dred, traveled by a special train from the East of Australia. In the party were retiring president, Sir John Monash, the president-elect, Professor E. H. Rennie, and other leading scientists and scholars of the Commonwealth of New Zealand. Professor Rennie's presidential address was principally devoted to an exhaustive analysis of the constituents of Australian plant products. He referred to their commercial possibilities and urged a vigorous policy of afforestation to provide against the extinction of valuable trees and plants.

THE Astronomy and Physics Club of Pasadena closed its program for the year with the following list of subjects and speakers: *Binary Stars,* Dr. R. F. Sanford, of Mt. Wilson Observatory; *Cepheid Variables,* Dr. R. H. Curtiss, of the University of Michigan; *Fluorescent Radiation from Incandescent Bodies,* Professor E. L. Nichols, of Cornell University; *Sun-spot Cycles,* Dr. S. B. Nicholson, of Mt. Wilson Observatory; *Extra-galactic Space,* Dr. Edwin Hubble, of Mt. Wilson Observatory; *Recent Development of the Saha Theory,* Dr. E. Freundlich, Potsdam, Germany; *Report of a Repetition of the Trouton-Noble Ether-Drift Experiment,* Mr. C. T. Chase, of the California Institute of Technology; *The Eclipse Expedition to Sumatra,* Dr. J. A. Anderson, of the Mt. Wilson Observatory; *Further Experiments on the Inertia of the Electrical Carrier in Copper,* Dr. R. C. Tolman, of the California Institute of Technology.

THE foot-and-mouth disease commission sent to Europe to study the research being done there on the problem returned after more than a year's stay. The commission, which consisted of Dr. Peter K. Olitsky, of the Rockefeller Institute for Medical Research; Dr. Jacob Traum, of the University of California, and Dr. Harry W. Schoening, of the Federal Bureau of Animal Industry, is now engaged in writing its report of the survey. After studying the research work and the control measures employed in France, Germany, England, Denmark, Sweden, Holland, Belgium, Switzerland, Austria, Hungary and Italy, the commission established itself at the Institut d'Hygiene, Strasbourg, and later also at the Laboratoire National de Recherches, Alfort, France. Experimental studies were made at these institutions on the causal agent of foot-and-mouth disease from its physical, chemical and biological aspects. Particular attention was given to certain phases of the problem bearing on methods of control of the disease used in this country. European investigators and officials gave the fullest cooperation and expressed their approval of the commission's work. It is hoped that this effort will result in solving some of the problems of this disease which causes such great economic losses all over the world. Members of the commission returned at the time because the appropriation for the study lapsed on July 1.

UNIVERSITY AND EDUCATIONAL NOTES

Nature reports further details of the will of the late Dr. J. E. Bles, who left all his scientific instruments, scientific books and the fittings and contents of his private laboratory to the University of Cambridge. Dr. Bles empowered his trustees to expend a sum, not exceeding £500, in completing any researches made by him and publishing the results of any researches not published at the time of his decease. The value of his estate was £42,677; failing issue, and subject to his widow's life interest and after certain bequests, he left the residue of his property to the university for a professorship of animal embryology to be called the Charles Darwin professorship and subject thereto upon similar terms for a professorship of bio-physics.

THE entire $30,000 estate of the late Albion W. Small, dean of the graduate school of the University of Chicago, has been bequeathed to the university for the founding of a publication in the field of social science. Dr. Small, who was seventy-four years old at the time of his death last March, came to the university when it opened in 1892 as head of the school of sociology. Prior to that he was president of Colby College, Maine.

DR. S. C. LIND, associate director of the Fixed Nitrogen Research Laboratory, has resigned to become director of the school of chemistry of the University of Minnesota. A division of photo- and radio-chemistry will be added to the chemical curriculum.

DR. RICHARD B. MOORE, formerly chief chemist of the U. S. Bureau of Mines and since 1923 director of research with the Dorr Company, of New York City, has been appointed dean of the school of science and head of the department of chemistry at Purdue University.

DR. BENJAMIN B. WATSON, who recently resigned from the Sir James Young Simpson chair in obstetrics and gynecology in the University of Edinburgh, arrived in the United States on September 1, having accepted a similar chair in the college of physicians and surgeons of Columbia University. Dr. Watson will also be the director of the Sloane Maternity Hospital. He succeeds in both positions the late Dr. William Studdiford.

