

paper had been duly published; hence the names were on the same status as those in any other paper. Having so decided, it could not answer Dr. Aldrich's question of whether the 1800 names were valid, because that embraced as many taxonomic questions as there were names involved, did not fall in the province of nomenclature, and lay outside the scope of the Commission.

The results of Mr. Edwards' 1932 questionnaire were never laid before the Commission, nor was the Commission asked to take any action by Mr. Edwards.

But in 1932 the Fifth International Congress of Entomology adopted (with dissenting voices) a four to two majority resolution of its Committee on Nomenclature and transmitted it to the International Commission on Zoological Nomenclature for action. This resolution definitely recommended that the names of Meigen (1800) be sustained. I was present at that Committee meeting and was, I think, one of the two who voted against the resolution, but I do recall that it was championed by an eminent dipterist.

The resolution presented an impossible request to the International Commission. No such body could properly establish a blanket validation of any long list of generic names, least of all names with which no species had originally been connected, and the correct application of which could therefore individually be highly debatable on zoological rather than nomenclatorial grounds. The Commission has always followed a policy of refusing to act on blanket requests.

In Opinion 152 (adopted in 1935) the Commission politely refused to accede to the request of the Fifth International Entomological Congress. The explanation of the situation by Secretary Hemming, published in the Opinion, is very clear. The Commission went further and advised dipterists or others interested that they would welcome petitions to suspend the rules in any given case where the Meigen names cause confusion.

It is no part of the function of the Commission to initiate such action, or any action. Its function is judiciary and may be likened to that of the Supreme Court of the United States in interpreting the meaning of our Constitution as applied to individual situations that may arise. It would be a woeful ignorance of judicial procedure that would expect our Supreme Court on its own initiative to seek out dubious situations and to render a decision covering them.

The blame for the confusion in regard to the Meigen names falls squarely on the shoulders of dipterists. Had any one of them, after the Commission was given authority to suspend the rules (by the Ninth International Congress of Zoology, 1913), presented petitions to the Commission requesting suspension of the rules in regard to any or each of the Meigen names that are found obnoxious, each petition individually would have been acted upon, and by now the names involved would either have been definitely adopted, or rejected in favor of certain others. Even Edwards, after taking the pains to circularize dipterists as to their opinion upon the Meigen names en masse, never requested any action of the Commission either upon the names en masse (which probably

would not have been considered) or upon them individually, which certainly would have been.

A similar situation arose in Hymenoptera. There the so-called Erlangen list and other considerations threatened a grand stirring around of family names. The undersigned prepared a series of petitions to the Commission, each covering a single name or series of interdependent names, some involved in the Erlangen list, others not involved. He sent copies to all working hymenopterists known to him and asked them either to sign or to indicate their disapproval. These petitions, with signatures and comments, were presented to the Commission, have all been acted upon, have all but one been granted by the Commission, and as a result we have available for use the family names in Hymenoptera that the usage of the 19th Century established. Blame for the fact that dipterists are not as well off cannot be fairly laid to the Commission.

J. CHESTER BRADLEY

Cornell University, Ithaca, New York

Successful Interchange of Ovaries Between Albino Rats and Mice

The present note deals with transplantation of entire rat ovaries into mice and vice versa. Each ovary was "shelled out" of the ovarian bursa, removed intact, and inserted into a corresponding location in the recipient. Excised ovaries were simply exchanged between adult rat and adult mouse. Both unilateral and bilateral implants were made. Approximately seven weeks later the transplants and (when present) the original undisturbed ovary of the opposite side were examined histologically. All implants had persisted, and all had an excellent blood supply. In several of the rat ovaries which had been implanted into mice there was regression, although some contained developing follicles in various stages. Some of the mouse ovaries, which had been implanted into rats appeared cystic, as from overstimulation. It is suggested that the large mass of adult rat ovarian tissue is insufficiently stimulated by the mouse pituitary, while the rat pituitary overstimulated the relatively smaller adult mouse ovaries.

One rat delivered a normal litter of seven young 18 days after receiving two mouse ovaries in substitution for her own. She failed to lactate. One mouse which received a unilateral substitution had a litter of seven apparently normal young 12 days later and also failed to lactate. Experiments are being continued.

JAMES M. SANDERS

*Department of Anatomy, University of Missouri, and
Department of Science, Chicago Teachers College*

Lomonósov and the Concept of Heat

My attention has been called to an article (*Science*, 1945, 103, 487) in which the author feels that insufficient tribute has been paid to M. V. Lomonósov and states that his name has never been mentioned in the European and the American scientific literature in connection with the development of our concept of heat.

