## 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.

BIOCHEMICAL PREPARATIONS: Volume 2—Eric G. Ball, Ed.—Wiley, 109 p., illus., \$3.00. Practical instructions for making various biochemical preparations.

DEFENSE MOBILIZATION, THE SHIELD AGAINST AGGRESSION—Director of Defense Mobilization—Govt. Printing Office, 51 p., illus., paper, 30 cents. This quarterly report reveals that we spent \$8,000,000,000 for defense within the three months just prior to July 1, including new and more complicated weapons.

FAUNA OF THE UPPER VALE AND CHOZA: 6, DIPLOCAULUS—Everett Claire Olson—Chicago Natural History Museum, 19 p., illus., paper, 35 cents. There are two species in the Arroyo Formation, this study reveals, one a pond dweller and the other a stream dweller.

HISTORY OF AMERICAN PSYCHOLOGY—A. A. Roback—Library, 426 p., illus., \$6.00. Tracing the beginnings of this young science back into colonial days and showing how psychological thought has changed and techniques have developed until they have reached the place of eminence held today.

ILLUSTRATED KEY TO WEST NORTH AMERICAN GASTROPOD GENERA—A. Myra Keen and John C. Pearson—Stanford University Press, 39 p., illus., paper, \$1.50. Covers 240 Pacific Coast Molluscan genera.

JOURNAL OF RESEARCHES INTO THE GEOLOGY AND NATURAL HISTORY OF THE VARIOUS COUNTRIES VISITED BY H. M. S. BEAGLE—Charles Darwin—Hafner, 629 p., illus., \$7.50. A facsimile reprint of the first edition, published in 1839, of this great classic of natural science. It gives the reader a wonderful impression of what South America, Tahiti and Australia were like in those days.

THE ORGAN: Its Evolution, Principles of Construction and Use—William Leslie Sumner—*Philosophical Library*, 436 p., illus., \$10.00. Traces the history of the organ, from the huge and complicated instruments of today back to

the primitive pipes of Pan made from reeds at the water's side, and shows the acoustical, mechanical and electrical principles that govern the working of the organ.

PICTORIAL ASTRONOMY—Dinsmore Alter and Clarence H. Cleminshaw—Crowell, 296 p., illus., \$4.50. Intended to make pleasant looking and interesting reading for the layman, this book is also suitable as a text.

THE RIGHT WAY TO HUMAN FIGURE DRAWING AND ANATOMY—A. Gladstone Jackson—
Emerson, 139 p., illus., \$2.50. A helpful book for all those who want to draw the human figure with accuracy.

SOMEWHERE IN NEW GUINEA—Frank Clune—Philosophical Library, 356 p., illus., \$4.50. A writer of travel tales tells of the search for gold that is somewhere in New Guinea, and of the Stone Age people who live there, impervious to progress.

The Surinam Coral Snake: Micurus surinamensis—Karl P. Schmidt—Chicago Natural History Museum, 9 p., illus., paper, 20 cents.

Television Technores—Martin Clifford, Ed. —Radcraft, 128 p., illus., paper, \$1.50. Intended for television service men, this book lists the troubles to which different makes are peculiarly subject.

Who Are the Guilty?: A Study of Education and Crime—David Abrahamsen—Rinehart, 340 p., \$5.00. The basic cause of crime, Dr. Abrahamsen finds, is in the home, but that does not exclude other precipitating causes outside the family. Criminal inclinations are symptoms of a deep distortion or sickness of the mind.

A WORLD APART—Gustav Herling, Translated from the Polish by Joseph Marek—New American Library, 256 p., illus., paper, 35 cents. A pocket edition of a book originally published by Roy Publishers describing life in Soviet prison and labor camps.

Science News Letter, July 26, 1952

**AERONAUTICS** 

## Safer Take-offs in Jets

➤ ENGLAND'S SUPER - MODERN jetliner is less likely to be victim of a take-off crash due to engine failure than regular piston-engined passenger planes, says Capt. A. M. A. Majendie, one of the two men who planned the introduction into service of the British Comet now flying between London and Johannesburg, South Africa.

Capt. Majendie, who put the ship through some of its early trial tests, said the risk is less of a jet engine failure than of a piston engine failure. And even if an engine failed, he said, the effect would be much less severe. Tests showed little plane swing when an outer engine was cut.

On the whole, the jetliner is simpler to fly than piston-engined planes. Some prob-

lems have been encountered but they have not been due to the jetliner's design.

For instance, navigation has to be much quicker. Capt. Majendie says there is little point in trying to fix position to the nearest mile if it takes 20 minutes to do so. By that time the plane would be 140 nautical miles, or 160 statute miles, from the spot.

Jetliner operating procedures are somewhat different from those of piston-type planes. To save fuel, the Comet's powerful turbine engines are not started until clearance is received from air traffic control. The pilot then taxis the plane directly to the end of the runway, guns and checks the engines, releases the brakes and zooms down the airstrip.

Coming in for a landing, the Comet actually approaches the field much more slowly than many piston-engined planes, Capt. Majendie reports. Landing the jetliner is as easy as landing the best of the older transport aircraft.

Capt. Majendie is sold on the new jet airliner. He says that since he has been flying the plane, he would be "very loath" to return to a piston-engined type.

Science News Letter, July 26, 1952

TECHNOLOGY

## Synthetic Rubber Hose For Fuel in War Areas

A SYNTHETIC rubber hose, now being tested at Fort Belvoir, Va., may some day be used to supply gasoline to front-line fighting equipment from safe positions in the rear.

This rubber pipe-line, designed to replace metal piping, can be laid from a truck traveling at 15 miles an hour. It is made of a synthetic that resists deterioration from gasoline or oil better than hose made of natural rubber. A product of the B. F. Goodrich Company, Akron, Ohio, it is manufactured in long continuous lengths by special methods developed by the company.

The 4-inch portable rubber pipe-line is said to be the lightest gasoline hose yet made. It can carry over 40 tons of gasoline an hour.

Science News Letter, July 26, 1952

## **Questions**

ENTOMOLOGY—How do chiggers attack? p. 63

FORENSIC MEDICINE—What formula can be used to tell time of death from body temperature? p. 50.

GERONTOLOGY—How many men stop working at 65? p. 56.

METEOROLOGY — Of what aid are fire weather forecasts? p. 52.

PHYSICS—What 60-year-old puzzle has just been solved? p. 55.

PUBLIC HEALTH—What are the differences between monoxide and food poisoning? p. 61.

TECHNOLOGY—How can brushes with inferior horsehair be detected? p. 57.

VETERINARY MEDICINE — How is vesicular exanthema of hogs spread? p. 55.

Photographs: Cover, pp. 50 and 51, National Advisory Committee for Aeronautics; p. 53, B. F. Goodrich Company; p. 55, British Information Services; p. 62, University of Chicago.