

SCIENCE

VOL. 77

FRIDAY, MAY 26, 1933

No. 2004

<i>Preliminary Report on the Yale North India Expedition: DR. H. DE TERRA</i>	497	<i>Reports:</i>	
<i>A History of the National Research Council, 1919-1933. III. Division of Engineering and Industrial Research: PROFESSOR DUGALD C. JACKSON</i>	500	<i>Medals Presented at the Annual Dinner of the National Academy of Sciences</i>	514
<i>Scientific Events:</i>		<i>Scientific Apparatus and Laboratory Methods:</i>	
<i>The Industrial Fellowships of Mellon Institute during 1932-33; The Morris Arboretum of the University of Pennsylvania; The Fourth Annual Conference of Donors at the Johns Hopkins University; Symposium on the Physics of Nuclei and of High Energy Radiations; The Conference on the Diffusion of Scientific Knowledge</i>	503	<i>An Apparatus for Maintaining Artificial Respiration in Laboratory Animals: DR. W. R. BOND. A Special Air-chamber for Studying Photosynthesis under Natural Conditions: PROFESSOR A. J. HEINICKE</i>	515
<i>Scientific Notes and News</i>	505	<i>The National Academy of Sciences:</i>	
<i>Discussion:</i>		<i>Abstracts of Papers Presented at the Washington Meeting III</i>	517
<i>Fluorescence of Cells in the Ultra-violet: DR. A. C. GIESE and PROFESSOR P. A. LEIGHTON. The Boron Content of Sea Water: DR. E. G. MOBERG and M. W. HARDING. Persistent Strands of the Root-rot Fungus in Texas: HOMER C. McNAMARA, R. E. WESTER and K. C. GUNN. The Most Northern Occurrence of Mesquite on the Great Plains: DR. CHAS. N. GOULD</i>	509	<i>Science News</i>	10
<i>Special Correspondence:</i>			
<i>The Academy of Natural Sciences of Philadelphia</i>	512		

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal
Lancaster, Pa. Garrison, N. Y.
Annual Subscription, \$6.00 Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary, in the Smithsonian Institution Building, Washington, D. C.

PRELIMINARY REPORT ON THE YALE NORTH INDIA EXPEDITION

By DR. H. DE TERRA

YALE UNIVERSITY

SCOPE OF THE EXPEDITION PLAN

THE idea that geological and biological sciences may support each other in research on related problems may at first appear strange, especially if they are supposed to cooperate in a task of exploration in a region so little known as the Himalayas. However, for me, who had explored formerly as a geologist in western Central Asia and northern India, it seemed quite obvious that a study of fresh-water life in these highly elevated mountain ranges would help to throw new light on the geographical conditions of the Himalayas during the Pleistocene and postglacial periods. For it was in comparatively young geological times that the Tibetan plateaus and the adjoining highlands were uplifted to form the "Roof of the World," and it was to be expected to find a peculiar faunal character with endemic forms which would reveal faunal relations to Central Asia or to India.

The geological work was to be focused on the study of those diastrophic events which resulted in the

earth's highest mountain structure, north of peninsular India. Investigation of such a wide scope which was to be carried out on difficult territory required careful selection of particularly promising mountain sectors. These were to be found in Kashmir proper, where a thick Pleistocene sequence of strata in a structural basin could furnish evidence on Pleistocene orogeny. On the other hand, the eastern Karakoram, north of the Himalayas, seemed to be most profitable for an investigation of the structural outlines of this northern neighbor of the Himalayas. Geomorphological observations were to support the structural studies. A topographical survey was to facilitate this work. Finally, there was a good chance for collecting vertebrate fossils in the richly fossiliferous Siwalik formations south of the Himalayas.

Owing to the great interest which this plan of mine found at Yale, and thanks to the kind support it received by its President, of Professor Ch. W. Warren, dean of Sheffield Scientific School, of Pro-

Revised PRINCIPLES OF PLANT PHYSIOLOGY

By Oran Raber

IN reworking this book, first published in 1928, Dr. Raber has made a wise selection from the body of material available, keeping his textbook still a connected story of plant physiology written for the student rather than an exhaustive treatise for the specialist.

Particular features of the revision

Extensive additions have been made to the sections on respiration, growth, mineral nutrition, etc.

Complete new sections have been added on hydrogen ion concentration and photoperiodism.

The former chapters on Growth and Reproduction have each been divided, making four chapters of suitable teaching length.

New questions have been supplied at the ends of the chapters.

New references have been added to suit the demands of all classes of students.

The photographs of plant physiologists, a notable part of the illustration scheme, have been changed and supplemented to give a better view of the living personnel of the subject.

ASSUMING a knowledge of elementary botany, physics, and chemistry on the part of the reader, Dr. Raber has presented a balanced, readable story of both the physiological and chemical aspects of plant physiology.

432 pages, \$3.00

The Macmillan Company
60 Fifth Avenue, New York