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Studies in the History and Method of Science. Edited by CHARLES SINGER. Vol. II., pp. xxii + 559, with 55 Plates and 82 Illustrations in the text. Oxford: Clarendon Press. 1921. Price 48s. net.

The first volume of this series appeared in 1917, and its great success has led to the production of the present sumptuous book and to the editor's statement that these Studies will in future appear regularly as an annual volume. The work comprises a collection of essays upon fifteen unconnected subjects in the history of science, biological, mathematical, physical, and speculative. Of these subjects the most elaborate and instructive essays deal with "Greek Biology and its Relation to the Rise of Modern Biology," by Charles Singer; "Roger Bacon and the State of Science in the Thirteenth Century," by Robert Steele; "Leonardo as Anatomist," by H. Hopstock; "The Scientific Works of Galileo," by J. J. Fahie; "Steps leading to the Invention of the First Optical Apparatus," by Charles Singer; "A Sketch of the History of Palæobotany," by E. A. Newell Arber; and "Archimedes' Principle of the Balance and some Criticisms upon it," by J. M. Child. The plates, coloured and plain, dealing with Ancient Greek and Early English representations of medicinal plants and animals, with Leonardo da Vinci's anatomical notes, with the instruments invented by Galileo, and with early palæographical engravings, are admirably reproduced and add greatly to the value and attractiveness of the book.

It will be noted that the balance between the history of different branches of science is well maintained; and thus in view of the great and constantly increasing interest that is now manifested in most of these, the present volume is bound to appeal to a very wide circle of scientific workers. As the editor remarks, "We may well look to this new orientation of scientific teaching to counteract the effects of the regrettable but real decline in the study of the older humanities," and both he and the publishers are to be congratulated upon the continued success achieved by this second volume.

Clinical Surgery by Case Histories. By A. E. HERTZLER. 2 vols, pp. 1106, with 483 Illustrations. London: Henry Kimpton. 1921. Price £5 net.

A concatenation of case-reports accompanied by photographs may be a basis on which individual experience is built, but in the crude form here presented scarcely merits publication and is not a means by which instruction can be conveyed to others. A
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chapter on "general principles" precedes the collection which is amusing if not instructive reading. Much of surgical interference is necessitated on account of "perverted physiology," hence, "physiology, not anatomy, becomes the guiding science," and the surgeon is advised to "act with boldness and dispatch when time is more important than detailed knowledge." "The besetting sin of the surgical profession," we are informed, "is undue speed," which may "be due to an innate tendency which finds satisfaction only in slashing and spattering of blood." We congratulate ourselves that this type of "surgeon" is still unknown here. Surely it is a physiological inaccuracy to write of an endocrine "system." A reperusal of 2 Cor. i. 17 will convince the recorder that the passage "yea yea, and nay nay" though "biblical" is not an "injunction."

The case-histories which occupy a thousand pages give quantity not quality and are not for emulation, and few of the photographs are more than moderately good; some exceedingly poor. Half the number of recorded cases with twice the work on each would not raise this book to the level of the good American publications. The sections on the tongue and mouth, and on the generative organs, fare better because photographs are replaced by wood-cuts, while the fairly uniform standard of photomicrographs suggests an extraneous selector.

The reviewer is puzzled by many terms, e.g., "benign epithelioma," "plant physician," etc., but the repetition of "trachina" and "trachinous" for the well-known nematode worm and the affection it produces indicates want of knowledge rather than want of care.

The recorder (we cannot call him "author") seems to think that professional brethren in difficulty will turn over the pages of this book until an illustration suggests a similarity and will then read the case-record, but this is subversive of all scientific principles.

Studies in Deficiency Diseases. By Robert McCarson, M.D., D.Sc., F.R.C.P. Pp. xvi + 270, with 82 Illustrations. London: Henry Frowde and Hodder & Stoughton. 1921. Price 30s. net.

