

## Reviews

### ORTHOPAEDIC APPLIANCES

*Orthopedic Appliances. The Principles and Practice of Brace Construction for the Use of Orthopedic Surgeons and Bracemakers.* By Henry H. Jordan, M.D. Foreword by E. G. Brackett, M.D. (Pp. 412; 176 figures. 21s. net.) London: Oxford University Press. 1939.

Over a century ago, long before orthopaedics had budded off from general surgery, methods of treatment for crippling conditions were confined to simple manipulation and splinting. With the nineteenth century came tenotomy and osteotomy, but the orthopaedic surgeon's patients still clanked in and out of his clinic in cumbersome and often permanent irons. Then operative surgery developed rapidly; bone grafting, arthrodesis, and tendon transplantation were employed with increasing success (tendon transplantation was soon found to have strict limitations), and operations were and still are deliberately performed with a view to making appliances unnecessary. The study of appliances, and interest in their construction, have been on the wane ever since. During and since the great war the construction of artificial limbs improved rapidly, but in other directions there has been little advance. The more senior surgeons and instrument makers say that, so far as surgeons are concerned, there has been an undoubted regression. More than one instrument maker will confide to the sympathetic listener that although young Mr. Osteotome is a very capable man he knows little about appliances and cares less, and his (the instrument maker's) tact is sometimes strained almost to breaking-point in trying to suggest which type of appliance is really the best for the patient. The accurate prescribing of appliances is almost a lost art. Yet these things still mean a great deal to the patient: the limitations of operative orthopaedic surgery are painfully obvious, and the patient who cannot be benefited by operation has the most lively interest in the "irons" that he is condemned to wear. Their weight, the comfort of them, their durability and cost are all of importance. And the patient who has to wear a temporary appliance also likes something efficient and comfortable.

Dr. Henry Jordan, a German surgeon now working in New York, so far from disdaining this field of work, is so interested in orthopaedic appliances that he has written a book about them. He is a pupil of Von Baeyer, to whom he willingly acknowledges his indebtedness. But Dr. Jordan has done more than write an exposition of the teaching and practice of a great German surgeon: he has made this subject of appliances peculiarly his own, and gives us not only an insight into Continental work, of which we know far too little, but also the benefit of his own experience. It would be childish to complain that British types of apparatus receive little attention; this is not an encyclopaedia but an account of personal work all the more valuable because much of it is unfamiliar to British surgeons. But it is a pity that he gives the impression that he knows nothing of the work of Hugh Owen Thomas, who more than any other man placed the use of appliances on a scientific basis.

Dr. Jordan is a plaster enthusiast. He likes the surgeon to make a positive cast for nearly every type of appliance. To us this seems strange, for it is the exception rather than the rule for our instrument makers to work from a plaster positive except for celluloid and block leather splints, where it is indispensable. And there is no doubt

that in many cases perfect appliances can be made from measurements alone, just as a well-fitting suit of clothes can be made without the tailor requiring a plaster cast of his client. Furthermore, a plaster cast, by representing soft parts as being hard and resistant, may sometimes be misleading, as the artificial limb maker knows so well. But it is useful to ponder over Dr. Jordan's insistence on this point. There are far too many fair and good appliances about and not enough excellent ones; and it is possible, in fact probable, that the more generous use of plaster positives would lead to better work. It would undoubtedly make for more co-operation between surgeon and instrument maker, and no one would welcome this more than the latter.

The arrangement of the book is in the main regional, and the various types of apparatus are described in relation to body mechanics and the requirements of the local lesion. Then come details of the construction of the appliances; many of them are familiar, but a number, particularly those for the lower limb, are designed with an ingenuity and skill that could come only from intelligent and single-hearted devotion to this neglected branch of therapeutics. Illustrations, all excellent, are numerous. The author was fortunate in getting a special grant to cover the considerable expense that they entailed; it was money well spent. This is a remarkable and valuable book; it may not make a wide appeal, but it will be appreciated by all who are lovers of their craft, whether surgeons or instrument makers—and it is in their hands that the happiness and comfort of the crippled patient rest.

### DIETETICS

*Nutrition and Diet Therapy. A Textbook of Dietetics.* By Fairfax T. Proudfit. Seventh edition. (Pp. 923; 64 figures. 14s. net.) London: Macmillan and Co. 1938.

This is an elaborate textbook of dietetics written by a trained practical teacher who has modified the present edition to adapt it for the course and examination requirements of the United States National League of Nursing Education. The general principles of nutrition are first stated: how energy is supplied to the body, the types of foodstuffs and their fuel value, the importance of minerals, water, and vitamins. The normal requirements of the body in health, planning meals for the family, and especially the feeding of children, are dealt with on clear and detailed lines, the author adding a chapter on how to adapt the constituents of diet to meet the tastes and customs of emigrants from abroad who have not already been assimilated into the life of the U.S.A. The next section gives details of practical work for the dietist under training, the equipment of kitchens and management of supplies, and a large number of recipes for preparation of foods. These parts are all handled in an interesting and up-to-date manner, offering many suggestions for variety.

The larger part of the book is taken up with the principles and practice of diet therapy, the general methods of dieting the sick, and details of the application of these methods to individual ailments. Some diseases, such as diabetes, especially lend themselves to elaborate dietetic treatment. The discussion of the indications—the foods to be allowed, those that are permitted, and methods of serving them palatably and with sufficient variety—is well done. Even recent results of treatment of deficiency diseases are made use of; and there are many pages of elaborate analyses of food showing not only their protein, carbohydrate, and fat content, their calorific value and mineral constituents from the Atwater and Bryant and

U.S. Department of Agriculture publications, but also the excess of acid or base, and content of vitamins A, B, C, D, and G. The book is thus based on the practice and requirements of workers in the United States, but can be read with interest and profit by all who have to do with the instruction of dietists or who work in hospital dietetic departments. It is probably too full and detailed to be used by general practitioners, who need a more summary treatment of the greater part of the matter covered and more immediately utilizable diet lists to hand to their patients.

