PUBLIC HEALTH

Well-Fed Children Protected Against Ills, Research Shows

ITH the precision of an engineer testing the efficiency of a locomotive by measuring its input and output, nutritionists have analyzed the food eaten by children, the part consumed and the part not used in an effort to determine the amount of food needed by the body to keep it in the best condition for warding off disease. This work was done in Detroit by Drs. Frances Cope, Helen A. Hunscher, Charles A. Wilson and Icie G. Macy at the Laboratory of the Children's Fund and in cooperation with the Children's Village.

The research sought knowledge by which the child's body may be built stronger so that it will better withstand attacks of disease later in life. The report declared that the body, when adequately nourished, has remarkable powers of resistance to disease and adverse conditions.

Studies made so far indicate that satisfactory growth may fluctuate and is not constant from day to day even un-

der the most rigidly controlled dietary and living conditions. It was pointed out that a sufficient quantity of the proper foods should be eaten to meet the demands of greatest growth and also to allow a margin of safety beyond actual demands.

Seven children from four to ten years of age were tested. Analysis of food used by the body and that not used revealed the actual amount of calcium, magnesium, sodium, potassium, sulfur, phosphorus and chlorine stored, the rate of storage as related to growth, and the interrelationship of the individual elements with each other in the building of the various body tissues.

"Individual children stored minerals in different amounts, even on an identical diet," the research workers explained. "Furthermore, each child showed variations in his utilization from period to period when kept on a constant food intake."

Science News Letter, September 30, 1933

See Also Page 224









FIFTEEN YEARS

ARCHAFOLOGY

New Sign in Mayan Writing Deciphered

HEN the meaning of a single Mayan hieroglyph is discovered it is practically a field day in American archaeology. About ten times in the past twenty years some scientist has added another hieroglyph to the list that can be deciphered. This time it is J. Eric Thompson of the Field Museum who has made a contribution, by identifying the sign that means 15 Tuns, or approximately 15 years. (SNL, Sept. 23, 1933, page 206).

Above are shown two ways in which the Mayan Indians of Yucatan wrote 15 Tuns (from drawings by S. G. Morley). Below are signs for 5 Tuns. The Mayas who carved hieroglyphs on stone or painted them in books thought it permissible to vary the glyphs so long as the essential features were easily recognized—just as today some writing is plain and some is fancy.

The word Tun, meaning stone, probably came to be used for the period of 360 days because a stone monument was customarily set up each 360 days or multiple of that period. Though the Mayas kept records in this manner, they were well aware that the solar year is five and a fraction days longer than 360, and their astronomers were more accurate in some ways than Europeans of the same age.

Science News Letter, September 30, 1933

A South American Indian who claims descent from the Incan chiefs of ancient Peru is working to restore the old Incan regime.

Lighthouse service workers report that sea lions have taken a lighted whistle buoy off Cape St. Elias, Alaska, as a favorite perch.

• First Glances at New Books

Hygiene

How to Stay Young—Robert Hugh Rose—Funk and Wagnalls Co., 195 p., \$1.50. The author of this book believes the secret of long life lies in abstemious eating. He cites the well-known examples of Chauncey M. Depew, Thomas A. Edison, John D. Rockefeller, Daniel Frohman and Louis Cornaro. Medical scientists will not quarrel with his plea for moderation in eating, even though they will not all agree that long life is to be attained thereby.

Science News Letter, September 30, 1933

Ethnology

YUMAN TRIBES OF THE GILA RIVER—Leslie Spier—Univ. of Chicago Press, 433 p., \$4. Aided by elderly Indians who remember the old tribal ways, Dr. Spier has pieced together a remarkable picture of life among the little-known Yuman tribes in southern Arizona. Especially interesting is the section of the book telling of the importance of dreams to those people. "Dream experience was at the bottom of all success in

life," writes Dr. Spier, "and as such was their constant preoccupation. Learning was displaced by dreaming, and while it was recognized that an individual acquired skill by practice or imitated songs on hearing others, his activity or knowledge would be neither wholly successful nor significant unless he had dreamed."

Science News Letter, September 30, 1933

Radio
HOW TO BUILD AND OPERATE
SHORT WAVE RECEIVERS—Various Authors—Short Wave Craft, 72 p., 50c.

Science News Letter, September 30, 1933

General Science

PROCEEDINGS OF THE UTAH ACADEMY OF SCIENCES, 1933—Utah Academy of Sciences, 183 p., \$2.50.

Science News Letter, September 30, 1933

Protozoology

THE FORAMINIFERA OF THE TROPICAL PACIFIC COLLECTIONS OF THE "ALBATROSS," 1899-1900—J. A. Cushman—*Govt. Print. Off.*, 79 p., 19 pl., 15c.