AT the University of California, Professor Raymond T. Birge has been promoted from associate pro-

fessor of physics to a full professorship. Professor A. Joffé, director of the Technical Physical Institute of Leningrad, Russia, will be a member of the physics staff during the spring semester, 1927. He will give a course on "Physics of Crystals" and will be available to direct research work of graduate students.

DR. FRANK M. LIFE, professor of physics and head of the department at the University of Arizona, has been appointed head of the College of Letters, Arts and Sciences, to fill the place of Professor Frank C. Lockwood, who has a year's leave of absence.

DR. C. L. WITHYCOMBE has been appointed university lecturer in advanced and economic entomology in the University of Cambridge.

THE council of the University of Manchester has made the following appointments: Mr. H. E. Buckley to be lecturer in crystallography; Miss Margaret S. Willis to be assistant lecturer in geography; Dr. C. E. Brunton to be demonstrator in human physiology; Dr. O. R. Howell, lecturer in applied chemistry in the faculty of technology; Mr. Robert Grindley, demonstrator in chemical technology in the faculty of technology.

DISCUSSION

WHAT CONSTITUTES PUBLICATION? A QUESTION CONCERNING NOMENCLATURE

IN SCIENCE, No. 1631, p. 362, I note a summary of Opinion 87 of the International Commission on Zoological Nomenclature: "Printer's proof sheets do not constitute publication and, therefore, have no status under the International Rules of Zoological nomenclature." No zoologist could be found, I suppose, who would dispute this salutary ruling;[1] but on reading the full opinion, the example selected to illustrate it appears to me unfortunate and the statement of the case misleading. It is the case of the "Smithsonian Miscellaneous Collections, 000."

In the Century Dictionary a proof sheet is defined as "a printer's proof," which is "a trial impression from composed type taken for correction." The printed matter referred to in Opinion 87 is a stitched octavo pamphlet of twelve leaves. The first leaf has the title quoted above, and an introduction (continued on page 2) stating the subject and author (W. G. Binney), and signed by Joseph Henry, Secretary, S. I., dated "Smithsonian Institution, Dec. 9, 1863." The following pages, numbered 3 to 12, are printed on one side of the paper only, all being left-hand pages.

Professor Henry referred to this paper in these words: "As a mere proof which will undoubtedly receive many corrections, these pages should not be quoted as authority, or referred to as a published work." This is certainly a naïve suggestion. Most zoological publications "will undoubtedly receive many corrections," even those of to-day; ours is not an exact science. The mere statement that the paper is a "proof" can not make it a "proof-sheet" if it is not one. As a matter of fact, it was never intended as a proof sheet in the true sense of that term. It is a pamphlet, stitched and paged, dated, furnished with a formal introduction to the reader, and sent out widely by a responsible scientific institution, not for the correction of typographical or similar errors, but to obtain "information relative to the subject of these researches" and "contributions of specimens . . . serving to illustrate local faunas," etc.

I need only add that the paper in question is a common one. The statement in Opinion 87 that it was sent out "to a limited number of persons interested in the study of mollusks," though apparently a mere assumption without documentary evidence, is doubtless true. But the limit was evidently placed high enough to reach all persons who would be interested, for the paper is still easy to get, over sixty years since it was issued. Many years ago I procured a copy from a dealer, and within the past year was given another among miscellaneous pamphlets on mollusks. A colleague here tells me that his copy was handed him three or four years ago by a friend who had it in duplicate. In the library of the Academy of Natural Sciences I find it duly bound with other "Smithsonian Miscellaneous Collections."

It is clear that the Smithsonian Institution gave this paper a general circulation among shell collectors and conchologists of its time, and doubtless supplied it to all inquirers. It was only by such general distribution that the objects of the publication could be attained. To claim that this paper was not published appears, to put it mildly, disingenuous. It does not belong to the class covered by the summary of Opinion 87.

It was in this pamphlet that the name *Carinifex newberryi* Lea first appeared. In the opinion under consideration, it is claimed that there was not "any indication" which of the species which had been named *newberryi* might be intended by Binney's *Carinifex newberryi*. This claim does not appear to be tenable. It should be understood that the work was a list of all North American species of air-breathing mollusks, classified under families and subfamilies, systematically arranged. Up to that time (1863),

[1] The only case which I recollect of proof sheet names finding their way into published works is that of W. E. Leach, whose proofs of a projected work were quoted by J. E. Gray many years ago.