

and the statutes framed and adopted. From these statutes we learn that the objects of the association are to be promoted by the appointment of committees charged with the consideration and investigation of questions submitted by the council, by the publication of the results of such investigations and by the holding of conferences and congresses. It was decided at the opening meeting that the first international committees should be appointed for dealing with the questions of nomenclature in mineral and organic chemistry, and with the unification of the modes of stating physical constants. The next meeting of the association is to be held in Berlin on April 13, 1912, with Professor Ostwald as president, and the 1913 meeting is to be held in Great Britain.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE governor of Pennsylvania has approved a bill giving an appropriation to the Schools of Mines, Engineering, etc., of the University of Pittsburgh, amounting to \$400,000.

HARVARD UNIVERSITY has received from the class of '86 \$100,000 to be used without restriction for the purposes of the college.

PRESIDENT TAFT, upon recommendation of the secretary of the interior, has forwarded to the senate the nomination of Professor Philander P. Claxton, professor of education in the University of Tennessee, as commissioner of education to succeed Dr. Elmer E. Brown, who recently resigned to accept the chancellorship of New York University.

DR. MICHAEL F. GUYER, of the University of Cincinnati, has been appointed professor of zoology in the University of Wisconsin.

PROFESSOR J. A. FERGUSON, of the Pennsylvania State College, has been appointed professor of forestry in the College of Agriculture of the University of Missouri. The College of Agriculture owns fifty thousand acres of forest lands in the southern part of Missouri. It is planned to utilize these lands as an out-door laboratory for the instruction in practical forestry.

FRANK LOXLEY GRIFFIN, Ph.D. (Chicago), assistant professor of mathematics at Williams College, Williamstown, Mass., has been appointed professor of mathematics at Reed College, the new institution at Portland, Ore., which is to open September 18, 1911.

THE REV. ALAN S. HAWKESWORTH has resigned from a lectureship in higher mathematics and semitic languages in the University of Pittsburgh.

PROFESSOR GEORGE D. HUBBARD, head of the department of geology at Oberlin College, has charge of the work in geology and geography at Ohio State University during the summer session.

W. H. LONGLEY, Ph.D., instructor in biology in Yale University, has been appointed assistant professor of biology in Goucher College.

WILLIAM CUMMING ROSE, Ph.D., formerly assistant in the Sheffield Scientific School, Yale University, has been appointed assistant instructor in physiological chemistry at the University of Pennsylvania.

#### DISCUSSION AND CORRESPONDENCE

##### DOUBLE MATING OF SILK-WORM MOTHS

IN SCIENCE for May 19, 1911, Professor Kellogg reports certain double mating experiments with silk-worm moths, of which he invites criticism. His account leaves one with the general impression of a "perturbation in the order of inheritance" due to the presence of spermatozoa furnished by two different males. Several possible explanations are suggested by Kellogg, none of which however is advocated. For example, he inquires:

Do the eggs in double-mated females receive more than one spermatozoon and are these spermatozoa often the representatives of both races used in the double mating? Or can the egg be in any way influenced by the mere presence in the spermatheca of spermatozoa representing both of a pair of allelomorphic heritable characters? Can fluids carrying the spermatozoa have any influence during fertilization? Can the spermatozoa of one type influence those of the other type during their enforced companionship for several hours or days in the female spermatheca?