

presented to the pathologist when he sets to work to determine the cause of death in any particular case.

A matter which strikes one forcibly and repeatedly in reading the book is its thoroughly practical nature.

The part on Bacteriological Methods is divided into four sections: the first on Culture Media, in the course of which the authors describe a simple method of preparing coagulated blood-serum tubes, a medium which they consider one of the most generally useful; the second on bacteriological examinations; the third on the methods of studying bacteria in culture, in which there are several ingenious and original ones, especially for anaerobic work; and fourthly a section on special bacteriology. It is in the matter of the serum-reaction that we have our only fault to find with the book; the method described is unsatisfactory because inexact, the dilution being only roughly carried out and not sufficiently accurately measured. The authors are evidently content with a dilution of 1 in 40 as evidence of the existence of typhoid fever, nor can we find any reference to the possible error introduced by a previous anti-typhoid inoculation.

In part 3 on Histological Methods the questions of the special conditions under which the various hardening and staining reagents are indicated are very fully detailed, including that of every tissue separately, and of mitosis, cancer bodies and special kinds of cells, including the malarial parasites. The book ends with a section on clinical pathology, such as the examination of pieces of skin removed during life, of uterine scrapings, of fluids obtained by puncture (including lumbar puncture) with the knowledge obtained by inoculation, or the isolation of the tubercle bacillus by digestion of the material in which it is embedded, and cytodagnosis, or the identification of the cause of an exudation by the cells which it contains, of sputum, of stomach contents, of urine and of faeces.

The book is well printed and bound, and the illustrations, many of which are original, are very good. We consider the book an acquisition to the library of any pathologist. Every Civil Surgeon in India is perforce a pathologist.

Examination of the Urine.—By G. A. DE SANTOS SAXE, M.D., Pathologist to the Columbus Hospital, New York City. A 12mo. volume of 391 pages, 76 figures, 8 coloured plates. W. B. Saunders & Co. Price \$1.50.

It is difficult to avoid the use of superlatives in reviewing this book. It is a clear, complete, and concise exposition of the subject and is brought quite up to date. A bare enumeration of its contents is as follows. After a short preliminary clearing of the ground the author deals very fully with the physical properties of the urine, and then passes to consider its "chemic" examination. The various proteids which may

be found in urine are detailed, and their relative importance, detection and differentiation fully described. The carbohydrates and their allies are next dealt with in the same exhaustive manner, and then urea and its congeners, and here is to be found a description of the quantitative test for the purin bodies, a matter likely to take an important place in uranalysis, and which is moreover very simple. The acetone group of substances is next considered and the diazo-reaction explained.

The microscopic examination of the urine is taken up with equal fulness and method, and the subject is fully illustrated by 26 figures and 6 coloured plates. The author lays special stress upon the identification of individual cells coming from different parts of the urinary and genital tract, and on the inferences to be drawn from their presence. An appendix describes the method of routine examination, and the apparatus and reagents required. The book contains misprints at pages 94 and 326, which will doubtless be corrected in a subsequent edition. They will not however cause confusion. The book is handsomely bound in soft leather, and printed on good paper with round corners. We have said enough to show the range of the book; we repeat that the method in which the subject has been treated is altogether admirable. We have read the book with great pleasure, and thoroughly recommend it as complete and essentially practical.

A Text-Book of Materia Medica.—For Pharmaceutical and Medical Schools, and for home study. By ROBERT A. HATCHER, Ph.D., M.D., and TORALD SOLLMAN, M.D. A 12mo. volume of 410 pages, 56 figs. W. B. Saunders & Co. Price \$2.00.

In this volume only the organic portion of the study of Materia Medica is considered. The book is written with the object of popularising the Laboratory method in the study of Materia Medica. The authors point out in the preface the great superiority of the objective over the didactic method in the study of any subject not only as a matter of training but as making the material more interesting and impressive, and they urge rightly that such is especially the case in attempting to learn Materia Medica, seeing that the almost proverbial subject can be directly traced to the neglect of objective study. Accordingly they set to work to devise a series of practical experiments by means of which the student might have the essential characteristics of drugs impressed upon his memory by means of a careful study of these in three directions, the naked eye study of the crude drugs, that of their microscopic appearances, and that of their chemic reactions.

They have found that by elimination of non-essentials the new method of instruction demanded little more time than the old, an important point in these days when the curriculum of the medical student is constantly tending to lengthen.

