

*Climate: a Handbook for Business Men, Students and Travellers.* By Dr. C. E. P. Brooks. Second edition, revised. Pp. 199. (London: Ernest Benn, Ltd., 1932.) 10s. 6d. net.

AN early second edition testifies to the general utility of Dr. Brooks's handbook. All parts of the globe are dealt with, and a useful feature at the end of each regional division is a table furnishing for a number of selected places data of temperature, humidity, rain, snow and thunder. There are very few illustrations, and, perhaps, it is a recommendation that the book is not encumbered by a lot of commonplace maps and diagrams.

The treatment is essentially statistical, but Dr. Brooks knows his subject too well to allow his outlook to be blinded by the data which he wields. This is an important matter because climatology as a science has suffered badly from the mishandling or misinterpretation of the very data on which it largely depends.

The book is, however, not so free from loose statements as is to be expected in a second edition. For example, a statement, to the effect that it is the relative humidity which gives the 'feel' of the air, seems to us to be faulty. The 'feel' of the atmosphere is an intricate complex of temperature, wind, radiation, moisture and probably, also, obscure influences like electricity; but, so far as humidity is concerned, it is surely the absolute humidity or vapour pressure as controlling the rate of evaporation from the body which is the important factor, not the relative humidity except at saturation point with fog. Thus on an enervating summer day of high vapour pressure the relative humidity is often much lower than on a bracing winter day of low vapour pressure.

L. C. W. B.

*Faith, Hope and Charity in Primitive Religion.*

By R. R. Marett. Pp. vii+181. (Oxford: Clarendon Press; London: Oxford University Press, 1932.) 10s. net.

DR. MARETT'S Gifford lectures for 1931-32, an expanded form of lectures delivered under the auspices of the Lowell Institute of Boston in the previous year, have as their theme the evaluation of the religious experiences of peoples of the lower culture, or as Dr. Marett prefers to call them, savages. It must not be thought, however, that Dr. Marett would regard anthropology as one of the normative sciences and that he would attempt to apply an ethical scale to primitive ideas of behaviour. His evaluation is biological in the sense that its aim is to test survival value. The various activities of the savage are passed in review one by one and analysed with the view of the isolation of their emotional content—savage religion being a matter of the emotions rather than of intellect or of action. Dr. Marett then proceeds to show that the religious emotions which colour the whole range of savage activity on the whole make for the virtues or qualities which he designates 'Faith, Hope and Charity' and regards

as the effective element in the contribution of religion to the advancement and survival of man. A brief summary does less than justice to the acuity of Dr. Marett's vision—it may be suspected that at times he finds his material a thought intractable. Nor is it possible to do more than refer to the insight shown in the many valuable suggestions on controversial points which he throws off, almost casually, in the course of his argument.

*Thermionic Vacuum Tubes and their Applications.*

By Prof. E. V. Appleton. (Methuen's Monographs on Physical Subjects.) Pp. vii+117. (London: Methuen and Co., Ltd., 1932.) 3s. net.

THE student with a good knowledge of general physics will find this volume very helpful in studying radio-frequency phenomena. Modern thermionic tubes have so many important applications in physics and electrical communication that a knowledge of their action and how they are constructed is essential to almost every research physicist and electrical engineer. The author writes carefully and clearly, so the ordinary reader easily grasps the laws which govern the emission of electricity from hot bodies and how to apply Richardson's formulæ to make calculations. He then explains the internal action of the two electrode tube (diode) and states some of its applications. Finally he discusses the three electrode tube (triode) and describes its applications as an amplifier, a rectifier and an oscillation generator. The book can be recommended to the experienced amateur in radio communication as a scientific introduction to the subject as well as to the physicist and mathematician who intend to read the relevant parts of advanced treatises well before following up some line of research.

*The Practical Treatment of Diabetes.* By Dr. T. Izod Bennett. Pp. ix+107. (London: Constable and Co., Ltd., 1931.) 6s. net.

THIS book is a brief and severely practical account of the modern method of treating the diabetic. References to theory are few and are limited to such details as are absolutely necessary to explain the therapeutic steps. A short chapter is devoted to diagnosis, the second and third to general principles of treatment and dieting, the fourth to the use of insulin, and the remainder of the book to complications and special problems and considerations. As described by Dr. Izod Bennett, the restoration of a diabetic to such condition that he is sugar-free on sufficient diet appears an easy matter, and the general practitioner who has not had to deal with many cases will learn with surprise that this object can be attained almost invariably within three weeks. How it can be done is clearly set out in some fifty pages of this book, which, as a practical guide, lacks no essential features. Specimen diets during treatment, and food tables showing the great variety finally available, are included.