and fifteen graduate degrees have been earned in the School of Botany.

Though a continuation of high special taxes is anticipated for the next few years, the trustees of the garden hope to see the end of this burden before a great while, and in cooperation with the university authorities they are now prepared to make larger research use of the equipment on hand and begin to provide for graduate instruction to a greater extent than has been possible heretofore. Last year a well designed fireproof building of about 12,000 square feet of floor space was put up. A part of this is being furnished in steel for stack purposes, and the remainingand larger-part is being equipped for laboratory use. It is now announced that a definite step toward the fuller development contemplated by the founder and planned by the director has been taken in the establishment of the post of plant physiologist at the garden, and the creation of a professorship of plant physiology and applied botany in the Shaw School of Botany, with provision for two research fellowships in botany: in addition to the Englemann professorship held by Dr. Trelease, the assistant professorship held by Dr. Coulter, a teaching fellowship to which Mr. C. D. Learn has recently been appointed, and the honorary post of plant pathologist at the garden held by Dr. von Schrenk.

With this equipment and staff, which are to be gradually increased and are likely to be much enlarged in the near future, it is intended to develop research and graduate instruction and to establish in the broadest sense a course in applied botany, in addition to giving the undergraduate instruction needed in Washington University.

To the new professorship, Dr. George T. Moore has been called, as possessing to an unusual extent the desired combination of established reputation, breadth of view and expert appreciation of the economic applications of botany. The research fellowships are open to capable graduate students from any college, and are believed to offer unusual opportunities for the productive use of talent in investigation. The library, herbarium and garden furnish the necessary facilities for the most advanced investigation, and the work in the School of Botany is to be so planned that the individual needs of students engaging in research will be met in every way possible, while leading to the customary degrees.

## SCIENTIFIC NOTES AND NEWS

THE following new members of the National Academy of Sciences were elected at the meeting on April 22, 1909: Professor Joseph S. Ames, Johns Hopkins University; Professor Maxime Bôcher, Harvard University; Professor Oskar Bolza, University of Chicago; Mr. Frank W. Clarke, U. S. Geological Survey; Dr. John M. Clarke, New York State Museum; Professor John M. Coulter, University of Chicago; Professor Henry Crew, Northwestern University; Professor Thomas Hunt Morgan, Columbia University; Mr. Waldemar Lindgren, U. S. Geological Survey; Professor Henry L. Wheeler, Yale University. The following were elected foreign associates: Professor Albrecht Penck, University of Berlin; Professor Gustaf Retzius, Stockholm; Professor Wilhelm Waldeyer, University of Berlin; Professor Wilhelm Wundt, University of Leipzig.

DR. ARRIGO TAMMASSIA, professor of forensic medicine in the University of Padua, has been created by the king of Italy a senator of the kingdom.

PROFESSOR G. LUNGE, of Zurich, has been elected an honorary member of the London Chemical Society.

THE founder's medal of the Royal Geographical Society has been awarded to Dr. Stein for his archeological and geographical explorations in Central Asia. The patron's medal has been awarded to Colonel Talbot for his surveys on the northwest frontier of India and in the Anglo-Egyptian Sudan.

ST. ANDREWS UNIVERSITY has conferred its doctorate of laws on Dr. James Wallace, F.R.S., professor of chemistry in University of Edinburgh.

DR. GEORGE LINCOLN GOODALE, professor of botany at Harvard University since 1878, will retire from active service at the close of the present academic year. Professor Goodale will celebrate his seventieth birthday on August 3.

DR. F. ZIRKEL, professor of mineralogy at Leipzig, has retired from active service.

DR. WILLIAM W. CADBURY has resigned as pathologist in the Henry Phipps Institute, Philadelphia, and sailed for China, where he will aid in the establishment of a University Medical School in Canton.

MR. D. L. VAN DINE, who has been the entomologist of the Hawaii Agricultural Experiment Station for the past seven years, has accepted a position in the Bureau of Entomology at Washington. His work will be on the insects affecting sugar cane and rice in the southern states.

At the meeting of the Board of Directors of the Rockefeller Institute for Medical Research, held on April 10, the following promotions and appointments were made:

Associate Members—John Auer (Physiology), Hideyo Noguchi (Pathology), Alexis Carrel (Surgery).

Associate-George W. Heimrod (Chemistry).

Assistants—Martha Wollstein (Pathology), Richard V. Lamar (Pathology), A. O. Shaklee (Physiology), Gustave M. Meyer (Chemistry).

