G. H. Perkins, H. Phipps, J. J. Pierrepont, G. A. Piersol, G. Pinchot, J. F. Porter, F. H. Pratt, H. S. Pratt, H. S. Pritchett, F. W. Putnam, R. Rathbun, R. W. Raymond, J. Reighard, E. L. Rice, W. N. Rice, W. E. Ritter, M. A. Ryerson, W. Saunders, C. Schuchert, C. P. Sigerfoos, L. Stejneger, G. M. Sternberg, F. L. Stevens, H. E. Summers, F. Smith, R. S. Tarr, E. W. Taylor, W. A. Taylor, R. J. Terry, R. Thaxter, E. L. Thorndike, S. E. Tillman, J. E. Todd, J. H. Todd, S. M. Tracy, E. N. Transeau, A. L. Treadwell, A. H. Tuttle, H. von Schrenk, F. C. Waite, C. Walcott, H. E. Walter, R. H. Ward, H. B. Ward, H. L. Ward, L. F. Ward, H. J. Webber, W. H. Welch, W. M. Wheeler, I. C. White, C. O. Whitman, H. S. Williams, W. S. Williamson, H. V. Winchell, C. E. A. Winslow, C. E. Woodruff, A. F. Woods, R. M. Yerkes, C. Zeleny.

All subscriptions exceeding one dollar in amount have been individually acknowledged.

Charles B. Davenport,

Secretary

THE COLUMBIA UNIVERSITY DARWIN LECTURES

A SERIES of lectures on "Charles Darwin and His Influence on Science," will be given at Columbia University on Friday afternoons, from February 12 to April 16, 1909, in 309 Havemeyer Hall, at 4:10 p.m., with the exception of the introductory lecture, which will be given at 11:10 A.M., on February 12, the one hundredth anniversary of Darwin's birth. The lectures, which are open to the public, are as follows:

February 12—"Darwin's Life and Work," by Henry Fairfield Osborn, Sc.D., LL.D.

February 19—"Terrestrial Evolution and Paleontology," by William Berryman Scott, Ph.D.

February 26—"Darwin's Influence on Zoology," by Thomas Hunt Morgan, Ph.D.

March 5—"Darwin in Relation to Anthropology," by Franz Boas, Ph.D.

March 12—"Darwin's Contribution to Psychology," by Edward Lee Thorndike, Ph.D.

March 19—" Darwin's Influence on Botany," by Daniel Trembly MacDougal, Ph.D.

March 26—"Darwinism and Modern Philosophy," by John Dewey, Ph.D., LL.D.

April 2 (date subject to change)—"Cosmic Evolution," by George Ellery Hale, Sc.D.

April 16—"Darwinism in Relation to the Evolution of Human Institutions," by Franklin Henry Giddings, Ph.D., LL.D.

SCIENTIFIC NOTES AND NEWS

Dr. Henry F. Osborn has been elected president of the New York Zoological Society.

DEAN FRANK OLIN MARVIN, of the School of Engineering of the University of Kansas, was elected president of the Sigma Xi scientific society at the recent Baltimore meeting.

Dr. S. A. Forbes has tendered his resignation as professor of zoology in the University of Illinois, which position he has held since 1884. The resignation is to take effect on September 1, 1909. He will remain as director of the State Laboratory of Natural History and state entomologist.

Dr. Charles Rockwell Lanman, professor of Sanscrit in Harvard University, has been elected a corresponding member of the Institute of France in the Académie des Inscriptions et Belles-Lettres.

Dr. Wilhelm Waldeyer, professor of anatomy at Berlin, has been elected a foreign member of the Stockholm Academy of Sciences.

THE University of Berne has conferred the honorary degree of Ph.D. upon the Rev. W. A. B. Coolidge, M.A., fellow of Magdalen College, Oxford, in recognition of his works on Swiss history and geography.

M. FREUNDLER has been elected general secretary of the Paris Chemical Society in succession to M. Béhal.

MR. STANLEY FIELD, nephew of Marshall Field, who founded the Field Museum of Natural History, Chicago, and in his will left a bequest of \$8,000,000 to the institution, has been elected president in succession to Mr. H. H. Higginbotham.

THE board of regents of the University of Kansas has appointed Professor H. P. Cady, of the department of chemistry, to be official weather observer to carry on the work begun by the late Dr. Snow forty years ago.

THE Carnegie Institution of Washington has made a grant of \$3,200 to Professor E. C. Case, of the University of Michigan, for the preparation of two monographs upon the Permian reptiles of North America. Four years ago a grant from the same source of \$1,300

was made, and as a result Professor Case published the monograph entitled, "Revision of the Pelycosauria of North America," which has been reviewed in this journal.

