close down altogether. In 1933–34, however, almost all the Colonial Governments agreed to double their existing rates of contribution, the United Kingdom Government substantially increased its support, and as a result of these efforts and of the resumption of contributions by the Union of South Africa, New Zealand and Newfoundland and the decision of the Government of Burma to support the institute, the position has been improved. Through the support of the Union Government of South Africa and a donation of £1,000 by Sir Robert Hadfield it has been possible to restore the staff of the mineral resources intelligence section nearly to full strength.

The exhibition galleries, the cinema and the Empire film library are referred to by Sir Harry Lindsay as representing the institute's activities in visual instruction in Empire affairs, and they have earned for it the title "An Empire Storyland." School parties formed the major part of the visitors to the galleries during the year. The galleries have been rearranged on a system which links the various Empire Courts into which they are divided in a sequence consistent with world geography. Each has its own color scheme; its contents comprise photographs, photographic transparencies, statuettes of Empire builders, dioramas and new types of exhibits that tell the story of the Empire's premier industries from the raw material of the producing country to the manufactured products of the world's markets.

The Empire film library, begun by the Empire Marketing Board, circulates to schools its own cinematographic romances of life, scenery and industries. Between the Empire film library, the cinema at the institute and the G.P.O. film unit, for which the institute acts as agent, the aggregate of the audiences to whom the films were shown in 1937 attained the record of 5,000,000, chiefly school children. The number of copies of films in the library is 1,300, and the number of borrowers has increased from 22,785 in 1936 to 24,600 in 1937.

The work of the mineral resources department has increased considerably. Technical inquiries totalled 1,101, an increase of nearly 19 per cent. over 1936, and the laboratory investigations involved the examination of 317 samples from 30 countries. The intelligence section of the plant and animal products department dealt with about 1,200 inquiries from over 40 empire countries.

THE REPRINTING OF HISTORICAL AND SCIENTIFIC BOOKS AND MONOGRAPHS

A SMALL committee, presided over by Professor B. Němec, met at Prague on December 3 and 4, to study the possibility of publishing old scientific works.

This question has been raised by Professor Němec, in the name of the Czechoslovak Research Council, and has been adopted as part of the plan of scientific work of the International Organization for Intellectual Cooperation, by the executive committee of the International Council of Scientific Unions, acting as a committee of scientific advisers.

This committee unanimously agreed that it would be desirable to publish a collection of manuscripts or works on the exact and natural sciences, printed copies of which are extremely rare or almost inaccessible. A collection of this kind would show the common origins of modern scientific culture and would be of great value to all interested in the historical development of the exact and natural sciences.

Considering the strictly international character of the undertaking the committee recommended that it be entrusted to the International Organization for Intellectual Cooperation. It was of the opinion that such a collection should not be confined to one branch of science alone and that it should embrace all the periods in the development of science since the Middle Ages. The committee further recommended that the publications might be divided into two series:

1. A series of facsimiles relating to very rare manuscripts or works containing engravings or illustrations indispensable for the value of such works.
2. A series of reprints of fundamental classical works in the development of the sciences, copies of which are extremely rare or no longer obtainable. In this series provision might also be made for the publication of manuscripts that have never been printed.

The committee suggests the publication in facsimile of the following manuscripts in the order given below:

1. "De Revolutionibus orbium caelestium," by Nicolas Copernic.
2. "De proprietatibus rerum," de Bartholomeus Anglicus. The committee was of the opinion that the publication in facsimile should be limited to the illustrations which appeared in all the editions. A summary of each chapter of the original work, with a biography of the author should accompany the illustrations.
3. "Micrographia," by Robert Hooke.

In addition, the committee suggests the reprinting of very rare works or the publication of hitherto unpublished manuscripts. It proposes the publication of the following works in the order given:

1. "New System of Chemical Philosophy," by John Dalton.
2. "Publication of a selection of letters from the scientific correspondence of Jean Hevellius, astronomer and selenographer." The greater part of this correspondence is at the Bibliothèque Nationale, Paris.
3. "Opuscula Botanitii argumenti," by Rudolph Camerarius.

4. "De solido intersolidum naturaliter contentor," by Nicolas Steno.

5. "Origin of Species," by Darwin. A reprint of the *first* edition (1859).

