

H. Eigenmann; 140, K. E. Guthe; 144, G. A. Hulett; 146, M. Nussbaum; 149, P. A. Guye; 150, C. A. Kofoid; 152, W. D. Hoyt; 154, J. P. Munson; 155, H. P. Hollnagel; 156, R. Thaxter; 157, L. Mercier; 158, H. V. Neal.

The secretary stated that during the past year no reports had been received from grants 22 and 27, awarded in 1889; 117 (1905); 124 (1905); 142 (1908), and 147 (1909). Grants 107 and 134 were withdrawn, since the recipients were unable to carry on the work for which the grants were awarded, and had repaid the total amount of the grant. It was voted to close the records of the following grants, since the work had been satisfactorily completed, and the results published: 138, Mme. P. Šafařík; 141, J. T. Patterson; 148, C. C. Nutting; 159, B. M. Davis; 160, L. J. Henderson, and to close upon receipt of publications the following: 136, H. Z. Kipp; 161, O. von Fürth. The secretary reported that additional publications had been received from W. Doberck (Grant 153), and from J. Koenigsberger (Grant 139), making a total of six publications aided by this grant.

An unusually large number of applications was received, and the trustees regretted that they were obliged to decline several which were highly deserving of aid.

It was voted to make the following new grants:

162. \$200 to Superintendent O. H. Tittmann, Coast and Geodetic Survey, Washington, D. C., for observing variations of latitude by means of a photographic zenith tube.

163. \$200 to Professor R. L. Moodie, University of Kansas, for phylogenetic studies of Amphibia.

164. \$200 to Professor J. M. Aldrich, University of Idaho, for a study of invertebrates, especially insects, found in and about the western salt and alkaline lakes.

165. \$150 to Professor M. E. Haggerty, Indiana University, for the study of instinctive reactions in newly born dogs of various breeds, and of the inheritance of these reactions.

166. \$200 to Professors F. C. Blake and C. Sheard, Ohio State University, for verification of the Kirchhoff-Abraham generalization of the Thomson formula for the discharge of a condenser.

167. \$150 to Dr. E. Rohde, Heidelberg, Germany, for studies of the metabolism of the mammalian heart.

168. \$125 to Dr. H. Freundlich, Leipzig, Germany, for a study of the kinetics of the transformation of aliphatic to aromatic compounds.

169. \$150 to Professor G. A. Hulett, Princeton University, for further studies of the electrochemical equivalent (in continuation of Grant 144).

It was voted that grants shall not be made for the purchase of books or ordinary laboratory apparatus, or for living expenses, or for appointments essentially similar to scholarships or fellowships. It was voted to request, but not to require, that all applications shall be type-written.

CHARLES S. MINOT,
Secretary

HARVARD EXCHANGE OF TEACHERS WITH COLLEGES IN THE MIDDLE WEST

HARVARD UNIVERSITY has arranged an annual exchange of teachers with four of the colleges in the middle west—Colorado College, of Colorado Springs, Colo.; Grinnell College, formerly Iowa College, of Grinnell, Ia.; Knox College, of Galesburg, Ill., and Beloit College, of Beloit, Wis. Every year, until the arrangement is terminated, Harvard University is to send a professor who will spend an equal portion of half an academic year with each of the four colleges mentioned above, and during that time will give to the students of these institutions such regular instruction in their courses as may be arranged by their faculties. The salary of this professor will be paid by Harvard University. His traveling expenses will be borne by the four colleges already referred to, and each of them will provide his maintenance while he is in residence. The professor will be selected every year by Harvard University, with the approval of the co-operating colleges, and he will go in the first or second half-year, as may be agreed. In return, each of the four colleges is expected to send to Harvard University each year one of its younger instructors for half a year, and during that time he will be appointed an assistant in some Harvard course; he will teach

and will be paid as though he were a regular member of the Harvard University staff. Unless by special agreement, he will not be required to give more than one third of his time to teaching, and may devote the rest of it to graduate and research work in any of the departments of the university. Each college is to notify Harvard University of the appointment as early as possible in the preceding year. The arrangement will go into effect in the academic year 1911-12. The first professor of Harvard University to take part in this exchange will be Albert Bushnell Hart, Ph.D., LL.D., Litt.D., Eaton professor of the science of government. His term of service will fall in the second half-year.

SCIENTIFIC NOTES AND NEWS

MR. SAMUEL FRANKLIN EMMONS, eminent for his contributions to the scientific study of ore deposits, died of asthma on the morning of March 28, at his home in Washington, D. C., aged seventy years. On the afternoon of March 30, the members of the United States Geological Survey united in a short memorial service in appreciation of his character and work.

DR. THEOBALD SMITH, professor of comparative pathology in Harvard University, has been appointed visiting professor at the University of Berlin, for the second half of the academic year 1911-12.

PROFESSOR EDWARD L. MARK, director of the Harvard Zoological Laboratory, has been elected a foreign member of the *Königlichen Böhmische Gesellschaft der Wissenschaften* in Prague.

DR. LAZARUS FLETCHER, F.R.S., director of the British Museum (Natural History), has been elected an honorary fellow of University College, Oxford.

DR. C. G. ABBOT, director of the Astrophysical Observatory of the Smithsonian Institution, will this summer conduct an expedition to southern Mexico to make measurements of the sun's radiation, which will be compared with simultaneous observations on Mt. Wilson. The congress has made a special appropriation of \$5,000 for this work.

PROFESSOR HIRAM BINGHAM, of Yale University, will on June 10 leave for a six-months' expedition to Peru. He will be accompanied by a geologist, a topographer and a naturalist and it is hoped by a pathologist. He expects to explore the seventy-third meridian from the Amazon Valley to the ocean.

DR. ROLAND B. DIXON, of Harvard University, is spending the second half of the academic year in the Bureau of the Census in Washington, devoting himself to a statistical inquiry in regard to the Indians.

MR. WILLIAM S. KIENHOLZ has been appointed director of a marine biological laboratory located at San Pedro, Cal. This laboratory is in connection with the Los Angeles schools and the city of Los Angeles expects to spend ten thousand dollars for the laboratory during the next two years.

DR. MARIE C. STOPES, lecturer on paleobotany in the University of Manchester, and Dr. R. R. Gates, of the Missouri Botanical Garden, who met at the Minneapolis meeting of the American Association for the Advancement of Science, were married at Montreal on March 18.

THE April meeting of the American Mathematical Society will be held at University of Chicago on Friday and Saturday, April 28-29. At this meeting Professor Maxime Bôcher will deliver his presidential address, the provisional title of which is: "Charles Sturm's Published and Unpublished Work on Differential and Algebraic Equations." Except for the summer meetings, this will be the first united meeting of the whole society since 1896.

DR. S. WEIR MITCHELL delivered the last lecture of the season before the Harvey Society on Saturday evening, April 1, at the New York Academy of Medicine. The subject of the lecture was "William Harvey, the Discoverer of the Circulation of the Blood."

PROFESSOR A. A. NOYES, director of the Physico-chemical Research Laboratories at the Massachusetts Institute of Technology, recently made an address before the College of Science of the University of Illinois, in