First Glances at New Books

GENERAL SCIENCE

ANNUAL REPORT OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION FOR 1929—*U. S. Government Printing Office,* 622 p., $1.75. It has been said that if the layman were to get but a single scientific volume a year, he should choose the Smithsonian Report. This new issue fully bears out this claim, for in its ample appendix of 447 pages are contained articles on a wide variety of scientific topics by leading authorities, many with illustrations. Original articles by Dr. R. E. Snodgrass, on "How Insects Fly," Herbert W. Krieger on "The Aborigines of the Ancient Island of Hispaniola," by Carl. W. Mitman, on "The Beginning of Mechanical Transport in the United States," and by Frederick L. Lewton, on "A Brief History of the Sewing Machine," are the work of members of the Institution staff. The other twenty articles are reprinted from various sources, and include Sir James Jeans on "The Physics of the Universe," Dr. Arthur H. Compton, on "What Is Light?" Dr. F. G. Donnan, on "The Mystery of Life," Dr. H. J. Muller, on "Heritable Variations, Their Production by X-Rays," and Dr. C. Leonard Woolley, of "Ur of the Chaldees." The Institution has a limited number of copies available for free distribution to those interested.

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Commercial Geography

OUR FOOD—Josephine Worthington and Catherine Victoria Matthews—*Owen,* 256 p., 96c. An extremely interesting book for children of grade school age. Tells where our food comes from, how it is grown, harvested, transported and prepared for the retail market. Many illustrations add to the interest. Adults as well as children can doubtless find many bits of new information about their favorite foods.

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Mathematical Tables

BARLOW'S TABLES—L. J. Comrie, editor—*Spon.* 208 p., 7 s 15 d. It was in 1814 that Peter Barlow published the first edition of his famous tables of squares, cubes, square root, cube roots and reciprocals of integer numbers up to 10,000; and ever since they have enjoyed a wide and well deserved popularity among computers. One reason for this was their freedom from errors. In 1840 a second edition appeared, edited by A. de Morgan, and the stereotype plates of this edition have been used for all subsequent printings until now. Thus the third edition is rather an event in mathematical publication, and it is particularly fortunate that its preparation has been placed in the capable hands of Dr. Comrie, superintendent of the British Nautical Almanac, probably the leading authority on mathematical tables. Several tables of the original, that were omitted in the 1840 edition, have been restored, notably of higher powers, and several new ones added, such as the square root of 10n, thus giving the square root of every tenth number from 10,000 to 100,000, and the printing of differences for the tables of roots and reciprocals. The excellent typography facilitates reference to the tables.

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Mining-Geology

FUNCTION OF NATURAL GAS IN THE PRODUCTION OF OIL—H. C. Miller—*American Petroleum Institute,* 267 p., $1. Natural gas and oil are intimately related beneath the ground and the driller in oil fields must consider and utilize both of these ready-made products of the earth. This technical report of the U. S. Bureau of Mines, prepared in cooperation with a division of the American Petroleum Institute, brings together current knowledge of the relationship.

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Sociology

CIVILIZATION AND THE CRIPPLE—Frederick Watson—*John Bale, Sons and Danielsson,* 120 p., 10s. 6d. A book on what the author calls "social orthopædics." In it are discussed various ways and means for turning the physically handicapped child into a useful and happy person.

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Magic

HOUDINI'S ESCAPES—Walter B. Gibson—*Harcourt,* 317 p., $3. Houdini was an acknowledged leader among magicians when it came to escapes from confinement, and in this book are given what purport to be explanations of his methods. If the book can be taken at face value, most of his most spectacular escapes were performed with prepared apparatus, but one wonders whether all of the secrets have really been given.

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