

knowledge based mainly on the work of the author and his colleagues. Where there are gaps, interesting speculations are presented of what he thinks the full picture may prove to be. Although the book does not set out to be a comprehensive and objective review, it would have been valuable to have learnt more fully why the author apparently discounts the important work of others who do not agree entirely with his own ideas.

The book can be roughly divided into three parts. The first part, "the Molecular Mechanism of Motion," is a detailed account of the basic mechanochemical changes that occur during contraction, changes which are mainly reactions of actomyosin, adenosine triphosphate and ions. The appreciation of these, the author maintains, is his laboratory's main contribution to the problem of muscular contraction, a contribution which was at first violently opposed, especially in England, but which is now, he believes, generally accepted as a basis. On this basis, an attempt is made to correlate these reactions to physiological observations, although many still cannot be so interpreted. The second part discusses observations on the contraction of the frog's heart and the rabbit's uterus and the effect of various drugs on these tissues. Included are some interesting comments on how these drugs exert their influence and on the application of some of the findings to therapeutics. For instance, he claims that the results of himself and his co-workers raise serious doubts as to the accuracy of the standardisation of digitalis preparations. The third part represents an effort to weave together into a coherent story the results reported in previous chapters. This concludes with a list of the actual events in the full cycle of contraction from those started by the arrival of the nerve impulse. Such an inventory, he suggests, "helps not only biochemical research but offers a solid basis for the analysis of pathological conditions."

It is difficult to decide for whom the book was written. Although the author sets out to write in a language understandable to the average biologist and to stress outline more than detail, many people, apart from those with an intimate knowledge of the field, may find it difficult to digest. Even the "Prefatory Note on the Histology and Physiology of Muscle" intended for those not acquainted with its structure and function may dissuade the most ardent reader from venturing further. However, one may be spurred on by Professor Szent-Gyorgyi's obvious desire that the results of his work should be of practical use and by his beliefs that "the attractions for the medically minded investigator will be spiced by the knowledge that dysfunction of muscle is death's main caterer" and that it will eventually be possible "to translate our theoretical knowledge into a reduction of human suffering."—Howard D. DARCUS.

STRAPPING AND BANDAGING FOR FOOTBALL INJURIES. By John H. C. COLSON, Fellow of the Chartered Society of Physiotherapy, Member of the Society of Remedial Gymnasts, and the Association of Occupational Therapists. Foreword by William Gissane, M.Ch., F.R.C.S. 10 × 7½ in. Pp. ix+85, with 180 figures. Index. 1953. London: Published officially for The Football Association by The Naldrett Press. Price 10s. 6d.

For those of us who were once actively interested in sport and vaguely medical, and those of us who are medical and still vaguely interested in sport, this book—at any rate as far as legs are concerned—is the long awaited answer to a prayer. What doctor, who has ever watched a game of any sort, has not been intrigued—and, yes, perhaps a little annoyed—with the uncanny witchcraft of the trainer, the coach, the "rubber," which enables him to deal so rapidly, efficiently and confidently with those minor afflictions of sport that are so common and yet so conspicuously absent from the medical text-books. And now in this excellent book of Mr Colson's one finds that, out of the experience of years, the great Football Association at any rate has been dealing with these injuries on a practical, scientific and entirely well organised basis. The book, with its succinct 85 pages and its meticulously detailed 180 figures (by S. Francis), tells a simple story, first of sound common sense, based on clear elementary and accurate anatomy, and obviously backed by thoroughly up-to-date orthopaedic advice. In the preliminary chapters, the materials required to carry out the treatment advocated, and the methods of achieving it, are clearly described in language intelligible to any layman—and any doctor! The author's thesis that recent injuries demand a judicious mixture of pressure bandaging and rest, followed by protected and graduated use of injured parts, helped by physiotherapy, is convincingly set out—and has proved itself in action. One only hopes its field will not be limited to its sponsors—The Football Association—as it would have the greatest value in many other spheres of sport; and also that it may be but the precursor of others on the arm and the trunk.—Arthur PORRITT.