We cannot conceive a better way of getting rid of the tedious boredom of listening to a course of *Materia Medica* lectures than by substituting for them a practical course such as that laid down in this little book, truly a clothing of the dry bones of the subject with a little living flesh of interest; and a change likely to take it out of the category of those which are forgotten as the examination is over. We can recommend the book and its guiding principle to lecturers on *Materia Medica*. It is well bound in soft leather and the illustrations are very good. They consist principally of the microscopic appearances of sections of medicinal plants.

A Text-Book of Mechano-Therapy (Massage and Medical Gymnastics).—By AXEL V. GRAFSTROM, B.S.C., M.D. 12mo of 200 pages, 28 figures. W. B. Saunders & Co. 1s. Second Edition.

THE book consists, in essence, of two parts, although it is not actually so divided; the first treats of the mechanical methods adopted in massage and in medical gymnastics, is fully illustrated by original drawings, and will completely fulfil the intention of the author, that it should be useful to medical students, trained nurses, and medical gymnasts. A chapter on the effects of movements is sound reading. The rest of the book deals with the treatment by these means of diseases of the various organs, and here are met with statements which appear to be imperfectly founded on physiological knowledge, and in some instances to be in direct opposition to this. Such statements are:—"Vibration imitates almost to perfection the bioplastic movements, and so becomes the most natural procedure of massage." "Local massage of the chest will dissolve the mucus and aid the expectoration." Had the author confined himself to a statement of observed results instead of attempting to offer explanations which are likely to mislead the imperfectly medically educated persons for whom it is intended, the book would, we think, have been more useful.

Practical Application of Rontgen Rays in Therapeutics and Diagnosis.—By WILLIAM ALLEN PUSEY, A.M., M.D.; and EUGENE W. CALDWELL. 690 octavo pages, 195 illustrations. W. B. Saunders & Co.

THIS, the second edition of the book, has been considerably enlarged. It is in two parts; the first by Caldwell on X-ray apparatus and its use in diagnosis; and the second on the therapeutic application of X-ray.

In the first part all details of the various forms of apparatus by which X-ray tubes can be excited are minutely described, and the differences in the tubes themselves, and the reasons for these, are stated. These chapters are full of practical points and furnish precisely the information which will be desired by a civil surgeon who wishes to set up an X-ray apparatus. He

will find in the chapter on static machines and their management great aid in choosing the apparatus which he will probably have to decide upon as suitable for use in most civil stations. In the second part, that on the therapeutic application of the X-rays, there is much of extreme interest. Professor Pusey deals not only with the clinical aspects of the subject, which he copiously illustrates with photographs of lesions taken at intervals of time, forming a convincing adjunct to his written descriptions of the cases, but also with the pathological aspects which are illustrated by micro-photographs of sections of several portions cut out from the edges of a "carcinomatous ulcer" at different stages of its progress towards cure under the influence of X-rays. To read the description of a case, to see the photographs showing its naked-eye appearances on different dates, and to be presented at the same time with micro-photographs showing the minute changes which are taking place, the disappearance of the invading columns of cells, and their replacement by connective tissue, is to be convinced that in X-rays, if properly applied, we have a very powerful remedial agent. The variety of case which may be so benefited is very considerable. We have only one adverse suggestion to make, and this is that the book is very bulky. It is printed, both as regards type and pictures, on thick paper, a fact which probably is one of the chief reasons that the latter are so excellently reproduced, but which is a distinct disadvantage to the migratory medical man in India. It is, however, a minor one, and we feel sure that the purchaser of the book will feel that he has made a very excellent bargain.

Diseases of the Nose and Throat.—By D. BRADEN KYLE, M.D., Professor of Laryngology and Rhinology, Jefferson Medical College, Philadelphia, &c. Third Edition. 8vo. pp. 669, with 175 illustrations and 6 chromo-lithographic plates. W. B. Saunders & Co., 1904. Cloth \$ 4.00 net. Sheep, or half-morocco, \$ 5.00 net.

THIS is quite one of the best text-books on Diseases of the Nose and Throat in the English language. Though its size is considerable there is very little redundant matter in it. Its style is so good and its descriptions so clear and practical that it is a pleasure to read it. Unlike some American text-books moreover an added pleasure is to have no fault to find with *ars literarum recte ordinandarum*.

The book has reached its third edition so no detailed review of it is necessary. Its position is established and deservedly. The most important additions in this edition are in the chapters on keratosis, epidemic influenza, Gersony's paraffin method for correcting nasal deformities and on the treatment of carcinoma by the X-rays. For paraffin injections, Dr. Kyle prefers Quinlan's syringe, which is an ordinary glass antitoxin syringe with a needle of large