

Books of the Week

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ACCULTURATION AND MATERIAL CULTURE, I—George I. Quimby and Alexander Spoehr—*Chicago Natural History Museum*, 40 p., illus., paper, \$1.00. Impact of Western Civilization on the native cultures of Oceania and North America as measured by the improvement in tools and other everyday articles.

ARCHITECTS OF AVIATION—Maurice Holland with Thomas M. Smith—*Duell, Sloan and Pearce*, 214 p., illus., \$4.00. The story of men who pioneered in aviation designing. With a preface by Jimmy Doolittle.

BIBLIOGRAFIA DE LA MATERIA MEDICA MEXICANA—Francisco Guerra—*La Prensa Medica Mexicana*, 423 p., illus., \$8.25. Containing 5,357 references to books and other publications on the medical properties of Mexican drugs. In Spanish.

EDUCATORS GUIDE TO FREE SLIDEFILMS: Third Annual Edition, 1951—Patricia A. Horkheimer and John W. Diffor, Editors—*Educators Progress Service*, 3rd Ed., 151 p., paper, \$3.00. Index to these important visual aids which can be obtained economically and in almost any subject.

FRUSTRATION IN ADOLESCENT YOUTH: Its Development and Implications for the School Program—David Segel—*Govt. Printing Office*, 65 p., illus., paper, 25 cents. A boy or girl in school is frustrated when what he studies does not appear to him related to his life and needs and when he cannot reach the goal of good marks. Here, an Office of Education specialist suggests how frustration can be reduced.

THE FUNDAMENTAL ASPECTS OF LUBRICATION—Otto A. Beeck, Chairman—*New York Academy of Sciences*, 237 p., illus., paper, \$4.00. Papers presented at a symposium in 1950.

I WONDER WHY—Thomas I. Dowling, Kenneth Freeman, Nan Lacy, and James S. Tippett—*John C. Winston*, 124 p., illus., \$1.44. First graders will learn how to read and learn basic scientific facts in Book I of a series.

LEARNING WHY—Thomas I. Dowling, Kenneth H. Freeman, Nan Lacy, and James S. Tippett—*John C. Winston*, 218 p., illus., \$1.76. Third grade curiosity about such things as friction, animals, common kitchen machinery etc. is satisfied from a scientific viewpoint in this reader.

THE MEMBRANE FILTER IN SANITARY BACTERIOLOGY: Public Health Report, Volume 60, No. 33—Harold F. Clark, Edwin E. Geldreich, Harold Jeter, and Paul Kabler—*Govt. Printing Office*, 35 p., illus., paper, 15 cents. Official report of the development and application of techniques which will greatly reduce the time, labor and space required for testing water. (See SNL Aug. 18, p. 103.)

THE OIL-SHALE INDUSTRIES OF EUROPE—Boyd Guthrie and Simon Klosky—*U. S. Bureau of Mines*, Report of Investigations 4776, 73 p., illus., paper, free upon request to publisher, 4800 Forbes Street, Pittsburgh 13, Pa. Although the production of liquid fuels and chemicals from oil shales is relatively new in the U. S., it is an old story in Europe.

PERSONALITY AND POLITICAL CRISIS: New Perspectives from Social Science and Psychiatry

for the Study of War and Politics—Alfred H. Stanton and Stewart E. Perry, Eds.—*Free Press*, 260 p., \$3.75. Lasswell, Sullivan, Levy, Klineberg and other social scientists, specialists in interpersonal and international relations, contribute chapters to this attempt to give understanding of the world we live in.

PITTSBURGH'S MELLON INSTITUTE—William A. Hamor—*Mellon Institute*, 4 p., illus., paper, free upon request to publisher, 4400 Fifth Avenue, Pittsburgh 13, Pa. Describing the equipment and research at this institution.

SEEING WHY—Thomas I. Dowling, Kenneth Freeman, Nan Lacy, and James S. Tippett—*John C. Winston*, 188 p., illus., \$1.60. Pupils in the second grade learn the importance of observation with this combination scientific-reader.

