

Research at Columbus, Ohio, has resigned to accept the professorship of abnormal psychology in Ohio State University. He will continue his clinical work and his researches in the abnormal field.

DR. J. BRONFENBRENNER, formerly assistant professor of preventive medicine and hygiene at the Harvard Medical School, has accepted a similar appointment in the department of bacteriology.

MR. JOHN L. BUYS, Ph.D. (Cornell, '22), has been made assistant professor of zoology in the Municipal University of Akron, Ohio., in the place of Dr. W. R. Allen, who goes to the University of Kentucky.

L. E. MILES, plant pathologist for the State Plant Board of Mississippi, has become associate plant pathologist and associate professor of plant pathology at the Alabama Polytechnic Institute.

DR. SIMON KLOSKY, of the research department, Edgewood Arsenal, Chemical Warfare Service, has been appointed instructor at the Martin Maloney Chemical Laboratory of the Catholic University of America.

DR. WALTER RITCHIE, assistant lecturer in biology in the University College, Aberystwyth, has been appointed assistant lecturer in biology at the Technical College, Bradford, in succession to Mr. L. P. W. Renouf, who has been elected to the professorship of zoology in the University of Cork.

DISCUSSION AND CORRESPONDENCE

RELIEF FOR RUSSIAN ASTRONOMERS

TO THE EDITOR OF SCIENCE: Complying with your request, I will make a brief statement as to the efforts which have been made by the American astronomers in recent months toward the relief of the physical needs of our colleagues in Russia.

Letters began to filter in from Russia about a year ago. We thus learned, for instance, that the grounds of the great Pulkowo Observatory had again been chosen as a field for artillery practice between rival factions. Fortunately, there had been a little intimation of what might

happen, and no damage was done to telescopes or other apparatus, the most valuable lenses having been stored below the possibility of damage. The letters foreshadowed impending distress for the necessities of life, and the natural anxiety about the winter of 1921-2. Later letters showed that the anticipations were being realized with distressing completeness.

At the meeting of the American Astronomical Society held at Swarthmore, in convocation week, or about January 1, 1922, a Committee on Russian Relief was appointed, consisting of Professors J. A. Miller of Swarthmore, Benjamin Boss of Albany, and H. C. Wilson of Northfield. A generous subscription of about \$150 was made at the meeting, principally for relief of astronomers at Pulkowo and for M. and Mme. Ceraski, formerly of the Moscow Observatory. The committee decided not to make further appeal for funds.

During the latter part of the winter the calls for help from the Russian observatories were numerous and beyond the means of the staff of any one observatory; consequently, after learning that the committee of the Astronomical Society had decided not to take further action, a small, informal committee assumed the responsibility and issued an appeal to the members of the staffs of the American observatories and departments of astronomy—having in mind that a monthly contribution might be given for five months, from the persons connected with our larger institutions.

Meanwhile, the American Relief Administration was extending its operations, and direct information was coming to us of the receipt of the food packets. An actual demonstration of the workings of the A. R. A. was hardly necessary, in view of the splendid efficiency of all relief work in which Mr. Hoover has had a hand.

In order to avoid any waste of time in correspondence between the members of a committee having proper geographical distribution, the three members were chosen from the same staff, and decisions could thus be reached immediately and appeals answered on the same day that they were received. One member of the committee is Russian, and thus our foreign friends were enabled to write their letters in

Russian, without the inconvenience of translating them into a language different from their own. The valuable personal acquaintance of this member in Russia was of great assistance in drawing up a list of institutions which ought to be reached.

The response to the appeal in America was immediate, and very generous. Up to August 15th, a sum of \$1,657.47 had been received, and food packets amounting to \$1,490 had been sent for distribution among the scientific staffs of twenty-five institutions, observatories or universities, and to some isolated astronomers or their dependent families. These packets were sent at intervals, considerably oftener than a month, as the funds came in for the purpose. We have received interesting testimony as to the care and judgment of the A. R. A. in the selection of contents of the food packets, having learned from the direct experience of our friends that a \$10 packet has actually supported two persons for a month. It should also be recalled that one fourth of all packets was used for the general relief of Russian children.

The recipients of the first shipments were requested to give us the names of other astronomers or their families that might need assistance, and thus the list has been considerably increased. Many replies have been received, but not yet has there been time for all to acknowledge the receipt of the food packages. The distress has been very great in the Crimea—perhaps where it had been least expected—and it was not possible for the A. R. A. to establish warehouses in this district until rather recently. From six to eight weeks seems to have been necessary for the actual receipt of the food at points which could be reached most expeditiously.

The last general distribution of food packets was made at the end of July, and we have assumed that by the time it reaches the persons for whom it is intended the new harvest will have removed the immediate urgency of relief. The balance which the committee has in the bank will be used in responding to calls from individuals not yet reached, or those in remote districts where the distress may still be acute.

No expenses of the committee have been charged to the fund, so that the distribution has been net. This, of course, applies also to the splendid work of the A. R. A.

The followers of the stars are a scattered, other-worldly folk, but their work on far-away things has brought them close together. Personal acquaintances are probably closer among astronomers and their families than is the case in most other branches of science. It has, accordingly, been a simpler matter for the American astronomers to give this little help to their Russian colleagues than it would have been for those in other departments of endeavor having a greater constituency. Men and women of America in several other branches could readily have contributed a hundred times what the astronomers could do—and perhaps they have—but the presumptive lack of personal contact would have made this a rather difficult proposition. The letters from Russian astronomers leave no doubt as to the sincerity of the appreciation of even this small measure of relief from America.

The members of the committee have been: George Van Biesbroeck, Otto Struve and the writer.

EDWIN B. FROST,
Chairman

YERKES OBSERVATORY,
WILLIAMS BAY, WISCONSIN
AUGUST 18, 1922

BOTULINUS TOXIN

SOMETIME ago Dr. Schlesinger and myself (*Proc. Soc. Exp. Biol. and Med.*, 19, 1, 1921; *Jour. A. M. A.*, 78, 1519, 1922) stated that the toxicity of crude filtrate from cultures of *Bacillus botulinus* may be greatly increased by the proper degree of acidification (approximately p_H 4). When we tried to find the limits of potency of such an acidified solution of toxin, we were extremely surprised to discover that even such minute quantities of solution which contained only 3×10^{-18} cc. of the original culture filtrate exhibited all the specific properties of the original toxin and killed mice in less than 48 hours when injected intraperitoneally. When this acidified solution of toxin was diluted