little, if anything, to the comfort of the patient. Attempts to transplant the ureters into the sigmoid or rectum have sometimes succeeded, but the great objection to all operations of this kind is the very serious risk of infection spreading along the ureter to the pelvis of the kidney.

It is essential that the valvular action of the ureteral orifices should be preserved, and this can apparently be secured by the operation described by Maydl in 1896, in which the trigone of the bladder is transplanted into the sigmoid flexure of the rectum. Such an operation was recently performed by myself, and the result up to the present time has been completely satisfactory.

A girl, aged 6, was admitted to the East Suffolk Hospital in May, 1920; the operation was performed on June 2nd. The upper three-quarters of the bladder was completely removed by a semicircular incision through the skin just outside the junction with the vesical mucous membrane, extending into the peritoneal cavity; the incision was carried across the base just above the trigone, and the abdominal cavity plugged with a gauze pad.

The base of the bladder, an elliptical area of 1½ in. across by ¾ in. vertically, including the trigone and the ureteral orifices—situated ¼ in. from each end of the transverse diameter—was then raised by dissection, care being taken to avoid stripping the ureters and interfering in any way with their vascular and nervous supply. A loop of the sigmoid could easily be brought down to the level of the raised trigone. The loop being clamped, a longitudinal insertion was made along it through the sero-muscular coat, and the posterior surface of the upper margin of the portion of bladder was sewn to the bowel about ¼ in. from this line by a continuous Lembert suture of fine silk. The bowel was then opened and the mucous membrane of the bladder and bowel were sewn together by a continuous catgut suture passing through the whole wall of each viscus, exactly as in the ordinary operation for gastro-jejunostomy. The silk suture was then continued for the remainder of the circumference through the sero-muscular coat of the bowel and muscular wall of the bladder, in the same way as the operation of gastro-jejunostomy is completed, so that the bladder wall formed part of the wall of the sigmoid, completely closing the gap. The bowel was replaced and the gap in the abdominal wall resulting from the removal of the bladder closed by silkworm sutures. The patient made an excellent recovery; there was no shock and the convalescence was normal.

At the present time—more than five months after the operation—the patient is perfectly well and happy, with a soundly healed scar. The bowel has retained the urine without the slightest difficulty; there has been no leakage or incontinence. The urine is retained all night, from 9 p.m. to 7 a.m., and during the day is passed at intervals of four or five hours.

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Reports of Societies.

"DOUBLE UTERUS."

AT a meeting of the Edinburgh Obstetrical Society, held on December 8th, 1920, with Dr. WILLIAM FORDYCE, President, in the chair, Dr. D. ROBERTSON DOBIE read a paper on pregnancy and labour in a double uterus. He discussed the different ways in which this condition may impede labour, and described an illustrative case. On examination after the onset of labour the vagina was found to be blocked by what seemed a pedunculated mass. At a later examination only did the actual condition become clear. By this time the foetal head had come down, but it was held by a band, like a strong adhesion, crossing the vagina. This was the septum between the two cervices, and had to be divided before delivery was possible. The extraction was then accomplished with forceps. After delivery the pedunculated mass that blocked the canal in the early stages was found to be the unimpregnated uterus, the cervix of which had been driven down to the vulvar outlet.

Dr. HAULTAIN referred to the great difficulty in diagnosis presented by these cases. He mentioned a case where the unimpregnated half of the uterus had been mistaken for a fibroid and had been removed. Dr. BALLANTYNE pointed out that the expression "double uterus" was a misnomer, as the condition was really one of two half uteri.

Dr. HAIG FERGUSON referred to a case in which the patient aborted from one half of the uterus at three months and six months later was delivered of a full-time child from the other half. Dr. LACKIE recorded a case where a thick band, similar to that in Dr. Dobie's case, blocked the canal. In another case the patient menstruated from one side one month and from the other side the following month.

Dr. H. R. A. PHILP then gave a communication on obstetric practice amongst the Akikuyu tribe of Kenya Colony, British East Africa.

He described the ceremonies which are carried out at the initiation of the girls into the tribal life. The most barbarous of these consists in the removal of the external genital organs. The girls are lined up in a sitting posture with the legs separated, whilst an old woman passes from one to the other and, regardless of their cries, removes the labia with a sweep of her knife. This is an invariable practice in the tribe, although the missionaries are making every effort to stamp it out. Another barbarous custom is the sending of difficult labour cases into the bush to die.

Reviews.

ORTHOPAEDIC AND REPARATIVE SURGERY.

