

*A Laboratory Manual for Comparative Vertebrate Anatomy.* By Libbie H. Hyman. Pp. xv+380. (Chicago: University of Chicago Press, 1922.) 2.50 dollars net.

THIS work is the outcome of a particular course of practical lessons conducted by its author. The disability which such an origin fastens upon a book is well known to every teacher of zoology, and Mr. Hyman's book is no exception to the rule. It suffers from the conditions of its birth—not that these, though American, were insalubrious, but that they were so highly specialised as to limit greatly the adaptability of the offspring. Nevertheless the care that has obviously been taken by the author, and his ability in presentation, should make his book useful even in our small cis-Atlantic schools of zoology, where a somewhat more elastic course of instruction is possible than that provided at Chicago.

Mr. Hyman rebels against the tyranny of the type system, and uses the comparative method of study in his laboratory. His chapters describe in succession the systems of organs of the Vertebrata as exemplified by Elasmobranchs (*Mustelus*, *Acanthias*, *Raja*), Urodeles (*Necturus*), a Chelonian, the pigeon, the cat, and the rabbit. The instructions for dissection are clear and sufficient; and an attempt is made to bridge the gulf which commonly yawns between the principles of the lecture room and the observations of the laboratory, by supplying an accompaniment of morphological comment in the form of introductions and summaries to the chapters. This device and the general nature of the first four chapters disguise—but do not dispose of—the evils of the type system, which are perpetuated in spite of the author's dismemberment of his types and the wide dispersal of their remains throughout the book.

Only one notable omission has been detected: Mr. Hyman's classification of the Chordates—two pages in length—ignores the Dipnoan fishes, nor in the whole of his book do they once appear, though the thesis often plainly demands them.

A pronouncing glossary forms a valuable appendix, though we fear its phonetics will not be acceptable to English ears. H. G. N.

*Studies in the Theory of Human Society.* By Prof. F. H. Giddings. Pp. vii+308. (New York: The Macmillan Co.; London: Macmillan and Co., Ltd., 1922.) 14s. net.

PROF. GIDDINGS points out that in science this century has been a time of rectification rather than of great discoveries. This applies particularly to the fundamental conceptions of sociology. These "Studies," which are always suggestive, frequently provocative, and in more than one instance illuminating, are a contribution to the revision of the theory of human society necessitated by the increased clarity and precision in scientific vision which has come about in the last twenty years. Their somewhat discursive character makes it difficult to give a concise account of the author's achievement in this direction; but, in brief, it may be said to lie in the application of a psychological interpretation to the conclusions of writers such as Darwin, Spencer, Bagehot, and Kidd, to name the more important, thereby accounting for social origins and the stages in the evolution of society in terms of the struggle for existence. Prof. Giddings's theory of human

society is that social phenomena are a product of stimulus reacted to by "pluralistic" behaviour, giving rise to consciousness of kind—the "herd instinct" of other writers—from which are derived discriminating association, the ethical code, co-operation and division of labour, and, in the long run, selection and perpetuation of the adequate—the "fit" of an older terminology.

*The Chemical Examination of Water, Sewage, Foods, and other Substances.* By J. E. Purvis and T. R. Hodgson. (Cambridge Public Health Series.) Second and enlarged edition. Pp. viii+346. (Cambridge: At the University Press, 1922.) 20s. net.

IN this edition the authors have expanded the chapters on water and milk, given more details on the analysis of foods and beverages, and added "an outline of elementary toxicological analysis." A very good feature is the inclusion of plenty of typical analyses. The book will be found very valuable to students preparing for the examination of the Institute of Chemistry, and can be recommended as a useful introductory treatise. Although the quoted results of water analyses are given with the acids and bases combined, there is no indication as to how the necessary calculations are to be made, and some of the sections are so condensed that it is doubtful if they are of value. A great drawback to the utility of the book is its high price.

*Modern Chemical Lecture Diagrams, with Uses and Applications fully described.* By Dr. G. Martin, assisted by J. M. Dickson and Maj. J. W. Christelow. Pp. 88. (London: Sampson Low, Marston and Co., Ltd., n.d.) 3s. 6d. net.

THE purpose of this book is not clear. The illustrations are found in most text-books with adequate descriptions—those supplied in the present work are often too brief to be of any service, as "Fig. 5 shows how these tubes were experimented with by Andrews and Tait." Many of the diagrams represent apparatus far from "modern." The only calorimeters illustrated are those of Favre and Silbermann; chromium is prepared by Fremy's method; sulphuric acid is concentrated in glass retorts, etc. In some cases the descriptions are faulty: Bunsen's eudiometer is ascribed to Cavendish; the Almaden process for the manufacture of mercury is called "Distillation of mercury," etc. As a work of three authors a more modern result might have been expected.

*Forensic Medicine and Toxicology.* By Dr. J. Dixon Mann. Sixth edition, revised throughout. By Dr. W. A. Brend. Pp. xi+573. (London: C. Griffin and Co., Ltd., 1922.) 30s.

THE sixth edition of Dixon Mann's "Forensic Medicine and Toxicology," which ranks among the foremost English text-books on the subject, is the second to be edited by Dr. William Brend. It has undergone a revision which brings it completely up-to-date; a larger page is used than in previous editions, and the number of pages is reduced. The section on insanity has been rewritten on the basis of modern psychiatric views; and that on toxicology gives additional information on poisoning by salvarsan, tetrachlorethane, T.N.T., and the gases of warfare, and on the infections formerly ascribed to ptomaine poisoning.