

stress on these points contain some of the most valuable thoughts in the book.

But it is impossible to maintain that the earlier man had not also combative elements in his nature. His constant normal character is sufficient evidence of this, and the weapons and remains of slaughtered foes which are a part of so many prehistoric sites and excavations. We know little enough yet about our early ancestors in those vast æons of life, but we certainly know that fighting for their lives and their food was at least one element in their age-long task. When we come down to later times, in which historical records are available, it is no less clear that sword or 'violence' cannot be dismissed as an entirely decadent and harmful thing. Alexander's empire was not the mere "Macedonian raid" which is here described, nor was the Roman Empire the last word in stupid violence.

The whole story is much more complex than that; but one or two capital facts emerge which are not allowed for in such a condemnatory survey. One, that Rome gave us, in spite of her crimes, the framework of modern civilisation in which we live, and which, it may be added, shows more hope of surviving than Mr. Heard would allow. In fact, if we survive at all, which one may postulate without over-confidence, it will be owing, among other things, to the work of Rome, including her sword. Perhaps still more important is the fact that the Greeks, to whom we owe the first definite formulations of knowledge—both objective and subjective—did this work in a constant atmosphere of war. With them at least the fighting did not inhibit keen and disinterested thought.

A last word of criticism must be that the unifying work of science is scarcely allowed for at all. This is perhaps the most serious omission. It is omitted, because to admit it would be to admit that our present scientifically organised society is actually the most stable, whereas the argument requires us to believe that civilisation is in its most acute 'crisis' and can only survive if we retrace our steps. Retrace we cannot; advance, enlarge and correct we may. The correction will include much of what Mr. Heard desires, and, above all, the further suppression of the instinct to war, which is a diminishing and not an increasing factor in our make-up. But towards that most desirable of consummations we must include, as a prime and growing factor, the disinterested pursuit of truth both as to the world around us and our own nature; and it will consist rather in developing and making more articulate the conscious than in attempting to read and make a guide of the deep-down and often misleading promptings of the subconscious.

F. S. MARVIN.

Les fossiles: éléments de paléontologie
Par Prof. Marcellin Boule et Dr. Jean Piveteau.
Pp. vii + 899. (Paris: Masson et Cie, 1935.) 170 francs.

HERE is a textbook of palæontology prepared for France, where the subject is considered apart both from biology and from geology. The introduction dealing with these subjects is of the shortest character, and is followed by a history of the science, in which the credit for its foundation is given to Leonardo da Vinci and Bernard Palissy, artists in paint and in clay.

The main part of the work is a systematic account of the organisms of the primary, secondary and tertiary periods, followed by that of quaternary man. Groups of organisms are treated in respect to their popularity rather than their scientific interest. Thus more than 500 pages are devoted to vertebrates, while such important phyla as Protista, Porifera and Coelenterata together are only assigned 41 pages, while insects have 9 pages in spite of the great evolutionary interest of their fossil forms. From a biological aspect the classification often does not satisfy; thus the Stromatoporids were probably Foraminifera, while the Artiodactyles and Cetacea are usually regarded as derived from the Creodonts.

The author's technique is that of a fine museum guide rather than that of the more discursive and critical teacher. At the same time the latter will appreciate "Les fossiles", since most fossil genera are mentioned, while there are 1,330 figures, of which a very large percentage are original. Unfortunately, there is no bibliography to help the reader to dip deeper into the science.

Old and New: Thoughts on the Modern Study of History

By F. S. Marvin. (University Extension Library.)
Pp. 224. (London: Ivor Nicholson and Watson, Ltd., 1935.) 4s. 6d. net.

THE title of Mr. Marvin's earlier book, "The Living Past", published in 1913, and frequently and deservedly reprinted, was almost a stroke of genius. In a phrase, it seemed to reveal, or at least to suggest, the true nature of the historian's task. The question whether history is a science has often been discussed, and is one which might naturally appeal to many readers of NATURE. Mr. Marvin is too wise to spend his efforts upon the somewhat academic question whether the methods and the materials of history fairly bring it into the category of what is usually called science. He prefers to go straight to the problem what we are really doing, or ought to be doing, in that study of the past which is called history, and how the process has been changed by the general movement of thought, scientific and philosophical, in modern times. He then proceeds to deal with certain selected aspects of history, by no means repeating his earlier work, but again leaving the reader with a high sense of human achievement, notwithstanding the terrible setbacks that have to be recorded. The chapters on the scientific work of the ancient Greeks, and on the marvellous technical advance in modern times, will prove specially interesting to scientific readers.

An Introduction to Comparative Zoology:
a Text-Book for Medical and Science Students. By
F. G. Sarel Whitfield and A. H. Wood. Pp. x+354.
(London: J. and A. Churchill, Ltd., 1935.) 15s.

