needs not only to be intelligent on game if he is to execute the laws properly, but he needs furthermore to know the influence of game and fur-bearing animals upon forests.

CURATOR W. C. MILLS, of the Ohio Archeological and Historical Society, and also of the Archeological Museum of the Ohio State University, has this summer been excavating a mound situated on the farm of State Senator W. D. Tremper. It has yielded hundreds of valuable specimens, which show remarkable skill in the art of graving and carving. In addition, there is evidence that here in this mound communal or tribal relations existed, for instead of numerous individual graves, one common grave served for the receptacle for hundreds of bodies. There are many other characteristics, which make this mound stand out. For instance, it was found that a wooden palisade had been erected around it. It was also discovered that the builders worked in quartz and several specimens were obtained. The Tremper mound is in form that of an animal enclosed by an embankment or wall. It is 250 feet long, with an average width of 50 feet and a maximum height of 8½ feet. Because of its resemblance to an animal it early became known as the Elephant Mound, although recent exploration has proved this formation to be incident to its use and construction and not intended to represent an animal.

PROBABLY the most accurate method for the determination of the value of the strength of an electrical current in absolute measure is by means of the Rayleigh current balance, in which the current to be measured is passed in series through two parallel circular coils of unequal radii, one of which is suspended from the beam of a balance. The distance between the planes of the coils is varied until the force of attraction between the two coils is a maximum, and the value of the force is obtained by adding weights to the other arm of the balance until its equilibrium is restored. Since the maximum force obtainable depends on the ratio of the radii of the coils alone, and not on their individual dimensions, it is only necessary to determine further the ratio of the radii of the coils, and this may be done with great accuracy by electrical means. The constant of the instrument, that is, the maximum force per unit current for the coils in question, has been obtained in the past by interpolation between values of the force, calculated for various assumed distances of the coils, in the neighborhood of the critical value for which the force is a maximum. For, although the general formulas of Maxwell and Nagaoka give the value of the force for any two given coils, at any assumed distance with great accuracy, no formula has been heretofore published for calculating at what distance the force becomes a maximum. To supply this lack there is derived in a paper just published by the Bureau of Standards, Department of Commerce, entitled "The Calculation of the Maximum Force between Two Parallel, Coaxial, Circular Currents," a formula which gives the critical distance as a function of the ratio of the radii. The latter part of the paper is devoted to the development of methods for facilitating the calculations. The formulas are illustrated by numerical examples and tables, and the new formulas are shown to give results in agreement with those derived by more indirect and laborious method of interpolation. Copies of the publication, Scientific Paper No. 255, may be obtained on request of the Bureau of Standards, Washington, D. C.

UNIVERSITY AND EDUCATIONAL NEWS

A COLONIAL mansion at 4037 Pine Street, Philadelphia, modeled after Washington's Mount Vernon home, has been purchased by the Mask and Wig Club, the University of Pennsylvania dramatic organization. After extensive alterations it will be turned over to the university as a gift to be used as the official residence of Pennsylvania provosts. The value of the gift exceeds $75,000.

PROFESSOR CHARLES A. KOFOID, professor of zoology, University of California, is on sabbatical leave for the current academic year. He is spending the first half of it in research work in Berkeley and will travel in the Orient

after January 1. Associate Professor S. J. Holmes has been granted leave of absence for the current academic year on account of ill health. Dr. R. Ruggles Gates, of the Missouri Botanical Garden, has been appointed acting associate professor in zoology for the current academic year, and Assistant Professor J. Frank Daniel has been made acting head of the department of zoology. Professor Robert C. Rhodes, professor of biology in Henderson Brown College, Arkadelphia, Arkansas, and Instructor Harry B. Yocum, of Kansas State Agricultural College, have been appointed assistants in zoology.

THE new professional school of chemistry of the University of Pittsburgh began its work on September 27, under the deanship of Dr. Raymond Foss Bacon, director of the Mellon Institute of Industrial Research. A prescribed four-year undergraduate curriculum leads to the degree of bachelor of chemistry, and the staff of instruction includes the regular faculty of the university and fellows from the Mellon Institute of Industrial Research who are especially qualified in various theoretical and technical branches. This combination gives the new school the opportunity to offer not only the usual undergraduate and graduate courses in chemistry and technology, but also specialized work under men who are experts in specific American industries. In addition, thirty special lectures by prominent chemists and technologists in the Pittsburgh district, have been arranged for the academic year 1915–16. Attendance at these lectures is required of the student body and they are also open to the public. The professorate of the new school is constituted as follows: Alexander Silverman, M.S., professor of chemistry and head of the department of inorganic, analytical and physical chemistry; David S. Pratt, Ph.D., professor of chemistry and head of the department of organic, sanitary and micro-chemistry; Samuel R. Scholes, Ph.D., E. Ward Tillotson, Jr., Ph.D. and Edmund O. Rhodes, M.S., professors of applied chemistry; Benjamin T. Brooks, Ph.D., professor of chemical engineering; William A. Hamor, M.A., professor of chemistry; Henry A. Kohman, Ph.D. and Harold Hibbert, ScD., professors of applied organic chemistry; Leonard M. Liddle, Ph.D. and R. Phillips Rose, M.S., professors of organic chemistry; Lester A. Pratt, Ph.D., professor of inorganic chemistry, and C. C. Vogt, Ph.D., professor of physical chemistry. Thirteen assistant professors and ten instructors complete the teaching staff of the school.

AT Lafayette College, Dr. Beverly W. Kunkel, of Beloit College, has been appointed head of the department of biology, and Dr. William Mackay Smith, of the University of Oregon, professor of mathematics.

DR. ROBERT CHAMBERS, JR., assistant professor of histology and comparative anatomy in the medical department of the University of Cincinnati, has resigned to accept a position on the staff of Cornell Medical College.

DR. HAROLD KNIEST FABER (A.B., Harvard, 1906; M.D., University of Michigan, 1911), formerly connected with the Rockefeller Institute for Medical Research, New York City, has been appointed assistant professor of pediatrics at the Stanford University Medical School.

WILLIAM WEBB KEMP, a graduate of Stanford and Ph.D. of Columbia, now professor of education in the University of Montana, has been appointed professor of school administration in the University of California.

DR. MAURICE PARMELEE is taking the place of Professor A. E. Jenks, chairman of the department of sociology and anthropology of the University of Minnesota, for the first semester of the present academic year.

DR. FRANK A. HARTMAN, of the department of physiology in the Harvard Medical School, has been appointed lecturer in physiology at the University of Toronto.

H. G. PLIMMER, F.R.S., pathologist to the Zoological Society, has been appointed professor of comparative pathology in the Royal College of Science, London.

PROFESSOR ADOLF WINDAUS, of Innsbruck, has succeeded Professor Otto Wallach as director of the chemical laboratory at Göttingen.