Fellows—M. T. Burrows (Pathology), Paul F. Clark (Bacteriology).

PROFESSOR H. G. VAN DE SANDE BAKHUYZEN has retired from the directorship of the Leyden Observatory and is succeeded by Mr. E. F. van de Sande Bakhuyzen.

DR. MAX WOLF has been appointed director of the University at Heidelberg in succession to Dr. Wilhelm Valentiner, who has retired owing to ill health.

DR. ERNST KÜSTER, of Halle, has been appointed keeper in the Botanical Institute and Garden at Kiel.

DR. S. SQUIRE SPRIGGE has accepted the editorship of the *Lancet*.

THE State Department has approved the attendance of the following as American delegates at the International Congress of Applied Chemistry to be held in London next month: Dr. Harvey W. Wiley, chief of the Bureau of Chemistry of the Department of Agriculture; Dr. Allerton S. Cushman, of the same department; Dr. Frank Wigglesworth Clarke, of the U. S. Geological Survey; Dr. Charles Baskerville, professor of chemistry at the City of New York College; Drs. William H. Nichols, Maximilian Toch, Herbert Plaut and Morris Loeb, of New York; Dr. William L. Dudley, of Vanderbilt University, and Dr. L. H. Baekeland, of Yonkers, N. Y.

DR. RAYMOND L. DITMARS, curator of reptiles in the New York Zoological Park, sailed for Europe on May 8 to visit the Zoological Gardens and arrange for the exchange of animals.

PROFESSOR F. L. STEVENS, of the North Carolina Station and College, will during this vacation visit the leading agricultural experiment stations and agricultural colleges of Europe, particularly those experiment stations engaged in work in plant disease or soil bacteriology.

PROFESSOR WILLIAM OSLER, of Oxford, is paying a visit to the United States and Canada. He expects to return to England on July 1.

DR. STELBERG, accompanied by Dr. de Quervain and Dr. Balber, has been sent by the Danish government on a scientific expedition to Greenland.

DR. SKOTTSBERG, the Swedish explorer, has returned from an expedition to southern Patagonia.

MR. DOUGLAS CARRUTHERS has returned from a natural history exploration in the unknown parts of central Arabia.

It is announced in the English journals that Dr. W. Bruce, of the Scottish Oceanographical Laboratory, has made more detailed plans of another Antarctic expedition to leave in 1911, the cost of which is estimated at £50,000. It is proposed to carry on extensive oceanographical work in the South Atlantic Ocean between and south of Buenos Ayres and Cape Town, as well as in the Weddell and Biscoe Seas; to map the coast-line of Antarctica to the east and west of Coats Land, and to investigate the interior of Antarctica in that longitude. Part of the project includes a journey across the Antarctic continent, starting at some suitable base in the vicinity of Coats Land and emerging at Mc-Murdo Bay, Victoria Land or King Edward Land. The program includes a circumpolar bathymetrical survey, especially in relation to the study of former continental connections. Mr. C. E. Borchgrevink will also conduct a new expedition to South Polar regions. The expedition, the financial and other details of which have already been settled, has been arranged under the auspices of the International Polar Exploration Commission at Brussels.

A PARTY sent by the government to investigate the circumstances connected with the murder by Ilongote tribesmen of Dr. William Jones, of the Field Museum of Natural History, Chicago, has recovered the valuable collection made during the past two years.

At the 665th meeting of the Philosophical Society of Washington, held on April 26, Professor Max Planck, of Berlin, gave a lecture entitled "Die Mechanik als Grundlage der Physik," complimentary to the American Physical Society.

MR. J. G. JACK will conduct a Field Class at the Arnold Arboretum, Harvard University, on Saturdays during the spring and early summer, to assist those who wish to gain a more intimate knowledge of the native and foreign trees and shrubs which grow in New England.

PROFESSOR BASKERVILLE announces a course of lectures by eight or ten recognized experts in the City of New York upon such subjects as water supply, sewage, gas, storage of combustibles, food adulteration, etc.

THE Sioux City Academy of Sciences held its annual meeting on April 13. Its program was devoted to a Darwin memorial which was as follows:

"The Biography of Charles Darwin," Professor H. C. Powers.

"Charles Darwin and the Theory of Natural Selection," Rev. Manley B. Townsend.

"The Principle of Natural Selection as Applied in Education," Professor E. A. Brown.

"" A Philosophy Out of Darwin," Rev. Ralph P. Smith.

