Books of the Week

For the editorial information of our readers, books received for review since last week's issue are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N. W., Washington 6, D. C. Request free publications direct from publisher, not from Science Service.

Arapaho Child Life and Its Cultural Background—Sister M. Inez Hilger—Govt. Printing Office, Bureau of American Ethnology Bulletin 148, 253 p., illus., paper, 75 cents. An Arapaho mother counts her baby's age in terms of his mental and physical development. She will say, "My child smiles," "My child walks," "My child speaks some words," or "My child is already able to think."

BACKGROUNDS OF HUMAN FERTILITY IN PUERTO RICO: A Sociological Survey—Paul K. Hatt—Princeton University Press, 512 p., paper, \$5.00. Prepared under the joint auspices of the Social Science Research Center of the University of Puerto Rico and the Office of Population Research of Princeton University to throw light on the attitude patterns which affect fertility on the island.

BIOLOGY, ITS HUMAN IMPLICATIONS—Garrett Hardin-Freeman, 2d ed., 720 p., illus., \$5.00. A text for the student who is taking what may be his only course in this science as well as the future specialist.

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4. DIALOGUES CONCERNING TWO NEW SCIENCES by Galileo. Crew and De Salvio translation. Intro. by Favaro. Unabridged. xxi+288 pp. 126 diagrams. Index. 5 % x8.

5. PHILOSOPHICAL ESSAY ON PROBABILITIES by Laplace. Transl. from sixth French ed. by Truscott & Emory. Intro. by E. Bell. Unabridged. viii+196 pp. 5 % x 8. Paper, \$1.25 (loth, \$2.50 (loth, \$4.50 (loth, \$4.

abridged. VIII+190 pp. 0.78 x o. Laper, X.2.50
6. LAWS OF THOUGHT by George Boole.
XVIII+424 pp. 5 % x8. Unabridged. Cloth, \$4.50
7. OPTICKS by Sir Isaac Newton. Unabridged.
Includes tributes by Albert Einstein, E. T. Whittaker, I. Bernard Cohen. Index. Ill. exvi+414
pp. 41/2x7. Cloth. \$3.95
8. PRINCIPLE OF RELATIVITY by Einstein, Lorentz, Weyl, Minkowski. Original source papers.
Notes by A. Sommerfeld. Perrett-Jeffrey translation. 224 pp. 5 % x8. Paper, \$1.50
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TEN-DAY CASH-BACK GUARANTEE.

CATALOGUE OF THE CENOZOIC PLANTS OF NORTH AMERICA THROUGH 1950—Robert S. Lamotte-Geological Society of America, 381 p., \$5.50.

A CLASSIFICATION OF THE CONULARIDA—G. Winston Sinclair-Chicago Natural History Museum, 11 p., illus., paper, 20 cents. Describing some diagnostic features that will aid in preparing a more adequate attempt at classification of this shell.

DEVELOPMENT OF RAPID METHODS OF SOAK-ING AND COOKING DRY BEANS-Elsie H. Dawson and others-Govt. Printing Office, USDA Technical Bulletin No. 1051, 53 p., paper, 20 cents. Government scientists have found out how to cook beans after only a one-hour soaking instead of overnight.

DISTRIBUTION OF EVOLUTIONARY EXPLOSIONS IN GEOLOGIC TIME: A Symposium-Lloyd G. Henbest, Ed.—Paleontological Society, 96 p., illus., paper, \$2.00. Discussing the rise and fall of ancient groups of organisms and methods of dating them.

Du Pont, the Autobiography of an Ameri-CAN ENTERPRISE: The Story of E. I. Du Pont de Nemours & Company Published in Commemoration of the 150th Anniversary of the Founding of the Company on July 19, 1802— E. I. Du Pont de Nemours & Company—Scribners, 138 p., illus., \$5.00. A beautiful record of what has happened to a great American company over a century and a half.

EARLY DEVONIAN FISHES FROM UTAH: Part I., Osteostraci-Robert H. Dension-Chicago Natural History Museum, 23 p., illus., paper, 50 cents. These fishes are the first vertebrates of this age discovered in the United States.

ENMERKAR AND THE LORD OF ARATTA: A Sumerian Epic Tale of Iraq and Iran-Samuel Noah Kramer—University Museum, 55 p., illus, paper, \$1.00. It was the ancient Sumerians who created the epic poem. Here is a tale of a hero who lived about the first century of the third millennium B. C.

An Explorer-Scientist's Pilgrimage: The Autobiography of William Herbert Hobbs— William Herbert Hobbs—J. W. Edwards, 222 p., illus., \$3.75. An authority on glaciers, earthquakes and volcanos describes his eventful life during which he explored the polar regions and other remote parts of the world.

FABRIC FACTS VERSUS NEW NAMES-Jules Labarthe, Jr.—Mellon Institute, 4 p., paper, free upon request to publisher, 4400 Fifth Ave., Pittsburgh 13, Pa. Those who buy new fabrics will be interested in this article on what is really known about the new fibers.