The idea that disease might be due to the absence of certain essential substances from the diet is by no means new, for it was suggested by Blane in regard to scurvy more than a century ago. It is only, however, during the past few years that direct proof has been given of the existence of a definite class of deficiency diseases, due either to the lack of certain vitamins or certain amino acids in the food. There has already collected on the subject of deficiency diseases a large and rapidly growing literature to which the present work forms a highly important contribution, since it serves both to
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emphasise the knowledge already acquired, and the ignorance which still exists in regard to normal metabolism. Although deficiency diseases are more commonly recognised as occurring among natives in tropical or sub-tropical climates, the possibility of such diseases arising in Western communities is by no means negligible, since with modern methods of manufacture there is considerable chance of destroying the vitamins in our food. Colonel M'Carrison's experiments on pigeons, monkeys, and guinea-pigs when fed on ill-balanced diets lacking in one or more vitamins are considered in detail, considerable space being naturally devoted to a consideration of vitamin B on which much of the author's work has been carried out. Of special interest in this connection are the pathological changes which occur in the intestine and above all in the endocrine organs. The increased load of adrenalin in the adrenals in experimental beriberi is extremely striking, though whether this increase can be directly correlated with the occurrence of oedema is still somewhat doubtful. Although beriberi and scurvy must be looked upon as due to the absence of vitamins from the diet, the etiology of pellagra and rickets still remains unsettled. In regard to the former disease, Colonel M'Carrison rather favours the view of Goldberger that the condition is due to a combined deficiency of proteins and vitamins. In a final section the practical applications of the experimental results are indicated. Although at the present time there is probably an exaggerated tendency to ascribe to a lack of vitamins all and every disease of unknown etiology, nevertheless there are good grounds for believing that in many pathological conditions a deficient or ill-balanced diet may play a not unimportant part. Colonel M'Carrison's book will prove of inestimable value to those who are especially interested in deficiency diseases, but it should be read with care by all who desire to keep themselves well informed of modern advances in the science of nutrition.

Human Physiology. By Professor Luigi Luciani, Director of the Physiological Institute of the University of Rome. Edited by M. S. Pembrey, M.A., M.D. Vol. V., Metabolism, Temperature, Reproduction, etc. Pp. 452, with 158 Illustrations. London: Macmillan & Co. 1921. Price 30s. net.

The fifth and last volume of the veteran Professor Luciani's treatise on Human Physiology covers a considerable range of subject matter. The first three chapters deal with metabolism, thermic economy, and the theory of human nutrition. The discussion of metabolism is introduced by an interesting account of the history of research into the subject, and a criticism of the various methods
of estimating the intake and output balance. The chapter on nutrition provides a lucid and highly practical discussion of the best known dietetic theories, which is calculated to be most useful to the practitioner. The most recent work on vitamins is not included, but the necessary references are provided in a footnote by the editor.

The next few chapters cover the subject of reproduction. Following upon a description of the anatomy and physiology of the male and female organs of generation, the physiology of pregnancy, parturition, and the puerperium are taken up. All these subjects are most adequately described, and in every section the practical application of the science is kept clearly in the forefront.

This naturally leads on to a chapter on the stages of life and death. The physiology of the new-born infant is followed by discussions of the physiological characteristics of the various periods of childhood, youth, maturity, virility, the critical age in man as well as in woman, the various theories of senility, and of the real nature of death. The last chapter is devoted to a comparative physiological study of the various human races, and to a critical examination of the different attempts at classification of them, which have been made by different authorities.

A bare enumeration of its contents is, however, by no means sufficient to indicate the value of this book. One is compelled in the first place to remark on the peculiar grace and charm of the literary style of the writing. The translation is masterly and has been performed with a rare sympathy. It is difficult to imagine that much of the perfection of the original can have been lost in the process. In the second place, the easy lucidity of the descriptions and the simple but skilful marshalling of all the salient points is impressive. The author writes throughout as one who remembers the practical application of his science, not alone to the science and art of medicine, but also to the art of living. The combination of these features with the erudition and great experience of the author put the work in a place by itself amongst modern text-books of physiology, and should suffice to secure for it a great welcome from multitudes of medical men and others who find the ordinary works on the subject so saturated with mathematical formulae as to be almost incomprehensible except by the elect.

Perhaps the chapter on the stages of life and death is the most fascinating in this volume, and all practitioners will be interested in Professor Luciani's theory as to death. As an example of the truly philosophic breadth of view which characterises the whole volume, one might cite the pages upon the fear of death which is inherent in Man, along with the account of the "almost joyous"
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death in Rome of F. W. Myers, the author of *Human Personality*, and the reproduction of Domenichino's famous picture of St Jerome receiving the *Viaticum*—examples respectively of triumph over the fear of death through a living belief in immortality based on pure reason, and through a similar belief based upon religious faith.

