

fact that Hampson has removed it to another genus does not invalidate the change, which was proper when made. He has here violated the rule 'Once a synonym, always a synonym.'

Page 366. The distribution of the genus *Morrisonia* is remarkable. Twenty-eight species are known, twenty-two in New Zealand, six in the United States, and none anywhere else in the world. Of the United States species, five are eastern, only one being western (Arizona). Morrison's species *peracuta*, described as from the United States, is removed to the next genus and becomes a synonym of a New Zealand species, the United States locality being regarded as erroneous.

Page 403, my species *Perigrapha achsha* is omitted (*Can. Ent.*, XXXVI., 32, 1904).

On page 596, *Leucania rubripallens* is credited to Kaslo, British Columbia. I did not find the species there (*Proc. U. S. Nat. Mus.*, XXVII., 863, 1894), and I believe that this is a case of misidentification. The synoptic table on page 594 is bad, the contrasts given under *a*³ and *b*³ are variable and valueless. *L. rubripallens* separates from *oxygale* and *minorata* by the redder color of the fore wings only, not by the degree of black shading on the hind wings. It occurs in the dry regions of Colorado and Utah and I believe does not occur in the wet wooded district of Kaslo.

On page 610, *Himella infidelis* is made synonymous with *Eriopyga conar* and marked 'non descr.' I do not object to the synonym, even if I do not agree to it, but the species certainly was described (*Can. Ent.*, XXXVI., 32, 1904).

HARRISON G. DYAR.

SCIENTIFIC JOURNALS AND ARTICLES.

THE leading article in the June number of the *American Geologist* is entitled 'The Fossil Turtles of the Bridger Basin,' by O. P. Hay, who states that hitherto geologists Cope, Powell, Emerson and King considered these beds as lake deposits, but his own conclusion is that they have 'been made almost wholly through river action.' Professor S. W. Williston says, concluding his article 'On the Lansing Man,' 'I am only confident that the

skeleton dates from Pleistocene times—and is old.' Professor Warren Upham contributes an article on the 'Age of the St. Croix Dalles,' and G. A. Waring one on 'The Pegmatyte Veins of Pala, San Diego County, California,' which is illustrated by five plates and two figures. Professor J. A. Bownocker in discussing 'The Salt Deposits of North-eastern Ohio,' concludes 'that Ohio contains enough salt to supply the entire country for an indefinite period.' A paper on 'Mineralogical Synonyms' is inserted, taken from the *Mineralogical Magazine* for May. The number concludes with an interesting editorial by Dr. G. P. Merrill on 'The New Building for the National Museum, at Washington, D. C.,' which is illustrated by a plate presenting the central plan.

SOCIETIES AND ACADEMIES.

CLEMSON COLLEGE SCIENCE CLUB.

THE 54th regular meeting of the club was held in the lecture room of the electrical laboratory, April 28, at 8 P.M. It was the occasion of the ninth annual meeting and banquet. There were present, in addition to the regular members of the club, delegates from other colleges in South Carolina and from the U. S. Department of Agriculture. The program consisted of numbers taken from the preceding programs of the club during the current year, and an informal address on certain phases of agricultural education by Assistant Secretary of Agriculture W. H. Hays. After the regular meeting, the annual banquet was served in the new museum in agricultural hall, and the banquet was made the occasion of the dedication of the museum.

The 55th regular meeting of the club was held in the lecture room of the electrical laboratory at 8:30 P.M., May 19. Professor J. S. Newman, under the title of 'Fifty Years of Agriculture,' discussed the advances in practical agriculture within that time, taking a somewhat pessimistic attitude in regard to what had actually been accomplished. Professor F. T. Dargan, under the title of 'An Undescribed Method of Demonstrating Horizontal Objects,' made a demonstration of his

apparatus and method, exhibiting Ewing's experiment for demonstrating Weber's molecular theory of magnetism, and showing the magnetic field by use of iron filings. The apparatus, which was very simple, is described as follows: The object to be exhibited is placed on a base (which in the speaker's apparatus consisted of a 60 by 75 centimeter drawing-board covered with white paper). Against two nails driven into this base near the back a large plane mirror is placed, and inclined forward at any desired angle by means of a wire attached to the top of the mirror and passing through a binding post screwed into the back of the base. To each upper corner of the mirror is clamped a 50-candle-power General Electrical Company 'stereopticon' lamp protected in front by metal half shades. These brilliantly illuminate the object and obviate shadows. The apparatus can, of course, be made permanent by hinging the mirror to the base and fastening the lights permanently. It will be seen that the apparatus has many applications in the teaching of the biological as well as physical sciences in exhibiting objects that can not be turned on their edge. The apparatus has the advantage over the projecting lantern with horizontal attachment, first that it does not require a darkened room; second, opaque objects can be exhibited; third, the size of the object to be exhibited is limited only by the size of the mirror; fourth, the apparatus is not only easy to operate, but can be put together from materials usually found in any laboratory.

At the close of the regular meeting, the annual business meeting was held. The annual report of the secretary was received. The following officers were elected for the ensuing year:

President—Professor F. S. Shiver.

Vice-President—Professor S. W. Reaves.

Secretary—Dr. F. H. H. Calhoun.

Members of Council—Dr. J. H. James and Professor F. T. Dargan.

HAVEN METCALF,
Secretary.

SPECIAL ARTICLES.

ASSORTATIVE MATING IN MAN.

As was pointed out in *Biometrika*, Vol. II., No. 4, 1903, "Darwin has given the name of sexual selection to the general conception of differential mating. As opposed to pure random mating within the population, we have first *preferential* mating, in which male or female classes with certain values of a character find it less easy to mate than other classes with different values. Secondly, we have *assortative mating*, in which, while all classes of males and females find mates, certain classes of males appear to be attracted to certain classes of females. If the male class of a given character tends to mate with a female class with generally like character we have a tendency to *homogamy*. Homogamy as one type of assortative mating is simply measured by the correlation between the two characters in the male and female of the pair. The influence of homogamy on the character of successive generations of a population may be very great indeed, and the whole range of effect from pure random matings to perfectly homogamous unions within a population is almost but not quite as important as the difference between self and cross fertilization in plants. It has the distinctive features as compared with self fertilization, that (1) it may have any degree of intensity, (2) it may be confined to special characters, and (3) it is not complicated by any of the supposed harmful effects of inbreeding."

In the paper from which the paragraph I have just quoted was taken we dealt with assortative mating in man with respect to a character—longevity—concerning which there could not possibly be any *conscious* selection. The characters dealt with by Pearson in former papers¹ are also—at least, probably—not made the object of conscious selection. The coefficients of correlation between man and wife in all these cases average about .2—or 'husband and wife are as much alike as uncle and niece, and probably as much alike as, if not more alike than, first cousins.'

¹ *Phil. Trans.*, Vol. 187, A, p. 273, and Vol. 195, A, p. 113; *Biometrika*, II., p. 353.