6. "Expériences pour servir à l'historie de la génération des animaux et des plantes," by Lazaro Spallanzani.

7. "Disquititio de sexu plantarum," by Linnaeus.

FLOOD CONTROL RESEARCH AT CORNELL UNIVERSITY

FLOOD control measures for the southern tier counties of New York State and the adjoining counties in northern Pennsylvania are under intensive study at Cornell University by the War Department, the School of Civil Engineering cooperating. Benjamin K. Hough, Jr., of the U. S. Army Engineering Corps, has a staff of 35 men working in Ithaca on problems of soil mechanics. A. N. Vanderlip with Professor Ernest W. Schoder and other members of the Cornell engineering faculty are conducting research in hydraulics. The War Department is making extensive use of the Hydraulics Laboratory of the College of Engineering and has erected on the campus a new soil mechanics laboratory, equipped with two carloads of apparatus from the abandoned Passamaquoddy Dam project in Maine.

Research is proceeding in two major directions: problems in channel improvement, construction of check dams and other water control measures; and studies of foundation conditions and suitable materials for earth embankments and earth dams where needed. The first important problem in the hydraulic group necessitated the construction of a scale model of the Chenango River through Binghamton, where disastrous floods occurred in 1935 and 1936.

The model, constructed in the Beebe Lake canal above the Hydraulics Laboratory and built to exact scale of 12 inches to 75 feet, has made possible studies of the Chenango River for two miles above its junction with the Susquehanna. The flow of water in the model is regulated in proper proportion to that in the river for its various flood stages and is measured and recorded very accurately for flood control study.

A serious difficulty has been to secure accurate data to guide the operation of the model. Few reliable records were made before the flood of July, 1935. The preliminary tests had to be run under three conditions: (1) with the river partly blocked by sections of the bridge, as immediately after the flood, (2) with the river partly blocked in a different way by contractors' trestles for the new bridge structure, and (3) with the river flowing freely under the new bridge. Now that the reliability of the model as an accurate reproduction of the river to scale has been established, each test still has to be done three times, with different levels of flow in the Susquehanna.

Careful experimental studies have shown the probable effects of a number of proposed channel improvements designed to lower the Binghamton flood stage at least a foot—a margin which would have had important beneficial effects during both recent floods.

Most of the dams and embankments to be constructed will be of earth. Hence the properties of the earth to be used assume great significance. Samples from various sites are under continuous scientific study. On the basis of these tests, army engineers are selecting sites and designing structures which will eventually control the flow of water through the entire Susquehanna Valley, and will, it is hoped, completely eliminate the danger of serious floods in the future.

WILD LIFE WEEK

PRESIDENT ROOSEVELT has set aside the week of March 20 to 26 as Wild Life Week. The week, sponsored by the General Wild Life Federation at the recent Baltimore meeting, will be devoted to raising funds for restoration work in all branches of wild life conservation.

The proclamation follows:

WHEREAS, One of the most important phases of the conservation of our natural resources is the protection and preservation of our wild life; and

WHEREAS, This is a work in which virtually our entire citizenship can participate wholeheartedly and enthusiastically, whether resident in the large metropolitan centers, with limited access to the great out-doors, or permitted to enjoy at first hand the wonders of nature; and

WHEREAS, The carrying into effect of any program for the conservation of our hereditary wild life—in the past seriously diminished and depleted by destructive exploitation and lack of proper understanding and sympathy—must enlist the support of all of our citizens if the mistakes of the past are to be avoided in the future in dealing with this important resource of incalculable social, economic, esthetic and recreational value:

Now, therefore, I, Franklin D. Roosevelt, President of the United States of America, do hereby proclaim and designate the week beginning March 20, 1938, as National Wild Life Week, and do earnestly appeal to all of our citizens first to recognize the importance of the problem of conservation of these assets in wild life, and then to work with one accord for their proper protection and preservation. To this end I call upon all citizens in every community to give thought during this period to the needs of the denizens of field, forest and water, and intelligent consideration of the best means for translating good intentions into practical action in behalf of these invaluable but inarticulate friends. Only through the full cooperation of all can wild life be restored for the present generation and perpetuated for posterity.

In Witness Whereof, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this 14th day of