This was no dull, cold, lifeless act of a sort which make the law a dismal science. It flashed lightning and rolled thunder. Hailed by some as a signal triumph if the Christian faith as against the atheistical tendency of science, by others as clear ecclesiastical tyranny and a recrudescence of the Inquisition, and by still others as a triumph of asininity which would defeat its own aim, the law attracted the attention and provoked the opinions of lawyers, scientists, ecclesiastics and teachers throughout the nation.

This discussion from the legal standpoint is noteworthy because the case is clearly stated, and because the Tennessee Bar Association, before which it was read, meeting at Memphis, officially rebuked the author because he "instead of being confined to the legal question discussed a religious issue."

But the point of his discourse lay in the fact that the force of law had been invoked in the interest of opinions claiming to be "religious."

Keebler claims that the "anti-evolutionist law" is unconstitutional on the following grounds:

- (1) It violates the sacred duty imposed by the Constitution of the state of Tennessee upon the legislature to cherish science.
- (2) It violates our constitutional guaranty of religious freedom.
- (3) It violates our constitutional guaranty of intellectual freedom.
- (4) It violates the fourteenth amendment of our federal constitution.
- (5) In so far as our university is concerned, it violates a solemn contract between the state of Tennessee and the United States of America.

In an eloquent closing paragraph this idea is stressed; "We may know that whatever rubbish of the centuries is penetrated in this irrepressible quest after truth, the essential verities will remain."

DAVID STARR JORDAN

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## SACCARDO'S "SYLLOGE FUNGORUM"

Whenever the history of botany is passed in review one of the outstanding monuments of patient comprehensive industry will be found always in the classified enumeration of the known fungi of the world, inaugurated and carried as near to completion as the term of a lifetime permitted, by the late Professor P. A. Saccardo, of Padua.

Like the comparable work of Linnaeus, his "Sylloge" seems destined to be continued in a series of supplements and revisions for many years before a successor is launched. As was true of his great Swedish precursor, Saccardo will incur much criticism for the artificiality of a classification suited to the state of knowledge of his time rather than ex-

pressing relationship, that ought never to obscure the value of his organized compendium to other branches of science and particularly to the new science phytopathology of which it forms an essential foundation stone.

After a dozen years, a twenty-third volume of the "Sylloge" has been given out under the authorship of Professor Trotter, of Portici. This constitutes the tenth general supplement to the work—and includes additions to Basidiomycetes in the broad sense which includes rust and smut fungi in this group. To descriptions of these, 950 large octavo pages are devoted; host- and name-indexes adding seventy-six pages more.

A special feature of this volume is a list of eighteen biographic sketches of Saccardo; and an enumeration of 238 publications by this distinguished Italian botanist whose interests were not at all closely limited to the field of mycology.

Tribute is paid by the editor to numerous workers whose studies have contributed to the present knowledge of fungi—grouped by countries; and in addition to the Americans included in this list it is to be noted that the late Professor Farlow, of Harvard University, and Professor Stevens, of the University of Illinois, receive special recognition in the preface.

WILLIAM TRELEASE

University of Illinois

## INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

THE Secretary of the International Commission on Zoological Nomenclature has the honor to announce the publication of Opinions 82 to 90 rendered by the International Commission on Zoological Nomenclature by the Smithsonian Institution in Smithsonian Miscellaneous Collections, volume 73, number 3, pages 1 to 40. The summaries read as follows:

Opinion 82. Suspension of Rules for Musca Linnaeus, 1758a, Type M. domestica.—By authority of the power conferred on the Commission by the 9th International Congress of Zoology to suspend the Règles as applied to any given case where in its judgment the strict application of the Règles will clearly result in greater confusion than uniformity, Article 30 is hereby suspended in the case of Musca Linnaeus, 1758, and Musca domestica Linnaeus, 1758, is hereby designated as type of Musca without prejudice to other cases.

Opinion 83. Acanthiza pyrrhopygia Vigors and Horsfield, 1827, versus Acanthiza pyrrhopygia Gould, 1848.—
The principle of the Rule of Homonyms is that any properly published identical name of later date is "stillborn and can not be brought to life." Acanthiza pyrrhopygia Vigors and Horsfield, 1827, invalidates Acanthiza pyrrhopygia Gould, 1848.

Opinion 84. Trematode, Cestode, and Acanthocephala

Names placed in the Official List of Generic Names.— The following names are hereby placed in the Official List of Generic Names: Trematoda: Dicroccelium, Fasciola, Gastrodiscus, Heterophyes. Cestoda: Davainea, Dipylidium, Echinococcus, Taenia. Acanthocephala: Gigantorhynchus.