The present reviewer has not had the privilege of reading the first four volumes of this great work. It is an omission which he hopes to rectify at an early date. But if, as may well be believed, they are all on the same high plane of excellence as this last one, the whole work must easily rank as the most delightfully readable, lucid, and stimulating treatise on modern physiology which is available in the English language. The translator, editor, and publishers deserve the grateful thanks of the profession for placing Professor Luciani's work within our reach.

_Gout._ By LL. Jones Llewellyn, M.B.(Lond.). Pp. xviii + 469.
London: William Heinemann. 1920. Price 30s. net.

The essential nature of gout is a problem which is not yet definitely solved in spite of much discussion and research.

In this work are presented the various theories of gout which have been from time to time advanced, and the light thrown upon them by the progress made in the fields of bacteriology and bio-chemistry. The gradual differentiation of various other forms of arthritis and the demonstration of their causation by bacterial infection are contrasted with the reluctance which has been displayed to abandon the idea of the purely metabolic origin of gouty arthritis.

The rise of the infective theory of gout is sketched, and the writer declares his adherence to it. He believes that in gouty subjects there is an inherent abnormality of nuclein metabolism and an increased tissue affinity for uric acid, but that it is by the occurrence of infections or sub-infections in these subjects that their latent tissue peculiarities become manifest as gout. He adduces the presence, in most cases, of local foci of infection and the symptoms of fever, leucocytosis, and glandular enlargement, as supporting an infective element in the disease.

A considerable section is devoted to a clinical account of the malady and to its diagnosis. The detection of tophi is emphasised as the one reliable criterion for distinguishing gout from other forms of arthritis, skiagraphy failing to differentiate the joint lesions from those of rheumatoid arthritis. In this connection attention is drawn to the fact that tophi, in their early stages, are soft, largely fluid swellings, and aspiration with a hypodermic needle, with subsequent examination of the fluid for biurate crystals, is recommended in doubtful cases. Treatment, dietetic, medicinal, and hydro-therapeutic, is fully discussed.
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W. M. Beaumont contributes a chapter on ocular disease in the gouty. He finds that there is no specific "gouty" ocular disease. The book is a valuable presentation of the very complex subject with which it deals, and contains much of great interest and usefulness from a practical standpoint.

**Gonococcal Infection in the Male.** By Norman Lumb, O.B.E., M.B., B.Sc.(Lond.). Pp. xii., with 178 illustrations. London: John Bale, Sons & Danielsson, Ltd. 1920. Price 25s. net.

This volume is essentially a practical one, in which the author puts in clear and lucid terms the technique and methods which he has found most useful in the diagnosis and treatment of gonorrhoea and its complications. In addition to his own large clinical experience he has made a careful study of modern literature on the subject, extracts from which greatly enhance the value of the book.

Great importance is attached to urethroscopy, both in treatment and in the diagnosis of cure, and this section of the work is carefully written and well illustrated. While one may not agree with the author in some of the methods advocated, e.g., the use of silver nitrate in strengths of gr. x. to the ounce to abort an established urethritis and in the later stages to set up a chemical urethritis with a view to establishing the certainty of cure, these are minor points and militate little against the value of the work as one of the most practical and useful text-books that have appeared on this subject.

**International Clinics.** Thirtieth Series. Vols. I.-IV. Philadelphia and London: J. B. Lippincott Company. 1920. Price £2, 2s. the set of 4 vols.

The set of four volumes for 1920 are now published. Sections are devoted to every branch of medicine and surgery. Under the heading of Clinics several interesting articles appear. These for the most part quote a series of cases, their history and treatment. "Influenza and its Complications in Children" is reviewed in the light of recent epidemics and should prove of value. In Vols. 2 and 3 a new feature is introduced in "Industrial Surgical Clinics." The objects of these clinics is primarily to call attention to the diagnosis and treatment of surgical conditions resulting from industrial accidents; but the other questions, both medical and legal, which arise so frequently in this type of case are also considered. The illustrations in these volumes are without exception of a high order and add greatly to the value of the articles which they accompany. A general index is included.