

assumed to be cool, a condition also indicated by the presence of spruce at 40–45 m in Mexico. It is our present hypothesis that moist and/or cool conditions represent periods of ice advance, whereas dry and/or warm represent intervals of retreat.

Noteworthy is the evidence of current desiccation at the top of the New Mexico profile—information that is missing in the Mexican data, where sedimentation was ended by Spanish construction. To be noted also is a displacement in the Mexican profiles caused by rapid sedimentation around the 55-m level. When this gap is closed, a strikingly consistent alternation of moist and dry intervals appears in these two sites, separated by a linear distance of some 1600 miles.

PAUL B. SEARS
KATHRYN H. CLISBY

*Conservation Program
Yale University*

Passports and Visas

THE following experiences of mine may interest some of your readers.

I lived in the USA from 1938 to 1950 and acquired the status of a permanent resident in 1948. In 1950 I came to Britain to take up a research post for one or two years. I then held a re-entry permit to the USA, valid until September 1951. I applied in August 1951 for the renewal of this re-entry permit, but even at the present time (December 21, 1951) I am still without any reply from the Immigration and Naturalization Service.

In September 1951 I was informed by the secretary of the American Mathematical Society that the Cole Prize for Number Theory would be awarded to me at the December meeting of the society, and that it has been customary for the recipient of the prize to give a lecture at the meeting. When, early in November, I had still received no reply from the Immigration and Naturalization Service, I wrote again (enclosing the letter from the secretary), requesting that my permit should be renewed in time for me to attend the meeting. No reply has come, and I am therefore prevented from attending the meeting.

It is difficult to believe that my inability to get any reply is due to administrative inefficiency, and I am concerned lest it indicate a change of policy about the renewal of re-entry permits. If this is so, grave hardships will be inflicted on individuals, and formidable new obstacles will have been placed in the way of the movement of scientists.

PAUL ERDÖS
*Department of Mathematics, University College
London, England*

THE undersigned, while enjoying the hospitality of the Pasteur Institute in Paris, were embarrassed by the situation in which a member of that institute was placed as a consequence of the McCarran Act of 1950. Since our return to the United States another distinguished member of the Pasteur Institute has found himself in a similar situation.

In order to acquaint American scientists with the nature of the decision that some of their honest and sensitive foreign colleagues have made, we ask that you publish the following letter.

We are grateful to Dr. Monod for making his letter available to us.

ERNEST BOREK
*Department of Chemistry
The City College, New York*

FRANCIS J. RYAN
*Department of Zoology
Columbia University*

INSTITUT PASTEUR, PARIS
4 juin, 1951

*Monsieur Larkin, Consul des Etats-Unis
Ambassade des Etats-Unis, 2 Avenue Gabriel, Paris*

MY DEAR MR. LARKIN:

This letter is meant as a conclusion to the conversation which we had last Wednesday on the matter of my application for a U. S. visa. I have considered this problem very seriously in the light of the information you gave me that, under the provisions of the Internal Security Act of 1950, I must be considered an "inadmissible alien" because I belonged to the Communist party from 1943 to 1945. To my regret I have come to conclude that I could not follow the course you suggested I should take, of applying to the Attorney General for special permission to enter temporarily the U. S.

In view especially of your extremely courteous and helpful personal attitude in this matter, I feel that I should explain in some detail the reasons that have led me to this negative decision. These are twofold.

To begin with, my proposed trip to the U. S. was planned, you may recall, in answer to invitations extended to me by the American Chemical Society and by the Harvey Society. However much I appreciate the honour entailed in these invitations, as well as the pleasure and fruitfulness of a scientific visit to the U. S., I cannot put these in balance with the extremely distasteful obligation of personally submitting my "case" to the Department of Justice, and of having to ask for permission to enter the U. S. as an exceptional and temporary favor of which I am legally assumed to be unworthy.

The second reason is that I am not willing to fill in and swear to any "biographical statement" of the type apparently required for this application. This refusal is not based on abstract principles only, but on a sad and terrible experience: this kind of inquisition was introduced into the French administration under the Occupation. I will not submit myself to it if I can possibly avoid it. Furthermore I feel quite sure you realize that such questions as "State name of all organizations of which you have been a member since 1918 or to which you have given financial or other support, giving dates of membership and dates of contributions" cannot be answered both *fully* and *truthfully*. It is unfair to demand a detailed sworn statement when the slightest omission, such as the "date of a contribution," might make one technically liable to a charge of perjury. You will also realize, I believe, that such statements, should they fall into wrong hands, might conceivably be used as a source of information. The mere possibility of this would make it impossible for me to submit one, even though I knew that mine would be most uninteresting. The fact that I have been completely estranged from my former political affiliations makes this even more impossible.

