people's imagination and in reports of successes by the Wright brothers, and it was scarcely to be wondered at if applications to aerial navigation found no suitable place in a treatise on analytical dynamics. In the twelve years that have elapsed there has been plenty of time for pure and applied mathematicians to provide material that would not occupy merely a single chapter on "The Aeroplane" in a second edition of such a book as this, but might even form a predominating feature of the whole work. Yet on referring to the index we do not even find the word "aeroplane," while the references under "stability" and "resistance of the air" do not lead to any matter suggestive, even vaguely, of the existence of aerial navigation. It may well be a matter of surprise that such an omission should be possible at the present day.

We cannot lay the blame on Prof. Whittaker, because a book of this kind is necessarily largely an exposition and collation of the work of other writers. But it will be found on closer examination that, outside the problem of small oscillations about a state of steady motion, very little work has been done in advancing what is really out-and-out the most important development of theoretical dynamics, and for the most recent of the developments which have taken place physicists and engineers rather than mathematicians are mainly responsible, much of their work being the property of the Government at present.

It is, however, rather a pity that Prof. Whittaker has omitted to introduce the subject under the heading of "stability of steady motion," as this would, at least, afford his readers some stimulus to turn their studies in the right direction. Possibly the author considered it scarcely desirable to make any change until further developments had taken place, and in this second edition he has rather confined his attention to elaborating references to original work on old ground. It is not usual in reviews to repeat what has been said in a previous notice about a first edition. For this reason a detailed account of the actual contents would be scarcely necessary or desirable. The present work will be found of much use by such students of a future generation as are able to find time to extend their study of particle and rigid dynamics outside the requirements of aerial navigation, and it will also afford a valuable source of information for those who are in search of new material of a theoretical character which they can take over and apply to any particular class of investigation.

G. H. B.

OUR BOOKSHELF.

Origenes y Tendencias de la Eugenia Moderna. By Joaquin Bonilla. Pp. 96. (Liverpool: *Daily Mail* (printers), 1916.) Price 3*s.* 6*d.* net.

THIS introduction to eugenics is intended primarily for Latin America. The author explains the aims of eugenics, and gives a sketch of the history of the idea of trying to control the agencies which improve or impair racial qualities in mankind. Simple expositions are given of Lamarckism, Darwinism, Mendelism, and Weismannism. There is a pleasant appreciation of the work of Sir Francis Galton, and the book pays due regard to experimenters and biometricians alike. The endeavours of the Eugenics Education Society are recognised, as well as the work of Prof. Karl Pearson's Eugenics Laboratory. So up-to-date is the book that mention is made of England's "Baby Week" and of the withdrawal of the veto on the representation of certain plays by Ibsen and Brieux. A chapter is devoted to eugenic activities in the United States.

The author has the wise and kindly intention of familiarising Spanish-speaking young people with the aims and methods of eugenics, and he seems to us to have written a clear and terse introduction to the subject. We should like to have seen some recognition of what is practicable in the way of ameliorating environment and function, and improving nurture generally. For the eugenic ideal does not, and cannot, stand alone. In a short book like this it should have been readily possible to avoid disfiguring verbal errors, such as Seleeby, Burcke, Havelock Elliott, and Weisner; but these are very small flies indeed in the carefully prepared ointment. We wish the book success.

The Human Body: An Account of its Structure and Activities and the Conditions of its Healthy Working. By Prof. H. Newell Martin. Tenth edition, thoroughly revised by Prof. E. G. Martin. Pp. xviii+649. (New York: H. Holt and Co., 1917.)

A BOOK which has reached a tenth edition needs but little recommendation. The late Prof. Newell Martin's work, like all that he did, is excellent. It is rather more bulky than the majority of books of an elementary nature; but, like these, it is a compendium of anatomy and physiology designed, not for the student of medicine, but for the general reader who desires to become acquainted with the mechanism of his own body and the reasons for the laws of health. It is naturally the physiological side which is mainly dwelt upon, only so much of structure being described as is necessary for the understanding of function. The present edition has been brought well up to date, and, like the only other book with which we may compare it, Huxley's "Elementary Physiology," has doubtless still before it a long and useful life.

A welcome feature of the book is the appendix, in which instructions for practical work are given in detail. Much of this will need a laboratory, but it is astonishing how much useful practical work can be performed without elaborate apparatus, and with the resources which are available to nearly every teacher.

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