Science News Letter, September 30, 1933

*First Glances at New Books

Travel

KAPOOT—Carveth Wells—McBride, 264 p., \$2.50. Back of this cryptic title is a book on Soviet Russia that alternately entertains and shocks. Mr. Wells travels and has his experiences in the romantic manner. Practically all such writings on Russia take sides, and Mr. Wells is "against," though he says that until he went to Russia he was decided-The word kapoot, ly sympathetic. which the author found symbolic, means "it's bust! it won't work!" Numerous things, from electric bells to automobiles, have a way of going kapoot in Russia, and kapoot they stay, he tells us. Science News Letter, September 30, 1933

Transportation

THE AMERICAN RAILROAD IN LAB-ORATORY—American Railway Association, 544 p., 50c. A brief digest of research and experimentation, conducted by railroads individually and collectively through the American Railway Association in the interest of constant improvement of their facilities and service. Science News Letter, September 30, 1933

Standards

1933 A. S. T. M. MANUAL ON PRESENTATION OF DATA—American Society for Testing Materials, 45 p., 50c. Prepared by a special committee of engineers to correlate and make available in convenient form some of the principles of efficient presentation of data, this manual discusses the application of statistical methods.

Science News Letter, September 30, 1933

Anthropology

PREHISTORIC MAN—Henry Field—Field Museum, 44 p., 8 pl., 25c. A pamphlet guide book to the "Hall of the Stone Age of the Old World" in the Field Museum at Chicago. The eight scenes exhibited in this new and already famous hall are pictured in the pamphlet, so that the stay-at-home "tourist" can gain a very good idea of these modern conceptions of Stone Age Europeans from the pictures and Mr. Field's explanations.

Science News Letter, September 30, 1933

Business-Motion Pictures

THE MOTION PICTURE INDUSTRY—Howard T. Lewis—D. Van Nostrand, 454 p., \$4. Not a book devoted to movie stars or the technology of the talkies but a thorough treatment of the business aspects of the motion picture industry. To anyone interested it will

present a very different picture of the industry than that obtained by the theatergoer, the motion picture engineer or even the actor. The author is professor of marketing in the Harvard Graduate School of Business Administration.

Science News Letter, September 30, 1933

Economics-Commerce

COMMERCE YEARBOOK, 1932, Vol. II, Foreign Countries—U. S. Department of Commerce—Government Printing Office, 743 p., \$1.25. This portion of the Commerce Yearbook contains economic summaries of the various individual foreign countries of the world and its second part is devoted to comparative world statistics ranging from climatic conditions to life insurance. There are also valuable appendices on rules for spelling foreign geographic names and weights and measures.

Science News Letter, September 30, 1933

Forestry

THE FORESTRY PRIMER: CIVILIAN CONSERVATION CORPS EDITION, 1933—C. L. Pack—American Tree Assn., 32 p., free. A special edition of this well-known pamphlet of effort on behalf of American forestry, dedicated to the CCC; the cover announces that it is now in its forty-first hundred thousand.

Science News Letter, September 30, 1933

Government-History

UNCLE SAM'S GOVERNMENT AT WASHINGTON — George L. Knapp—Dodd, Mead, 283 p., \$2. In introducing two chapters devoted to Federal scientific research, the author explains that some of the most valuable work of Uncle Sam's government at Washington is the scientific research carried on by various scientific bureaus and divisions. The book as a whole is an illuminating and satisfactory account of the history and function of the Federal Government at Washington.

Science News Letter, September 30, 1933

Radio

POINT-TO-POINT RESISTANCE MEAS-UREMENTS — Clifford E. Denton — Gernsback Publications, 64 p., 50c.

Science News Letter, September 30, 1933

Archaeology

THE HUMANISTIC VALUE OF ARCHAEOLOGY—Rhys Carpenter — Harvard Univ. Press, 134 p., \$1.50. The four lectures published here were given by Prof. Carpenter as the Martin Classical Lectures, annually delivered at Oberlin College. The theme of the discussions —what Greek archaeology has actually contributed to the world's knowledge of literature, sculpture, painting, architecture—is developed skillfully in the hands of this well-known archaeologist-teacher.

Science News Letter, September 30, 1933

Philosophy

THE HAPPY BEAST IN FRENCH THOUGHT OF THE SEVENTEENTH CENTURY—George Boas—Johns Hopkins Press, 159 p., \$2. A scholarly study of that curious working of the French mind when France was probably at her most civilized, and certainly the leader of the civilization of her time—a mental twist that rejected the claims of civilized man, first in favor of savages (mostly imaginary ones), and then of the beasts themselves.

Science News Letter, September 30, 1933

Printing Technology

Newsprint and News Ink—Government Printing Office, 86 p., 15c. The technical results of an inquiry into ink and paper used in printing conducted cooperatively by the U. S. Government Printing Office and the Mechanical Department of the American Newspaper Publishers Association.

Science News Letter, September 30, 1933

Education-Physics

STUDY OUTLINES IN PHYSICS—Jessie Williams Clemensen—Teachers College, Columbia University, 154 p., \$1.75. An educational research devoted to the technique of constructing and evaluating study outlines used to assign more effectively lessons to high school physics students.

Science News Letter, September 30, 1933

Mechanical Engineering

Symposium on Motor Lubricants

—American Society for Testing Materials, 121 p., paper \$1.25, cloth \$1.50.

Science News Letter, September 30, 1933

Science News Letter will secure for its subscribers any book or magazine in print which was published in the United States. Send check or money order to cover regular retail price (\$5 if price is unknown, change to be remitted) and we will pay postage in the U. S. When publications are free, send 10c for handling. Address: Book Dept., Science News Letter, 21st and Constitution Ave., Washington, D. C.