Opinion 133.—Under the Rules, the type of *Urothoe* is *U. rostratus*. The original author of a family name is free to select any contained genus as the nomenclatorial type of that family. It is not necessary to select the oldest included genus as type genus for the family. Under the present premises it is unnecessary to substitute the newer name Urothoidae 1932 for the earlier Phoxocephalidae.

C. W. STILES

WASHINGTON, D. C.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

MEETING OF THE EXECUTIVE COMMITTEE

THE fall meeting of the Executive Committee was held at Atlantic City on October 24 and 25, 1936. The following members were present: Drs. Cattell (*chairman*), Caldwell, Chamberlin, Conklin, Livingston, McKinley, Ward, Wilson and Woods. In addition to the usual number of formal business items and minor matters, the following deserve record here:

The constitution of the American Association for the Advancement of Science provides in the complete plan of the association for a Section on Manufactures and Commerce. The advisability of organizing this section to provide for active and careful scientific discussion of questions of outstanding importance has been brought up many times and came up for discussion as a question of association policy. The Executive Committee requested Dr. Wilson to bring together a group to consider the feasibility of such a move, and if discussions warrant, authorized him with the full approval of the Executive Committee to take steps towards formulating a plan to be presented to the council at the Atlantic City meeting.

The rôle of affiliated state academies was discussed in connection with a communication suggesting the organization of a state association for the advancement of science for coordinating the activities of scientists within the state. No action was taken, but the opinion was expressed that such a function fell clearly within the powers of a state academy.

The program for the Atlantic City meeting was carefully discussed and plans made to provide on Friday a general luncheon for all sections and societies. It is expected that a distinguished member of the British Association will be present to deliver an address after the luncheon. Discussion of the Atlantic City meeting brought out the fact that sessions of many sections and societies would close on Thursday evening or earlier, and that this fact would imperil the success of the sessions planned for Philadelphia on the following Saturday. Other special features are being provided for Friday, and a detailed announcement will be made shortly. The association will adjourn on Friday evening to meet at Philadelphia on Saturday, January 2. Members attending will be guests of the various scientific organizations in Philadelphia and special courtesies arranged for that occasion. Full details will be published soon.

In view of the pressure at meetings, which has been the subject of frequent comment, the Executive Committee felt that the situation could be greatly improved to the advantage of all concerned by extending the number of days utilized for sessions. This would provide more time for the discussions of papers and for additional joint sessions. Plans were discussed for presenting the advantages of the change suggested to the various affiliated societies.

The dates of the Richmond meeting were changed to provide that the meeting open formally on December 27, 1938.

The financial reports of the treasurer for the fiscal year 1936 were presented, accepted and ordered audited. The treasurer's budget for the fiscal year 1937 was referred to the council for approval with such adjustments as may be desired.

The financial reports of the permanent secretary for the fiscal year 1936 were presented, accepted and ordered audited. The permanent secretary's budget for the fiscal year 1937 was referred to the council. The financial report of the Saint Louis exhibition and the budget for the Atlantic City exhibition were approved as presented.

The general secretary reported verbally plans for the academy and secretaries conferences, status of branches and junior academies, and plans for establishing other branches.

Dr. Woods reported that the Occasional Publication (No. 3) containing the symposium papers on "The Scientific Aspects of Flood Control," read at the Rochester meeting, had been published.

The permanent secretary was advised to have copies made of a report submitted by Dr. Miles with regard to procedure for awarding the annual Association Prize. It was felt that these copies should be distributed to secretaries of sections and affiliated societies in order to develop a better understanding of the situation and of the methods of securing maximum advantage in connection with this award.

On recommendation of the respective sections, fellows were elected as follows: Psychology, 5; Engineering, 1; Medical Sciences, 1.

The American Psychiatric Association was accepted as an affiliated society. (This organization has a total membership of 1,912. Of this number 135 are members of the association, 73 of these being fellows. The organization is entitled to one representative in the council of the association, who will be *ex-officio* a member of the section committee of the Section on Medical Sciences.)

