

the state; Professor B. W. Jones for the college of law; and President C. R. Van Hise on behalf of the university.

After reviewing Colonel Vilas's almost continuous connection with the university in one capacity or another from the time that he entered as a preparatory student in 1852, until his death fifty-six years later, and after pointing out the great service which he rendered his alma mater as a regent as well as a professor of law, President Van Hise spoke of the significance of the endowment of over \$30,000,000, from the Vilas will. President Van Hise said:

The benefits of Colonel Vilas's will are likely to influence the development of the university long before financial advantages are received. Those who are striving for the construction of the university along the highest as well as the broadest lines now have the powerful moral support of one of the ablest and most distinguished citizens that have ever lived in this state, of the man who by long study of educational problems in the university has the best right to speak as to its future. The will of Colonel Vilas is not merely a deed of gift to the university; it is a gift of his highest thought, matured through years of consideration of the educational problems of this state. It is, indeed, possible that this gift of his mind may be even greater in its influence on the development of the university than the gift of his property. Thus Colonel Vilas's will is not merely a financial bequest; it is a profound state paper which is certain to influence perpetually the development of higher education in this commonwealth.

President Van Hise explained that the will provides: first, for a theater, as a memorial to the beloved son, Henry Vilas, who was graduated at the university in 1894, but who died at an early age; second, after providing for this memorial half of the income goes for scholarships and fellowships, for the support of art and music, and for the maintenance of ten research professorships with adequate salaries and assistants. He said:

There can be no broader statement of endowment for research than that of the Vilas will. "These professorships," the will reads, "are designed to promote the advancement of knowledge rather than to give instruction; not more than three hours a week, nor more than one hour in

one day shall be exacted of the incumbent for teaching, lecturing, or other instruction to students or otherwise. Any branch of human learning may be selected as a subject for special study." "The university may best be raised to the highest excellence as a seat of learning and education," the will continues, "by abundant support in pushing the confines of knowledge: the special object of this trust."

As Dr. Van Hise points out:

These research professorships, while not first in order, are placed "first in importance among the purposes of the trust." The provisions for their support, including liberal salaries, assistants, materials, a limited amount of instructional work, and relations with students, are an epitome of the situation in the best German universities, which are admitted to stand first among the institutions of the world in the advancement of knowledge. The accumulated university wisdom of the past century Colonel Vilas has concentrated in this great document for the advancement of knowledge.

#### THE DARWIN ANNIVERSARY MEETING OF THE AMERICAN ASSOCIATION

THE program for the Darwin Anniversary meeting of the American Association is now practically complete. The following have accepted the committee's invitation to present papers on the subjects given:

T. C. Chamberlin: Introductory remarks as president of the association.

Edward B. Poulton: "History of the Theory of Natural Selection since Darwin."

J. M. Coulter: "The Theory of Natural Selection from the Standpoint of Botany."

D. T. MacDougall: "The Direct Effect of Environment."

C. O. Whitman: "Determinate Variation."

C. B. Davenport: "Mutation."

W. E. Castle: "The Behavior of Unit Characters in Heredity."

D. S. Jordan: "The Isolation Factor."

C. H. Eigenmann: "Adaptation."

E. B. Wilson: "The Cell in Relation to Heredity and Evolution."

G. Stanley Hall: "Evolution and Psychology."

H. F. Osborn: "Recent Paleontological Evidence of Evolution."

These papers, which will probably be presented on Friday, January 1, will be published in a memorial volume. A dinner will be held

in the evening at which less formal speeches will be made.

#### SCIENTIFIC NOTES AND NEWS

PROFESSOR H. F. OSBORN will deliver the third series of the "Norman W. Harris Lectures" before Northwestern University, from December 3 to 11. The subject of the course is "The Age of Mammals in Europe and America." The lectures treat of the Cænozoic period faunistically and from the standpoint of migrations between the old and the new worlds. According to the conditions of the lectureship they will be published subsequently in book form.

DR. THEOBALD SMITH, professor of comparative pathology in the Harvard Medical School, will give a course of eight Lowell lectures on "Our Defenses against the Microorganisms of Disease." These lectures, beginning March 16, will be given on Tuesdays and Fridays.

THE non-resident lecturer in mathematical physics at Columbia University for the year 1908-9 is Professor Max Planck, of Berlin. In the latter part of April and the early part of May, 1909, he will deliver a course of lectures upon "The Present System of Theoretical Physics," dealing particularly with the questions of reversibility, heat-radiation, and the principle of relativity. Details of the dates and subjects of the individual lectures will be published early in March.

PROFESSOR BATESON delivered an inaugural lecture at Cambridge University on October 23, on "The Methods and Scope of Genetics."

DR. WILLIAM P. MASON, professor of chemistry at the Rensselaer Polytechnic Institute, of Troy, N. Y., gave the annual Founders' Day address at Lafayette College, on October 21, his subject being "A Plea for a wider and better Extension of the Knowledge of Sanitary Science. The degree of LL.D. was conferred upon Professor Mason.

IN connection with the visit of the members of the Congress of Electrical Units to Cambridge University, degrees of doctor of science were conferred on Dr. S. W. Stratton, Professor Svante A. Arrhenius, Professor G. Lippmann and Dr. E. G. Warburg.

MR. W. H. HOLMES, chief of the Bureau of American Ethnology, sailed for South America on October 28, as delegate of the United States to the Pan-American Scientific Congress. He will return in February. During his absence Mr. F. W. Hodge will be in charge of the bureau.

IN accordance with the current federal agricultural appropriation act, authorizing the establishment of an experiment station in the Island of Guam, Dr. W. H. Evans, of the Office of Experiment Stations, has visited the island and selected a site for the station at Agaña. The station will be conducted under the immediate supervision of the office, with H. L. V. Costenoble as agent in charge.

SIR DANIEL MORRIS, Imperial Commissioner, West Indian Agricultural Department, has resigned.

MR. ROSWELL H. JOHNSON has resigned his position as investigator at the Station for Experimental Evolution of the Carnegie Institution at Cold Spring Harbor, N. Y., to become a consulting geologist. His manuscript on "Determinate Evolution in the Color Pattern of the Lady Beetles" is now in press.

DR. I. F. LEWIS has returned from Europe, where he has been studying at Naples and Bonn, and has resumed his duties as professor of biology at Randolph-Macon College, Ashland, Va.

SIR JAGADIS CHANDRA BOSE, M.D. (Cantab.), D.Sc. (Lond.), professor of the Presidency College, Calcutta, addressed the Biological Club of the Massachusetts Institute of Technology on October 22. His subject was "The Plant as a Living Machine," and the lecture was followed by a demonstration of plant responses, mechanical and electrical.

THE 347th regular meeting of the Middletown Scientific Association was held in the Scott Laboratory of Physics, Wesleyan University, on October 27, when Professor Herbert William Conn delivered an address on "The Fight against Tuberculosis."

A MEETING of the Columbia Chapter of the Society of Sigma Xi was held with the department of physics, on October 29. The