

## First Glances at New Books

**PHYSICS OF THE AIR**—W. J. Humphreys—*McGraw Hill* (\$6). Since 1920, when the first edition of *Physics of the Air* came out, the activities of the atmosphere have assumed increased importance in our daily lives. Weather reporting and forecasting have become more and more transoceanic matters, aviation has passed from a military to a commercial basis, the outdoor range of sound has become something of practical importance. For these and many other reasons, this new edition of Prof. Humphreys' book, thoroughly revised to date and including much new material, will receive a double welcome: as the return to availability of an out-of-print classic, and as the incorporation into a single volume of the most modern fundamental knowledge in an important though too little exploited branch of the science of physics.

*Meteorology*  
*Science News-Letter, March 2, 1929*

**DIABETIC SURGERY**—Leland S. McKittrick and Howard F. Root—*Lea and Febiger* (\$4.25). An important contribution to the literature of surgery is this volume which reviews in detail the work at the New England Deaconess Hospital "during the first five years of the Banting era." Dr. Daniel F. Jones and Dr. Elliott P. Joslin add forewords. The book is well and profusely illustrated.

*Medicine*  
*Science News-Letter, March 2, 1929*

**DIABETES AND ITS TREATMENT**—Frederick M. Allen—*Funk & Wagnalls* (30c). Facts about the symptoms, causes, treatment and general care of diabetes which will be helpful to those suffering from the disease or to their families. The little book is another of the National Health Series.

*Hygiene*  
*Science News-Letter, March 2, 1929*

**BACTERIOLOGY AND SANITARY SCIENCE**—Louis P. Gershenfeld—*Lea and Febiger* (\$4). The book is designed for students in pharmacy, chemistry, nursing and allied sciences. As such it does not pretend to give complete details of bacteriology, parasitology, etc., but only such details as will be of practical help to the persons for whom it was written.

*Bacteriology—Public Health*  
*Science News-Letter, March 2, 1929*

**THE RADIO LIBRARY: Vol. I, Radio Fundamentals; Vol. II, Radio Tubes and Antennas; Vol. III, Radio Transmitters and Carrier Currents; Vol. IV, Radio Receivers and Servicing; Vol. V, Radio Measurements.**—*International Textbook Co.* (\$7.50). In these five little books, each small enough to go into a coat pocket, is contained a complete and concise library of information on all phases of radio. The radio dealer, the service man, the "ham" or even the ordinary broadcast listener who wants to know some of the technical details of radio, will find the work of interest. Good printing and binding add to its value.

*Radio*  
*Science News-Letter, March 2, 1929*

**MOTHERHOOD IN BONDAGE**—Margaret Sanger—*Brentano's* (\$3). Miss Sanger's book is chiefly a collection of the letters sent her by desperate women seeking a way out of their bondage of too much motherhood. The author has wisely written only a few paragraphs at the head of each chapter, letting the mothers tell their own tragic tale of too early and too many children, complicated by sickness and poverty.

*Eugenics*  
*Science News-Letter, March 2, 1929*

**ELEMENTARY EUGENICS**—Elliot R. Downing—*University of Chicago Press* (\$1.75). This book, besides explaining the laws of heredity, makes a plea for the application of eugenic principles to the breeding of men as well as of race horses, fancy poultry and plants.

*Eugenics*  
*Science News-Letter, March 2, 1929*

**NATURE CRUISING**—John Van Schaick—*Murray* (\$2.50). The personal reminiscences and observations of a person in tune with the objectives of science.

*Natural History*  
*Science News-Letter, March 2, 1929*

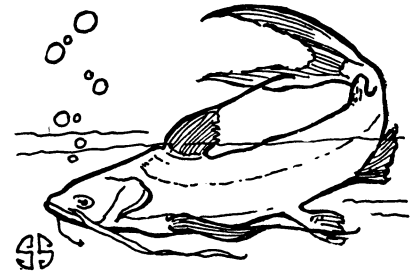
**A REVISION OF THE NORTH AMERICAN SPECIES OF BUPRESTID BEETLES BELONGING TO THE GENUS AGRILUS**—W. S. Fisher—*Government Printing Office* (65c). This is Bulletin 145 of the U. S. National Museum; of interest to students of entomological taxonomy.

