

The Fauna of the Deep Sea. By SIDNEY J. HICKSON, M.A. New York, D. Appleton & Co. Modern Science Series.

THIS volume of the Modern Science Series is one of the attempts at popularizing a subject which is of exceptional interest to scientific readers. The publication of the various deep sea exploring expeditions are too detailed and too technical for the comprehension of the ordinary reader. In this little book of 170 pages Mr. Hickson has attempted to collect all of the essential and interesting results of the study of the fauna of the bottom of the ocean. He gives us a short history of the investigations and describes the conditions of life at the bottom of the sea. The laws of distribution of fauna in different zones of the depths are explained, and then follows an outline of the discoveries in regard to each group of animals as they exist at the bottom of our deep seas. As a popular account of an interesting scientific subject this little volume is successful, and will enable a general reader to answer the most commonly asked questions as to the conditions of life at the bottom of the sea. It is illustrated with twenty-three figures.

Physiological Practicums. By Prof. B. G. WILDER. Press of the Ithaca Journal.

UNDER this title Professor Wilder has published as a series of separate slips the directions for laboratory work which he furnishes his students in Cornell as guides in the study of mammalian anatomy. Accompanying the laboratory directions are a series of twenty-nine figures on separate slips of paper. From these notes one can gain an adequate knowledge of the method of laboratory work pursued in Cornell, and an instructor who has similar work to do will find the notes of practical value.

Exactly why Professor Wilder calls them physiological practicums does not appear, for there is no physiology involved in the work. The practicums cover nothing but general anatomy of certain of the organs of mammals, and any teacher who obtains them with the hope of getting assistance in practical physiology will be disappointed. The practicums, of course, bristle with Professor Wilder's peculiar terminology, a matter not to be deplored perhaps except in the case of the brain. It does seem to be superfluous to introduce here an entirely new set of terms which will be of no value to the student outside of the special text books published by Professor Wilder.

Darwiniana Essays. By Prof. H. HUXLEY. New York, D. Appleton & Co.

ASIDE from Mr. Darwin himself there is certainly no writer who has contributed so much to the general extension and acceptance of the evolutionary doctrine as Professor Huxley. From the first appearance of the origin of the species Professor Huxley has been its champion, and from time to time his clear brain and lucid pen have given to the public essays upon one and another phase of the general studies inaugurated by Darwin. These essays have appeared at intervals from 1859 until 1888, the last one constituting an obituary on Mr. Darwin. The essays scattered in various publications have been finally collected in one little volume, and to them have been added a series of six lectures upon the general subject of the causes and phenomena of organic matter delivered to working men in 1863. Taken together the essays comprise Mr. Huxley's valuable contributions to the general subject of evolution, and one can clearly discern in reading them one after the other the strong influence their author has had upon this growing conception of science. There

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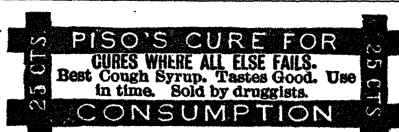


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is no need of extended notice of the separate essays, which are so well known to scientists, but their publication together, assisted by the preface, tells us that as a unit they still represent Mr. Huxley's views upon evolution and that he has in later years not swerved to any great extent from the position adopted even in the first essay. This collection of essays of Darwinian hypothesis certainly forms a valuable addition to one's library on evolutionary topics. The title is unfortunate, for Professor Huxley has chosen the same title which has been earlier used by Professor Gray for a similar book, and two books with the same title are sure to produce confusion.

Guide to the Study of Common Plants. An Introduction to Botany. By VOLNEY M. SPALDING, Professor of Botany in the University of Michigan. Boston, D. C. Heath and Co., 246 p., 1884, 85 cts.

THIS little book will doubtless prove of great assistance to many teachers of botany in the elementary classes. The author has given an admirable series of exercises, developing a natural and practicable method in the elementary study of plants and plant life. The publication has been suggested by the frequent inquiries of teachers regarding the preparation in botany required for admission to the University of Michigan.

Summer Birds of Green County, Pa. By WARREN JACOBS. Waynesburg, Pa., Republican Book and Job Office.
Bird Life in Labrador. By WINFRED A. STEARNS. Amherst, Mass. \$1.

THE first of these is a brief pamphlet giving a list of the summer birds of Green County, with a note or two as to their habits.

The second is a somewhat more extended account of the birds of Labrador and takes partly the form of a

narrative of Mr. Stearns's journey in that country. It contains no descriptions of the birds but more in regard to their habits and abundance.

