

## Books of the Week

**ASTRONOMY: A Textbook for University and College Students**—Robert H. Baker—*Van Nostrand*, 461 p., tables and illus., \$4., 4th ed. For use in introductory courses requiring no special preparation in mathematics and physics. This 4th ed. contains a brief treatment of celestial navigation, and results of recent inquiries in astronomy.

**CHECKLIST OF THE COLEOPTEROUS INSECTS OF MEXICO, CENTRAL AMERICA, THE WEST INDIES, AND SOUTH AMERICA: Part 4**—Richard E. Blackwelder—*Smithsonian Institution*, 763 p., paper, 50 cents. United States National Museum, Bull. 185.

**CHEMISTRY AND HUMAN AFFAIRS**—William E. Price and George H. Bruce—*World Book Co.*, 788 p., illus. and diagrs., \$2.68. A textbook implementing a general high-school chemistry course, with broadly cultural as well as utilitarian value.

**ELECTRONICS IN INDUSTRY**—George M. Chute—*McGraw-Hill*, 461 p., illus. and diagrs., \$5. A broad introduction to the use of electronic circuits and equipment, outlining the industrial uses of tube circuits and giving detailed explanations of a large number of electronic equipments now serving in industrial plants.

**FOOD CONSUMPTION LEVELS IN THE UNITED STATES, CANADA, AND THE UNITED KINGDOM**—*Government Printing Office*, 58 p., tables, paper, 15 cents. Third report of a Special Joint Committee set up by the Combined Food Board.

**HIWASSEE ISLAND: An Archaeological Account of Four Tennessee Indian Peoples**—Thomas M. N. Lewis and Madeline Kneberg—*Univ. of Tennessee Press*, 311 p., tables, illus. and maps, paper, \$5.50. The story, representing nearly two years of large scale excavation, of the prehistoric people who successively inhabited one of the largest islands in the Tennessee River.

**AN INTRODUCTION TO BOTANY**—Arthur W. Haupt—*McGraw-Hill*, 425 p., illus., \$3.50, 2nd ed. A textbook intended to introduce the college student to the science of plant life, and attempting to lay the foundation for further studies, rather than treat the

subject exhaustively.

**OUR FAR EASTERN RECORD: The War Years**—Shirley Jenkins—*Institute of Pacific Relations*, 96 p., paper, 25 cents. The third pamphlet in a series of documentary studies of American Far Eastern policy, attempting to answer questions regarding the nature of our Far Eastern Policy.

**PERMIAN FUSULINIDS OF CALIFORNIA**—M. L. Thompson, Harry E. Wheeler, John C. Hazzard—*Geological Society of America*, 77 p., maps and illus., \$1.25. Geological Society of America, Memoir 17.

**PROBLEMS IN THE IMPROVEMENT OF READING**—Constance M. McCullough, Ruth M. Strang, Arthur E. Traxler—*McGraw-Hill*, 406 p., tables, \$3.50. A book to aid teachers and administrators in solving the reading problems which they encounter in their schools, ranging in scope from the elementary schools to adult education.

**RACIAL MYTHS**—Mary Ellen O'Hanlon, O. P.—*Rosary College*, 32 p., paper, 25 cents. A scientific examination of some of the erroneous ideas and prejudicial theories so detrimental to social and interracial justice.

**RADAR: What It Is**—John F. Rider and G. C. Baxter Rowe—*Rider*, 72 p., illus. and diagrs., paper, \$1. A complete, non-technical explanation of the principles of radar, of its applications, and of its various uses by the Armed Forces.

**A VEGETABLE GARDENER'S HANDBOOK ON INSECTS AND DISEASES**—*Government Printing Office*, 30 p., illus., 15 cents. An aid to the gardener in identifying the more common insects and related forms and the more common diseases that attack vegetable gardens in the U. S., and in providing him with simple directions for the control of these pests.

**X-RAYS IN PRACTICE**—Wayne T. Sproull—*McGraw-Hill*, 615 p., tables and illus., \$6. A comprehensive treatment, giving the reader a broad understanding of X-rays, their nature, and the many purposes for which they may be used.

*Science News Letter, July 27, 1946*

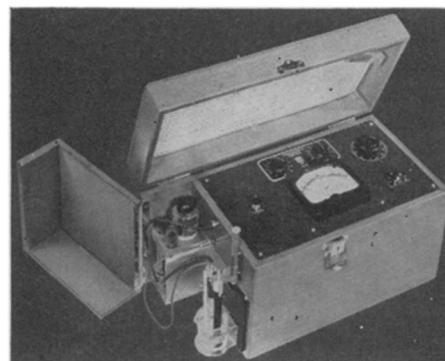
equipment installed on pilot boats. One bank will soon use facsimile transmission to send copies of checks presented for cashing to a central office to identify the signature.

The facsimile transmitter is a scanning machine with a spinning cylinder about which the copy to be sent is wrapped. A sharp point of light traces a closely spaced spiral line on the surface of the paper, and causes the lights and darks of the copy, made by print or pictures, to be reflected with varying intensity upon a photoelectric cell.

The electric currents from the cell caused by the varying light are converted into radio waves by special equipment in the broadcasting apparatus. These waves are received on a cylinder in the receiver, spinning at identically the same speed as the transmitter cylinder. They pass through sensitized paper, leaving an exact copy of the original.

*Science News Letter, July 27, 1946*

An unusual thing about the *white stork* is that for ages longer than recorded history it has built its nest on roofs or close to human habitations.



### pH INDICATOR FOR "EVERYBODY"

Here's the pH Indicator for the man who is not necessarily a pH expert. It's portable and handy for any lab. It's sturdy and dependable and easy to use.

Instrument can be used with either thick or clear solutions at any temperature to 50C. It's affected neither by "sticky" weather (unless relative humidity is over 95 and ambient temperature is over 30C), nor by the electric fields of other nearby equipment.

Catalog E-96(2) gives further details.

**LEEDS & NORTHROP**  
MEASURING INSTRUMENTS · TELEMETERS · AUTOMATIC CONTROLS · HEAT-TREATING FURNACES

Jr1 Ad E-96 (25e)

RADIO

## Next: "Reading by Radio"

► **FACSIMILE** radio receivers will soon join ordinary receivers and television sets in the modern "radio" home. They will provide exact copies of letter-sized, four-column news sheets put on the air at frequent intervals by special broadcasting stations.

Facsimile transmission of pictures, charts, printed pages and letters by radio is not new, but improved transmitting method and receiving equipment now make the procedure more practical. The installation of receivers in homes is dependent upon the erection of broadcasting stations to put the printed news on

the air. One such station has been completed in New York, and six others elsewhere will follow soon.

This first is FM-Facsimile broadcasting station WGHF, of Finch Telecommunications. Successful demonstrations have recently been made in transmitting the letter-size newspaper, at the rate of 500 words a minute, to receiving sets in the city, and to others on moving passenger trains and soaring airplanes.

Similar facsimile transmission may have many other uses. The approach of vessels below New York harbor is now being reported by Radio-Telefax