H. Holmes, Kansas City; H. C. Hamey, Kirksville; E. R. Hedrick, Columbia.

At the business meeting provision was made for the submission to the members of amendments to the constitution providing for the enlargement of the society so as to include teachers of science. In future mathematics and science sections will be held in addition to the general meetings. The next meeting will be held in April or May at Columbia. A more complete report of the meeting may be found in *School Science and Mathematics*.

L. D. Ames,
Secretary.

DISCUSSION AND CORRESPONDENCE.

RELATION OF MUSEUMS TO EXPERTS.

To the Editor of Science: The letter from Dr. Holland on 'The Relations of Museums to Experts and Systematists who are Engaged in Working Up and Naming Collections,' published in Science for December 15, seems to me altogether too general and too sweeping for universal acceptance. While I agree with Dr. Holland, fully, in his idea that all material borrowed from a museum or from a collector should be promptly and scrupulously returned, I think there are many cases in which a monographer or a student of a special group is fully entitled to retain material which may be sent him for identification. We are all supposed to be working for the advancement of science—for the establishment of definite facts. If a collector happens to find material which he is incompetent to use, which he can not place and of which he can not recognize the value he should, as a true and philanthropic student, send it to some one who has the ability to use it for the help of other workers. Museum material is worthless so long as it remains unknown and unidentified, and can be made of value only when it is recognized as forming a certain link in the chain. The specialist who visits a museum is in honor bound to leave its specimens intact, but the museum maker, the collector, has no right to ask busy workers for their time and labor without some courtesy in the form of a return. In my own work I have sent hundreds of specimens to specialists for identification and description of new species, and have never asked, or expected, that the material would be returned to me. I have also worked over many collections made by others and have not hesitated to retain such specimens as I wanted for myself. When a specialist is willing to take the time and trouble to study a collection—at my request—the smallest courtesy I can offer him is the retention of the material with which he has worked. If I do not have full confidence in him as an authority in that particular group I do not send him my unstudied material. Of course there are cases in which a collector finds a specimen which he can not place, but which he recognizes as being rare or unique, and then he is perfectly justified in submitting it to an expert and asking for its return, but such cases should not constitute a general rule.

Dr. Holland expresses the idea that all material studied should remain the permanent property of the original owner. It seems to me that a distinction should be made. When a worker in any line visits a museum, or secures the loan of material for study, he is the party favored, and can have no claim; but when a museum or a collector asks the specialist to work a lot of unrecognized material the worker is justly entitled to such reward as he may find in the retention of the specimens to which he has given his time and work.

S. M. Tracy.

Biloxi, Miss.

THE LETTERS K AND W IN ZOOLOGICAL NOMENCLATURE.

In Science of September 29, page 399, I referred to a practise prevalent in certain quarters, of changing the letters k and w to c and v, respectively, whenever they occur in generic and specific names of animals.[1] At

[1] I there attributed the change of *Kogia* to *Cogia* to Dr. D. G. Elliot; but I find that he did not originate it. The form *Cogia* was used years ago by Wallace (1876), Blanford (1891) and Lydekker (1891). The late Dr. W. T. Blanford had curiously little respect for the original form of names, and even went so far as to alter the name of the well-known ant-genus *Pheidole* to *Phidole*, in Col. Bingham's work on the ants of

the end of the article I suggested that if working zoologists would send me their votes for or against these proposals, I would list the names and forward them for publication. I give below a list of those voting, *all against* the changes referred to. Many of the voters added strong expressions, condemning the practise of altering names, and some wrote long and interesting letters. Not a single voice was raised in favor of the changes. It will be seen that the list, while only moderately long, includes a highly representative series of names:

FRANK C. BAKER, Chicago Academy of Sciences. [Mollusca.]

PAUL BARTSCH, assistant curator, Division of Mollusca, U. S. Nat. Museum.

C. J. S. BETHUNE, editor *Canadian Entomologist.*

PHILIP P. CALVERT, University of Pennsylvania. [Odonata.]

THOMAS L. CASEY, U. S. A. [Coleoptera, Mollusca.]

H. L. CLARK, Olivet College. [Echinoderms.]

EDWIN W. DORAN, Biological Department, James Millikin University.

E. P. FELT, state entomologist of New York.

L. S. FRIERSON, Frierson, La. [Mollusca.]

K. W. GENTHE, assistant professor of natural history, Trinity College, Hartford, Conn.

JOSEPH GRINNELL, Pasadena, Calif. [Birds.]

JUNIUS HENDERSON, curator of museum, University of Colorado. [Birds, Mollusca.]

L. O. HOWARD, chief of Bureau of Entomology, U. S. Department Agriculture.

DAVID STARR JORDAN, president of Stanford University.

J. PERCY MOORE, University of Pennsylvania. [Vermes.]

HENRY F. NACHTRIEB, professor of animal biology, University of Minnesota.

J. G. NEEDHAM, Lake Forest, Ills. [Entomology.]

OSCAR W. OESTLUND, University of Minnesota. [Aphididæ.]

GEO. W. PECKHAM, Milwaukee, Wis. [Arachnida.]

MARY J. RATHBUN, U. S. Nat. Museum. [Crustacea,]

H. M. SMITH, Bureau of Fisheries, Washington.

CHAS. P. SIGERFOOS, professor of zoology, University of Minnesota.

C. W. STILES, Public Health and Marine Hospital Service. [Helminthology.]

F. M. WEBSTER, Bureau of Entomology, U. S. Department of Agriculture.

It occurs to me that it might become a useful custom to take votes on questions of wide interest through the agency of SCIENCE; not for the purpose of enforcing rules or decisions, but in order to bring out and crystallize public opinion. When there were many votes on each side, the editor or the voters might be asked to choose one on each side to present the arguments in full.

T. D. A. C.

India (which he was editing), quite without the approval of the author himself!

SPECIAL ARTICLES.

THE CLASSIFICATION OF MOSQUITOES.

RECENT authors have subdivided the Culicidæ in various ways, although using mainly the same set of characters. It seems, however, that the best and most natural grouping consists in the recognition of three subfamilies, as follows:

I. ANOPHELINÆ. Defined by the long elliptical compressed thorax; the palpi are long in both sexes; the metanotum is without hairs. The larvæ have a short sessile breathing apparatus and are surface feeders, being supplied with fan-shaped tufts on the dorsum, which serve as an attachment to the water film. A ventral brush or rudder is present on the last segment after the first stage. The larvæ live in all kinds of water, from that in hollow trees to the edges of swift streams, depending upon the species in question. They all require a comparatively extended surface, owing to their habits of surface feeding. Contains the genus *Anopheles* and its subdivisions.

II. CULICINÆ. Defined by the short rounded thorax; the palpi are generally short in the female, sometimes short in the male also; the metanotum is without hairs. The larvæ have a long breathing tube, always longer than wide, and are not surface feeders. A ventral brush or rudder is present on the last segment after the first stage. The larvæ live in permanent or temporary stagnant pools or puddles; several species are addicted to hollow trees and one lives only in water-worn holes in rocks. A few species are predaceous, feeding ex-