May I call your attention to Moore's *History of chemistry* (3rd ed.), in which there is a full-page picture of Lomonósov, followed by three pages in tribute to him. On page 61 it is stated: "Lomonósov can be called the first real physical chemist because he looked at chemistry from the standpoint of physics and mathematics; his ideas were at least 100 years in advance of his time." The text goes on to give his views in regard to heat

and pays tribute to his other various advanced ideas.

This textbook is widely used in the colleges and universities of the United States, so I feel the statement in the published article must be in error.

LEROY S. WEATHERBY

Department of Chemistry
University of Southern California

Book Reviews

Diseases of the skin. (3rd ed.) George Clinton Andrews. Philadelphia-London: W. B. Saunders, 1946. Pp. vi + 937. (Illustrated.) \$10.00.

This book constitutes a thorough revision of the author's textbook on dermatology, and, as Andrews states, "more than sixty new skin diseases have been added to the text."

The present book is an excellent text for undergraduate and postgraduate students of dermatology as well as for the general practitioner. Far less voluminous than the first edition, it offers a more balanced discussion of the various phases of this speciality with less emphasis on theory and more emphasis on practical aspects. In addition to the inclusion of many new diseases of the skin, the book is up to date in the discussion of advances in therapy such as penicillin, the sulfonamides, streptomycin, and new X-ray apparatus.

In the first edition entirely too much space was devoted to the theory and physics of X-ray and radium therapy. In the current edition the author has limited his own discussion of these therapeutic agents to 20 pages, yet the subject is adequately covered. Of value to the dermatologist who desires a more complete knowledge of Roentgen-ray physics as applied in dermatology is Chapter 35, by Carl B. Braestrup.

The discussion of skin diseases due to fungi (64 pp.) is particularly valuable in view of their prevalence. Many of the larger cities in the United States are having the greatest epidemic of tinea capitis in their history, and Andrews' discussion of the therapy of ringworm of the scalp is particularly helpful.

Especially worthy of mention is the excellent discussion of the therapy of each disease. The prescriptions are excellent and are brought up to date by being rewritten entirely in the metric system.

It has been said that "one picture is worth a thousand words." The illustrations in Andrews' text are excellent and well reproduced. The author has not hesitated to draw upon dermatologists throughout the country in order to obtain the best photographs of skin diseases available.

If there is any criticism of the book, it might be directed toward the extremely brief discussion of cutaneous neuroses. With the increased attention directed toward

the psychosomatic aspects of disease in general, it would seem desirable to give more than a page and a quarter to a discussion of the neurogenic aspects of skin diseases.

CARROLL S. WRIGHT

1402 Spruce Street, Philadelphia, Pennsylvania

Forest tree breeding and genetics. R. H. Richens. (Imperial Agricultural Bureaux Joint Publication No. 8.) Cambridge, Engl.: Imperial Bureau of Plant Breeding and Genetics, 1945. Pp. viii + 79. 5s.

Although the results of forest tree breeding and genetics research have proceeded to only a limited degree toward the point of practical application, literature in the field has multiplied greatly in recent years. This publication performs a signal service for the research worker by bringing together and collating literature from all sources appearing from 1930 through 1944. As pointed out in a foreword by H. G. Champion, "There is no publication bringing together for the use of the forester all the information which already exists in this important field, and it is to fill this gap that this technical communication has been compiled."

Following an orienting introduction, progress and problems in the general field of forest genetics are analyzed and documented at some length under 22 subject matter captions.

The bibliography includes over 600 titles and seems very complete. Besides being arranged alphabetically, it is collated for 9 gymnosperm genera and 22 angiosperm genera. Each genus is characterized as to its species, genetical nature, and status of research. For example, *Pinus* is discussed and documented in regard to natural variation, effects of environment, genetical analysis, cytology, timber yield, photoperiod, efficiency of reproduction, shape, quality, competition, temperature, fungi, insects, hereditary defects, selection, hybridization, induced mutation, and pollination.

Another feature is a glossary of some 300 terms defined with respect to their significance for forest tree breeding.

From start to finish the publication is planned to be of maximum usefulness to the forest geneticist and should be available to every serious worker in the field.

KENNETH P. DAVIS, *Dean*

School of Forestry, Montana State University
Missoula