Opinion 85. Ninety-eight Generic Names in Crustacea placed in the Official List of Generic Names .- The following names are hereby placed in the Official List of Generic Names: Crustacea: Acmaeopleura, Asthenognathus, Bathyplax, Camptandrium, Camptoplax, Catoptrus, Ceratoplax, Chasmagnathus, Chasmocarcinus, Clistocoeloma, Cyrtograpsus, Dissodactylus, Durckheimia, Epixanthus, Euchirograpsus, Eucrate, Eucratodes, Eucratopsis, Euryetisus, Euryplax, Eurytium, Fabia, Galene, Geryon, Glyptograpsus, Glyptoplax, Gomeza, Goneplax, Halimede, Helice, Hephthopelta, Hexapus, Holometopus, Holothuriophilus, Homalaspis, Lachnopodus, Leptodius, Liagore, Libystes, Liomera, Lipaesthesius, Litocheira, Lophopanopeus, Lophopilumnus, Lybia, Melybia, Metasesarma, Metopocarcinus, Micropanope, Notonyx, Oediplax, Ommatocarcinus, Opisthopus, Orphnoxanthus, Panoplax, Paragalene, Parapanope, Parapleurophrycoides, Paraxanthus, Percnon, Perigrapsus, Pilumnoides, Pilumnus, Pinnaxodes, Pinnixa, Pinnotherelia, Pinnotheres, Planes, Platychirograpsus, Platypilumnus, Platyxanthus, Polydectus, Prionoplax, Pseudocarcinus, Pseudopinnixa, Pseudorhombila, Psopheticus, Ptychognathus, Pyxidognathus, Rhithropanopeus, Rhizopa, Ruppellioides, Sarmatium, Scalopidia, Scleroplax, Speccarcinus, Sphaerozius, Tetraxanthus, Tetrias, Thaumastoplax, Utica, Varuna, Xanthasia, Xanthodius, Xenophthalmodes, Xenophthalmus, Zosimus, Zozymodes.

Opinion 86. Conulinus von Martens, 1895.—The generic name Conulinus von Martens, 1895, takes as type Buliminus (Conulinus) conulus Rv., and is not necessarily invalidated by Conulina Bronn.

Opinion 87. The Status of Proof-Sheets in Nomenclature.—Printer's proof-sheets do not constitute publication and, therefore, have no status under the International Rules of Zoological Nomenclature.

Opinion 88. Otarion diffractum vs. Cyphaspis burmeisteri.—The name of a species is not disqualified merely because the author included in his conception bodily parts of more than one species. The name of a genus based on such a species is therefore available. Otarion diffractum Zenker is valid. Otarion is to be preferred to Cyphaspis, and C. burmeisteri Barr. is a synonym of O. diffractum.

Opinion 89. Suspension of the Rules in the Case of Gronow 1763, Commerson 1803, Gesellschaft Schauplatz 1775 to 1781, Catesby 1771, Browne 1789, Valmont de Bomare 1768 to 1775.—Under suspension of the rules, in any case where such suspension may be considered necessary according to the interpretation now or hereafter adopted by the Commission, the following works or papers are declared eliminated from consideration as respects their systematic names as of their respective dates: Gronow 1763, Commerson 1803, Gesellschaft Schauplatz 1775 to 1781, Catesby 1771, Browne 1789, Valmont de Bomare 1768 to 1775.

Opinion 90. Report on Sixteen Generic Names of Mammals for Which Suspension of Rules was Requested.—None of the sixteen names receives a unanimous vote for suspension; accordingly, the Commission is not emnames (namely: Cercopithecus, Gazella, Hippotragus, Lagidium, Nycteris, and Manatus) receive two thirds majority or more for suspension, and are, therefore, to be referred for final decision to a special committee of three to be appointed by the president of the section on nomenclature of the next international congress. Ten names (namely: Echidna, Anthropopithecus, Coelogenys, Chiromys, Dasypus, Dicotyles, Galeopithecus, Hapale, Rhytina and Simia) fail to receive a two thirds majority vote for suspension, and therefore the Law of Priority is to be applied in these cases.

C. W. STILES, Secretary.

## SCIENTIFIC APPARATUS AND LABORATORY METHODS

## A BLACK COLLODION COATING FOR ATMOMETER SPHERES

MANY of those engaged in the study of the influence of evaporation upon plants, insects, and so forth, have need for black atmometer spheres, used in conjunction with similar white spheres for indicating the possible influence of solar radiation upon rates of water loss. A supply of satisfactory black spheres has not yet been secured, although ceramic experiments are in progress toward that end. It is therefore still necessary to employ superficially blackened spheres. A method for blackening white spheres with washed lampblack has been described (Science 58: 182-183, September, 1923), but spheres blackened in this way require to be reblackened after each rain and after each cleaning. Another and recently developed method for superficially blackening white spheres is to lay over the spherical surface a thin collodion film bearing lampblack. The collodioncoated spheres have proved very satisfactory. Their preparation is described below.

Collodion solution (Merk's "Reagent" or "U. S. P., No. 9") is employed, with sufficient lampblack mixed into it to produce a thoroughly opaque, black film when the sphere is dipped in the liquid. It is well to moisten the lampblack first with a little alcohol, to make a paste, which can then be easily and uniformly dispersed throughout the collodion solution. There should be no air bubbles in the mixture, which needs finally to be thinned by addition of ether.

Regular white atmometer spheres with their necks waterproofed are dipped in the black liquid, so as to coat thoroughly the whole spherical surface, care being taken to avoid air bubbles that might lie between the porcelain and the coating. Upon lifting