bustion, in the coal basin of Decazeville and Aubin. His description also of the irreparable mischief wrought by the reckless destruction of forests, is well worth reading, for it must be remembered that the weird desolation of the limestone plateaux is a thing of comparatively recent date, and an indirect consequence of the French Revolution. Of the rock shelters of the "reindeer age" in the valley of the Dordogne and of other rivers, he has much to say, and of the dwellers in "holes of the rock" down to the present day; for these caves have been enlarged, or faced with masonry, or actually excavated, at various dates, and in some cases are still inhabited. Of the dolmens and other megalithic remains which are common on the plateaux region, Mr. Baring-Gould writes as one who has made a study of the subject. Perhaps some of his ethnological speculations may not meet with universal acceptance, but they are, at any rate, worth considering. The book contains many curious bits of folk-lore, as we might expect, and narrates sundry remarkable historical episodes in the mediæval struggle between France and England, and in the sanguinary conflicts of Huguenots and Romanists. A chapter is also devoted to the romantic, though often discreditable, story of Joachim Murat, who was born at a dirty little "bastide" of the same name on the Causse de Gramat, near the source of a tributary of the Lot. The book, in short, while it indicates the author's cultivated tastes and wide range of reading, directs the attention of travellers to a region of singular and varied interest, which hitherto has received but little notice even from the French themselves. It is only inadequately described in Reclus' great work, "Géographie Universelle." It has not, however, escaped the indefatigable emissaries of Baedekker, who gives, in the volume on Southern France, a succinct account of the district, evidently founded on personal knowledge. Armed with the little red book, and Mr. Baring-Gould's more bulky volumes, a rich reward undoubtedly awaits the visitor. The guide-book will direct his steps aright; Mr. Baring-Gould's pleasantly written and admirably illustrated volumes will give him abundant information about the chief points of interest, whether physical, archæological, or historical, and will be an unfailing resource during those hours of enforced leisure, which, on a journey, are apt to become tedious. T. G. BONNEY.

OUR BOOK SHELF.

An Elementary Treatise on Theoretical Mechanics. Part I. Kinematics. Part II. Statics. By Alexander Ziwet, Assistant Professor of Mathematics in the University of Michigan. (London and New York: Macmillan and Co., 1893.)

AMERICAN mathematicians have always followed the system of the French and continental school, so that the progress of the American student in analytical development has not been arrested and stunted by the excessive reverence of the Newtonian methods prevalent in this country.

According to the continental system a student is introduced at the earliest possible stage to the Cartesian methods of geometry and to Leibnitz's extensions in the domain of the Differential and Integral Calculus; and then, even with a comparatively small equipment of analytical knowledge, hardly extending beyond an acquaintance with the notation, he is prepared to study and appreciate a work like the present; while the English student is kept back by clumsy antiquated methods, on the pretext of developing his geometrical and general reasoning powers.

This work is intended as an introduction to the science of theoretical mechanics, adapted to the particular wants of engineering students who, with the characteristic practical energy of their race and age, will not desire to be kept marking time over the rudiments.

The general treatment of the subject is elegant and complete, and valuable collections of illustrative examples are introduced at the different stages. One of these, however (ex. 6, § 276), caught the eye, as requiring amendment; as also the Fig. 29 of the catenary.

An old friend, the problem of the beam in a bowl—in other words, of a spoon in a teacup—given as ex. 20, § 151, deserves separate discussion, and a complete solution in the text.

The present opportunity is favourable for expressing to Prof. Ziwet the thanks of mathematicians in this country for his valuable Report of Prof. Klein's Lectures on Mathematics, called the "Evanston Colloquium," held before members of the Congress of Mathematics in connection with the World's Fair at Chicago, at Northwestern University, Evanston, Ill. G.

By Order of the Sun to Chile to see his Total Eclipse, April 16, 1893. By J. J. Aubertin. Pp. 152. (London: Kegan Paul, Trench, Trübner, and Co., 1894.)

TWO years ago Mr. J. J. Aubertin, having seen a copy of NATURE for October 13, 1892, containing a letter on the then coming solar eclipse, went home and dreamed a dream. In his vision the Sun visited him and ordered him to gird up his loins, and go to the desert of Atacama and watch the eclipse. This brief explanation is necessary in order to account for the rather clumsy title of the book before us. Mr. Aubertin, regardless of the belief that dreams should be reversed, and that he was seventy-five years of age, travelled to Chile, and, meeting Prof. Schaeberle there, became one of the eclipse party. He was, however, more an interested layman than a scientific observer, and therefore his book is of very little value to astronomers. In fact, the book is chiefly taken up with tittle-tattle of interest to very few beyond the parties concerned. A picture of the corona, as seen by the author, is very pretty, and compares favourably with the impressions recorded by observers of the phenomena before photography monopolised the field as a coronal artist. But at the present time, the results of visual observations of the corona are regarded with suspicion, and rightly, for they never afford any very definite information as to the true form and structure of the sun's surroundings. However, Mr. Aubertin faithfully records what he saw, so his observation must be accepted. The book contains Prof. Schaeberle's photograph as a frontispiece.

Reise nach Südindien. Von Emil Schmidt. Mit 39 Abbildungen im Text. (Leipzig: Wilhelm Engelmann, 1894.)

HERR SCHMIDT'S book is a plain, straightforward narrative of a tour through Southern India, in the course of which he visited Madras, Travancore, made an excursion to Cape Comorin, proceeded by Trivandrum to Cochin, and thence by Coimbatore to the Anamalay Hills, going afterwards to the Nilgiris, and finishing at Calicut. The object of the journey was mainly to study the native peoples, and numerous ethnological photographs give a certain value to the book. There is, however, nothing new in the way of an important contribution to science in the work, which is most interesting as showing the impressions produced on an intelligent and observant German by a visit to Southern India. The style is lively, but perfectly serious, and cannot fail to be of much value in Germany, where it appears few books have been pub-