

## Books of the Week

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THE BEST SCIENCE FICTION STORIES 1949—Everett F. Bleiler and T. E. Dikty, Eds.—*Fell*, 314 p., \$2.95. Includes stories by many authors such as Ray Bradbury, Lewis Padgett, Martin Gardner, and J. J. Coupling reprinted from *Astounding Science Fiction* and other magazines for devoted fans.

DIAGNOSING BEE DISEASES IN THE APIARY—C. E. Burnside, P. Sturtevant, and E. C. Holst—*Gov't. Printing Office*, 31 p., illus., paper, ten cents. The crowded living conditions in a hive makes contagious disorders spread unless detected and treated.

DRINKING'S NOT THE PROBLEM—Charles Clapp, Jr.—*Crowell*, 179 p., \$2.50. Written for the potential alcoholic by a former alcoholic.

GUADALCANAL: THE FIRST OFFENSIVE—The War in the Pacific: United States Army in World War II—John Miller, Jr.—*Gov't. Printing Office*, 413 p., illus., \$4.00. The second combat volume to appear in the Army's far reaching historical project. Profusely illustrated with a hundred photographs and 36 maps.

A PROFESSIONAL GUIDE FOR JUNIOR ENGINEERS—William E. Wickenden and G. Ross Henninger—*Engineers' Council For Professional Development*, 55 p., paper, \$1.00. Presents the philosophy and engineering ethics a young engineer needs for success as viewed by the authors.

REFRIGERATION FUNDAMENTALS—*The American Society of Refrigerating Engineers*, 6th ed.,

692 p., illus., \$7.00 in U. S.; \$7.50 elsewhere. Covers basic data, fundamental principles, and practices of refrigeration.

SIXTH SEMI-ANNUAL REPORT OF THE ATOMIC ENERGY COMMISSION JULY 1949—Atomic Energy Commission—*Gov't. Printing Office*, 203 p., paper, 45 cents. This report sums up briefly the major developments and gives the status of the programs as they stood at the end of June 1949. A feature "Biology and Medicine" includes a brief description of the course of radiation illness followed for the past two years. Also published under the title ATOMIC ENERGY AND THE LIFE SCIENCES.

VERTEBRATE EMBRYOLOGY—Robert S. McEwen—*Holt*, 3rd ed., 699 p., illus., \$4.90. Brought completely up-to-date with attempts to clarify various passages. Includes new work on the Pig.

WONDERS OF NEPTUNE'S KINGDOM—F. Martin Duncan—*Sampson Low*, 159 p., illus., \$4.50. A description of the many wonders and problems of marine life, from the rock pools around the coasts of the British Isles to the Coral Islands. Beautifully illustrated with reproductions from the author's original photographs and drawings.

THE WORLD OF LIFE: A General Biology—Wolfgang F. Pauli—*Houghton Mifflin*, 653 p., illus., \$5.00. A college text with evolutionary approach.

Science News Letter, August 27, 1949

### AERONAUTICS

## Train British Fliers Here

➤ THIRTY-SIX British pilots are now in the United States, learning to fly the Boeing Stratocruiser with the help of ground equipment, the Curtiss-Wright electronic flight simulator, now the property of Pan American World Airways and used by that company to train pilots.

These pilots from England are employees of the British Overseas Airways Corporation (BOAC), and are getting ready to operate Boeing Stratocruisers soon to be delivered to the company. Pan American has already trained American pilots and flight engineers, utilizing this equipment. About eight weeks will be required for the training course of the visiting pilots.

The electronic flight simulator reproduces in great detail the flight deck or cockpit of the airplane whose performance it is designed to reproduce. It incorporates all the existing data upon which the plane itself was produced. Without leaving the ground, it can accurately simulate any condition of flight of which the plane itself is capable.

The simulator, a huge electronic-mechanical device in a model of a cockpit with

all the hundreds of dials, levers, switches and other controls which a pilot encounters in the plane, was conceived and designed by Dr. R. C. Dehmel, of the Curtiss-Wright Corporation, with the cooperation of the Boeing Aircraft Company. Similar simulators can be built to aid in training for other planes.

This flight simulator cost \$250,000 to build. It looks like a lot of money to put into a training device, but as a "training plane" it can handle four times the flight and ground crews at a tenth of the cost and in a fraction of the time involved in the use of an actual plane.

One important feature of this flight simulator is that the entire operating crew, pilot, co-pilot, engineer and others, are trained at the same time. An instructor behind them operates switches which activate the pilot's dials to indicate trouble with fuel flow, wrong oil pressure, carburetor icing, faulty spark plugs and other difficulties. Pilot response is noted by him, and also the corrective action taken. This ground training is preliminary to final training in actual flight.

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### MEDICINE

## Once-Dread Plague Is Now Victim of Modern Medicine

➤ TWO cases of bubonic plague reported in New Mexico are the first cases of the once-dread disease known in this country since 1947, records at the U. S. Public Health Service show.

The feared "black death" of the Middle Ages, bubonic plague has only been conquered effectively within the past half-dozen years. The new advances that combat plague include: DDT for killing off the infected fleas on rodents which spread the disease; sulfadiazine, which has prevented plague among persons exposed to the disease; and streptomycin, which cures plague.

Although no report has been received on how the victims were infected, the disease may have been brought into the country from abroad.

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### GEOLOGY

## "Dawn Redwood" Pollen Found in Scottish Coal

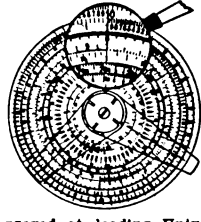
➤ TREES like the recently discovered Chinese "dawn redwood" grew in Scotland between 30 and 50 million years ago.

Fossil pollen grains like those of the living Chinese tree have been found in coal mined in the town of Mull, states Dr. John B. Simpson of the Geological Survey Office, Edinburgh, in the British science journal, *NATURE* (May 14).

The fossil pollen grains in the Mull coal are practically identical in shape, size and microscopic structure with pollen brought out of the Metasequoia forest of China. Dr. Simpson has not been able to find coal-embedded pollens resembling those of either the coast redwoods or the California big trees. Nearest things to his Metasequoia pollen grains, he notes, are two species of cypress, one found in China, the other in the United States.

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