MORE than fifty surgeons have combined to make public the fruits of their experience of modern orthopaedic and conservative surgery in the two volumes of *Chirurgie Réparatrice et Orthopédique*,[1] published under the direction of Messrs. JEANBRAU, NOVÉ-JOSSERAND, OMBREDANNE, and DESFOSSES, so that this work may be almost considered as a system of reparative surgery. The preface, in which it is truly said that the advance in the treatment of injuries, which took place during the war, must be maintained for the benefit of the injured in peace time, is for the rest a paean of triumph of French surgery; for it all advances made during the war are claimed; no credit, so far as we can find, is given to allied or enemy surgery. But this is a harmless exhibition of national vanity which may be pardoned in the circumstances and which does not seriously detract from the value of the book as a guide to treatment, seeing that the various authors, while sufficiently patriotic, do not hesitate to quote the names of alien surgeons.

It is difficult within the scope of a review to criticize a work of this magnitude adequately, but an attempt to indicate its merits is possible. It deals with the treatment of wounds and injuries of every description in war and peace, in an introduction and sixteen chapters. In addition, it contains an article of 47 pages by Professor Jeanbrau on French war pensions, and the text of the law of March 31st, 1919, on this subject is printed as an appendix. A bill has been introduced in the Senate to extend the provisions of this law to the civil population and to provide the necessary special clinics.

In the introduction Dr. Lemaitre discusses the general principles of the modern treatment of wounds, laying more stress upon the removal of injured tissue and even on excision than on irrigation methods, such as that of Carrel, in the treatment of infected wounds. Professor Patel deals with the operative and orthopaedic treatment of war fractures and the application of these methods to civil practice. In this connexion it is as well to note that in France "orthopaedic" is used as contrasted with "operative" to denote treatment by the use of instruments alone, a sense which is happily obsolete in this country and in America.

Dr. Ledoux-Lebard defines the general principles of the radiological localization of foreign bodies and the proceedings necessary for their extraction. The chapters by Professor Ombredanne on the late removal of projectiles, and particularly those chapters concerned with plastic surgery, on which he is an acknowledged authority, are very valuable. The several chapters on orthopaedic and prosthetic apparatus are welcome, for these are subjects not adequately dealt with in surgical works in the English language. In these chapters Ducroquet, Calvé, A. Trèves, Nové-Josserand, Hendrix, and others describe not only suitable apparatus, but the principles upon which they should be constructed.

Dr. Roux-Berger contributes an interesting and lucid article on the sequelae of wounds of the chest and their treatment by the methods which constitute one of the

[1] *Chirurgie Réparatrice et Orthopédique.* Publié sous la direction de MM. E. Jeanbrau, P. Nové-Josserand, L. Ombredanne, et P. Desfosses, Secrétaire de la rédaction. Paris: Masson et Cie. 1920. 2 vols. (Roy. 8vo. pp. 671: 518 figures, 7 plates. 80 francs net.)

striking advances made by surgery during the war. The boldness of conception and skill in execution of this branch of surgery is well brought out by the descriptions and excellent illustrations in this chapter. Sicard and Froelich write on the post-traumatic sequelae of injuries of the spine and of the contents of the spinal canal, and the latter has some useful pages on the so-called spontaneous lesions of the vertebral column which should be distinguished from the results of traumatism.

The abdomen, which offers so wide a field for surgery in primary lesions, does not bulk largely in reparative surgery. Ventral hernia and artificial anus and their cure, and urethral fistula are the only subjects in this chapter, and the last seems to be hardly correctly described as an abdominal lesion.

Osteo-articular lesions necessarily occupy much space. The treatment of ankylosis, of malunion of fractures, of pseudarthrosis in all its forms and of flail joints receive full notice from a number of authors.

Professor Lambret's article on cinematization of amputation stumps is short, but to the point, and we agree with his conclusions. The suggestions of Vanghetti have been put in practice for at least five years, but we are not yet in a position to estimate their practical value. This, as Professor Lambret says, is largely due to the want of satisfactory prostheses for these cases. The technique of the operations for the provision of plastic motors has been worked out and may be considered established; it is comparatively easy thus to procure adequate and resistant sources of power, but until satisfactory prostheses are available we are compelled to suspend judgement on this subject.

The production of this work, with its wealth of excellent illustrations, redounds to the credit of the publishers and editors who have been so enterprising as to undertake it and carry it through to so satisfactory a result. We have only one complaint to make, and when we call attention to the fact that an alphabetical index is lacking, we do so in the hope that this serious defect will be remedied in the next edition.

