

SCIENTIFIC EVENTS

THE MATHEMATICIANS OF AMERICA AND OF SOVIET RUSSIA

THE Soviet Embassy has recently received for transmission to Soviet mathematicians a statement of solidarity signed by a number of their most distinguished American colleagues.

The document carries signatures of ninety-three mathematicians of forty-seven American universities and colleges. Professor Marston Morse, president of the American Mathematical Society, and Dr. George D. Birkhoff, Perkins professor of mathematics at Harvard University, are signers, as are eight past presidents of the society.

The statement reads as follows:

We, the undersigned mathematicians of the United States, send our greetings and express our heartfelt sympathy to our colleagues of the Soviet Union in their struggle against Hitler fascism. What the future of mathematics would be in a Hitler-dominated world we know from the unprecedented destruction of mathematics in Germany after the advent of Hitler. We are deeply impressed by the heroic stand of the Soviet peoples and know that the mathematicians of the Soviet Union are doing their part in this supreme effort.

The bonds between mathematicians in the United States and the Soviet Union are particularly strong since during the past two decades the center of world mathematics has steadily shifted to these two countries. We know many of you personally and more of you through your scientific writings. We know that you are fighting alongside your fellow-countrymen in their brave struggle against the invading tyrant and we assure you that we here are doing everything in our power to aid all peoples struggling against fascism.

With best wishes for a successful fight against the evil forces of fascism, we remain, fraternally, your colleagues in the United States.

Included among the signers are the following members of the National Academy of Sciences:

Professors H. Bateman, of the California Institute of Technology; G. D. Birkhoff, of Harvard University; G. A. Bliss, of the University of Chicago; S. Lefschetz, of Princeton University; G. A. Miller, of the University of Illinois; M. Morse, of the Institute for Advanced Study; W. F. Osgood, of Harvard University; J. F. Ritt, of Columbia University; E. B. Van Vleck, of the University of Wisconsin; O. Veblen, of the Institute for Advanced Study; J. von Neumann, of the Institute for Advanced Study; J. L. Walsh, of Harvard University; N. Wiener, of the Massachusetts Institute of Technology, and E. T. Bell, of the California Institute of Technology.

NEW TYPHUS VACCINE BEING TESTED IN BOLIVIA

AMONG the problems that health authorities keep constantly in mind is that of typhus fever, which

made such ravages during and after the last war. Recently a new vaccine against typhus fever was developed by Dr. Cox, Public Health Service, Hamilton, Montana, which it is hoped will be both effective and suitable for mass production. It has produced a high degree of immunity in laboratory animal tests, but in order to prove its efficiency, a trial must be made on large groups of people. Experiments could not be conducted in the United States because the form of typhus now present in this country is not the "European" type. The first attempts at testing the vaccine took place in the Balkans, Spain and China but were frustrated by the war. When the possibility of making these trials in one or more of the American republics came under consideration, it was decided to approach the matter through the Pan American Sanitary Bureau, the coordinating public health agency of the Americas. One of the chief functions of the bureau is the prevention of the international spread of disease, it being authorized by the Pan American Sanitary Code to undertake scientific research to this end. The bureau communicated with various Latin American countries in which louse-borne typhus is found and with the cooperation of the Bolivian authorities it was decided to send a commission to Bolivia to make a trial of the vaccine among 10,000 Bolivian Indians. In order to conduct the experiment, it is planned that half the members of every household, in the area chosen for the study, are to be vaccinated with typhus vaccine, to a total of 5,000 persons. The disease incidence in the vaccinated and the unvaccinated groups is then to be compared. In cases where the family refuses to have only half of its members vaccinated, it is thought desirable to inject the other half with the pneumococcus pneumonia vaccine, thus using the opportunity to conduct also a pneumonia study. Dr. R. E. Dyer, assistant director of the National Institute of Health, and his colleague, Dr. N. H. Topping, have been in La Paz, Bolivia, to work in cooperation with Bolivian authorities, who are giving their whole-hearted assistance. The experiment may require as long as nine months. It is possible that similar studies may be undertaken elsewhere should circumstances justify them.

