

The explanation of the restriction which the author has imposed upon himself no doubt is to be found in the fact that his interest lies in the theological side of his subject. He has therefore confined his attention to those countries in which the witch is to be regarded as a subject under the ban of the Church and a heretic, rather than as a survival from an earlier stage of culture. In this volume, as in the preceding, due allowance must be made for the author's strong theological bias; but so far as the facts are concerned, his account for each of the countries with which he deals is comprehensive, detailed, and accurate to a degree beyond that attained by any other book on the subject.

*A Botanist in the Amazon Valley: an Account of the Flora and Fauna in the Land of Floods.* By Prof. R. Ruggles Gates. Pp. 203+11 plates. (London: H. F. and G. Witherby, 1927.) 7s. 6d. net.

THE opportunity of a voyage up the river Amazon so far as Tefé, which, including stays of a few days at Para Manaos, and Tefé, occupied about six weeks, has led Prof. Gates to give an account of the general scenery and vegetation which can be seen from the deck of steamers and from his brief visits to terra firma. To any one making the journey by one of the Booth line boats and river steamers, this narrative by a botanist will be of interest, but for the serious student Prof. Gates adds very little to our knowledge, and he himself is undoubtedly the chief gainer by this very interesting opportunity, of which he appears to have taken full advantage, judging from his frequent allusion to his impedimenta for collecting, etc. The book appears to be the author's diary in print, so that much similar information is repeated; but a good many items will be of value to others who may make the journey.

We are surprised that Prof. Gates compares the huge leaves of the *Victoria Regia* with their vertically upturned edges to dinner plates; nor is he correct as to the colour of the flowers, since they are pure white at first and turn pink in the course of the day and then dull crimson as they fade. Two short chapters at the end of the book on palms and other trees of the Amazon, and on woods and timbers of this region, are of value.

*Sternhaufen: ihr Bau, ihre Stellung zum Sternsystem und ihre Bedeutung für die Kosmogonie.* Von P. ten Bruggencate. (Naturwissenschaftliche Monographien und Lehrbücher, Herausgegeben von der Schriftleitung der *Naturwissenschaften*, Band 7.) Pp. v + 158 + 4 Tafeln. (Berlin: Julius Springer, 1927.) 15 gold marks.

THIS is a very comprehensive monograph dealing with star-clusters and the work of various investigators on the problems of their distribution in space and of their structure. In Part 1 the author gives the general distribution of the clusters in the sky and describes the methods employed by Charlier, Kapteyn-Schouten, and Shapley for determining their distances. Parts 2 and 3 are devoted to investigations on the arrangement of the component stars of the clusters and the

dynamical problems involved. The work of Ed-dington, Jeans, Shapley, and Von Zeipel naturally forms the framework of the chapters included. In Part 4 the author considers the question of star-clusters in relation to a general scheme of cosmogony. As this monograph is intended essentially for students, references to original papers are given in footnotes. In the list of catalogues of star-clusters, reference should have been made to that compiled by Melotte from the Franklin Adams Chart, and published as *Memoirs of the Royal Astronomical Society*, vol. 60.

*Through Kamchatka by Dog-Sled and Skis: a Vivid Description of Adventurous Journeys amongst the Interesting and Almost Unknown Peoples of the most inaccessible Parts of this remote Siberian Peninsula.* By Dr. Sten Bergman. Translated from the Swedish by Frederic Whyte. Pp. 284+16 plates. (London: Seeley, Service and Co., Ltd., 1927.) 21s. net.

IN this book Dr. Bergman describes several journeys which he and his wife took a few years ago in the interior of Kamchatka, when he was leader of a biological and ethnographical expedition sent by the Swedish Geographical Society. It is the best kind of travel book, with no tedious details of daily routine, but enough incidents of travel to illustrate the customs and habits of the people and the difficulties of the road. There is also much original matter in the account of visits paid to the Lamuts and Koryaks in the remoter parts of the peninsula, and to the degenerate and disappearing Kamchadals. The book is useful as giving a full and readable account of a part of Asia which is little known and seldom visited except by trappers and fur dealers. The maps and illustrations add to its value. Fuller accounts of the results of the expedition are now being published in Swedish scientific journals.

*Delineations of American Scenery and Character.*

By John James Audubon. With an Introduction by Prof. Francis Hobart Herrick. Pp. xlv + 349. (London: Simpkin, Marshall and Co., Ltd., 1926.) 18s. net.

AUDUBON'S "Ornithological Biography," as he called the text in five volumes which accompanied his great work on "The Birds of America," contained a number of descriptive articles of a general value. Fifty-nine of these essays and two of his prefaces are reprinted in this volume, to which his biographer adds a short introduction. Most of the essays are sketches of pioneer life in the Ohio and Mississippi valleys, Labrador, Newfoundland, and New England between 1808 and 1834. A few treat more particularly of animal life. They were all written in the places and among the scenes they describe and portray vividly many aspects of life in America that have now passed, submerged in the flowing tide of population. Thus they fulfil the writer's aim, which was to record America as he saw it before man effected drastic changes on the face of the country. The volume is a useful contribution to American natural history and geography.