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ONE OF MY STUDENTS vacationed for a time in Florida, a few years ago. This week he brought in two pecks of specimens that his mother could no longer house in their small apartment. The collection consists of many whelks an inch long to some which were twenty inches in circumference; starfish; and sundry bivalve shells. This is an excellent example of an activity which could initiate creative work in the future.

GREEN THUMB INHIBITOR. Mother, living in Indiana, comes up with this deduction. She has found that plants watered with "softened" water will not thrive. The chemical treatment given their household supply of water adds something harmful to the plants. She now waters her plants with water which bypasses the softener.

HAROLD M. AUGUST of Pennsylvania writes: "Congratulations from a new member . . . Your column is very helpful and your comments are both humorous and human." Seriously, thanks, HMA. To you other guys and gals, if you are still disturbed with something in your mental craw, get out your writing iron and fire away at "The Old Fossil," 5061 North Saint Louis Avenue, Chicago 25.

## REVIEWS

SACKS, JACOB. *The Atom At Work*. The Ronald Press Company, New York. xii + 327 pp. illus. 1951. \$4.00.

Dr. Sacks offers two reasons for the writing of this book. They are: "To remove the mystery surrounding atomic energy from the minds of all of us who are interested; and to show the constructive and hopeful side of the story of atomic energy." Had the author limited his work to either objective, the book would still be a desirable accomplishment.

Historically, there is included an informative résumé of the Curies' discovery of radioactivity and the many events, people, and machines which contributed to atomic fission and the production of radioactivity. In addition, the book tells the current story of how isotopes and artificial radioactivity are used in the fields of chemistry, biology, industry, and medicine in an effort to better understand, among other things, disease, fertilizers, penicillin, photosynthesis, the elimination of static, the location of defects in metals, and to make better rayon and tires.

The high standard physical features, clear illustrations, excellent literary style, and nontechnical language combine to make this book one of the best in this field.

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LWOFF, ANDRE. *Problems of Morphogenesis in Ciliates*. John Wiley & Sons, Inc., New York. ix + 103 pp. illus. 1950. \$2.50.

This is a monograph of a highly specialized nature. In it the author considers certain self-reproducing granules of ciliates, the kinetosomes, in their relations to such processes as differentiation, development, morphogenesis, evolution and reproduction. The author presents evidences: that kinetosomes have a morphogenic force; that they are frequently segregated in some cells and not in others; that this irregular distribution

changes the potentialities of the cells; that the fate of kinetosomes depends on their metabolism, their positions in the organism, and on several factors of the environment. He discusses some of the problems which arise from these facts, and suggests possible uses of these facts to explain cell differentiation and protoplasmic inheritance. The terminology is somewhat difficult.

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CRAFTS, A. S., H. B. CURRIER, and C. R. STOCKING. *Water in the Physiology of Plants*. Chronica Botanica Co., Waltham, Mass., and Stechert-Hafner, Inc., New York. xx+240 pp. illus. 1949. \$6.00.

Water in the Physiology of Plants is a monograph on the relations of water to plant cells. The authors have combined the results of their extensive researches with relevant facts wisely selected from the numerous papers on the absorption, movement and utilization water by plants. As a result the book is a synthesis of present day concepts relative to water utilization by plants. It offers students an attractive means of becoming better acquainted with contemporary literature dealing with the mechanism of osmosis, the uptake, movement, retention and loss of water. Those who, because of lack of time, are unable to give the entire book a thorough reading can bring themselves up-to-date on plant-water relations by reading the excellent summaries which end each chapter. An extensive bibliography of nearly 800 titles is included.

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BULLOUGH, W. S. *Practical Invertebrate Anatomy*. Macmillan & Co., London. xi + 463 pp. 1950. \$4.50.

The beginning of each chapter on invertebrate phyla, from Protozoa up to and including Chordata, describes the general characteristics of the phylum, class, and order of the invertebrates commonly used for study in college zoology. For each representative listed under the genus name, the general account, anatomy, conclusions and references are presented. The general account is

a description of the life history of the individual. Under anatomy, the general structure is described, with important words in bold-face type to facilitate the laboratory work on the study of the specimens. As conclusions the author suggests particular characteristics to be noticed and the characteristics of the phylum, class, and order to be compared with that of the specimen being studied. Many of the references listed are of little value to the average small college student as some are written in foreign languages and others cannot be obtained in an average small college library.

In the reviewer's opinion, the section on the anatomy of the specimens might well be separated into a laboratory manual as the text is cumbersome to handle during the lab work. The rest of the information given in the book is excellent reference material. The paper of the text seems poor, however, and might not stand hard wear in the laboratory. The text is easily read and a person can quickly find the description of the specimens he wishes to look up. The table of contents is comprehensive; listing the phylum, class, order, genus, and the common names of all the representatives given in the book. There are 168 excellent figures and the text is concluded with general references, general appendix, index of authors and general index.

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## FILMSTRIPS

Three new agricultural filmstrip series in full natural color, *Selection of Breeding Stock—Beef*; *Selection of Breeding Stock—Sheep*; and *Selection of Breeding Stock—Hogs*, have just been released by the Audio-Visual Division, Popular Science Publishing Company, 353 Fourth Avenue, New York 10, N. Y. Each of the three series consists of two full-length filmstrips, one devoted to the male and the other to the female of the species, with emphasis on points that teach students to recognize and evaluate best breeding characteristics of the animals. Each series comes with a helpful Teaching Guide that provides ample background, development and review material to teachers and group leaders.