

occurred with the higher doses. The blood concentration was generally between 2 to 6 mg. per 100 cm.³; most often it was between 2 and 4 mg. Of the 83 cases, vomiting occurred in 7, skin rashes in 7 and fever in 7 (8.5 per cent), different cases being involved by the different affections. Four of the skin rashes resembled erythema nodosum; they appeared between the sixth and tenth days, the blood concentration being within the usual limits, and they disappeared within two days of stopping the drug. Similarly the drug-fevers were associated with average blood concentrations. No macroscopic haematuria due to sulphathiazole occurred; this freedom from urinary complications is attributed to the maintenance of a large fluid intake, over 100 ounces (about 2,800 cm.³), daily. The urine should also be kept alkaline. In some cases the concentration of drug in the urine rose as high as 450 mg. per 100 c.c., which is considerably above the saturation limit.

Thirty patients admitted for knee operations were given 10 gm. of sulphathiazole during the 18 hours before the operation. The blood levels ranged from 2.8 to 12 mg. per 100 cm.³, averaging 6.1 mg. The concentrations in the fluid of the knee joint were about the same, 80 to 86 per cent of the drug being present in the free form. In two cases in which the

joint fluids were septic, the same result was obtained as in uninfected joints. This shows that sulphathiazole passes readily from the blood into joint cavities.

In some patients the compound was given prophylactically, to prevent infection developing. For this purpose a blood level of 2 mg. per 100 cm.³ is desirable at the time of operation. The author's cases were not sufficient to assess the value of this procedure; but he notes that it did not prevent suppuration around pins in a significant percentage of cases.

In other patients the compound was given therapeutically, but the results are difficult to evaluate. The author gained the impression that sulphathiazole benefits wounds containing sensitive haemolytic streptococci, but bacteriological proof could not be obtained.

When the compound was applied locally, according to the author's technique (not described), it persisted as lumpy masses; in vaseline packs it often persisted for 2 to 3 weeks, and in bony recesses it has been observed after 6 weeks. In 6 patients, 1 to 4 gm. of the powder were spread round the wound in a thin layer; traces appeared in the blood after four hours and persisted for 14 days; the blood level never rose above 1.5 mg. per 100 cm.³. There was no constant effect, either deleterious or beneficial, upon epithelialization and the formation of granulation tissue.

Reviews

STITT'S DIAGNOSIS, PREVENTION AND TREATMENT OF TROPICAL DISEASES.—By Richard P. Strong, M.D., Sc.D., D.S.M., C.B. Sixth Edition. Volumes I and II. 1942. H. K. Lewis and Company, Limited, London. Pp. xv plus 871 plus xi in volume I. Illustrated. And Pp. vii plus from 872 to 1747 plus xi in volume II. Illustrated. Price, £5-5-0 for two volumes combined

The appearance of these two volumes on tropical medicine is an event of very great importance to all medical men in the tropics. Stitt's book on tropical diseases has enjoyed a world-wide reputation, probably second only to that of Manson's book, which was well deserved. It presents tropical medicine from the American point of view, which is not necessarily very different from that of the African and Asiatic points of view, but it is natural that there are here and there different emphases.

The present edition of Stitt's book is edited and largely re-written by Dr. R. P. Strong, Emeritus Professor of Tropical Medicine at the Harvard University. Dr. Strong has added as much as any living man to our knowledge of tropical medicine and it is very appropriate that he should assume the responsibility for this important book.

One cannot discuss the two volumes page by page though the reviewer would very much like to do so as he has spent some weeks perusing nearly every section most minutely. One can say that on the whole the information on every subject is both extensive and accurate. It is also presented in a very palatable form that will appeal to the student and research worker.

In nearly every subject, however, there is always some opportunity for difference of opinion and it is only natural that a writer will lay more emphasis on his own point of view. The malaria section is a very complete exposition of the subject and is entirely up-to-date; for example, he discusses in some detail the invasion of Brazil by *Anopheles gambiae*, imported from Africa. In the matter of treatment, Dr. Strong takes the older view regarding the value of large doses of quinine. This is not in concert with general world opinion on the subject, and it is a gospel that one would hesitate to preach at the present day, even if one's opinion did coincide with Dr. Strong's, in view of the very great quinine shortage.

