venture upon no prophecy even so cautious as Bacon's—'As for the mixed mathematics, I may only make this prediction, that there can not fail to be more kinds of them as nature grows further disclosed'—a declaration that is sage enough, though a trifle lacking in precision. Prophecy, unless based upon confident knowledge, has passed out of vogue, except perhaps in controversial politics; even in that domain, it is helpless to secure its own fulfilment. Let me rather exercise the privilege of one who is not entirely unfamiliar with the practice of geometry, and let me draw the proverbial line before indulgence in prophetic estimates. The names that have flitted through my remarks, the discoveries and the places associated with those names, definitely indicate that, notwithstanding all appearance of divergence and in spite of scattered isolation, the sum of human knowledge, which is an inheritance common to us all, grows silently, sometimes slowly, yet (as we hope) safely and surely, through the ages. You who are in South Africa have made an honorable and an honored contribution to that growing knowledge, conspicuously in your astronomy and through a brilliant succession of astronomers. Here, not as an individual, but as a representative officer of our brotherhood in the British Association, I can offer you no better wish than that you may produce some men of genius and a multitude of able workers who, by their researches in our sciences, may add to the fame of your country and will contribute to the intellectual progress of the world.

A. R. FORSYTH.

SCIENTIFIC BOOKS.

Catalogue of the Lepidoptera Phalænæ in the British Museum, London. Vol. IV., Noctuidæ (part), 1903; Vol. V., Noctuidæ (continued), 1905. By Sir GEORGE F. HAMPSON, Bart.

This is a continuation of the monographs of the moths of the world, of which Vol. III. was noticed in SCIENCE, N. S., XV., 99, 1901. A notice of Vol. IV. will be found in the *Canadian Entomologist,* XXXVI., 27, 1904. Volume V., now before us, consists of 634 pages and treats of 2,073 species of Noctuidæ, comprising the subfamily Hadeninæ. These moths have unspined hind tibiæ and hairy eyes, and are familiar to us under the name *Mamestra* and allies. But these familiar names are again largely changed, unavoidably, no doubt, but we fear that the changes are not permanent. Even if subsequent authors can be induced to respect Sir George Hampson's selections of the types of the older genera, we doubt if he will be generally followed in defining no genera on secondary sexual characters. This is done generally in other families of Lepidoptera and the characters prove very useful. We think some of the genera as used in the volume before us would stand subdivision, *Polia,* for example, which contains 209 species. This would save the old genus *Mamestra,* which now sinks as a synonym of *Polia.* These remarks apply to the other volumes as well and are a criticism on the general system adopted. It is not to be expected that the system could be changed during the progress of the work.

A number of our North American species, particularly those recently described, sink as synonyms. This is mostly perfectly justified, as there has been a tendency recently to describe too many forms as species in the Noctuidæ. This tendency has received a just rebuke.

On page 24, *Scotogramma* is marked as a 'new' genus, no doubt by an oversight.

On page 178 all the forms of *comis* and *olivacea* fall together into the synonymy. I believe this is going a little too far, as I think there can be distinguished two species, though closely allied. Otherwise my contention about these forms is sustained.

On page 267 the name *Chabuata velutina* is used. It should be *Chabuata lutina. Velutina* was preoccupied when described and the author very properly changed the name. The

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 Northeastern 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 accomplshed. Professor F. T. Dargan, under the title of 'An Undescribed Method of Demonstrating Horizontal Objects,' made a demonstration of his