THE FAMILY PROBLEMS HANDBOOK: How and Where to Find Help and Guidance-Arnold W. Holmes—Fell, 191 p., paper \$2.00, cloth \$3.50. Advice on a great variety of questions that may come up in the home from bed-wetting to mothers-in-law and old age assistance.

GERMANY'S NEW NAZIS—Anglo-Jewish Association—Philosophical Library, 76 p., paper,

\$2.75. Report of an investigation conducted by the Foreign Affairs Committee of A.J.A. The conclusion is that Germany has a fundamentally healthy social structure which is, nevertheless, far from completely stable.

GENERAL GENETICS—Adrian M. Srb and Ray D. Owen-Freeman, 561 p., illus., \$5.50. An introductory text emphasizing the biological implications of genetics.

Guiding Children's Arithmetic Experi-ENCES: The Experience-Language Approach to Numbers—J. Allen Hickerson—Prentice-Hall, 322 p., illus., \$6.65. A book for teachers to aid them in making numbers and mathematical concepts meaningful to children.

A Home Program for Patients Ambula-TORY WITH AIDS—Edward E. Gordon—National Multiple Sclerosis Society, 19 p., illus., paper, free to any multiple sclerosis patient upon request by physician to the publisher, 270 Park Avenue, New York 17, N. Y. Telling patients how to build up weakened muscles and loosen tight muscles through special exercises, daily activities and hobbies. One of four such manuals; the others are for independently ambuiatory patients, wheel chair patients and more confined patients.

HOPEWELLIAN COMMUNITIES IN ILLINOIS-Thorne Deuel, Ed.—Illinois State Museum, 271 p., illus., paper, \$3.50. A series of papers descriptive of these ancient Americans, famous for the huge mounds they erected.

THE INDIAN CASTE OF PERU, 1795-1940: A Population Study Based Upon Tax Records and Census Reports-George Kubler-Govt. Printing Office, Institute of Social Anthropology Publication No. 14, 71 p., illus., paper, 75 cents. An almost complete lack of knowledge concerning population growth among the Indians of Peru was remedied with the finding of old tax records.

IOURNAL OF AN EXPEDITION TO THE MAU-VAISES TERRES AND THE UPPER MISSOURI IN 1850 -Thaddeus A. Culbertson, edited by John Francis McDermott-Govt. Printing Office, Bureau of American Ethnology Bulletin 147, 164 p., illus., paper, 75 cents. A historic document of an early trip of exploration up the Missouri.

NATIONAL PHYSICAL LABORATORY REPORT FOR THE YEAR 1951-Her Majesty's Stationery Office, 77 p., paper, 75 cents. The official report of research conducted during the year.

A New Leptodactylid from Chile—Karl P. Schmidt—*Chicago Natural History Museum*, 5 p., illus., paper, 10 cents. Two specimens of this frog are gifts of Dr. D. S. Bullock, of Chile.

Notes on Birds from the Marcapata Val-LEY, CUZCO, PERU-Melvin A. Traylor, Jr.-Chicago Natural History Museum, 7 p., paper, 10 cents. Based on collections recently sent to the museum.

PALATABILITY AND NURITIVE VALUE OF HOME-CANNED CHICKEN PREPARED BY DIFFERENT METHODS FOR PROCESSING—Gladys L. Gilpin and others-Govt. Printing Office, USDA Technical Bulletin No. 1054, 36 p., paper, 15 cents.

PRINCIPLES OF HUMAN RELATIONS: Applications to Management—Norman R. F. Maier—Wiley, 474 p., \$6.00. To aid the officers of industry in preventing misunderstandings and developing smooth relations through democratic administration. Instructions for giving training in human relations are included. REFERENCES TO THE TUATARA IN THE STEPHEN ISLAND LETTER BOOK—Karl P. Schmidt—Chicago Natural History Museum, 10 p., illus., paper, 20 cents. Notes on a lizard-like reptile, now almost extinct, and living only in New Zealand.

RENAL FUNCTION: Transactions of the Third Conference—Stanley E. Bradley—Josiah Macy, Jr., Foundation, 210 p., illus., \$3.50. Bringing together men from various branches of science to discuss this common problem.

RESOURCES FOR FREEDOM—President's Materials Policy Commission—Govt. Printing Office, illus., paper, Vol. I, Foundations for Growth and Security, 184 p., \$1.25; Vol. II, The Outlook for Key Commodities, 210 p., \$1.50; Vol. III, The Outlook for Energy Sources, 43 p., 50 cents; Vol. IV, The Promise of Technology, 228 p., \$1.75; Vol. V, Selected Reports to the Commission, 154 p., \$1.25. Of great interest to those who want to know what lies ahead.

THE SCIENTIFIC PAPERS OF JAMES CLERK MAXWELL—W. D. Niven, Ed.—Dover, 1488 p., illus., \$10.00. This edition is complete and unabridged from the edition of 1890. Scientists and students alike will enjoy reading in Maxwell's own words accounts of the problems he solved.