THE WARTIME SERVICE OF BIOLOGICAL ABSTRACTS

JOHN E. FLYNN, editor-in-chief of *Biological Abstracts*, University of Pennsylvania, writes that with each month of the continuance of the war diffusion of knowledge of current scientific advances becomes more and more difficult and uncertain.

When the war broke out and the blockade was imposed, the receipt by American libraries of scientific

periodicals of Germany, Italy and the invaded nations was either delayed or completely suspended. Subsequently some of this literature began to trickle through by way of Russia, Siberia and the Pacific. The outbreak of hostilities between Germany and Russia has shut off this last important means by which European publications can reach this country. Uncertain Lisbon alone is left. The scientists of Europe are likewise handicapped by the similar unavailability of scientific periodicals published in the Americas.

The abstracting journals remain almost the only means by which scientists of different nations may remain in effective contact. *Biological Abstracts* has been undertaking to compensate, so far as an abstracting journal can compensate, for this deficiency in the means of diffusing knowledge, by arranging to abstract the European literature as completely as is possible in these times. Some of our European collaborators are still active and a considerable number of current periodicals, apparently no longer available in libraries of the United States, are regularly being abstracted. Through the cooperation of the library of the Marine Biological Laboratory at Woods Hole and of the United States Department of Agriculture, special arrangements have been made for the abstracting of the foreign periodicals obtainable in these libraries. Through the courtesy of Dr. Stephen P. Duggan, director of the Institute of International Education, the cooperation of a group of Swiss biologists has been enlisted for the abstracting of German-language periodicals available in Switzerland and not in the United States. Correspondence is actively under way with biologists in the neutral nations with the aim of locating the publications in these nations and arranging for their regular abstracting.

At the present time some 1,400 periodicals are being reviewed in *Biological Abstracts*. This includes a group of about 300 periodicals, mainly European or Latin American, assigned during the course of this special drive for the better coverage of the foreign-language literature.

The editors of *Biological Abstracts* earnestly request that all biologists who are in a position to do so will aid in the abstracting of the European literature available to them. It is only by this means that, for the duration of the war, current research in biology can be brought effectively to attention. Any who are not now assisting in this way but are willing to do so are asked to communicate with Dr. Flynn.

CENSUS OF SCIENTIFIC AND SPECIALIZED WORKERS IN THE UNITED STATES AND IN OTHER COUNTRIES

IN connection with the development of the National Roster of Scientific and Specialized Personnel, Presi-

dent Leonard Carmichael and Robert Shosteck report that it has become important to have for comparative purposes some statistical information concerning specialized personnel in countries other than the United States. From a number of points of view connected with national defense and cultural relations this information seems to be important. It will also be useful in demonstrating to American authorities the relationship between numbers of specialists and the effective defense level of various nations. Possibilities of international collaboration in the sciences may also first be determined in certain instances from such a table.

It has proved surprisingly difficult to secure information of this sort. Varied sources have been tapped to secure the incomplete data now in the Roster's file. These sources include censuses, professional directories and registries, yearbooks of various nations, professional society memberships as given in *Minerva*, and data secured by American diplomatic representatives in various nations. It is likewise recognized that some of this information may be inaccurate or somewhat out-of-date, as well as incomplete.

The data which have been compiled are available to readers of SCIENCE, who may obtain copies of the mimeographed report by application to the National Roster of Scientific and Specialized Personnel, Atlantic Building, Washington, D. C.

The authors will be grateful to readers of SCIENCE who may be in a position to amplify, correct or otherwise make suggestions concerning the preliminary tabulations contained in this report. Indications concerning the number of members in professional societies, persons registered in various professional or scientific fields, or other census figures for any particular country or professional occupation, would be acceptable. Possibly some readers may be willing to consult displaced foreign workers now in this country who may have information concerning this matter. All information in this field should be addressed to the authors at the address given above.

It must again be emphasized that the figures presented in the National Roster's tabulation are offered merely as a starting point for future corrections and additions. The data are arranged by fields for each country, and the source of all data is given on a supplementary sheet.

RETIREMENTS AT THE OHIO STATE UNIVERSITY

At the Ohio State University the following members of the faculty have retired with the title emeritus: Dean J. H. J. Upham, of the College of Medicine; Dr. William Lloyd Evans, chairman of the department of chemistry, and Dr. Joseph A. Leighton, chairman of the department of philosophy.