*Entomology*  
*Science News-Letter, March 2, 1929*

### NATURE RAMBLINGS

By FRANK THONE

*Natural History*



#### Sea Citizens

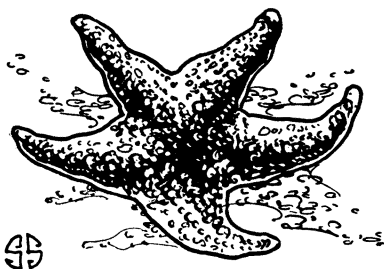
When the virago wife of the comic strip tells her hen-pecked spouse to "shut up", we do not expect the poor, persecuted husband to maintain silence longer than that day's installment of fun. He has to say something at the beginning of the next day's strip, if only to start things moving.

The gaff-topsail catfish of South Atlantic regions, however, has a real burden of "jaw-holding" imposed upon him. Seventy days is his minimum sentence for that is the length of time it takes for a batch of his wife's eggs to hatch out, and he has to keep them in his mouth until they do. Even after they are out of their little vellum shells his sentence is not quite up, for they have to remain in daddy's sheltering jaws until they are able to swim for themselves, and even after they leave the parental roof-of-the-mouth, he swims about with them for a time, ready to receive them back into the fold if danger threatens.

During all this time he cannot eat, for if he should attempt to he might swallow some of his own offspring, like Chronos of old; he has no special pouch or cavity to carry the eggs in. Plenty of water, but no bread, is included in his seventy days' sentence. Only when the youngsters are able to shift for themselves can the devoted parent depart and seek a meal of soft-shelled crabs.

Such solicitude on the part of either parent is not frequently found among fishes. The usual stunt is to produce a large quantity of tiny eggs and allow for an extremely heavy infant mortality. Indeed, there are many fish that will eat their own offspring without any sign of conscience. But the gaff-topsail catfish produces only a few relatively large eggs—one or two dozen as a rule—and must therefore take better care of them.

(Turn to next page)

Nature Ramblings—*Cont'd**Starfish*

They are such dead, dry, rigid things as one finds them in museums and curio shops, that it is hard to believe that they ever were alive, or to imagine what kind of life could have been in such a creature, so utterly different in shape and construction from "flesh, or fowl, or good red herring", from worm, or bug, or snail, or anything else alive that we are commonly used to.

But very much alive the starfish is, when he inhabits the shallow waters of his native shore—he inhabits the downhill, or wet side, of the shore, of course. A living starfish is not stiff, but can bend his five arms under him very completely, and also move them from side to side a good deal. His movements are not very swift, but there is no need for haste in most cases, for the food he is after is even slower than he.

The starfish feeds very largely on small sea creatures like shell-fish. He has a very strong liking for oysters. It worries him not at all that he cannot pull an oyster's shell open. He simply wraps himself around it, and waits. Presently the poor oyster, suffocated, opens his own shell, and the giant outside the door engulfs him. The starfish has the interesting and pleasant ability of sticking his stomach outside his mouth, if he finds a bit of food so large he cannot get it through his mouth into his stomach.

Oystermen hate starfish with the holy hatred born of serious financial losses, especially when the five-armed gluttons invade their expensive "seeded" oyster-beds. Latterly an oystermen's association has placed a bounty on their heads—if a starfish has a head. At any rate they want the starfish exterminated, and are willing to pay for the job.

*Science News-Letter, March 2, 1929*

The great meteorite which fell in Siberia in 1908 scorched the vegetation for miles around.

First Glances at New Books—*Continued*

WHAT EVERYONE SHOULD KNOW ABOUT EYES—F. Park Lewis—*Funk & Wagnalls* (\$3.00). The vice-president of the National Society for the Prevention of Blindness discusses eyesight for the benefit of the layman. A book from the National Health Series.