Transactions of Joint Medical-Legal Conference Sixteenth Annual Meeting: A Panel Discussion on Administration of Workmen's Compensation Laws—A. J. Lanza and others—Industrial Hygiene Foundation, 46 p., paper, 75 cents.

ULTRASONIC PHYSICS—E. G. Richardson— Elsevier, 285 p., illus., \$5.00. Telling what has been accomplished in this new science, with emphasis on the ultrasonic interferometer as a precision laboratory tool.

United States Participation in the United Nations—Report by the President to the Congress—Gout. Printing Office, 324 p., paper, 65 cents. "The United Nations," says the President, "has been the mainstay of our work to build a peaceful and decent world."

VOCATIONAL SERVICES FOR PSYCHIATRIC CLINIC PATIENTS—Thomas A. C. Rennie and Mary F. Bozeman—Harvard University Press, 100 p., paper, \$1.25. Results of a study to determine the exent to which patients in psychiatric outpatient clinics have vocational problems. About 79 per cent do.

Woodwork for the Beginner—Franklin H. Gottshall—Bruce, 139 p., illus., \$4.00. Suitable for use in classes in woodworking, the directions for making simple articles for the home do not assume any previous experience in any of the operations involved.

World Neighbors Working Together for Peace and Plenty: Report of the First National Conference on International Economic and Social Development—Thomas B. Keehn, Chairman—First National Conference, 198 p., illus., paper, \$1.00. The purpose of this conference was to consider the challenge provided by the billion people living in underdeveloped areas and the possibilities created by Point IV.

Science News Letter, July 19, 1952

Untreated *pilings* in British Columbia coastal waters sometimes have been eaten through and rendered useless in a year's time by marine borers, more destructive to timbers than decay.

AERONAUTICS

Helicopters in Arctic

THE EVER-EXPANDING field of usefulness of the helicopter will soon include rescue work in the arctic where weather and terrain make operations with ground equipment or ordinary airplanes difficult or impossible.

For this purpose, the Royal Canadian Air Force is getting six special craft built by the Helicopter Corporation of Morton, Pa.

The type ordered is the H-21A Work Horse which can operate in temperatures down to minus 65 degrees Fahrenheit, is capable of long-range operations and has space for 12 litters or 14 seats in addition to its two-man crew.

Its heating system not only keeps the cabin warm but also warms up the engine, transmission and controls. It is powered by a Wright Cyclone 9 engine, said to be the largest engine ever installed in a production model helicopter.

When the first helicopters were developed many experts saw little of practical value in them and predicted that they would not be important in aviation. But the war in Korea has proved differently. There helicopters are doing valiant work in removing wounded men to the rear, rescuing trapped men, delivering troops and equipment to forward positions and serving in reconnaissance.

Important as the helicopter has proved itself in military affairs, it will probably play an even more important part in civilian activities. It is already in successful use in delivering mail from central postoffices to others in the neighborhood.

One probable job, when more helicopters

ENTOMOLOGY

Coals to Newcastle— Beetle to South Pacific

LIKE SHIPPING coals to Newcastle, the University of California recently airmailed 50 live Vedalia beetles to the Samoan Islands in the far South Pacific to fight the cottony cushion scale.

It was just 64 years ago, 1888 to be exact, that a similar scale infestation was wiped out in California when the U. S. Department of Agriculture imported the one-eighth-inch-long beetles from Australia.

At that time the cottony cushion scale was completely controlled and there has been no trouble since 1888—except in recent years following application of DDT and other new organic insecticides for control of other pests. Use of these insecticides destroys the beetles and thus permits the scale to increase to destructive levels.

The predatory beetles are sent in special, flat boxes of porous wood, so light they may be put in envelopes and air mailed readily to distant parts of the globe.

The Vedalia beetle has been distributed to 65 different countries and geographical areas of the world since 1890.

Science News Letter, July 19, 1952

are available, is to serve as feeders from neighboring cities to transcontinental and other airways and the airliners that travel these routes.

Early helicopters were one-man craft. Helicopters that carry a dozen men are now common, and ones large enough to carry twice the present passenger load are under construction.

What is reported to be the largest helicopter yet built is the jet-powered XH-17, constructed by the Howard Hughes aircraft company and now undergoing ground tests, which is designed for cargo carrying. Particularly suitable for the short-range moving of heavy military equipment, in operation it will straddle its cargo much as the lumber lift used in timber straddles a heavy log.

Science News Letter, July 19, 1952

"How-to-Do-It" Books You Should Have! Use of Tools and Fundamentals of Mechanics

TWO CLOTH BOUND BOOKS that will help anyone in repairs around the house, shop or laboratory. How to use tools for measurement, woodworking, painting, metalworking, soldering, wire splicing. Basic principles and fundamentals to help you understand and operate machinery.

Photographs by Fremont Davis and text by Marjorie Van de Water and Morton C. Mott-Smith, Science Service Staff.

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