—S. C. Griggs and Company of Chicago have published a book by John P. Davis on "The Union Pacific Railway," which gives a history of the railway in question from its origin to the present time, with special reference to its relations with the United States Government. It tells how the idea of a trans-continental railway originated and how for many years its realization was prevented by the difficulties of the work and the influence of sectional jealousies. The successive attempts that were made to obtain a charter are recounted, with an analysis of the charter under which the road was actually built. A chapter is also devoted to the operations of the Credit Mobilier and the legislative scandal that arose in consequence. The author is inclined to excuse the operations in question on the ground that they were no worse than occurred in the building of other railroads in those days; and yet in his preface he says, speaking of the Union Pacific: "The agencies through which this particular instrument was obtained and applied to use will be found seriously out of harmony with settled political and moral principles." In conclusion, Mr. Davis considers briefly what steps the government ought to take to recover the sum due it from the railway company, which will amount at the maturity of the bonds in 1899 to \$125,000,000. He notices several plans that have been suggested, but comes to no definite conclusion as to which is the most advisable; so that on the practical aspect of the subject he does not shed much light. As a history of the railway, however, the book will doubtless be of use.

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LIVING near the famous "Serpent Mound," Adams County, Ohio. I have had opportunity to make a collection of pre-historic relics. I will sell same to any one interested in archaeology. Write me. Warren Cowen, Elmville, Highland County, Ohio.

TO EXCHANGE.—Herbarium specimens. Address, H. P. Chandler, Beaver Dam, Wisc.

KARYOKINETIC FIGURES IN MAMMALIAN TISSUES.—Since the publication of my Preliminary Notice in *Science* for Dec. 1, 1893, many parties have written me asking for permanent preparations showing mitosis. To these parties I have sent slides, and I now offer to all who desire them slides showing mitotic figures in nuclei of embryo kitten. A good immersion objective is necessary to make out the figures satisfactorily. Send 60 cents in stamps. If the slide is not satisfactory, return it, and I will return the money. I do not care to exchange slides. Frank S. Aby, State University, Iowa City, Iowa.

FOR SALE.—A small collection of bird skins, consisting of 135 specimens of New England species, most of which are in good condition and all have full data. Nearly all were collected in the Connecticut valley in Massachusetts. Price, \$10. Address, H. L. Clark, 3922 Fifth Avenue, Pittsburgh, Penna.

FOR SALE.—Price \$150, cost originally between \$300 and \$400, a microscope and following accessories: Acme (No. 2), stand and case lost, \$75; Crouch, one-fifth collar adjustment and objective, \$25; Tolles, four-tenths ditto, \$45; Tolles amplifier, \$12; Baush and Lomb, half solid eye piece, \$8; Baush and Lomb, achromatic condenser, \$18; Hartnack Polarizer, \$30; turn-table, \$6; Hartnack, camera lucida, \$20. D. T. Marshall, Metuchen, N. J.

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WANTED. Second-hand books on osteology, embryology, and comparative anatomy. Send list, stating condition and cash price. Can offer a few good sets of birds' eggs if desired. R. C. McGregor, Palo Alto, California.

WE are engaged in a study of the geographical distribution and osteology of our North American Box Turtles or *Terrapene (Cistudo)*. Specimens from Georgia, Tennessee, Alabama and the Dakotas are especially desired. Material from other localities would be welcomed. Would gladly pay expressage and return specimens if desirable. Specimens should be enclosed in a small box with but little paper (without alcohol) and addressed, W. E. Taylor, Walker Museum, University of Chicago, Chicago, Ill.

WANTED.—Addresses of persons interested in archaeology. Copies of the new archaeologic journal in exchange for lists of collectors. A collection of 10,000 valuable objects, the results of my nine years' exploration in the Mississippi Valley, for sale. Price, \$7,650. Warren K. Moorehead, Waterloo, Indiana.

WANTED.—Extracts made from departmental libraries or archives, and from the Congressional Library at the National Capital; languages translated by an experienced linguist. Address, "Translator," 2020 Fifteenth Street, N.W., Washington, D. C.

WANTED.—(1) Data of Cases of Contagious Mental Disorders; (2) "Anatomy of Suicide," by Forbes Winslow; "English Suicide Fields," Radcliffe. State date and price of (2) and (3). Address, James Wood, M.D., 162 St. John's Place, Brooklyn, N. Y.