

sponded in all essentials to the modern class, including, as it did, both the salamanders and the frogs (though excluding the apodal Cæcilians).

I have long suspected, however, that the term was older; but in spite of persistent efforts I was unable to obtain access to a copy of the book I had in mind. Taking advantage, therefore, of my friend and colleague, Gerrit S. Miller's recent visit to Berlin I requested him to give me the results of an examination of the volume in case he should be able to find it in any of the libraries there. This he has kindly done and the result confirms my suspicion.

The book in question is by A. J. G. C. Batsch, and is entitled: 'Versuch einer Anleitung zur Kenntniss und Geschichte der Thiere und Mineralien.' It was published in Jena and consists of two parts, the first bearing the date of 1788 and containing the general introductory matter and the vertebrates, the other dated 1789, embracing the lower animals and the minerals.

According to Mr. Miller's analysis of the class *Amphibia* in the first part, Batsch divides it into four 'families,' viz., I., *Testudines*; II., *Batrachi*; III., *Lacertæ*; and IV., *Serpentes*. From the enumeration of the genera admitted by Batsch it is evident that he accepted without any essential alteration the scheme of classification proposed twenty years earlier by Laurenti in his 'Synopsis Reptilium,' though adding the turtles which Laurenti for some unexplained reason had left out. Thus the genera *Triton* and *Salamandra* are left with the *Lacertæ*, the cæcilians with the *Serpentes*, and the *Batrachi* consist solely of the genera *Pipa*, *Bufo*, *Rana* and *Hyla*. Batsch's BATRACHIA of 1788, therefore, is an exact equivalent of Laurenti's order SALIENTIA of 1768 and becomes a synonym pure and simple of the latter. We have thus traced the German usage of the word 'Batrachier' for the tailless order only, which was thought to have originated with Johannes Müller, in 1832, back to its first pounder.

It is then pretty plain that in view of this discovery the term *Batrachia* has become untenable for the whole class.

Under these circumstances there seems to be nothing else to do but to accept AMPHIBIA as the formal Latin name for the class as it is restricted at present. While there are many good reasons why it would be desirable to retain the word for the combined classes embraced in the term herpetology, I recognize that it would be utterly hopeless to attempt the substitution of a later name of approximately the compass of the present class.

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U. S. NATIONAL MUSEUM,  
December 16, 1904.

#### AN ADAPTATION OF THE CARD CATALOGUE CABINET FOR THE STORAGE OF MICROSCOPIC SLIDES.

EVERY worker in natural history who has to prepare and handle quantities of microscopic slides is met with the problem of how to store them safely and in such form that they can be readily referred to. In the special field of Coccidæ in which the writer is interested there has accumulated in the collection of the Department of Agriculture at least 20,000 slides relating to, perhaps, a thousand different insects. To these additions are being constantly made and daily consultation with this slide collection is necessary for purposes of comparison and identification of the new material. The systems of slide storage which have been tried have all proved to be more or less cumbersome and not especially easy of reference except by consultation of indexes, and especially not elastic in the sense of allowing for indefinite additions. In other words, the different styles of grooved slide boxes once filled can not be added to, and in a growing collection it becomes necessary to have elaborate rearrangements at frequent intervals if anything like classification is attempted. If the slides be simply added seriatim the necessity arises for an elaborate card index and the consultation of many different slide boxes to get together the material representing one subject. It seemed to the writer that all these difficulties could be avoided by devising some plan similar to the method of the card catalogue of the different library bureaus.

The result of a study of the subject has

led to the devising of a cabinet and means of storing slides which has proved, in actual experience of a year, to be thoroughly satisfactory in every particular. To enable the slide to be stored as one would an index card a special envelope or jacket for the slide was devised. It is made of strong manilla paper and but little larger than the standard slide size (1 x 3 in.). This jacket is given the dimensions of  $3\frac{1}{4} \times 1\frac{1}{4}$  in., and was manufactured in quantity at a cost of about two dollars a thousand. The jacket affords an opportunity for sufficient labeling, and enables the slide to be classified in a specially constructed cabinet exactly as one would an index card. The cabinet follows the general plan of the library index case, is of five drawers of three partitions each, and will hold upwards of 2,000 slides. The guide cards are specially cut to correspond with the slide envelope, and have on the lower edge an extended lip perforated for the countersunk retaining rod which runs just below the level of the slides. This holds the guide cards and gives additional security to the slides, which remain readily in place by their own weight. Each cabinet is arranged with a lock which fastens all five drawers and gives security to the material. The drawers have the retaining device so that there is no danger of their being pulled entirely out and their contents spilled. The envelopes, however, give such protection to the slides that they will not break even from falling some distance, and, furthermore, protect them entirely from dust.

This system of storing slides allows for additions to be made indefinitely, just as in the case of the card catalogue, and enables the most minute and accurate subdivisions and classification of material, especially important where so large a number of subjects are being accumulated and studied as is indicated above. The adoption of this system of filing slides has decreased the work of consultation and handling material at least two thirds, and has rendered such consultation and handling so easy that the whole collection is more often consulted and correspondingly much more serviceable than before. These cabinets, while specially made, are inexpensive, and seem to have

solved the problem, at least so far as permanent balsam slide mounts are concerned. In the writer's own preparation of material in his special subject the slides are always thoroughly dried over an alcohol flame as soon as they are prepared. In the case of mounts which can not be thus dried this system will not apply, for the slides can not be placed in such cabinet until they have become thoroughly dried. Once thoroughly dried, however, the intense heat of a Washington summer does not result in any softening or attachment to the enclosed jacket. This system of keeping slides has met with the general approval of all who have seen it, and it seems, therefore, desirable to give it this exploitation for the benefit of those working with similar material.

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U. S. DEPARTMENT OF AGRICULTURE,  
December 7, 1904.

#### QUOTATIONS.

CONVOCATION WEEK AT THE UNIVERSITY OF  
PENNSYLVANIA.

THE American Association for the Advancement of Science held its first meeting in Philadelphia in 1848. After an interval of thirty-six years it met for the second time in Philadelphia in 1884, when the attendance was 1,261. This was the largest meeting in the history of the association, but the numbers were increased by 303 members of the British Association, which met that year in Canada. At the Boston meeting of 1880 there were 997 and at the Montreal meeting of 1882 there were 937 members in attendance. These meetings represent a culminating point in the history of the association, and an important epoch in the development of science. Until 1882 there were only two sections of the association, one for the exact sciences and one for the natural sciences. But at about this period specialization and differentiation became imperative. The conditions were in part met by dividing the association into sections, but more adequately by the establishment of special societies. The American Society of Naturalists was organized in 1883, and has since held winter meetings, the membership being confined to professional students