthur J. Hill has been promoted to an associate professorship in organic chemistry, with assignment to the Sheffield Scientific School and the Graduate School. William L. Crum, Ph.D., has been advanced to an assistant professorship in mathematics. English Bagby, Ph.D., in psychology, and Archer E. Knowlton, E.E., in electrical engineering, have been advanced to assistant professorships.

DISCUSSION AND CORRESPOND-ENCE

DEVONIAN PLANTS

To the geologist, the invertebrate paleontologist, or the stratigrapher who turns to the map of North America, the Devonian system is one of a completeness and grandeur that must be satisfying in the extreme. The mapping has proceeded through nearly a century, and the horizons have been divided on accurate faunal data. To long lists of invertebrates are added remarkable fishes.

To the paleobotanist on the contrary, the Devonian is at once alluring and forbidding. While the algae with a great record go back to