The subject of blackwater fever is dealt with exhaustively and the modern point of view is well presented.

The section on trypanosomiasis is good, particularly that of the South American trypanosomiasis. One feels perhaps that a little less emphasis might be given to the question of goitre, and the inclusion of figure 52 showing a group of goitrous children conveys the idea that this infection actually causes goitre, whereas recent work suggests that the association of *Trypanosoma cruzi* infection and goitre is an accidental one.

The section on leishmaniasis is equally good and perhaps the writer has done almost more than justice to the work that has been done on this subject in India and particularly at the School of Tropical Medicine, Calcutta.

A few diseases like tularæmia and undulant fever have been given much more space than are usually given to them in textbooks of this kind. This is not said in any critical spirit; on the contrary we feel that when a writer has paid special attention to any one subject he should give the reader the advantage of his special knowledge. This is particularly true in the case of undulant fever; probably nowhere else can such a comprehensive account of undulant fever be found as in this textbook.

Another similar example is Bartonellosis. The reviewer has acquired a much clearer mental picture of this unique disease from Dr. Strong's account than he ever had before, from other sources.

Cholera and the dysenteries are given very adequate treatment. To the epidemiology of cholera considerable space has been devoted and here as elsewhere good use is made of the epidemiological data collected by the Health Organization of the League of Nations. These chapters are again up-to-date, for there is nearly a page devoted to sulphanilyl-guanidine.

The chapter on the rickettsias is an excellent one. It is interesting that trench fever is not included in this chapter but is given a separate one. It seems doubtful to the reviewer if this disease deserves a separate chapter in a textbook of tropical medicine. It does not occur anywhere at the present day—and we are in the fourth year of a war—and it never was a tropical disease. When it could be fitted into the chapter on rickettsias there was some excuse for its

inclusion, but Dr. Strong won't give it place here, a decision which may or may not be a sound one.

The first real criticism applies to the section on leprosy. In this chapter there are certain points which are not usually presented in textbooks and which are very useful, but on the whole we feel that the chapter has been written from one point of view and is based on the experience of American workers, most of whom happen to have worked mainly in countries where leprosy is seen mainly or solely in its severest forms and where compulsory isolation is practised, so that the reader in India will find himself saying 'this picture may represent leprosy in some parts of the world but it does not describe leprosy as we see it here'. There are many mis-statements regarding leprosy in certain parts of the world and particularly in India; for example, the number of lepers in India is given as 100,000 which was an estimate made in 1893, and there are no references whatsoever to more recent estimates which often mention figures ten times this figure. There are many other examples where emphasis is given to old observations and to theories which have been superseded and abandoned. In the section on the pathology of this disease, there is no clear distinction made between the nodular and neural types which show very different histologies. Under clinical manifestations, the same criticism is applicable; no mention is made of the high incidence of very mild non-progressing cases of leprosy seen in some countries. Under nerve leprosy it is stated that wrist drop is not uncommon and that foot drop is rare, whereas actually the opposite is the truth. Under symptoms, it is stated that in the majority of cases of leprosy beyond the primary stage some rise of temperature is constantly observed. Experience of leprosy workers in general is that apart from the lepra reaction and a secondary infection, there is usually no rise of temperature whatsoever.

The account of the treatment of the disease is, on the whole, good but contains some inaccurate and misleading statements. It includes the remark that 'Engel Bey recommends . . .'. Engel Bey wrote 40 years ago and on the whole much too much emphasis is laid on older forms of treatment that have been superseded.

References are always a problem in a book of this kind. It is a problem to which there is no real solution and one sympathizes with the writers of certain standard textbooks who have solved it by giving no references at all. Dr. Strong's attempt at a solution is not very satisfactory. He has referred to innumerable workers in the text, but has only included a fraction of these amongst his references, and he has not been very careful to verify these. Perhaps the reviewer was unlucky, but the first six references he looked up were wrong in some important point.