ENLARGEMENT OF THE PROSTATE.

To grow old gracefully is the hope of most men, but to grow old healthfully is the expectation of few. It is a source of immense satisfaction that surgery can do so much to make the old age of many men happy. When one reads in the new edition of FREYER'S *Clinical Lectures on Enlargement of the Prostate*[2] the grateful letters and comments of many of the patients to whom prostatectomy has given a new lease of life one feels that much good, after all, is being done, and the unpalatable memories of failures are forgotten. The operation of suprapubic prostatectomy associated with Sir Peter Freyer's name may now be regarded as standardized, to use a commercialism. Certainly in this country no other operation has anything like the same vogue, and the only comments in the past few years have been in the direction of prevention of such complications as haemorrhage and post-operative obstruction, and the advisability of doing a two-stage operation. There is no need to call attention to particular points in these lectures. Suffice it to say that they are written in racy, vigorous style, the details of cases cited are invariably interesting, and the work is founded on 1,600 cases carefully noted and honestly followed out to their conclusion. The book is one which certainly every surgeon ought to know and one which every general practitioner will find helpful.

This edition contains a new chapter on cancer of the prostate, a condition which is apparently more common than was formerly supposed. In Freyer's experience 13.8 per cent. of all his cases were clinically malignant, all but two cancer. He acknowledges that microscopic examination was not made in every case operated on, so that possibly the percentage is higher; indeed, it is so suggested by Albarran and Hallé, who argue that "adenomatous transformation of the prostate in advanced age is in a number of instances the primary stage of a malignant degeneration." We have known of other surgeons who have been surprised to find that a small tough prostate difficult to remove, but regarded as simple pathologically, proved on examination to be cancerous. It would be well worth while submitting every prostate removed by operation to microscopic examination. The diagnosis of cancer of the prostate is by no means certain. If in a patient presenting the usual symptoms of prostatic enlargement one learns that "the symptoms have run their course rapidly in a few months only instead of as many years"; if the rectal examination discovers the prostate to be hard, irregular, immobile, tender to touch; and if catheterization is painful and the instrument meets with sudden resistance in the prostatic urethra, then the conclusion that the prostate is cancerous may safely be drawn. As to operability, experience shows that in some few cases enucleation is practicable and apparently curative, but the surgeon will require to determine the matter for himself with one finger in the rectum and the other in the bladder through the suprapubic wound.

The chapter is a welcome addition to the book, though, being cast in the form of a clinical lecture, admittedly it touches not much more than the fringe of the subject. It is not unreasonable to hope that doctors will make rectal examinations more frequently, and so capture these early cancerous prostates and give both patient and surgeon a chance.

[2] *Clinical Lectures on Enlargement of the Prostate.* With a description of the author's operation of total enucleation of the organ. By Sir Peter J. Freyer, K.C.B., M.D., M.Ch., LL.D. London: Baillière, Tindall, and Cox. 1920. (Demy 8vo, pp. viii + 174; 56 plates. 10s. 6d. net.)

ANATOMY AND MUSCULAR EXERCISES.

THAT a second edition of *Applied Anatomy and Kinesiology*[3] should have been called for within two years of the appearance of the first is evidence of a demand for anatomical knowledge on the part of those who teach the various systems of physical exercises now practised, and also on the part of their pupils. We agree that our knowledge of muscles, particularly of their combination to produce familiar actions, is not well set out in our standard textbooks of anatomy, and that there is great need for a book such as this in which movements of the living body form the theme and the dissected body the dissertation.

In spite of very excellent illustrations and clearly-worded explanations, Professor BOWEN'S second edition suffers from the defects of the first: it is based on a superficial knowledge of the physiology of the human body, which, in our opinion, is even more important to an instructor in gymnastics or graduated exercises than a complete mastery of the anatomical details relating to muscles, bones, and joints. To exemplify the reason for making this criticism the reader may be referred to the chapter devoted to the upright posture. There the student is taught that in some respects the human body is not adapted for the upright posture—as shown by the lack of valves in the inferior vena cava and the presence of valves in intercostal veins where they are regarded as unnecessary. The inferior vena cava is part of the great venous cistern from which the heart is filled; even moderate exercise leads to the distension of this cistern; violent and prolonged exercise has been known to cause it to rupture. If valves were provided they would be not only useless, but injurious. The valves in the intercostal veins, as in veins arising in and passing among muscles have nothing to do with the upright or horizontal posture, but are provided to secure the passage of blood towards the heart during intermittent and alternating action of the adjacent muscles. No one can teach or practise exercises intelligently unless the significance of venous valves has first been grasped.

