antedate any distinction between plant and animal life, this is desirable. The present equivocal position of the slime moulds is not affected.

This definition is not presented with the expectation that it will prove entirely satisfactory, but rather with the hope that it will call forth a better. Possibly such a definition has already been published. If so, it has been strangely overlooked by the writers of our textbooks.

GEORGE W. MARTIN
RUTGERS COLLEGE

MUSCA LINNÆUS, 1758, AND CALLIPHORA DESVOIDY, 1830

IN accordance with the Rules of the International Zoological Congress, the attention of the zoological profession is invited to the fact that Dr. L. O. Howard, W. Dwight Pierce and twenty-one other professional zoologists have requested the International Commission on Zoological Nomenclature to exercise its plenary power in the case of the Linnæan genus *Musca* 1758, and, under suspension of the Rules, to declare *M. domestica* as type of this genus, also, under suspension of the Rules, to validate *Calliphora* Desvoidy, 1830, with *C. vomitoria* as type.

The request is based on the grounds of practical utility, and an almost unbroken history of consistent usage since 1758 in the case of *Musca,* and since 1830 in the case of *Calliphora.* It is claimed that a strict application of the Rules will produce greater confusion than uniformity.

According to the premises at present before the commission, if the Rules are strictly applied, the generic name of *Musca* would take either *M. cæsar* or *M. vomitoria* as type, and the species *M. domestica* would be cited either in *Conostoma* 1801 [?] (type *Ascaris conostoma* = larva of *M. domestica)* or in *Promusca* 1915 (type *M. domestica),* thus resulting in a very regrettable change in the nomenclature of the species in question as almost universally used in entomological, zoological, medical, epidemiological and veterinary literature.

The secretary of the commission invites any person interested in these cases of nomenclature to communicate his opinion on the subject as soon as possible, and not later than May 1, 1918,[1] when the subject will be submitted to the commission for vote.

C. W. STILES,
Secretary to Commission
TWENTY-FIFTH AND E STREETS, N. W.,
WASHINGTON, D. C.

THAT CHEMICAL "CRAMMING" MATCH

PROFESSOR JACOBSON'S spelling match, a cue word device adopted by many students when cramming up for an examination, prompts me to record a remark made a quarter of a century ago by one of our greatest chemists. Said he "I once had a student who could repeat every chemical formula in all the books, but I never could teach the damned fool a thing about chemistry."

W. J. HUMPHREYS

WARNING

A MAN calling himself Walter F. Clarke and representing himself as my nephew is reported as seeking financial accommodation from my colleagues throughout the country. I have no such nephew and I know no person of that name.

JOHN M. CLARKE
STATE MUSEUM,
ALBANY, N. Y.

QUOTATIONS

THE NEW FRONTIERSMEN

THE comments received regarding the reports in the *Times* of the meeting of the American Association for the Advancement of Science are such as to give encouragement to those men of science who are the new frontiersmen of our civilization. They are the men of the lens and the meter, of the balance and the crucible, of the magnet and the spectrum, of the atom and the electron, of the syllogism, the equation, the theorem, the statistic. They are no less the frontiersmen, the precursors, than this republic's early pioneers of the axe, the plow, the rifle and the saddle. They who have patiently enlarged the borders of truth are as deserving sons of democracy as they who have pushed out the physical bounds between the desert and the sown.

[1] On account of delay caused by the war, final vote will not be taken until about January 1, 1924.

Day after day, these new pioneers—frontiersmen even in the midst of the great cities—are out in search of bacteria, which are what the wild beasts or savages were to the early settlers, or the elusive element or the invisible principle or the pervasive but unformulated law. And night after night they venture forth over the universe's quadrillions of miles as hunters in the skies to bring back fresh bits of stellar truth to the earth. To rank such service with that of the old frontiersmen of the western solitudes and to let its findings take their place in the most important news of the day is one of the very encouraging signs in a democracy about which so many disparaging observations are made.

The privation of the new frontiersman is not as a rule that of living far from neighbors and friends, of enduring untempered cold or withering heat, or of going without sufficient food. It is the hardship of holding one's self to a course of study or research that will lead out beyond the edge of the known, the privation of denying one's self every comfort to find what the truth is and the suffering of following wherever the truth leads. When the public put such men among their greatest citizens, as the people of France put Pasteur, there need be less anxiety about democratic ideals. But the scientists should take the great public into their confidence. If the scientist have not the ability to speak to the people, then he should have in his city laboratory or his field tent with him an interpreter, the reporter, one who can "merge scientific facts into new human relations." The reporter must also be a frontiersman.—*The New York Times.*

SCIENTIFIC BOOKS

The Mineralogy of Pennsylvania. By SAMUEL G. GORDON. Special Publication No. 1, The Academy of Natural Sciences of Philadelphia, 1922, 255 + xiv pp., plate and text illust. 8vo.

"The Mineralogy of Pennsylvania" gives in an exceptionally clear and concise way all the essential data as to the geology and mineralogy of the state. The crystal forms are not only described but well illustrated, and for each of the many minerals one or more of the best analyses are presented. The book opens with a graphic historical outline. The first great inspiration to the science in Pennsylvania might be said to date from the pilgrimage made to the laboratory of Abbe Haüy in Paris by several Pennsylvania students, notably Adam Seybert, Gerard Troost (a native of Holland), and later by Lardner Vanuxen and William Keating, whom we may regard as the first scientific mineralogists of America. A powerful aid to the development of the study was the fine collection of minerals brought back from Europe by Adam Seybert.

The founding of the Chemical Society in Philadelphia in 1792, marks one of the earliest stages in this science and that of mineralogy in the United States. Following this came the organization of the Academy of Natural Sciences of Philadelphia, the first mineralogical accessions being some artificial crystals prepared by Dr. Troost. Later, Seybert's collection was acquired, and was lectured upon by Troost. Contemporaneously, in 1812, Isaac Lea published "An Account of the minerals at present known to exist in the vicinity of Philadelphia"; four years earlier, in 1808, Adam Seybert had issued his "Catalog of some minerals which are found in different parts of the United States." It is impossible to overestimate the inspirational value of these early writings.

"The Origin and Occurrence of Minerals" are treated on pp. 11-22. A synopsis of the classification of minerals according to their occurrence by Wherry and Gordon is given, followed by a discussion of each kind of deposit, with lists of the minerals of each assemblage. A new arrangement of the well-known classification of rocks after Rosenbusch, Kemp and Iddings is presented. Data of this chapter are not available elsewhere. General Geology of Pennsylvania: Here, on pp. 23-24, the geologic formations of the state are tabulated, with notes on the character of the rocks and their minerals. This is the most up-to-date and complete statement of the geology of the state that is available.

One hundred and fifteen pages (34-149) are devoted to a detailed description of about two hundred and fifty minerals found in the state. After the heading of each mineral, in which name, composition and crystal form are stated, the mineral is described in the following order: color, lustre, form, hardness, specific gravity,