Mr. Taft left for Panama on January 25 on the cruiser North Carolina, accompanied by the following engineers: Frederick P. Stearns, Boston; John R. Freeman, Providence, R. I.; James Schuyler, Los Angeles; Isham Randolph, Chicago; Henry R. Allen, Chicago; A. P. Davis, Washington, D. C., and Allen Hazen, New York.

Dr. Ellsworth Huntington, instructor in geography at Yale University, will leave New Haven on February 10 for an extended scientific trip in Palestine and Asia Minor.

Mr. Frank A. Perret, who contributed an article on "Some Conditions affecting Volcanic Eruptions" to the issue of Science for August 28, 1908, is at present engaged in investigating the conditions of the Calabrian earthquake.

THE Research Club of the University of Michigan will celebrate the Darwin centennial on February 17. The president, Professor Wenley, of the department of philosophy, will give the eulogy; Professor Reighard, of the department of zoology, will speak on "Darwin's Contribution to Zoology"; Professor Case, of the department of geology, on "Darwin's Contribution to Geology"; Dr. De Leng-Hus, of the department of botany, on "Darwin's Contribution to Botany"; and Professor Pillsbury, of the department of philosophy, on "Darwin's Contribution to Psychology." Further, in conjunction with the Michigan Academy of Science and the Society of Sigma Xi, the club will hold a public commemoration meeting on April 2, when the address will be delivered by Professor Scott, of Princeton University.

In addition to lecturing at the Sorbonne, Paris, and at the University of Oxford, President Roosevelt has consented to give a lecture before the students and faculty of the University of Berlin in May, 1910.

During the meeting of the Association of American Universities recently held at Ithaca, President Charles R. Van Hise, of the University of Wisconsin, lectured before the Cornell Chapter of Sigma Xi on "The Conservation of our National Resources."

Professor T. A. Jaggar, Jr., lectured before the Society of Arts of the Massachusetts Institute of Technology on January 21 on "The Scientific Aspects of the Messina Earthquake."

Dr. George H. Shull, of the Station for Experimental Evolution, Cold Spring Harbor, gave an illustrated lecture in the Friday Evening Course of Clark College on January 15, on "Plant Breeding, Economic and Scientific."

Mr. H. E. Ashley, assistant chemist in the Technologic Branch of the United States Geological Survey, read recently a paper before the Columbus Section of the American Chemical Society embodying his recent researches on colloids in clays.

On Friday evening, January 15, Dr. W. R. Brooks, of Hobart College, delivered a lecture on "Other Worlds than Ours" before the Stanford Scientific Society. On February 5 Dr. Robert T. Morris, of New York City, is to lecture before the same society on "A Canoe Trip to Hudson Bay."

THE following tablet was recently placed in Barney Hall, of Denison University, in honor of C. L. Herrick, who for many years was professor of geology and natural history in this institution:

CLARENCE LUTHER HERRICK 1859 1904

FOUNDER OF THE DENISON SCIENTIFIC ASSOCIATION BULLETIN OF THE SCIENTIFIC LABORATORIES JOURNAL OF COMPARATIVE NEUROLOGY

A TRUE TEACHER

A COMMITTEE has been formed to erect a monument in honor of E. J. Marey, the eminent physiologist. Subscriptions may be sent to M. Carvallo, at the Institut Marey, Parc des Princes, Boulogne-sur-Seine.

BRIGADIER GENERAL WILLIAM PRICE CRAIG-HILL, past president of the American Society of Civil Engineers, died at Charleston, W. Va., on January 18, at the age of seventy-five years.

Dr. Charles Denison, a specialist in the treatment of tuberculosis, died at his home in Denver, Col., on January 10.

Braxton H. Guilbeau, professor of zoology at the Louisiana State University, died on January 16, 1909. He was a graduate of the same institution, and had been in charge of the zoological department for several years. Since 1906, he had been director of the Gulf Biologic Station. Owing to heavy university work, he was unable to carry on as much research work as he was ambitious of doing. In summer work at Cornell, he investigated the froth production of the "Spittle Insects." on which he published a paper in the American Naturalist for December, 1908. At the time of his death, he had been engaged for several months investigating the parasites of Plusia brassica, confirming the results of French investigators as to the development of many insects from a single egg. Unfortunately this work was left in such a stage that it will be impossible to bring it together for publication.

SURGEON-GENERAL JOHN EDWARD TUSON, a retired officer of the Indian Medical Service, the author of numerous contributions to medical science, died at Eastbourne, on December 24, at the age of eighty years.

