

called "the skyhook," a light, strong contrivance, easy to operate, and well adapted to protecting the sterile glass slides from contamination except for the time they were exposed. Mr. Meier prepared the slides and has examined and photographed them. He credits Colonel Lindbergh with careful and painstaking work and says that "Colonel Lindbergh's knowledge of pure-culture technic made him thoroughly aware of the necessity of developing a trap that could be used with minimum danger of error resulting from contact with dust in the cockpit."

In his flights between the American mainland and Denmark, by way of Greenland and Iceland, Colonel Lindbergh exposed 26 slides and returned them with field notes and free-hand maps indicating exactly where and for how long, and under what conditions each slide had been exposed. Mr. Meier has taken care of the preservation of the slides and has examined and photographed representative sections. He has been able to identify the genus and in some cases the species of many of the objects trapped in the petroleum jelly which covered the slides. More complete identifications will in many cases have to await the assistance of botanists familiar with the characteristics which identify various kinds of pollen, and of scientific workers who are specialists in different groups of fungi, mosses and lichens. On one slide, exposed far north of the Arctic Circle, Mr. Meier was able to discover under the microscope more than 40 different types of objects in a space five centimeters square. This was on a slide exposed 3,000 feet above sea level along the northeastern coast of Greenland.

Mr. Meier and other Department of Agriculture workers, assisted by Army, Navy and Coast Guard flyers, have done a considerable amount of aerial work in trapping spores and other micro-organisms, but this has been overland and in places where it was to be expected that the catch would be abundant. "This Lindbergh collection," according to Mr. Meier, "is the first of its kind to give concrete evidence of the part played by air currents in the distribution of fungi between northern lands." He points out the possibility that a single living spore which is transferred by the air currents and dropped in a spot favorable for reproduction might create a center for rapid spread of infection.

GRANTS IN AID OF RESEARCH ADMINISTERED BY THE NATIONAL RESEARCH COUNCIL

THE National Research Council has been informed that the Rockefeller Foundation has appropriated \$80,000 to the council to be used for individual grants in aid of research in the natural, medical and mathematical sciences during the ensuing three-year period, 1935-37. This fund is available for use in grants of

moderate size (usually less than \$1,000) for the purchase of apparatus, materials and supplies, for employing technical assistance, and for field expenses. In general grants will not be made for personal services or fellowship stipends, for expenses of publication, for the purchase of books, for travel to attend scientific meetings, or for the research work of students under instruction. In the awarding of grants preference is ordinarily given to the support of investigations (a) in which the problem itself and the methods to be employed are clearly stated and in which definite results can be expected with the aid of a single grant and (b) toward the prosecution of which the university or other institution also contributes financially or through other special support. The fund is administered by a special committee of the Research Council composed of the chairman and the treasurer of the council, together with the chairmen of the council's seven divisions of science and technology.

Applications for grants to be made this spring should be submitted before April 1, 1935. Correspondence should be addressed to Dr. C. J. West, secretary, Committee on Grants-in-Aid, National Research Council, 2101 Constitution Avenue, Washington, D. C.

During the past five years the Rockefeller Foundation has appropriated to the National Research Council sums for individual grants and for conferences totaling \$370,000. From these sums 638 grants have been made for the support of individual investigations and for conferences for the construction of research programs or for the coordination of research on special subjects.

ISAIAH BOWMAN,
Chairman

ANNUAL MEETING OF THE METALLURGICAL ADVISORY BOARD

REPORTS on metallurgical investigations made at the Carnegie Institute of Technology during the past year will be given by a group of investigators at the eighth annual open meeting of the Metallurgical Advisory Board to be held at the institute on Friday, February 8. Approximately 400 metallurgists are expected to attend the meeting.

Dr. John Johnston, director of the department of research and technology of the U. S. Steel Corporation, will preside at the morning session, and Dr. Frank N. Speller, chairman of the Advisory Board, will give the address of welcome.

Progress made by the Metals Research Laboratory in theoretical investigations will be reported by the director, Dr. R. F. Mehl. The various projects now being studied in the laboratory are classified under four major heads, namely, plastic deformation of metals, precipitation from solid solution, oxidation of