This book will be of value to several different classes of readers; to the doctor who wants to know something about contemporary methods of training, and requires an easily readable book to give him some of the scientific rationale of these training methods; to the more intelligent and better educated coach and athlete; to the physical educationist needing a "refresher course", and to new entrants to the physical education profession who require an elementary survey of the whole field of applied science in sport.


Published by Lea and Febiger, Philadelphia. 300 pages. £ : : .

A few years ago, apart from the classical studies of A.V. Hill, from the pre-war era, there was virtually only one book on the subject of physiology of exercise. Within the last two or three years, there has been a surge of literary activity in this field, several books that must have been started almost simultaneously appearing within a short time of each other, and obviously covering the same ground. The book under review is therefore one of several recent publications, but it deals with several topics not covered in the other exercise physiology books. The opening chapters are concerned with the cellular anatomy and physiology of muscle, and its nerve supply. This is followed by a chapter on "Kineoenergetics" and serves as an introduction to modern investigation techniques into muscle activity by electromyography and electrogoniometry, plus a useful revision of our 1st M.B. physics as applied to bioechanics. The heart and peripheral circulation are also considered from a mechanical as well as a physiological viewpoint, as is respiration. Heat regulation is considered both in changes due to exercise and to changes in environment, although data from trained athletes undergoing maximum performance are scarce. Perhaps the forthcoming Olympic Games might provide results worth including in subsequent editions. Metabolism, diet and fluid balance are all discussed, and there is a chapter devoted to a mixture of unclassified topics, including the pharmacological effects of drugs and other ergogenic aids used by some athletes.

The last chapter is particularly valuable to those who without being formally trained physiologists are required to teach some physiology and to understand how to carry out the calculations. This chapter on "Calculation methods" starts off by giving detailed instructions on the use of the slide-rule for every-day calculations. I know all the clever young newly qualified doctors and physical educationists know this, but to us of an older generation, we can revise and practice without loss of face or without being tiresome to our impatient juniors. Detailed calculation methods are also given for apparatus that was only available in research units a few years ago, largely concerning the evaluation of energy expenditure from respiratory investigations. Techniques are also given for some physique assessments, but Parnell's simple technique for field (as opposed to research) use is not mentioned, although in use in some places in the U.S.A., e.g. by Lindsay Carter in California. Finally, there is a useful revision section on definitions, formulae and laws, e.g. Ohm's Law, Hooke's Law, Newton's Laws etc.
To any doctor qualified over ten years, not obtaining 1st Class Honours, and interested in the physiology of exercise, I think this book should prove valuable, interesting, and enjoyable to read. It will also have value to the lecturer in physical education, and might well become a standard book for 4th year Bachelor of Education courses in physical education. After reading it, I feel I shall be better able to understand our guest lecturers from the Physiology Division of the M.R.C.

"WHY WAS HE BORN SO BEAUTIFUL" AND OTHER RUGBY SONGS. Edited: H. Morgan.

1967. Published by Sphere Books, Ltd. London. Pages 187. 5/-.

The collection of some 140 songs in this paper-back book is extensive, and includes almost all the songs doctors learnt as students, as members of University or other clubs, and as members of the Services in war time or afterwards. The songs are hardly fit for the drawing-room, even in this permissive society, but many have become firmly embedded in the folk-lore of this country and its Commonwealth. They will awaken much nostalgia amongst the more honest of our members, though others may be shocked, at least publicly. Memories have been evoked of a Welsh tenor singing the solo of Cathusalme, accompanied by a thousand voices whispering the chorus pianissimo whilst waiting in the darkness to move up to El Alamein (Archer, J. 1968 - personal communication).

In the Forward, Michael Green suggests that this book might fill a gap somewhere between Smollett and Henry Miller, and feels that "there is something for everybody, providing they can drink enough beer to dull their finer senses". The use of the book in mixed company is more a matter of dispute. No doubt most Rugby Wives and Girlfriends are already familiar with many of the songs. It has been noticed that, when the evening advances, and the "singing" starts, we can divide the girls into three clear groups: those that walk out in shocked didgeon; those that carry on drinking as if unaware of what is taking place; those that gather round the piano and join in - and it is rarely that this last group have to brush leaves from their coats when the evening ends. I think I shall lend this book to my daughter.