PROFESSOR F. W. MOTT, F.R.S., began on April 20 a course of two lectures at the Royal Institution on "The Brain in Relation to Right-handedness and Speech." On April 24 Mr. R. T. Günther began a course of two lectures on "The Earth Movements of the Italian Coast, and their Effects." The Friday evening discourse on April 23 was delivered by Mr. Alexander Siemens on "Tantalum and its Industrial Applications."

HENRY AUGUST HUNICKE, formerly professor of chemistry in Washington University, and later chemist for the Anheuser-Busch Brewing Association and a practising chemical engineer, died at St. Louis on April 5 at the age of forty-eight years.

ALBERT B. PORTER, for ten years professor of physics at the Armour Institute, Chicago, and later engaged in the manufacture of scientific instruments, died on April 17, at the age of forty-three years.

MR. FREDERICK KATO, who was interested in mineralogy, died of pneumonia in his home on Jersey City Heights on April 20, at the age of forty-three years.

DR. FRITZ ROEMER, director of the Senckenberg Museum of Natural History at Frankfort, has died at the age of forty-two years.

At the meeting of the American Philosophical Society in Philadelphia on April 22, Mr. Edwin Swift Balch presented the following resolution which was passed unanimously:

WHEREAS, The United States in former years made many brilliant discoveries in the Antarctic, including the continent of Antarctica by Charles Wilkes, and

WHEREAS, The United States have not taken any part in the recent scientific explorations of the South Polar regions;

Resolved, That the American Philosophical Society requests the cooperation of the scientific and geographical societies of the United States, to urge on the United States Navy and the general government, that it do make sufficient appropriations to fit a government vessel to thoroughly explore and survey the coast of Wilkes Land, and other parts of Antarctica.

By recent act of the legislature provision has been made for a biological station to be located on the shores of Devil's Lake, North Dakota. An appropriation has been made for building laboratories and providing annual maintenance. This laboratory will be fortunately situated for the study of many interesting ecological and physiological problems, inasmuch as Devil's Lake is a large body of brackish water with no outlet and represents the collected water supply of a large interior drainage basin. The direction of this laboratory will be under the charge of the biological department of the State University, of which Professor Melvin A. Brannon is head.

THE fifteenth general meeting of the American Electrochemical Society will be held at Niagara Falls, Canada, on May 6, 7 and 8. The retiring president, Mr. E. G. Acheson, has chosen as the subject of his address "The Electrochemist and the Conservation of Our National Resources." The program includes a symposium on "The Electrometallurgy of Iron and Steel," to include eleven papers.

THE New York Botanical Garden offers the following prizes for essays not exceeding 5,000 words, from the income of the Caroline and Olivia E. Stokes Fund for the Preservation of Native Plants: (1) \$40, (2) \$25, (3) \$15. Essays must be typewritten in duplicate and must reach the garden not later than June 20, 1909.

KING LEOPOLD, of Belgium, has decided to grant a prize of \$5,000 to the author of the best work answering the following question: "Describe the progress of aerial navigation and the best means to encourage it." All essays or works relative to the subject and competing for the prize must be sent to the minister of science and arts in Brussels before March 1, 1911. The competition is open to all nationalities. No new edition of any work already in print will be admitted to this competition unless it comprises thorough changes and considerable additions. In case certain sections of any work or essay on the subject have already been published, such work or essay may still be able to enter in this competition providing the last part is published during the time allotted for the competition. The jury will comprize three Belgians and four foreign members. No member of the jury will be allowed to send any work or essay to the competition. The manuscript, work or

essay winning the prize must be published during the year following the one in which the prize will be awarded. Competitors may use French, English, Flemish, German, Italian, Spanish or Portuguese.

THE Hampstead Scientific Society has under consideration a proposal to establish an astronomical observatory and meteorological station on the reservoir near the summit of Hampstead Heath, London. It is proposed to rent, at a nominal charge, a portion of the top of the reservoir near the Whitestone Pond, to build there an observatory house, and to erect the eight-inch reflecting telescope, equatorially mounted, by Grubb, presented to the society some two years ago by Dr. F. Womack; and to establish on the same area a meteorological station, equipped as a "Normal Climatological Station" under the regulations of the Meteorological Office.

ARRANGEMENTS have been made by Professor Foerster, of the University of Berlin, to republish in German an abstract of the documents of the American Association for International Conciliation. Separate articles by Mr. Elihu Root, Mr. Andrew Carnegie, Professor Ladd, of Yale, and Professor Rowe, of the University of Pennsylvania, have been translated into foreign languages, but this is the first arrangement for a general translation and republication.

