

faithfulness in the delineation of detail far surpasses anything of its kind that has yet been produced.

The "Atlas" contains photographs of 'selected' regions of the Milky Way, and the great majority of these are naturally clustered round galactic longitude 330°, the portion of the galaxy most rich in interest, in the constellations of Ophiuchus, Scorpius, and Sagittarius. Opposite each photograph is a detailed description of the field; and in the companion volume there is for each field a chart in which are shown the B.D. stars and principal nebulae, clusters and dark markings, and an accompanying table giving the positions of these objects and other details. It is a little unfortunate that the positions are referred to such an obsolete epoch as 1875. The division, however, into two volumes, enabling photograph, description, chart, and table to be consulted simultaneously, is an immense convenience. It is futile to attempt to describe the photographs; suffice it to say that the dark markings in all their gradation of intensity and intricacy of outline are most faithfully reproduced. The lack of uniformity in the blackness in these photographs of many of the dark markings at once suggests their true cause; that they are obscuring clouds and not holes, as was at first thought. To Barnard we owe most of our knowledge of these markings, and it is therefore appropriate that there should be included in this volume a "Catalogue of 349 Dark Objects in the Sky." The first part of this list was published by Barnard several years ago, and the greater part of the remaining objects were selected by him personally.

There remains to be mentioned the introduction. This appears in the first person as from the pen of Barnard himself, it having been compiled from notes that he put down for this purpose over a period of ten or more years, and from extracts from his published papers. It contains a description of the Bruce telescope, some general remarks on the Milky Way, in particular on its naked-eye aspect, and notes on the preparation of the "Atlas." It ends with a useful bibliography of Barnard's papers on cognate subjects.

Everyone connected with the production of this "Atlas" is to be congratulated. It is a delight to behold and to handle, and forms a fitting memorial to the great observer who planned it. A glance at the striking portrait forming the frontispiece will suggest why anything less noble would have been inadequate.

H. K.-S.

### Our Bookshelf.

*Evolution and the Spirit of Man: being an Indication of some Paths leading to the Reconquest of the 'Eternal Values' through the Present Knowledge of Nature.* By Dr. J. Parton Milum. Pp. 228. (London: The Epworth Press, 1928.) 7s. 6d. net.

THE subject of this work is "the significance of the evolutionary world view for man himself," and the writer's endeavour is "to re-read the facts of scientific research in the spheres of biology, geology, anthropology, and psychology." The task seems an ambitious one, but it has to be done over and over again unless we are to be submerged by a continually increasing flood of uncorrelated facts. Men of science are often impatient of such attempts, partly because they themselves are interested in particular problems of research, partly because the limitations of their own outlook are apt to be emphasised in these attempts at a synoptic view. Nevertheless, we can imagine a student of any of the natural sciences reading this book with both interest and enthusiasm. It displays not only a remarkable acquaintance with recent research and theory, but also vigorous powers of comprehension, and genuine fertility of speculative resource. The book, in a word, is original and will repay careful study.

It is probable that many readers will find that the anthropological sections interest them most. Dr. Milum regards man as a mutation, and has no belief in any intermediate species such as the bruteman, dear to Freudian psychologists and popular encyclopædists. He is disposed to think that the rigours of the Great Ice Age effected the provocative crisis of the origin of our species. He does not consider that since the Stone Age there has been much in the way of increase of natural intellectual capacity; accumulation of knowledge is not the same thing. He takes the line adopted by the Rivers-Elliot Smith-Perry school, that modern savages are degenerates, not, in the true sense, primitive men; and with regard to civilisation, he regards it as a cultural tradition (not primarily racial) developed by creative individuals, inspired by ideas, and overwhelmed from time to time by barbarians from without or within. There is an especially interesting section upon the relations of the pastoral age of culture to the development of religion, particularly of Christianity. Religious teachers, as well as students of science, would do well to read this excellent book. J. C. H.

*The Naron: a Bushman Tribe of the Central Kalahari.* By D. F. Bleek. (University of Cape Town: Publications of the School of African Life and Language.) Pp. ix+67. (Cambridge: At the University Press, 1928.) 6s. net.

THE School of African Life and Language of the University of Cape Town is to be congratulated on having attained the dignity of a series of publications, even if, owing to scarcity of funds, it has been possible to attempt nothing elaborate