

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.