THE Appalachian Engineering Association will meet in Roanoke, Va., on Saturday, May 8, when the following papers will be read:

"Lead and Zinc Ores in Wythe and Pulaski Counties," by Mr. M. M. Caldwell, of Roanoke.

"Organization and Engineering Difficulties of the Virginian Railway," by Major William N. Page, of Washington, D. C.

"The Virgilina Copper District," by Dr. Thomas L. Watson, State Geologist of Virginia, and Professor of Economic Geology, University of Virginia.

"Geologic Engineering Code of Ethics," by Captain Baird Halberstadt, of Pottsville, Pa.

"Properties and Uses of Mineral Gypsum," by Dr. Frank A. Wilder, of North Holston, Va., ex-State Geologist of Iowa.

The meeting will be followed on Saturday evening by a banquet for the association and invited guests, tendered by the Chamber of Commerce of Roanoke.

THE fourth annual meeting of the Oregon State Academy of Sciences was held at the High School, Salem, on February 19 and 20, with the following program:

President's Annual Address, A. R. Sweetser.

Illustrated Lecture on Birds, Wm. L. Finley.

"Some Perplexing Problems in the Most Complex of the Sciences," Gaylard H. Patterson.

"Disturbance of Embryonic Nutrition," Ernest Barton.

"The Mineral World," W. A. Miller.

"Some Hymenoptera," C. E. Bridwell.

"The Sea Side Laboratory at Friday Harbor" (illustrated), C. O. Chambers.

"The Kinetic Theory of Matter," B. C. Eastham.

"Denatured Alcohol," C. E. Bradley.

"Problems in Sex Determination," J. F. Bovard.

THE National Association for the Prevention of Consumption has arranged to hold a tuberculosis exhibition at the Art Gallery, High Street, Whitechapel, London. The exhibition will illustrate the extent, cause, spread, prevention and cure of tuberculosis, and will have a special section devoted to tuberculosis in children. It is expected that the exhibition will be opened by the President of the Local Government Board on June 2, and it is proposed that after it has been shown in London it should be taken to various provincial cities and towns.

## UNIVERSITY AND EDUCATIONAL NEWS

A BOARD of education has been established in Iowa to control the State University, the State College of Agriculture and the Mechanic Arts and the State Normal School. The board is to consist of nine members, appointed by the governor, and confirmed by the senate, five to be republicans and four democrats. The members of the board serve for six years, one third retiring every two years. The board is to elect a finance committee, of three members, from without its own membership. These three men are to give their entire time to the business management of the institutions, and are to receive salaries of \$3,500 a year.

THE twelfth conference for education in the south was held in Atlanta, Ga., April 14 to 17.

The conference, while discussing general educational subjects, was devoted especially to the improvement of conditions in the open country. The president, Mr. Robert C. Ogden, of New York, gave an address, and the program included addresses on "The American Spirit in Education," by Dr. S. C. Mitchell, the newly elected president of the University of South Carolina; "The National Program in Education," by Dr. Elmer Ellsworth Brown, U. S. Commissioner of Education; "How the National Government may cooperate with the States in Bettering Conditions in the Open Country," by Mr. Gifford Pinchot, of the Forest Service, Washington.

DR. W. F. DEARBORN, assistant professor of educational psychology in the University of Wisconsin, has resigned to take a similar position in the University of Chicago. Dr. B. H. Bode, assistant professor of philosophy in the University of Wisconsin, has resigned to accept a professorship in the University of Illinois.

DR. EDMUND LANDAU, of Berlin, has been called to a professorship of mathematics at Göttingen.

DR. HERMAN KOBOLD has been called from Kiel, to a professorship of astronomy at Berlin.

M. PAUL LANGEVIN has been appointed professor of physics in the Collège de France, as successor of the late M. Mascart.

## DISCUSSION AND CORRESPONDENCE ON GENERIC NAMES

IN a recent issue of SCIENCE, Dr. Hubert Lyman Clark has done good service in deprecating the too familiar practise of naming species after (commonly insignificant) persons. While not a systematic zoologist sensu stricto myself, I have had occasion to consult taxonomic works quite extensively for a number of years past, and I am therefore in a position to appreciate the force of Dr. Clark's It is my object here to extend criticisms. their application a little, so as to cover generic names as well. It appears to me that for these last the objection holds with even greater force, since the genus is, theoretically, at