THE TORREY BOTANICAL CLUB

The club was called to order on April 14, 1908, at 8:30 o'clock, by Vice-president John Hendley Barnhart. Seven persons were present.

The scientific program consisted of two papers, as follows:

The Relation of Chemical Stimulation to Nitrogen Fixation in Sterigmatocystis: Marion E. Latham.

This paper will appear in full in a future number of the *Bulletin* of the club.

Some Forms of Protoplasmic Reaction: H. M. Richards.

The speaker reviewed the more recent literature and theories bearing on the subject of the stimulus and response of protoplasm.

Both of these papers were followed by an interesting discussion, and the meeting adjourned at ten o'clock.

C. Stuart Gager,
Secretary

THE AMERICAN CHEMICAL SOCIETY. NEW YORK SECTION

The eighth regular meeting of the session of 1907–8 was held at the Chemists' Club, 108 West 55th Street, on May 8.

Professor Charles E. Munroe, of the George Washington University, addressed the Section on, "Explosions in Mines."

C. M. Joyce,
Secretary

DISCUSSION AND CORRESPONDENCE

THE GERMAN ANATOMICAL SOCIETY

To the Editor of Science: During the recent meeting of the Anatomische Gesellschaft, at Berlin, I noticed several points of management and procedure which seemed to me of value in economy of time, and I send you my notes with the hope that their publication may interest those in charge of the meetings of similar organizations in America.

In the first place, the meetings of our societies often suffer by reason of overcrowded programs. There is not time to present all the papers presented and the chances for discussion of those which are read are reduced to a minimum.

In the German society the number of papers to be presented at a single session is limited by statute to twenty-five and usually but about that number is printed on the preliminary program. This year, owing to the number of titles sent in at an early date, the number was increased to thirty-nine, those in excess to be read only in case others ahead of them were omitted for one reason or another.

This restriction of number of papers allows an increase of the time limit for each person to twenty minutes, but one person is allowed only one place on the program, although he may give two or more papers, provided that he do not overrun his allotted third of an hour. Only once did I notice that a speaker overran his time and he was called to order by the president.

As a rule, the speakers went at once straight to the pith of their communications; wasting no time in historical summaries of previous knowledge of the subject, details of technique or minutiæ of diagrams or specimens exhibited, which only tire and confuse the listener who only wishes to know the new points and the broadest evidence upon which the conclusions are based. Knowing these, he can wait for details until the complete paper is published.

The sessions were announced to begin at 9 A.M. instead of ten o'clock, as is usual with us, and they lived up pretty closely to this schedule. This apparently was well understood, as when the meeting was called to order a goodly audience was present. Were the Americans ever to live up to their late program hour, calling the meeting to order at 10 o'clock instead of "dawdling" until most of the members had got together, the lesson of punctuality would soon be learned and considerable time would be saved.

With this limitation of the number of papers and the economy of time which has been alluded to, there was abundant time for discussion, and all must admit that discussion is frequently as valuable as, sometimes more valuable than, the paper itself. In these dis-

cussions there appeared a feature which struck me as of the greatest value. With us the discussion is rarely, if ever, reported, but at Berlin as soon as a speaker had finished his discussion, a page handed him a folio of cardboard with pencil, paper and blotting paper (there are fountain pens in Germany), and the substance of his remarks was at once jotted down and handed to the secretary. For any society which wishes to publish a full account of its proceedings some such method would be of great importance, while any one who has ever acted as secretary and has later tried to get together abstracts of the discussion will at once recognize its value.

J. S. KINGSLEY

PARIS,
April 28, 1908

DATES OF EARLY SANTORIN AND ISCHIAN ERUPTIONS

OWING to conflicting literary sources and the difficulty of reconciling them, the chronology of early volcanic eruptions in islands of the Mediterranean, especially those of the ancient Thera and Pithecusæ, is involved in much uncertainty. The dates assigned to the first two or three eruptions of Thera have been the subject of much discussion, as it is a matter of some historical importance that they should be determined with as much precision as possible, in order thereby to fix divers contemporary events.

A welcome contribution to the literature of this subject is to be found in a recent number of *Hermes* (43, p. 314), in an article by Professor A. Klotz, of Strassburg, entitled "Die Insel Thia." Reasons are given by him for regarding the following as authentic dates of the first three outbreaks of the Santorin group known to have taken place during continuous history: B.C. 196 and 66; A.D. 46. Through a misunderstanding of Pliny's text the last of these is commonly referred to the year 19 A.D., and the intermediate one is seldom mentioned in geological treatises. For a list of eruptions occurring during our present era one may consult the writings of Fouqué and Alfred Philippson, the latter in volume 1 of "Thera" (1899). These two geologists, and also H. S. Washington,[1] have discussed the physical evidence for estimating the time-interval since the earliest eruption of all which can be associated with a period of human culture, and find reason for assigning it to the proto-Mycenæan, or roughly speaking, 2000 B.C.

Early Ischian eruptions have likewise afforded material for debate. A list of all known disturbances is given by Fuchs in his elaborate monograph, "L'Isola d'Ischia," and a slightly different chronology is proposed by Ettore Pais in his recent volume on "Ancient Italy" (1908). According to this author, we have authentic accounts of four eruptions of Epomeus during classical antiquity, as follows: (1) a very early one which drove out the Eretrians and Chalcidians; (2) that which occurred shortly after 474 B.C., and caused the Syracusans to leave the island; (3) that which took place shortly before the birth of Timæus (*ante* 352 B.C.); and (4) one in 91 B.C., which is mentioned by Julius Obsequens. The same author also undertakes to identify the circular lake described by Pliny as having been formed by an earthquake, with the modern Porto d'Ischia.

C. R. EASTMAN

HARVARD UNIVERSITY

SPECIAL ARTICLES

A NOTE ON THE PROPORTION OF INJURED INDIVIDUALS IN A NATURAL GROUP OF BUFO

IN "Darwinism To-Day" (p. 84) Kellogg draws attention to Conn's reference to a maimed frog which was able, in its natural environment, to survive so serious a loss as the whole of both feet, as illustrating the idea that "selection is not so rigid as to eliminate *all* unfit individuals." Probably every naturalist could cite from his own experience many analogous instances of survival after more or less severe injury. Little is known, however, regarding the actual proportion of maimed individuals in a given group.

In making a study of correlation[2] in the common toad (*Bufo lentiginosus americanus*, LeC.) I had the rather unusual opportunity

[1] *Amer. Journ. Arch.*, **9**, p. 504.

[2] *Jour. Exp. Zool.*, IV., 4, 1907.