The "location of the vermiform appendix" is also cited as another instance of imperfect adaptation to upright posture in man. "The upright position shifts this structure from the highest level of the digestive tract in the quadruped to the lowest in man, where it is subject to much greater pressure and liable to irritation by fragments of food forced into it by changes in pressure." Such a statement will find no support from what is known of the comparative anatomy or of the physiology of the intestinal tract.

We might have cited statements equally ill founded from the chapters devoted to the spinal musculature, to the action of the muscles of the leg and foot in maintaining the weight of the body in standing and in walking, or in

[3] *Applied Anatomy and Kinesiology: The Mechanism of Muscular Movement.* By Wilbur Pardon Bowen, M.S., Professor of Physical Education, Michigan State Normal College. Second edition. Philadelphia and New York: Lea and Febiger. 1919. (Med. 8vo. pp. 334: 197 figures.)

the chapter devoted to breathing and breathing exercises. The book in many respects is so good that we hope in a future edition the principles of physiology which underlie the practice of "kinesiology" may receive a rendering more in keeping with modern knowledge.

DISEASES OF AVIATORS.

AVIATION demands a high degree of physical fitness and mental balance from those devoting themselves to it, whether in war or peace. Drs. MAUBLANC and RATIÉ, with several years of experience behind them, have written a short and lucid account[4] of the methods they employ in the medical examination of aviators and candidates wishing to take up aviation; they lay stress on the importance of the following points in any such examination. Candidates should be rejected if their past history gives evidence of major or minor epilepsy, tuberculosis, recent malarial infection, or war wounds leaving behind them definite evidences of injuries to nerves, joints, the central nervous system, or the lungs. Similarly, valvular disease of the heart, high arterial blood pressure, or marked functional cardiac disturbances, emphysema, or tuberculosis of the lungs, the presence of extensive pleural adhesions, definite diseases of the abdominal viscera generally, diminution of the visual fields or marked ametropia, deafness, liability to attacks of vertigo, and inadequate response to tests of sensorial acuity or variations of equilibrium, are all adequate causes for the rejection of any candidate. The authors devote forty pages to the description of their various methods of testing the reactivity to sensory impressions (visual, auditory, tactile) and to changes of equilibrium; these methods are applied to candidates who have passed the more medical examination indicated above. The book is clearly written, and should be in the hands of all medical men who have to do with aviators or the selection of candidates for aviation.

The book, *Aviation Disease, its Cause and Remedies*,[5] by Professor CRUCHET and Dr. MOULINIER, deals with a subject studied by these authors since the year 1910. The symptoms of the disease come on chiefly at the higher altitudes of flight and in the course of long flights; they are aggravated by unduly rapid descents. They consist of such things as dyspnoea, palpitations, nausea, deafness, psychical defects of vision, loss of the sense of orientation, headache, lumbago, and increasing slowness of ideation, or somnolence. Naturally, the clinical picture varies in different instances. Discussing the causes of aviation disease, the authors lay great stress on the rise of minimum arterial blood pressure that always is observed in it, but is not observed in the well-trained and fit aviator; other factors, such as fatigue, exposure to cold, intellectual and emotional exhaustion, temporary or permanent disorders of the auditory apparatus, and undue rapidity in descending to earth, are contributory but less important in the development of the disease. In effect, the whole syndrome is brought about by unduly rapid rising to high altitudes, as in mountain sickness, or unduly rapid descent. Discussing the training of aviators with a view to rendering them less liable to the physical and cardiac fatigue that lead to the development of the symptoms described above, the authors emphasize the importance of giving rest to aviators as soon as they develop evidences of such fatigue, whether mental or bodily; it may be added that a good picture of the mental exhaustion typically demanding a change of occupation in an aviator is furnished in some chapters of Mr. J. E. GURDON'S *Over and Above*,[6] a book describing the experiences of an aviator flying in France during the recent war. Professor Cruchet and Dr. Moulinier produce a considerable amount of evidence in favour of the views they advance, and their little book will be read with interest by aviators and the medical men who have charge of them.

[4] *Guide pratique pour l'Examen Médical des Aviateurs des Candidats à l'Aviation et de Pilotes.* Par Drs. Maublanc et Ratié, Médecins du Centre d'Aviation de Chartres. Paris: J. B. Baillière et Fils. 1920. (Imp. 16mo, pp. 109; 25 figures. Fr.3.)