This being said, I should like to add that I did not reach this decision lightheartedly, as I fully realize that it means cutting myself partially away from a country which I love, and to which I am attached by very strong links. Not only am I half American, but I have many very close friends in your country. I have learned by experience to respect and admire American science. Indeed, I owe much to several American scientific or other institutions, such as the Rockefeller Foundation, and I may perhaps venture to say that, as a scientist, I have had more recognition in the U. S. than in my own country.

However, all this is strictly personal, and I would like to mention another more general aspect of these problems. Scientists themselves are quite unimportant. But science, its development and welfare, are overwhelmingly important. Isolation is the worst enemy of scientific progress. (If proof of this statement were needed, I would point to the strange and profound deterioration of Russian biology in recent years.) Measures and laws such as you are now obliged to enforce, will contribute in no small extent to erecting barriers between American and European science. I do not pretend to know whether such measures are justified in general, and in any case I have no right to express an opinion. But I can say, because it is a plain fact, that such measures represent a rather serious danger to the development of science, and that, to that extent at least, they must be contrary to the best interests of the United States itself.

Thanking you again for your courteous help,

I remain,

Sincerely yours,

JACQUES MONOD

THE recent action of the State Department in denying a passport to Linus Pauling to visit Great Britain represents the latest step in an increasingly dangerous sequence of events, which can only result in the throttling of the free exchange of information so essential to the continued success of scientific research in this country and the rest of the free world. In the belief that the full significance and exceedingly shortsighted implications of this and previous actions of a similar nature have escaped the public attention they deserve, and in the conviction that only through the mobilization of public opinion can this dangerous policy be abrogated, members of the chemistry faculty of the Florida State University, acting as individuals, have formed the "Florida Committee on Science and Public Affairs." The primary purpose of the committee is "... to disseminate information on critical issues involving science and public affairs, . . . [and] the interpretation of social issues involving science and the scientist within the democratic tradition of this country."

It is the firm conviction of the committee that only through the concerted action of all scientists in this country directed toward arousing public interest in matters of this nature and bringing to public attention the facts involved and the seriousness of the ultimate consequences in terms of decreased scientific productivity can the fabrication of an American "Iron Curtain" be halted. To this end the committee cannot too strongly urge that scientific workers everywhere make every effort, in terms of dissemination of in-

formation to the public and in direct protest to responsible agencies, to halt this dangerous trend which can culminate only in the material weakening of this country's scientific potential.

RUSSELL H. JOHNSON
EARL FRIEDEN
RAYMOND K. SHELINE
WERNER HERZ
H. M. WALBORSKY
ERNEST GRUNWALD
JACK EICHINGER
ROWLAND E. JOHNSON
KARL DITTMER
JOHN E. LEFFLER
MICHAEL KASHA
RUSSELL J. KEIRS
F. J. KEARLEY, JR.

*The Florida Committee on Science and Public Affairs
Tallahassee*

Culture Collections of Microorganisms

THE establishment and maintenance of museums of natural history and of herbaria in which are preserved collections of animals and plants for study and comparison have long been recognized as a proper responsibility of governments and universities. In a very real sense these collections constitute the principal bases upon which rest our knowledge of the relationships, phylogeny, and taxonomy of the higher plants and animals.

The myriads of microorganisms in the environment of man are quite as significant to him as are these higher forms. Yet, in spite of various efforts, the gathering, study, and maintenance of collections of microscopic forms have never been accomplished on a comparable scale. Individuals or teams of investigators regularly assemble and maintain extensive collections of microorganisms representing special fields of interest. Too often, however, these collections are lost when the individuals or teams cease to work actively with them. Subsequent investigators, wishing to work in the same or related fields, may spend much time and effort in attempts to isolate similar organisms, and not infrequently they fail to duplicate or extend earlier work because of the impossibility of regaining living specimens of the particular species or strains upon which previous work was based.

Many microorganisms—for example, the bacteria and viruses—cannot be identified by comparison with dried or preserved specimens. For their identification living cultures are essential, since their characterization depends on knowledge of their physiology and antigenic structure, as well as their morphology. A usable collection of microorganisms thus resembles a botanical garden in that it must be a collection of minute living plants, and a zoological garden in that it must be a collection of minute living animals. Such a collection is furthermore unique in that it has as one of its important functions the distribution of sub-