

REVIEWS OF BOOKS : BOEKRESENSIES

MANUAL OF ANATOMY

A Manual of Human Anatomy. Vol. I. Thorax and Upper Limb. By J. T. Aitken, M.D., G. Causey, M.B., F.R.C.S., J. Joseph, M.D., M.R.C.O.G. and J. Z. Young, M.A., F.R.S. Pp. vii+162. 36 Figures. 14s. net plus 7d. Postage Abroad. Edinburgh & London: E. & S. Livingstone Ltd. 1956.

Contents: I. General Introduction to the Thorax. II. The Chest Wall. III. The Pleura. IV. The Lungs. V. The Mediastinum. VI. The Heart. VII. Other Mediastinal Structures. VIII. The Lymphatic Drainage of the Thorax. Suggestions for Osteology and Surface Anatomy Classes. IX. General Introduction to the Upper Limb. X. The Anterior Aspect of the Shoulder Girdle. XI. The Contents of the Axilla. XII. The Posterior Aspect of the Shoulder Girdle. XIII. The Shoulder Joint and its Stabilising Muscles. XIV. The Muscles Acting on the Elbow Joint. XV. The Forearm and the Back of the Hand. XVI. The Elbow and Radio-ulnar Joints. XVIII. The Palm of the Hand. XVIII. The Joints of the Wrist and Hand. XIX. The Cutaneous Nerve Supply. XX. The Lymphatic Drainage of the Upper Limb. Suggestions for Osteology and Surface Anatomy Classes. Index.

A Manual of Human Anatomy. Volume II. By J. T. Aitken, M.D., G. Causey, M.B., F.R.C.S., J. Joseph, M.D., M.R.C.O.G. and J. Z. Young, M.A., F.R.S. Pp. viii+180. 53 Figures. 16s. net+7d. Postage Abroad. Edinburgh & London: E. & S. Livingstone Ltd. 1956.

Contents: I. General Introduction. II. The Back of the Neck and the Trunk. III. The Spinal Cord and its Membranes. IV. The Face and Scalp. V. The Front and Sides of the Neck. VI. The Mouth and Tongue. VII. The Deep Dissection of the Neck. VIII. The Muscles of Mastication and the Mandibular Joint. IX. The Intracranial Region. X. The Orbital Cavity and Eyeball. XI. The Ear. XII. The

Inferior Surface of the Base of the Skull. XIII. The Pharynx and Related Structures. XIV. The Larynx. XV. The Nasal Cavities. XVI. The Joints of the Cervical Vertebrae. XVII. The Lymphatic Drainage of the Head and Neck. XVIII. The Sensory Nerve Supply. Suggestions for Osteology and Surface Anatomy Classes. Index.

A Manual of Human Anatomy. Volume III. Abdomen and Pelvis. By J. T. Aitken, M.D., G. Causey, M.B., F.R.C.S., J. Joseph, M.D., M.R.C.O.G. and J. Z. Young, M.A., F.R.S. Pp. viii+135. 29 Figures. 12s. 6d. net+6d. Postage Abroad. Edinburgh and London: E. & S. Livingstone Ltd. 1957.

Contents: I. General Introduction. II. The Anterior Abdominal Wall. III. The Abdominal Cavity. IV. The Abdominal Cavity (continued). V. The Abdominal Cavity (continued). VI. The Kidneys and Ureters. VII. The Diaphragm, Adrenal Glands and Abdominal Sympathetic Nervous System. VIII. The Posterior Abdominal Wall. IX. The Pelvic Viscera and Peritoneum. X. The Perineum. XI. The Perineum (continued). XII. The Prostate, Urethra and Vagina, Functional Aspects of the Pelvis and its Organs. XIII. The Muscles, Vessels and Nerves of the Pelvis. XIV. The Lymphatic Drainage of the Abdomen and Pelvis. Suggestions for Osteology and Surface Anatomy Classes. Index.

A Manual of Human Anatomy. Volume IV. Lower Limb. By J. T. Aitken, M.D., G. Causey, M.B., F.R.C.S., J. Joseph, M.D., M.R.C.O.G. and J. Z. Young, M.A., F.R.S. Pp. viii+117. 36 Figures. 12s. 6d. net+6d. Postage Abroad. Edinburgh & London: E. & S. Livingstone Ltd. 1956.

Contents: I. General Introduction to the Lower Limb. II. The Pelvic Girdle. III. The Lateral and Posterior Aspects of the Hip Joint. IV. The Anterior and Medial Aspects of the Hip Joint. V. The Hip Joint—Structure and Movements.

VI. The Knee Joint. VII. The Ankle Joint. IX. The Foot. X. Posture and Walking. XI. The Cutaneous Nerve Supply of the Lower Limb. XII. The Venous and Lymphatic Drainage of the Lower Limb. Suggestions for Osteology and Surface Anatomy Classes. Index.

A Manual of Human Anatomy. Volume V. Central Nervous System. By J. T. Aitken, M.D., D. A. Sholl, B.Sc. and J. Z. Young, M.A., F.R.S. Pp. vii+140. 40 Figures. 12s. 6d. net + 6d. Postage Abroad. Edinburgh and London: E. & S. Livingstone Ltd. 1957.

