Books of the Week

ATLAS OF SURGICAL APPROACHES TO BONES AND JOINTS—Toufick Nicola— Macmillan, 218 p., illus., \$5. A systematic study with lucid illustrations by the author of the anatomical approaches to bones and joints. Foreword by Maj. Gen. Norman T. Kirk, Surgeon General of the U. S. Army.

BRITAIN AGAINST GERMANY, 1939-1945: A Record in Pictures—British Information Service, 127 p., illus., free. A review of Great Britain's own part in the victory over Germany and her European satellites.

DESTROYERS IN ACTION-Richard A. Shafter—Cornell Maritime, 246 p., illus., \$2.50. Description of the many and varied ways in which destroyers are employed in wartime, plus many interesting items con-cerning their historical background.

EDUCATION IN CHILE—Cameron D. Ebaugh —Gov't Printing Office, 123 p., 25 cents. This booklet is part of a program to promote understanding of educational conditions in the American countries and to encourage cooperation in the field of Inter-American education.

THE ELEMENTS OF GLASS TECHNOLOGY FOR SCIENTIFIC GLASS BLOWERS—W. E. S. Turner—Glass Delegacy of the University of Sheffield, 31 p., 3/6.

ESSENTIALS OF NEURO-PSYCHIATRY—David M. Olkon, Lea and Febiger, 310 p., illus., \$4.50. Presents the fundamental principles for the evaluation of mental disorders based on genetic, psychologic, psychiatric and general medical information.

FUN WITH ELECTRONS-Raymond F. Yates

-Appleton, 157 p., illus., \$2.75. A blue-print of electronics for any teen-ager who likes to see how and why things happen.

PETROLEUM PERIODICALS — Margaret M. Rocq, Elizabeth Nutting and Katherine Karpenstein—Special Libraries, 18 p., 10

THE PLACE OF SCIENCE IN THE EDUCA-TION OF THE CONSUMER—The National Science Teachers Association—The Consumer Education Study, 32 p., free. A statement prepared for the Consumer Education Study of the National Association of Secondary-School principals.

PRIMER OF ELECTROCARDIOGRAPHY—George Burch—Lea and Febiger, 215 p., illus., \$3.50. Enables the student who is entirely unfamilar with the subject to acquire fundamental knowledge of electrocardiography in the most direct manner.

THE SCRIPTA MATHEMATICA STUDIES: A Collection of Papers in Memory of Sir William Rowan Hamilton—Scripta Mathematica, 82 p., \$1.50. Contains papers dealing with a number of important phases of Hamilton's life and scientific activity.

THIS IS SCIENCE—Association for Childhood Education, 43 p., 50 cents. Prepared to meet a widespread demand by teachers who wish to learn how the field of science may best be used to enrich the experiences of their pupils.

Tomorrow's Trade—Stuart Chase—Twen-tieth Century Fund, 156 p., \$1. No. 5 in the series of guide lines to America's

Science News Letter, December 8, 1945

AERONAUTICS

Flies 500 Miles an Hour

The XP-47J, conventional propeller-driven plane has set a record which remains unbroken, it is revealed with removal of war secrecy.

➤ FLYING over 500 miles per hour in level flight, the XP-47J, a conventional propeller-driven plane set a record which remains unbroken, the Air Technical Service Command revealed when war secrecy on this test was partially removed.

An experimental XP-47J underwent tests on Aug. 4, 1944, at Farmingdale, Long Island, before Army observers who watched it hurtle over 500 miles per hour through the skies, faster than any other conventional propeller-driven craft known. This speed was beyond that previously considered possible by aircraft experts for such type planes.

Designed and built by the Republic Aviation Corporation, the XP-47J was never produced beyond the experimental stage. Only one "I" was ever built because mass production would have required a complete retooling program. However, the experimental plane was an important development because its distinctive features and improvements were later incorporated in the P-47M Thunderbolts and finally the long range P-47N's. The army felt it wiser to continue production of the Thunderbolts at that late date than to begin a new program.

The XP-47J is similar to the thousands of early P-47D planes built up to that time. Its high rate of climb and tremendous speed made it an excellent interceptor fighter type. It has the same power plant later installed in the P-47N's, the Pratt and Whitney R-2800 C type

engine, and a General Electric CH-5 turbo-supercharger. At a pressure altitude of 34,000 feet such features permit the development of 2800 horsepower under war emergency power conditions.

Science News Letter, December 8, 1945

Armed Forces Education Will Be Investigated

➤ EDUCATION as practiced in the armed forces during the war will be investigated by the American Council on Education under a Carnegie Corporation of New York grant, in order to find its implications for civilian educa-

For this purpose \$75,000 was appropriated as a part of the \$1,002,500 of 1944-45 grants summarized in the annual report of President Devereux C. Josephs. Over half of the total was devoted to emergency war grants that normally would not fall into the Carnegie Corporation program. These included \$225,000 to the American Red Cross and \$150,000 to the National War Fund.

Another large grant was \$75,000 to the Carnegie Foundation for the Advancement of Teaching for its graduate record examination project.

Science News Letter, December 8, 1945

One reason why rayon tires have superior strength is that rayon is produced in long, continuous strands while natural fibers are short and must be twisted together to form yarn.