Dr. R. Engländer, professor of mechanical engineering in the Vienna Technical Institute, has died at the age of fifty-nine years.

The death is announced of Dr. A. Grigorief, for twenty years secretary of the Imperial Russian Geographical Society.

THE Darwin anniversary addresses delivered on Darwin Day before the American Association for the Advancement of Science have all been assembled, and will be published at an early date by Messrs. Henry Holt & Company. The title of the volume will be "Fifty Years of Darwinism, Modern Aspects of Evolution and the Various Biological Sciences, Centennial Addresses in Honor of Charles Darwin before the American Association for the Advancement of Science, Baltimore, Friday, January 1, 1909."

At a meeting of plant pathologists called at Baltimore, December 30, 1908, in connection

with the meeting of the American Association for the Advancement of Science, Professor A. D. Selby, of the Ohio Experiment Station, was elected temporary chairman, and Mr. Donald Reddick, temporary secretary. The temporary committee, appointed at Washington, on December 15, consisting of C. L. Shear, Donald Reddick and W. A. Orton, presented its report recommending that an organization of American plant pathologists be perfected. The report of the committee was accepted and temporary organization was effected by the unanimous election of the following officers: President, Dr. L. R. Jones, Vermont Agricultural Experiment Station; Vice-president, Professor A. D. Selby, Ohio Agricultural Experiment Station; Secretary-treasurer, Dr. C. L. Shear, U. S. Department of Agriculture; Councilmen, Professor J. B. S. Norton, Maryland Agricultural Experiment Station; Dr. B. M. Duggar, Cornell University Agricultural Experiment Station. The five officers elected form a council which is to consider and make recommendations in regard to all questions relating to the permanent organization, policy and affiliation of the society. The next meeting will be called at such time and place as may be decided by the council.

THE calendar of the botanical seminar of the University of Nebraska for the present year contains the titles of forty-six papers to be presented at twenty-two meetings to be held during the present academic year. Among the meetings is a Darwin Anniversary on February 12, of which the program is as follows:

Mr. Pool: "Pre-Darwinian Evolution."

Dr. Walker: "The Life of Darwin."

Professor Ward: "Darwin as a Zoologist."

Professor Barbour: "Darwin and the Geological Record."

Professor Bessey: "Darwin's Contributions to Botany."

Professor Wilcox: "Darwin's Contributions to Plant Physiology."

THE note in regard to the Winnipeg meeting of the British Association for the Advancement of Science printed in Science for January 15 should have read:

The Honorary Local Secretaries of the British Association for the Advancement of Science to be held in Winnipeg from August 25 to September 1 of this year, are C. N. Bell, Esq., W. Sanford Evans, Esq. (Mayor), Professor M. A. Parker, and Professor Swale Vincent. Enquiries and communications on matters connected with the meeting should be addressed: To the Local Secretaries, British Association for the Advancement of Science, University of Manitoba, Winnipeg, Man.

A CABLEGRAM has been received at the Harvard College Observatory from Kiel, stating that the eighth satellite of Jupiter was photographed at the Greenwich observatory on January 164.551, G. M. T. in

The satellite is visible in a large telescope.

The American Geographical Society has made a collection representing the finest grades of wall maps, atlases and other appliances used in teaching geography in European schools. The collection has been made in the expectation that it will be useful to teachers of the subject and to those who are preparing to teach it. A descriptive catalogue has been prepared and the collection will be exhibited at the house of this Society, 15 West 81st Street, New York, till February 27. Later it will be loaned in whole or in part, to normal and training schools and other educational centers throughout the country as long as there is a demand for it.

The board of consulting chemists appointed by President Roosevelt to pass on pure food questions has announced a decision in regard to the use of benzoate of soda. The report is signed by President Ira Remson, of Johns Hopkins University, chairman; Russell H. Chittenden, director of the Sheffield Scientific School of Yale University; John H. Long, professor of chemistry, Medical School, Northwestern University, and C. H. Herter, professor of physiological chemistry, College of Physicians and Surgeons, New York. Dr.

Alonzo B. Taylor, professor of pathology of the University of California, is a member of the board, but he was absent in Europe during the experiments. The most important of the findings are:

First—Sodium benzoate in small doses (under 0.5 gram per day), mixed with the food, is without deleterious or poisonous action, and is not injurious to health.

Second—Sodium benzoate in large doses (up to 4 grams per day), mixed with the food, has not been found to exert any deleterious effect on the general health nor to act as a poison in the general acceptation of the term. In some directions there were slight modifications in certain physiological processes, the exact significance of which modifications is not known.