*Hygiene*  
*Science News-Letter, March 2, 1929*

CARE OF THE MOUTH AND TEETH—Harvey J. Burkhardt—*Funk & Wagnalls* (30c). The subject is simply explained by the director of the Rochester Dental Dispensary. Another of the useful National Health Series.

*Hygiene*  
*Science News-Letter, March 2, 1929*

DIE GESCHLECHTSCHROMOSOMEN—Franz Schrader—*Bornstraeger* (\$5). The text of this work is in English, though printed in Berlin. It is the first number of a series to be issued under the general title *Zellen-und Befruchtungslehre in Einzeldarstellungen*, edited by Prof. P. Buchner of Breslau. This book is a comprehensive and critical review of the present knowledge of sex chromosomes and will be of great value for reference. An 18-page bibliography adds to its helpfulness.

*Biology*  
*Science News-Letter, March 2, 1929*

COLLECTED REPRINTS—University of California. This is the eleventh volume of reprints of the reports of work done under the George Williams Foundation for Medical Research. Fifty-one reprints covering a great variety of subjects are included.

*Medicine*  
*Science News-Letter, March 2, 1929*

COLLEGE CHEMISTRY—Lyman C. Newell—*Heath*. This is the latest edition of a new textbook of chemistry for college students. The author is Professor of Chemistry at Boston University.

*Chemistry*  
*Science News-Letter, March 2, 1929*

THE BEGINNINGS OF CHEMISTRY—Harriet Blaine Beale—*Coward McCann* (\$2.50). Chemistry told to very young chemists. It is up-to-date chemistry, too, and the telling is done brightly, and the pictures will show boys and girls how to do it themselves.

*Chemistry*  
*Science News-Letter, March 2, 1929*

CHEMICAL REACTIONS AND THEIR EQUATIONS—Ingo W. D. Hackh—*Blakiston* (\$1.75). The second edition of a very useful book intended as a guide to chemical students in learning to balance chemical equations.

*Chemistry*  
*Science News-Letter, March 2, 1929*

MINDANAO AND THE SULU ARCHIPELAGO, with MAP AND CHARTS OF MINDANAO AND THE SULU ARCHIPELAGO—P. J. Webster—*Bureau of Printing, Manila*. A brief but illuminating description of the geography and economic resources of the largest island of the Southern Philippines, and the second largest of the entire archipelago.

*Geography*  
*Science News-Letter, March 2, 1929*

THE SPRING AND SUMMER ACTIVITIES OF THE DUSKY SKUNK IN CAPTIVITY—W. T. Shaw—*N. Y. State Mus. Handbook 4* (30c.). The detailed journal of the development of a young skunk from birth to the fifteenth week will be of especial interest to naturalists.

*Mammalogy*  
*Science News-Letter, March 2, 1929*

THE ECOLOGY AND ECONOMICS OF ONEIDA LAKE FISH—C. C. Adams—*Roosevelt Wild Life Forest Exp. Sta.* (\$2.50). A detailed and exhaustive discussion of the fishes of one of the best known and most important of fresh-water lakes, well illustrated and supplied with a good bibliography.

*Ichthyology*  
*Science News-Letter, March 2, 1929*

OUR ENVIRONMENT: HOW WE ADAPT OURSELVES TO IT—H. A. Carpenter and G. C. Wood—*Allyn and Bacon* (\$1.20). A clearly written, excellently illustrated textbook for a general science course in the junior high school.

*General Science*  
*Science News-Letter, March 2, 1929*

PHYSIQUE OF WOMEN IN INDUSTRY—Industrial Fatigue Research Board—*His Majesty's Stationery Office*. E. P. Cathcart, E. M. Bedale, C. Blair, K. Macleod, E. Weatherhead and Sybil G. Overton, medical inspector of factories, are the joint authors of this careful report which is issued as "a contribution towards the determination of the optimum load." The study reported was evidently made in thorough and careful fashion and should be of value to those in this country who are interested in various phases of industrial hygiene and woman labor.

*Industrial Hygiene*  
*Science News-Letter, March 2, 1929*