SPACE MEDICINE: The Human Factor in Flights Beyond The Earth—John P. Marbarger, Editor—*University of Illinois Press*, 83 p., illus., \$2.00 paper or \$3.00 cloth. Serious discussions of how and whether man can live and function on other planets or on a man-made satellite circling the earth in outer space.

SPECIFIC METHODS OF ANALYSIS—Samuel E. Q. Ashley—*New York Academy of Sciences*, 124 p., illus., \$2.50. The improved methods described provide an important research tool in a number of the sciences.

TENTH SEMI-ANNUAL REPORT OF THE ATOMIC ENERGY COMMISSION—U. S. Atomic Energy Commission—*Govt. Printing Office*, 151 p., paper, 35 cents.

THE WORLD OF COPERNICUS: Sun, Stand Thou Still—Angus Armitage—*New American Library*, 165 p., illus., paper, 35 cents. Pocket edition of a book originally published by Henry Schuman, Inc., this complete edition includes a history of astronomy before Copernicus, his biography and the eventual triumph of the Copernican Theory.

Science News Letter, August 25, 1951

ICHTHYOLOGY

Electric Fishing Net Predicted for Ocean

► THE development of an electric fishing net "in which fish are as helpless as dust particles in a vacuum cleaner" is predicted by Dr. Carl L. Hubbs and John D. Isaacs of the University of California's Scripps Institution of Oceanography.

Here's how an electrical net for collecting fish specimens would work: A negative pole would be placed at the outside of the net, a positive pole would be placed at the center. Electrical supply on fishing and research vessels would be adequate for the work.

A number of experiments leading to such a net have already been made.

Experiments on the reactions of fish in an electrical field have been conducted for several years by the California Academy of Sciences as part of the California Coopera-

tive Sardine Research Program. Research has shown that all normal reactions to sound, light, and so on, are suppressed when the fish are in the presence of the field.

Dr. Karl F. Lagler, of the University of Michigan, and Andreas B. Rechnitzer, of the Scripps Institution of Oceanography, have been experimenting with electrofishing as a way of taking fresh-water fish from very shallow, obstructed waters.

Electrofishing in the ocean has long interested fisheries men and scientists. An electrical net is reported to have been developed recently in Russia.

Science News Letter, August 25, 1951

CHEMISTRY

Purer Ragweed Pollen Extract Fights Hay Fever

► THE NATION'S hay feverites may sneeze and suffer less, thanks to a new ragweed pollen extract developed by Drs. Theodore B. Bernstein and Raymond P. Mariella and Miss Anne L. Mosher of Northwestern University, Evanston, Ill.

The extract will be used in treatment of patients for the first time this summer. It is reported to be purer and more powerful than previous pollen extracts. It can be used in skin tests for hay fever as well as in immunization against the allergy.

The Northwestern scientists estimate that their extract is almost 100% pure, compared to material formerly used which was almost 40% impure. The new extract is made by dripping yellow ragweed solution through a glass tube filled with a special acidic aluminum oxide. The acid wash removes both pigments and impurities.

Science News Letter, August 25, 1951

INVENTION

Patent Device to Keep Furnace from Smoking

► NO SMOKE will belch from furnace stacks with a device which automatically injects air and steam into the combustion zone of the furnace whenever dense smoke collects in the upper part of the combustion chamber. The result is complete combustion of the particles of fuel, soot and combustible gases that form the smoke. The invention is usable with any type of fuel that might make smoke.

The device is actuated when the density of the smoke in the upper chamber is great enough to cut a beam of light that falls on a photoelectric cell. Injection continues for a predetermined period of time, regardless of the condition of the smoke detector device. It creates a turbulence in the combustion chamber and the air materially aids combustion.

Inventor is Conway Pierce of Detroit, Mich. Patent 2,562,507 was awarded to him.

Science News Letter, August 25, 1951