### NASAL TUBERCULOSIS

*Tuberculose et Tuberculides Nasales.* By J. Margarot and J. Terracol. (Pp. 356; 38 figures. 60 fr.) Bordeaux: Delmas, Editeurs. 1938.

In the latest addition to the long series of International Oto-rhino-laryngological Monographs published by Delmas, Professor Margarot and Professor Terracol of the University of Montpellier deal with tuberculosis and the tuberculides of the nose. In the first part, which may be regarded as introductory, there is a full account of the modern views on immunity in relation to tuberculosis; especially difficult to interpret with certainty are the skin reactions to tests with tuberculin and also the mechanism of reinfections supervening upon latent or upon healed lesions. This portion gives a valuable and unbiased account of these vexed questions, with special attention naturally to the forms of infection with an attenuated virus. There follows an elaborate clinical study, profusely illustrated, of lupus and other forms of tuberculosis of the nose and its immediate neighbourhood. In the third part the attenuated infections with tuberculosis are described. The sarcoid of Besnier-Boeck is apparently accepted as belonging properly to this classification and is fully described in this section, but the difficulties connected with the aetiology and pathogenesis of this rather mysterious disease are not dismissed lightly. The fourth part concludes with a full account of the general and local treatment.

There is some unavoidable repetition in a book so specialized in character, and some of the clinical illustrations might be regarded as repetitive also, but the authors have supplied in a monograph of reasonable size an authoritative account of a group of diseases which present many unsolved problems to the pathologist and many difficulties to the clinician. It is to the latter, however, that the book is addressed, and it should prove a welcome help to dermatologists and rhinologists.

### MARRIED HAPPINESS

*Psychological Factors in Marital Happiness.* By Lewis M. Terman. Assisted by Paul Bутtenwieser, Leonard W. Ferguson, Winifred Bent Johnson, and Donald P. Wilson. First edition. (Pp. 474; 28 figures. 24s.) London: McGraw-Hill Publishing Company. 1938.

Dr. Terman and his collaborators have analysed the answers to a questionnaire sent to 792 married couples representing a sampling of urban and semi-urban population of middle and upper middle cultural levels in California. It is easy to criticize the value of statistics based on material collected in this way, but it is difficult to see how information on the results of marriage can otherwise be obtained. Therefore while we may have to take the results set forth in this book with a certain amount of reserve, they are none the less interesting and valuable. It is interesting but perhaps not surprising to note that the happiness of one spouse is by no means always dependent on the happiness of the other, and that

the differences between the happy and the unhappy follow a different pattern for husbands and wives. The results of the inquiry upset many preconceived ideas. For example, it is found that if there are individual marriages that are made more happy by the presence of children these are offset by others made less happy, and the authors conclude that much nonsense has been written about the risks entailed by marrying on inadequate income or by marrying out of one's age or educational class. Similarly the risks of early marriage, brief premarital acquaintance, inadequate sex instruction, adolescent "petting," and a history of sex-shock on the part of the wife, have been much exaggerated.

While sexual factors are important they are less so than psychological and cultural factors, but they are apt to get the blame when psychological adjustments are poor. A subject which receives a good deal of attention is inadequate orgasm in women; this would seem to depend on deep-seated variants, since it is subject to remarkable and unexpected differences which are quite independent of many factors such as sex education, sex freedom, or even sex inclination.

This book certainly merits the close study of all those who are interested in medical psychology, and since, as the authors say, the findings cannot be regarded as conclusive it must act as a stimulus to further research.

### SHOCK

*Shock and Related Capillary Phenomena.* By Virgil H. Moon, A.B., M.Sc., M.D. (Pp. 442; 30 figures; 5 charts. 21s. net.) London: Oxford University Press. 1939.

During the great war the problem of shock and its treatment received the attention of a commission of experts who reported on the various factors which contributed to the development of this condition. Much has been done of recent years to elucidate their exact role, but there has been a tendency on the part of investigators to stress the importance of one or other of them rather than to determine the actual mechanism of shock production.

The hypothesis that loss of blood fluid through the capillary walls is the essential factor in shock has been gaining support recently. Many investigators have come to the conclusion that mere mechanical loss of fluid in a traumatized area is not in itself sufficient to explain shock, and the diminution of circulating blood volume which is so characteristic of the condition is produced by some other mechanism. All those who are interested in traumatic and other forms of shock will find in Professor Moon's book a clear account of recent experimental investigations; and, if he has put forward the thesis of capillary atony and leakage as the essential feature of shock, it is not to be regretted, for it will bring about a much-needed reorientation of ideas on this important problem. There is a good bibliography.

### REFRACTION OF THE EYE

*Refraction of the Eye.* By Alfred Cowan, M.D. (Pp. 320; 172 engravings, 3 coloured plates. 21s. net.) London: Henry Kimpton. 1938.

Thirteen years' experience as a teacher in the Graduate School of the University of Pennsylvania is a warranty of the value of the work of Dr. Alfred Cowan on the refraction of the eye. In some three hundred pages he gives a complete and informative account of the human eye and of its reaction to light, and the work is done as well as could be desired. First he deals with the nature of light and with reflection and refraction, then with the characters of lenses, and finally with the reaction of the