The Florida Academy of Science was accepted as an affiliated state academy, with one representative in the council of the association.

The Alpha Epsilon Delta Pre-Medical Fraternity was accepted as an associated society. (This organization has a total membership of 985 members. Of this number, 47 are members of the association, 37 of these being fellows.)

Dr. Conklin was appointed the representative of the association at the Centennial celebration of Emory University in December, 1936.

The permanent secretary and the general secretary were appointed representatives to the First National Conference on Educational Broadcasting, to be held in Washington, from December 10 to 12, 1936.

Dr. Caldwell was appointed the association's representative to the Tokyo Conference of the World Federation of Education Associations, and he was asked to confer with Dr. Paul Monroe on the possibility of the association's cooperation in organizing the program of the section on science for this congress.

Certain matters were reported for record:

President Conklin served as delegate at the meeting of the British Association at Blackpool, from September 9 to 16, 1936.

For the International Conference on Letter Symbols for Heat and Thermodynamics, held at the headquarters of the American Society of Mechanical Engineers, New York City, from September 14 to 15, Dean George B. Pegram, Columbia University, and Professor George F. Bateman, Department of Mechanical Engineering, Cooper Union, were selected as representatives and served in that capacity.

For the Centennial Celebration of the Chartering of Wesleyan College, Macon, Ga., on Friday, October 23, Dr. A. S. Edwards, head of the Department of Psychology at the University of Georgia, was appointed and served as delegate.

The meeting adjourned at 3:30 P. M. to meet in Atlantic City on December 27.

HENRY B. WARD,
Permanent Secretary

SPECIAL ARTICLES

VITAMIN C IN PASTEURIZED MILK

OUR results and those of Whitnah and Riddell[1] indicate that the vitamin C or ascorbic acid content of fresh milk is relatively constant throughout the year, although variations occur in individual cows. No increase in the ascorbic acid content of cow's milk was produced by green feeding nor of goat's milk by intrajugular injection of 4 grams of ascorbic acid daily.

Plant tissues which contain ascorbic acid apparently also contain an ascorbic acid oxidizing enzyme which is liberated when the cells are crushed. The enzyme in some plants is very active. For example, the large amount of ascorbic acid present in cabbage is completely oxidized within 5 minutes after the previously frozen raw cabbage cells are disintegrated. While the feed is masticated and stored in the rumen by the cow, all the ascorbic acid it contains is probably oxidized. Therefore the cow and animals with similar digestive systems, and possibly birds, must either synthesize ascorbic acid or reverse the oxidation.

Variations in the rate of oxidation of ascorbic acid in milk can be explained best by assuming the presence of an ascorbic acid oxidase, the action of which is markedly accelerated by traces of dissolved copper.

[1] SCIENCE, 83: 162, 1936.

The milk from individual cows varies in ascorbic oxidase activity. Our experiments indicate, although the proof is not yet conclusive, that ascorbic acid disappears more rapidly from winter milk (dry feed) than it does from summer milk (pasture feed). This may be due to a difference in amount of enzyme or of copper. Some investigators report that the vitamin C feeding value of summer milk is higher than that of winter milk. Failure to feed immediately after milking, or immediately after pasteurizing, accounts for some of the conflicting conclusions which appear in the literature.

A very slight destruction of the enzyme occurs in milk pasteurization by the "holder" method (30 minutes at 62–63° C., 143–145° F.). This method gives satisfactory bacterial destruction without injuring creaming ability. Heating for one-half minute or longer at 77° C. (170° F.) destroys the enzyme and so retards the oxidation of the ascorbic acid, but it also destroys the creaming ability which is demanded by consumers. Less severe heating exerts some preserving effect, depending on the partial destruction of the enzyme.

Traces of dissolved copper in milk heated to 77° C. or higher have very little accelerative effect on the oxidation of ascorbic acid when compared with the