3:15 P.M. Ascent of Tumamoc Hill: Or Drive to Cactus Garden of the University of Arizona. Exhibition of Publications.

In the evening forty scientific men were the guests of the Carnegie Institution of Washington at dinner. Brief addresses were made by Geh. Professor Engler, director of the Royal Garden of Berlin, Professor R. H. Forbes, director of the U.S. Agricultural Experiment Station of Arizona, Professor B. E. Livingston, director of the Laboratory for Plant Physiology of Johns Hopkins University. Dr. Eduard Ruebel, of Zurich, and Dr. D. T. MacDougal. Congratulatory telegrams from President Woodward, Professor V. M. and Mrs. E. S. Spaulding and others were The members of the International Phytogeographic Society also presented testimonials of plate to Professor H. C. Cowles, Dr. Geo. E. Nichols and Dr. Geo. D. Fuller.

The members of the society had been the guests of the Carnegie Institution during the previous week at the Coastal Laboratory at Carmel, California, and at the Salton Sea. During the week following the anniversary date, subsistence, tentage and transportation were furnished to a party of thirty traversing the desert to the base of the Santa Catalina Mountains, and making the ascent to the summit of Mt. Lemmon and the Montane plantation. Ample opportunity was given for observations and discussion of factors affecting distribution, including temperature and evaporation gradients, origin and development of formations and the physical and physiological facts implied in conceptions of chaparral, desert, steppe, forest, etc.

The establishment of the Desert Laboratory was authorized by the trustees of the Carnegie Institution late in 1902. Messrs. F. V. Coville and D. T. MacDougal selected a site at Tucson in February, 1903, and after citizens had contributed two hundred acres of land and other concessions a laboratory was erected and Dr. W. A. Cannon as resident investigator took over the building and began work in September, 1903.

The department of botanical research was created by the trustees in December, 1905, and

Dr. D. T. MacDougal was appointed director with headquarters at the Desert Laboratory. The equipment has been extended to include the Coastal Laboratory at Carmel, Calif., experimental plantations at various places and the department sustains relations with a large number of collaborators in various institutions.

621

THE WILLIAM H. WELCH FUND OF THE JOHNS HOPKINS MEDICAL SCHOOL

THE General Education Board, endowed by Mr. John D. Rockefeller, has appropriated \$1,400,000 for the Johns Hopkins Medical School to establish an endowment to be known as the William H. Welch fund, in honor of Dr. Welch, to whom the organization and development of the school are in a large measure due. The objects of the fund are described in a statement given out by the Rev. F. T. Gates, secretary of the General Education Board, as follows:

Since the opening of the Johns Hopkins Medical School in the early nineties, it has been universally conceded that the teaching of the underlying medical sciences, namely, anatomy, physiology, pathology and pharmacology, must be placed in the hands of men devoting their entire time to teaching and research in their subjects.

As the clinical branches are more extensive and more complicated than the above-mentioned underlying sciences, the medical faculty of the Johns Hopkins University has become convinced that it is fully as important that the clinical subjects should be cultivated and taught by men freed from the distraction involved in earning their living through private practise.

The trustees of the Johns Hopkins University and the Johns Hopkins Hospital and the medical faculty of the Johns Hopkins University united in requesting of the General Education Board funds that would enable them to reorganize the departments of medicine, surgery and pediatrics so that the professors and their associates in the clinic and the laboratories should be able to devote their entire time to their work.

In making the gift the General Education Board has placed absolutely no restriction upon the freedom of these men. They will henceforth be in position to do any service that either science or humanity demands. They are free to see and treat any one, whether inside or outside the hospital, but they will accept no personal fee for any such service.

It is not expected that this radical innovation in medical teaching will deprive the Johns Hopkins Medical School of such advantages as are still to be gained from the services of other men who are practitioners of medicine and surgery. In the conduct of the dispensary, in the teaching of students and in the cultivation of the specialties men simultaneously engaged in practise will to some extent continue to be utilized.

SCIENTIFIC NOTES AND NEWS

Dr. Robert Broome, the authority on South African paleontology, is visiting America for a year of scientific research especially upon the ancient vertebrates of the Permian period. He has accepted a temporary appointment upon the staff of the American Museum of Natural History for this purpose, and has brought with him his private collection of South African Permian reptiles.

THE Hon. Bertrand Russell, who will this year lecture at Harvard University, and Professor Etienne Boutroux, of the University of Paris, have been appointed Woodward lecturers at Yale University.

SIR WILLIAM CHRISTIE, formerly astronomerroyal, has been elected Master of the Clock-makers' Company, London.

Professor Raymond Dodge, of Wesleyan University, Middletown, Connecticut, is spending the current academic year in research in physiological psychology at the Nutrition Laboratory of the Carnegie Institution of Washington, Boston. A special laboratory has been equipped with an Einthoven string galvanometer and other apparatus of a similar order of precision, including much apparatus devised by Professor Dodge.

Dr. F. B. Sumner has been appointed biologist in the Scripps Institution for Biological Research of the University of California.

Dr. G. F. Paddock has been appointed assistant in the Lick Observatory of the University of California.

Dr. Orland E. White, recently an instructor in botany at South Dakota State College and an assistant and graduate student in the

laboratory of genetics, Bussey Institution of Harvard University, has accepted the appointment as plant breeder to the Brooklyn Botanic Garden.

Father Theodor Angehrn, S.J., has been appointed director of the Haynald Observatory, Kalocsa.

Dr. Giuseppe Bastianelli, Rome, is visiting the medical institutions of the United States.

Professor W. M. Hays, former assistant secretary of agriculture, has gone to Argentina as a consulting adviser to the secretary of agriculture of that country. His services were secured with a view to the inauguration of a plan for rural education. It is expected that he will be absent from this country six months or more. Mrs. Hays accompanied him.

Dr. Frank E. Lutz, accompanied by Mr. Charles W. Leng, has been in Cuba on an entomological collecting trip on behalf of the American Museum of Natural History. After a period of study in Havana where facilities for work were accorded by Professor Carlos de la Torre, the expedition established field headquarters in Pinar del Rio.

With the sanction of the British secretary of state, Sir Aurel Stein has undertaken an expedition into Central Asia, which he expects to occupy him for nearly three years. Proceeding to Chinese Turkestan by a hitherto unexplored route, he plans to spend the winter in the desert, afterwards extending his work further east towards the western borders of China.

Dr. W. J. Humphreys, professor of physics in the United States Weather Bureau, lectured at the University of Illinois on October 23. His subject was "The Temperature Effects of Volcanic Dust in the Atmosphere."

AT a joint meeting of the Philadelphia Section of the Illuminating Engineering Society and the Philadelphia Photographic Society held at the Engineers Club on October 17, Dr. A. W. Goodspeed read a paper entitled "A simple unit method for measuring the actinic effect of illuminants both primary and secondary." This paper embodied an analysis of