Third—The admixture of sodium benzoate with food in small or large doses has not been found injuriously to affect or impair the quality or nutritive value of such food.

THE application made to Congress by Senator Lodge for charters for the National Institute of Arts and Letters and for the Academy of Arts and Letters having led to inquiries regarding the organizations, a statement has been issued by the executive committee of the academy. This institution, according to the statement, was organized in 1904 by the National Institute of Arts and Letters, which, in turn, had been organized by the American Social Science Association in 1898, with a view to the advancement of art, music and literature. The membership of the institute is 250, including representatives from all sections of the country, while the membership of the academy is limited to fifty and is chosen from that of the institute. The first seven members, chosen by ballot, were William Dean Howells, Samuel L. Clemens, Edmund Clarence Stedman and John Hay, representing literature: Augustus Saint-Gaudens and John La Farge, representing art, and Edward MacDowell, representing music. The academy has recently effected a permanent organization and has elected this executive committee: President, William Dean Howells; Chancellor, William M. Sloane, and Permanent Secretary, R. U. Johnson. The officers of the institute are: President, William M.

Sloane; Vice-presidents, Henry Van Dyke, John W. Alexander, Arthur Whiting, Brander Matthews, and Hamlin Garland; Treasurer, Hamilton W. Mabie, and Secretary, R. W. Johnson.

Dr. Walter B. Pillsbury, director of the psychological laboratory, University of Michigan, and non-resident lecturer in psychology, Columbia University, will give a course of eight lectures on "The Psychology of Reasoning," in Schermerhorn Hall, Columbia University, at 4:10 p.m., on the days and on the subjects which follow:

Tuesday, January 19—"Logic and Psychology." Wednesday, January 20—"Belief."

Friday, January 22—"Meaning and the Concept."

Tuesday, January 26—"The Psychology of Judgment."

Wednesday, January 27—"Judgment and Language."

Friday, January 29—"Inference, the Syllogism."
Tuesday, February 2—"Universal and Particular Conclusions."

Wednesday, February 3—"Induction and Deduction, Analogy."

UNIVERSITY AND EDUCATIONAL NEWS

MR. JOHN D. ROCKEFELLER has made a further gift of a million dollars to the University of Chicago. His gifts to the university now amount to more than \$25,000,000.

At the last meeting of the Board of Directors of Bryn Mawr College a gift of \$100,000 was presented to the Board by the Alumnæ Association of the College, the first instalment of the sum of \$1,000,000 which the alumnæ have undertaken to try to raise for the additional endowment of the college. The alumnæ have made it a condition of their gift that the money shall be used for academic salaries and they have endowed the chair of mathematics with this first \$100,000 and stipulated that the money released by freeing the college from maintaining this professorship shall be used in raising the salary of each full professor in the college. Professor Charlotte Angas Scott has held since the opening of the college the chair of mathematics, which the alumnæ have endowed.

The legislative board of visitors of the University of Missouri in its report to the governor of the needs of the university, recommended that the legislature appropriate \$475,000 for new buildings. Of this amount, the board recommended that \$250,000 be spent for a fireproof library building, \$100,000 for a physics building, \$75,000 for a chemistry building and \$50,000 for a women's gymnasium.

AT Central University, Danville, Kentucky, Young Memorial Hall was dedicated on Friday, January 8. The speakers for the occasion were Dr. Henry S. Pritchett, president of the Carnegie Foundation for the Advancement of Teaching, Dr. Willis G. Craig, of Chicago, and Dr. J. M. Blayney, who spoke on behalf of the trustees of the university. Young Hall is a well constructed building. one hundred and twenty-two by seventy-six feet, made of buff brick and trimmed in light sandstone. The first floor and a portion of the basement will be occupied by the department of physics under the direction of Professor Clarence McChayne Gordon, Ph.D. (Göttingen); the second floor will be devoted to the work in chemistry, with Friend E. Clark, Ph.D. (Johns Hopkins), in charge.

A FOURTH report upon The High School Course in Botany adopted by the College Entrance Examination Board as a basis for its examinations, giving the course in full with certain explanatory matter, has recently been printed by a committee of the Botanical Society of America. A copy thereof will be sent to any one especially interested in this matter upon application to the chairman of the committee, Professor W. F. Ganong, Smith College, Northampton, Mass.

THE newspapers state that President Benjamin Ide Wheeler, of the University of California, has declined the presidency of the University of Michigan.

Dr. E. A. Noble will be installed as president of the Woman's College of Baltimore on February 2.

Professor George F. Swain, professor of civil engineering at the Massachusetts Insti-