

of the University of Wisconsin, is chairman. The committee desires to secure a collection of material which will show by photographs the history of the comet from its first appearance until it was no longer visible even to the most powerful telescopes. The committee is requesting every astronomer who possesses any photographs of the comet to cooperate with them in making this history complete. The photographs used will be of four kinds: those possessing conspicuous technical excellence, those of good quality but having slight defects, those presenting obvious technical defects, and those obtained with small cameras by unskilled observers. As many as possible of the photographs used will be of the first class, but when it is necessary to make use of some of inferior excellence in order to avoid gaps in the history this will be done.

UNIVERSITY AND EDUCATIONAL NEWS

THE appropriations for the U. S. Bureau of Education for the fiscal year ending June 30, 1912, show an increase of \$7,600 over the appropriations for the current fiscal year, as follows: For the investigation of rural education, industrial education and school hygiene, including salaries, \$6,000; one clerk at \$1,600. The total specific appropriations for the bureau are as follows: Salaries, \$72,800; library, \$500; collecting statistics, \$4,000; distributing documents, \$2,500; printing annual report, \$25,000; education of natives of Alaska, \$200,000; reindeer for Alaska, \$12,000.

THE legislature of the state of Utah, during its recent session, made an appropriation of \$300,000 to the State University for the construction of the main building of the institution. This building is to house the general library, the art gallery and the administrative offices. The legislature also passed a bill which has become a law, putting the support of the university and the agricultural college on a permanent financial basis by providing that these two institutions shall receive annually 28 per cent. of the income of the state derived from a $4\frac{1}{2}$ mills tax. This 28 per cent. was divided between the institutions as fol-

lows: 64.43 per cent. to the university; 28.34 per cent. to the agricultural college and 7.23 per cent. to the branch normal school, a separate institution affiliated with the university. On the basis of present assessed valuations the annual income of the university for general maintenance is about \$200,000. New buildings and other constructions are to be provided by special appropriations.

THE legislature of Indiana, which adjourned on March 6, appropriated nearly \$200,000 to Indiana University for the next biennium. This appropriation includes \$150,000 additional maintenance, \$35,000 of which is for the Graduate School, and \$50,000 for the Medical School, for the maintenance of the Long Hospital.

ACCORDING to the daily press a graduate of the Philadelphia College of Pharmacy whose name has been withheld, has offered to donate \$1,000,000 toward the erection of a comprehensive group of three buildings, one of which shall be specially devoted to research work, for the institution. He stipulated that the building shall be on the Parkway on a site provided by the city. Mayor Reyburn divulged this fact in discussing his plans for making the western end of the Parkway, between Logan Square and Fairmount Park, a great center for Philadelphia's educational, engineering, scientific, historical, art and research organizations.

MRS. BENJAMIN HICKS, of Old Westbury, N. Y., has bequeathed \$100,000 to Swarthmore College.

COLUMBIA UNIVERSITY has received the sum of \$693,000 from the executors of the estate of the late Mr. George Crocker, for the establishment of the Crocker Cancer Research Fund. It is understood that the remainder of the bequest is under litigation.

WE are requested to state that assistant professorships of physiology, anatomy and bacteriology and pathology are to be filled in the Philippine Medical School. Information respecting the positions may be secured by addressing the Chief of the Bureau of Insular Affairs, War Department, Washington, D. C.

THE School of Engineering at the University of Pittsburgh, announces that Mr. Morris Knowles, C.E., will take charge of the course in sanitary engineering and public health. This course will be developed in cooperation with the medical school of the university and the departments of health of the city and state. The students will have a year's practical work along this line during their four years' course.

THE board of trustees of the University of Illinois in its annual meeting on March 14, made the following appointments and promotions: George Alfred Goodenough, associate professor of mechanical engineering, of the university was promoted to be professor of thermodynamics. Professor Charles Russ Richards, dean of the College of Engineering, University of Nebraska, professor of mechanical engineering in charge of the department. Professor Richards succeeds, as head of the department, Professor L. P. Breckenridge, who two years ago relinquished his office to take up work at Yale University. Mr. Burt R. Rickards, of Columbus, Ohio, who has been for some three years chief of the laboratories of the Ohio State Board of Health, was appointed associate professor of municipal and sanitary dairying in the Agricultural College.

DISCUSSION AND CORRESPONDENCE

LARVAL SPECIES

IN his recent review of Theobald's last volume on the mosquitoes Dr. E. P. Felt emphatically condemns the founding of species, or of a classification, on larval characters.¹ Dr. Felt has a right to his opinion, but his remarks are so incomplete that they do not fairly present the question at issue. In the case of the Culicidæ, as in the many others that might be cited, there were causes which led logically to such a course. First of these was the fact that certain species of mosquitoes could not be distinguished in the imago state, while they showed very marked differences in the larval condition. This led naturally to the founding of species on the early stages and Dr. Felt himself was the first to take this

step. He has been amply justified by the fact that, in spite of diligent study with abundant material, no tangible characters for separating the imagos have been found. It should be added that a study of the male genitalia has revealed corresponding differences, equally marked with those of the larvæ. There can therefore be no question that the species indicated on larval characters really exist in nature. Since then a considerable number of species have come to light which are only separable on characters of larvæ and male genitalia.

Under such circumstances two courses are open to the systematist who will not recognize larval characters, neither of which, in our opinion, is scientific. The most convenient is to ignore the true condition and adhere to the concept of species on the basis of well-marked differences in the imagos; the other is to admit the species indicated by the larvæ and draw up descriptions from the indistinguishable imagos. To designate, as specific, individual differences due to variation, as Theobald has done in the case of *Aedes fitchii*, *A. abfitchii* and *A. subcantans*,² only obscures the subject. We do not advocate the founding of species on larval characters as a general practise and we think that Dr. Felt expresses needless alarm on this account. Under the special conditions indicated above and in similar cases we not only consider the founding of species on larval characters justified, but unavoidable. Furthermore, if the mosquitoes are considered from an economic standpoint (and we are constantly told that this is the primary reason for their study) a knowledge of the larvæ is fully as important as that of the imagos.

But, Dr. Felt's criticism in his approval of Theobald's position is mainly aimed at our paper on the classification of the mosquitoes by larval characters.³ He chooses to ignore the fact that we have since published a classification of the imagos, which, in the main, is

² "Monogr. Culicidæ," Vol. 4, 1907, pp. 319, 321.

³ "The Larvæ of Culicidæ Classified as Independent Organisms," *Journ. N. Y. Entom. Soc.*, Vol. 14, 1906, pp. 169-230, pl. 4-16.

¹ SCIENCE, N. S., Vol. XXXIII., pp. 150-151.