in all countries on the diseases of plants and various other aspects of economic mycology. The first number was issued in January, and it is hoped to complete a volume of between four and five hundred pages annually. The announcement says:

Mycologists and plant pathologists often find it difficult to keep themselves informed of the progress of work in other countries. The publications in which an account of current work is given are very numerous and are scattered through a large number of journals, many of which only occasionally contain an article of interest. There are few, if any, libraries in which all these publications can be found, while the working mycologists in the overseas part of the British Empire often have access to only a small proportion of them. The committee of the Imperial Bureau of Mycology has accordingly felt that it is desirable to start the publication of a compact vet comprehensive survey of current literature dealing with the various aspects of applied mycology, on the lines of the Review of Applied Entomology published by the Imperial Bureau of Entomology in London. While Botanical Abstracts remains the only journal that aims at giving a complete citation of the literature in all branches of botanical science, the present Review will be specially directed to supplying to workers with restricted library facilities, sufficiently full abstracts of papers on the diseases of tropical crops and other similar matters of interest to mycologists in the overseas parts of the British Empire to enable them to keep informed of the progress of current work.

Though the chief object of the new journal is to give an up-to-date summary of work bearing on the practical application of the study of plant diseases to the reduction of the wastage due to such diseases in agriculture, the fundamental researches on which most progress in this direction is based have a wider appeal. The *Review* will enable all those who are interested in the progress of science to follow the development of one of its younger branches; the student of pure science will, it is hoped, find many side-lights on the wider problems on which he is engaged; while the practical grower will be able to learn the experience in other countries with improved methods for controlling plant diseases.

Subscriptions, orders and all communications respecting the publication should be sent to the editor, Imperial Bureau of Mycology, Kew, Surrey, England.

## THE PUBLICATION OF SCIENTIFIC PAPERS

In view of its general interest to contributors to scientific journals, we are permitted to print the following letter addressed by Professor Ross G. Harrison, of Yale University, managing editor of the *Journal of Experimental Zoology*, to its contributors:

Owing to the high cost of printing and the consequent large deficit incurred in the publication of its journals, the Wistar Institute has notified the editorial board of the Journal of Experimental Zoology that, unless financial support is forthcoming, it will not be possible to print during the present year more than two volumes or one thousands pages of the Journal, instead of the three volumes of five hundred pages each published in 1921. Since the war material for publication has been coming in at a rapidly increasing rate, so that there is now on hand more than sufficient to fill the two volumes to be issued this year. This means that, under present conditions, manuscripts now received can not appear much earlier than eighteen months from date. It is hoped that before long conditions in the printing trade will become more favorable or that some method of financing the deficit may be devised. In the meantime, the editorial board find it necessary to ask your cooperation in meeting the present difficulties. This can best be done by making papers as concise as possible, by using the simplest form of illustration-such as can be reproduced by zine engraving, by omitting tables as far as is consistent with clearness, and by avoiding duplication in publication.

The editors do not wish to set any arbitrary limit to the length of papers that can be accepted; for some are concise at fifty pages and others verbose at five. A colored plate may be a necessity in some instances and a useless expense in others. It is felt, however, that almost every paper would be improved by judicious pruning, and the authors, as the best qualified persons to do this, are asked to undertake the task. It is scarcely to be expected that even the utmost self restraint on the part of contributors will entirely meet the exigencies of the situation, so that the editors will probably have to exercise their judgment as regards the space that can be allotted to each paper submitted. Nevertheless, if contributors are willing to undertake drastic measures themselves, it will frequently spare the editorial board the necessity of declining papers which, under other circumstances, they would like to

accept, and it will serve the greatest good to the greatest number by giving every one a fair share in the use of our present limited facilities for publication.

# THE GRANTS FOR RESEARCH OF THE NATIONAL ACADEMY OF SCIENCES

PROGRESS has been reported as follows on grants made by the National Academy of Sciences:

#### BACHE FUND

The researches of Carl H. Eigenmann, for which grants 214 and 220 were made, have been published in the *Memoirs of the Museum of Comparative Zoology*, Vol. 43, Parts 1 and 2, and in the *Proceedings of the American Philosophical Society*, the *Journal of the Washington Academy of Sciences*, and the Indiana "University Studies." The research on fishes of the upper Amazon basin and Lake Titicaca is still in progress.

A preliminary paper on the work of H. W. Norris on cranial nerves of amia and lepidosteus will be published shortly in the *Proceedings* of the Iowa Academy of Science.

Star counts have been made by H. Nort, of Gouda, Holland, for more charts of the southern hemisphere. Additional counts have been made to find distance correction for the Franklin Adams charts. Formulæ have been derived to compute the equatorial coordinates of the fields counted from the declination and the R.A. of the center of the plate and the focal length of the telescope used. The limiting magnitude for ten additional charts of the northern hemisphere has been derived.

Preliminary results of the research of J. C. Jensen, grant No. 218, have been published in the *Proceedings* of the Nebraska Academy of Science for 1919.

Results of the research of H. G. Barbour, of McGill University, grant No. 219, have been published in the *Proceedings* for Experimental Biology and Medicine, 1920; The Journal of Pharmacology and Experimental Therapeuties, 1921; and The American Journal of Physiology, 1921.

Preliminary results of the research of T. H. Goodspeed, of the University of California, grant No. 224, have been published in the University of California Publications in Botany, Vol. 5.

#### SMITH FUND

There was issued in 1921 as a publication of the Leander McCormick Observatory of the University of the University of Virginia, "349 parabolic orbits of meteor streams and other results," by Charles P. Olivier, a discussion of 22,000 observations of meteors made by members of the American Meteor Society. It is a comprehensive report of results of an investigation which has been aided by several grants from the J. Lawrence Smith Fund at various times since 1913 to Professor S. A. Mitchell, director of the McCormick Observatory, under whose supervision the work has been done.

### SCIENTIFIC NOTES AND NEWS

DR. E. A. DE SCHWEINITZ, professor of ophthalmology at the University of Pennsylvania, gave the presidential address at the opening session of the American Medical Association held at St. Louis on May 23.

DR. E. W. RICE, JR., has been elected honorary chairman of the board of directors of the General Electric Company. He will devote his time particularly to the supervision of the scientific, engineering and technical work of the company in this country and abroad.

DR. ROSS AIKEN GORTNER, professor of agricultural biochemistry at the University of Minnesota, has been elected to the office of national president of Phi Lambda Upsilon, the honorary chemical society. He succeeds Dr. Harold A. Fales, of Columbia University.

THE annual meeting of the Iron and Steel Institute, under the presidency of Mr. Francis Samuelson, was held on May 4 and 5 at the house of the institution. The Bessemer Medal was presented to Professor Kotaro Honda.

DR. MURK JANSEN, of Leyden, has received the Umberto I prize awarded every five years by the province of Bologna for the best work or discovery in orthopedics.

AT the recent annual meeting of the American Academy of Arts and Sciences the election of the following fellows and foreign honorary members was reported by the council: Class I. The Mathematical and Physical Sciences: Walter Sydney Adams, Pasadena; Gano Dunn, New York; Thomas Alva Edison, Orange, N. J.; Edwin Crawford Kemble, Cambridge; Richard Chase Tolman, Washington; Arthur Stanley Eddington, Cambridge, England. Class II.