[5] *Le Mal des Aviateurs: Ses Causes et ses Remèdes.* Par Dr. René Cruchet, Professeur agrégé à la Faculté de Médecine, et Dr. René Moulinier, Médecin de la Marine. Paris: J. B. Baillière et Fils. 1920. (Post 8vo, pp. 94; 12 figures. Fr.3.)

[6] *Over and Above.* By John E. Gurdon. London: W. Collins, Sons and Co., Ltd. 1919. (Cr. 8vo, pp. v + 250. 7s. 6d. net.)

MIDWIFERY.

DR. JELLETT'S *Short Practice of Midwifery*[7] is so well known that the appearance of an eighth edition calls for little more than mention. The text has been thoroughly revised and, where necessary, brought into line with the practice taught and carried out at the Rotunda Hospital, Dublin, during the author's term as Master. Many of the illustrations have been redrawn and improved, and Dr. English has added a most interesting statistical table in the form of an appendix, which shows the nature and proportion of all the cases treated in the Rotunda during the masterships of Sir W. J. Smyly, Dr. R. D. Purefoy, Dr. E. H. Tweedy, and Dr. Jellett. As the grand total of cases so reviewed is over fifty-one thousand, it will be realized that few similar tables are available from which more reliable data can be drawn. To teachers this appendix will prove of the greatest value and interest. From every point of view this remains one of the best of the smaller textbooks of midwifery in the language.

An equally well known book in its sphere is Professor JARDINE'S *Practical Textbook of Midwifery for Nurses*,[8] which now makes its appearance in a seventh edition. In substance it remains much as it was in the last edition, and the teaching contained in it has proved so suitable to the needs of so many nurses that not much change could be either expected or desired. The new edition will continue to be the *vade mecum* of many maternity nurses, and they will find in its pages practically all that they require to know either for the practice of their profession or for the examinations of the Central Midwives Boards.

A SYNOPSIS OF MEDICINE.

BOOKS which attempt to condense into a short "compendium" the whole survey of medicine turn out, as a rule, to be cram books for the student, and more often than not, bad cram books. Dr. TIDY, in his *Synopsis of Medicine*,[9] has succeeded in compiling a better compendium than seemed possible to expect. In compact form this volume furnishes an admirable *index medicus*. The author, in his preface, expresses very modest hopes that his book may sometimes prove useful "to those who have to revise rapidly their knowledge of medicine in general or of some disease in particular." Its usefulness will not be so limited. The scope of the work is far wider than in the majority of similar books. To take a single example: "Tuberculosis" is discussed more fully and a good deal more intelligibly than in the average textbook. Modern experiments and modern theories are adequately presented. Or again, in the section on diseases of the nervous system, the anatomy and physiology of the nervous system will be found clearly described and ably linked up with the clinical manifestations of pathological changes. The discussion of carbohydrate metabolism in reference to diabetes is wonderfully clear and comprehensive. Throughout the book "treatment" meets with ample consideration, and this fact alone will enhance its value enormously for the busy practitioner. Dr. Tidy is to be congratulated on having written a good book and given it a good index. The publishers have so contrived, without sacrificing the quality of either the paper or the type, that it will slip into a fair-sized overcoat pocket.

NOTES ON BOOKS.

DR. GABRIEL BIDOU is known as the author of a monograph on instrumental orthopaedics, which was reviewed by us in our issue of August 2nd, 1919, p. 138. In the pamphlet he has recently issued on the action of artificial muscles[10] the same subject is dealt with, and a walking instrument for a case of paralysis of the lower limb is

[7] *A Short Practice of Midwifery.* By Henry Jellett, M.D., F.R.C.P. Ire. Eighth edition, revised. London: J. and A. Churchill. 1921. (Demy 8vo, pp. 564; 236 figures. 18s. net.)

[8] *A Practicat Textbook of Midwifery for Nurses.* By Robert Jardine, M.D. Seventh edition, revised and enlarged. London: Henry Kimpton. 1920. (Cr. 8vo, pp. 311; 60 figures. 7s. 6d. net.)

[9] *A Synopsis of Medicine.* By Henry Letheby Tidy, M.A., M.D., B.Ch.Oxon., F.R.C.P.Lond. Bristol: J. Wright and Sons, Ltd. London: Simpkin, Marshall, Hamilton, Kent and Co. Toronto: Macmillan Co. of Canada, Ltd. 1920. (Cr. 8vo, pp. xv+952. 25s.; postage 1s.)

[10] *Des action musculaires artificielles.* Par Dr. G. Bidou. Paris: "La Vie Médicals." 1920. (Fcap. 8vo. 15 pp.: 4 figures. 2 plates.)