Contents: I. General Introduction. II. Identification of Parts of the Brain and its Early Development. III. The Coverings of the Brain and the Spinal Cord. IV. The Blood Vessels and the Cranial Nerves. V. The Examination of the Nervous System. VI. The Spinal Cord. VII. The Medulla Oblongata. IX. The Pons. X. The Midbrain (Mesencephalon). XI. The Forebrain (1). XII. The Forebrain (2). XIII. The Histology of the Cerebral Cortex. Index.

The strenuous demands of a modern medical curriculum has unfortunately brought pressure to bear on the basic medical disciplines, anatomy and physiology, so that there is often a tendency to 'cut out' details in anatomy, to concentrate on what may only be required of the student in the clinical years and to increase the emphasis on function. The former two tendencies lead to many difficulties. Modern anatomical teaching should first endeavour to inspire the student to 'understand' human structure on the basis of 'pure' anatomy so that he may be able to apply his knowledge to function and disease and then, as a corollary, to train his mind in the principles of anatomy by using the logical approach of development (both embryological and evolutionary) structure, functional aspects and probable growth-phases or changes.

The authors have mainly followed this approach and have produced a reasonable dissection programme and a readable description of the parts dissected. The instructions are simple, the sketches large and clear. Medical schools have various methods of dissection and those that contemplate recommending these manuals to their students will have to organize a 'practice run' to determine whether the plan in the manuals suits their purposes (i.e. as regards the number of cadavers available, suitability of integration with the physiology course). The reviewer is favourably impressed not only by the authors' style and presentation but especially by the 'practicals' at the end of each volume where surface markings and osteology are planned for small tutorial classes. These would reduce the teaching load for these practicals would require only competent student demonstrators or junior lecturers.

The authors acknowledge that their course on neuro-anatomy (for University College, London) may be in excess of what may be considered necessary elsewhere for the second medical examination; but why all the emphasis should be placed on the central nervous system and so little on the autonomic nervous system is difficult to understand in the light of the aims set out in the preface of each volume.

The reviewer feels obliged to take the authors to task on a few points: In each preface they state that 'the study of each part can thus be undertaken with some knowledge of the functional implications of the anatomy and not as a mere exercise of memory. Much detail has been omitted'. Very few anatomists can honestly aver that their experience of anatomy has not come about by much exercising of the memory. Functional aspects are of

assistance, but the bases of *understanding* in anatomy are thorough dissection, clear visual memorizing, correlation of features and a solid foundation of embryology. Furthermore, although it is 'popular' to add occasional functional aspects of structures in modern text-books, anatomy as a discipline cannot at the same time embody physiology—the two should be integrated in the lecture theatre. The amount of functional aspects of, say, the duodenum, presented in these manuals may link it with the pancreas and gall-bladder, but cannot claim to frame its position in the student's mind as regards its relationship to peritoneum, the right kidney or the transpyloric plane. However, no one can deny the importance of providing the opportunity for the student to appreciate the mechanical and kinesiological aspects of the locomotor apparatus so that he may grasp the essentials of myology, arthrology and osteology.

This argument leads on to the second sentence quoted above. How much should be omitted? This depends on the number of hours available and not on the commonest diseases encountered in the clinical years. The reviewer considers that the authors have almost struck a reasonable balance, but he feels that if repetitions (and not of major features at that) had been avoided and additional facts inserted in their place, many sections would have been of more value to the student. A second-year anatomy course can be made 'attractive' by sacrificing some detail but this should not be done on the altar of over-applied anatomy. For example, in volume I, much of the general introduction is repeated in the following chapter and the repetition is not particularly of 'essential' points. Instead of repeating fig. 1 (vol. 1) as fig. 15 (60 pages on), it may have been more advisable, say, to provide a diagram of the structure of a vertebra to illustrate the text. The illustration of the ossification centres of the os innominatum may have given way for one showing the attachments to the bone, especially in the light of such a loose phrase as 'This is the tensor fasciae latae, which arises from the iliac crest in front' (Vol. IV, page 6), which by its vagueness will disturb the student more than ease matters for him. No mention is made of the communications between the superficial and deep veins of the lower limb.

A few of the weak features are the over-simplification of the lymph drainage and the scanty descriptions of the coronary arteries, the mammary gland, the internal ear, the peritoneum, and the costo-vertebral joints, while some of the surface anatomy instructions are cumbersome, e.g. of the heart. There are minor errors throughout the manuals, but when the reviewer considers the books in their entirety, these criticisms do not weigh heavily against the distinct value of the series, and he has no hesitation in recommending them to South African anatomy departments (especially those with small staffs) for a 'trial run' with a view to permanent adoption. However, he advises that these manuals should be considered purely on their merits as laboratory guides. They in no way replace the standard text-books. They may 'cover' the course, but the majority of South African students would need to refer to their text-books to supplement their knowledge to meet the requirements of the second-year examiners.

The manuals are well printed and wire-backed, each having a differently coloured cardboard cover, which unfortunately will wear badly.