HERE is a textbook for the Kitchener School of Medicine at Khartoum, and presumably the animals with which it deals form the syllabus of that School, together with some consideration of embryology, heredity, evolution, ecology and metabolism. The morphology of the types is done admirably. The size, print and especially the illustrations are exceptionally good. There may be a sufficient reason in the psychology of students for making the work so morphological in Khartoum, but the tendency in Great Britain is for the teacher to lighten morphology with a consideration, most elementary of course, of function in relation to the environment in which the animal dwells. Here much emphasis is laid on parasites, blood flukes, tapeworms, *Ascaris*, ticks and 'medical' insects being included besides all the types usual in Great Britain. This may be wise, for the applied side anyhow will have to be considered later by the student in a tropical country, where he will be seeing the effects of animal parasitism. In any event, parasites are not good forms on which to teach observation, which surely is of the first importance to the commencing student. If all these additional types are to be considered, why not omit the dogfish altogether? It has little to do with the Sudan and the course would be sensibly lightened without much loss.

(1) **A Manual of the Common Invertebrate Animals, exclusive of Insects**

By Prof. H. S. Pratt. Thoroughly revised edition. Pp. xviii+854. 7.50 dollars.

(2) **A Manual of Land and Fresh Water Vertebrate Animals of the United States (exclusive of Birds)**

By Prof. H. S. Pratt. Second edition. Pp. xvii+416. 6 dollars.

(Philadelphia: P. Blakiston's Son and Co., Inc.; London: J. and A. Churchill, 1935.)

THESE two books are thoroughly revised and greatly improved second editions, and are really two volumes of the same work. They aim at giving descriptions of the common invertebrates and vertebrates of the United States, by means of which their relationships and names may be determined. The insects are excluded, their half million or so of species obviously requiring separate treatment. The classificatory keys, the analytical tables and descriptions have been tested by us in several groups, and appear to be admirable, while the numerous illustrations (184 and 974 respectively) are well selected. They enable the visitor to the coast, mountain, plain or lake to name quickly any beasts that he may be watching in the open, or perhaps at home under magnification, with reasonable certainty, and this encourages him to observe. They are clearly books valuable in every classroom and library in North America, as similar synopses of the local fauna would be in any country.

West Coast Shells:

a Description in Familiar Terms of the Principal Marine, Fresh-water and Land Mollusks of the United States, British Columbia and Alaska, found west of the Sierra. By Josiah Keep. Revised by Joshua L. Baily, Jr. Pp. xi+350. (Stanford University, Calif.: Stanford University Press; London: Oxford University Press, 1935.) 17s. net.

FIFTY years ago, conchology was a hobby both in Europe and America, and most large seaside towns had societies for its study. The infinite variety and the beauty of the shells were their attractions, and it was not unusual to pay several pounds for a prime specimen. Now shells are recognised as a part of the complex of every coast, often governing factors in its formation. This rewritten book of Josiah Keep, originally published in 1881, is 'tuned up' to a new conchology that may well some day be as popular as the old. Oysters, razors, limpets, borers, burrowers, clams, etc., as titles of chapters indicate its key, and the technique of their consideration is both simple and scientific. British natural historians may well read it, for on the coasts of Britain dwell each of the above groups, but such would be well advised to take old Keep's advice: "While you admire their lovely shells, think even more of the quiet and pleasant lives they spend in their ocean home".

Wild Life Studies

By Frances Pitt. (Argosy Books, No. 3.) Pp. iv+189+9 plates. (London: Thomas Nelson and Sons, Ltd., 1935.) 3s. 6d. net.

THIS is a series of studies of the private lives of certain birds and beasts, most of them common dwellers in the English fields and hedgerows—voles, weasels, hedgehogs, peewits, owls, hawks and such. There are also two chapters on puffins and seals. Miss Frances Pitt writes on all these animals with an intimacy and humour which ensure ease and enjoyment for the reader, and the perusal of the book should certainly add interest and pleasure to a Nature lover's rambles. The author directs attention to the useful work done by animals commonly known as pests in a manner refreshingly free from sentimental special pleading. The pen drawings by G. E. Collins are delightful.

The Life and Writings of Giambattista Vico

By H. P. Adams. Pp. 236. (London: George Allen and Unwin, Ltd., 1935.) 8s. 6d. net.

A BOOK on Vico in the English language has long been overdue. Mr. Adams, in giving us the benefit of detailed studies of living Italian scholars, has revealed to a wider circle of readers the greatness of mind of one recognised by Goethe as a patriarch of modern thought. Indeed, after a detailed analysis of Vico's writings, Mr. Adams shows how he has influenced the trend of modern philosophy, from the eighteenth century down to the contemporary Italian thinkers. Thus the book under review will be found of interest to the historians of philosophy as well as to those of literature and political theory. T. G.