To avoid closing this review on a querulous note, the reviewer will summarize his criticism by saying that the present edition has surpassed its predecessors in every way, in the amount of information, in the accuracy of its presentation, and in the general soundness of the views expressed, and that it has securely established the place of this book in the front rank of books on tropical medicine. As a book of reference on the whole subject of tropical medicine, it will be considered the best there is by the majority of workers in this field.

L. E. N.

TEXTBOOK OF PATHOLOGY.—By Sir Robert Muir, M.A., M.D., Sc.D., LL.D., F.R.S. Fifth Edition. 1941. Edward Arnold and Company. Pp. vii plus 991. Illustrated. Price, 35s.

MUIR's book needs no introduction. It is one of the most reliable textbooks on the subject. Although first and foremost a Scottish student's book, it has been popular with medical students far and wide.

The present edition incorporates the chief advances which have been made in the various branches of pathology during the five years since the previous edition was published. A certain amount of re-modelling

has been made and some portions have been re-written, while a few descriptions have been condensed; this has afforded space for the new matter without increase in the length of the book.

The volume is divided into sections of general and special pathology, seven chapters (284 pages) being devoted to the former and thirteen (686 pages) to the latter. The sections on tumours, haemopoietic system and endocrine glands are particularly good. The account of nephritis is full and up to date. In the treatment of less important diseases and some of the tropical conditions, the author seems to have exercised considerable restraint; this will not however affect an average student. The important additions to this edition include regional ileitis, vitamin K and its relation to coagulation, and to haemorrhage in obstructive jaundice, Albers-Schonberg disease, the genetics of haemophilia, etc.

Illustrations are numerous, well chosen and clearly reproduced. There are a number of references in footnotes to important monographs and special publications.

It is a remarkable achievement on the part of publishers to have been able to bring out such a well-printed volume with good paper in war time and give it to us at the pre-war price.

R. C.

DISEASES OF THE RESPIRATORY TRACT.—By

Jacob Segal, M.D., F.A.C.P., F.A.C.C.P. 1941. Oxford University Press, London. Pp. ix plus 172. Price, 10s. 6d. Obtainable from Oxford University Press, Bombay and Calcutta

THIS synopsis or outline of diseases of the respiratory tract has little to commend it to the student for whom it appears to be intended.

It has the appearance of having been dictated from lecture notes to a non-medical secretary and of not having been revised as to spelling. Nor have the proofs been carefully read. There are, for instance, four spelling errors in the first fourteen pages—viz., 'Sica', 'particulary', 'atack' and 'diagnoss'.

Items for criticism occur upon thirty-one of its pages.

Although the symptoms and signs of lobar pneumonia are listed under ten headings no mention is made of the most important sign, bronchial breathing, or of other auscultation phenomena.

Pyrexia and tachycardia are not mentioned in massive collapse of the lung, though they occur early and characteristically.

The sulphonamides are mentioned but no dosage is given.

Fever, chills (!), vomiting and pain in the extremities are amongst the list of symptoms of acute follicular tonsillitis.

C. M. S.

OBSTETRICS.—By Harvey Clock Williamson, M.D., and George Schaefer, M.D. 1941. Oxford University Press, London. Pp. viii plus 113. Price, 10s. 6d. Obtainable from Oxford University Press, Bombay and Calcutta

THIS book is a synopsis of obstetrics and is not claimed by the authors to be a textbook on that subject. It is more essentially a synopsis than most books that bear that title, but every other page has been left blank, leaving ample space for more notes or sketches by the student. No unnecessary words are used and only important facts are included, but the subject-matter is well classified and should be of great help to the student in systematizing knowledge acquired by wider reading. The text includes recent advances in obstetrics such as the chemotherapeutic treatment and roentgenographical classifications of pelvic types by Caldwell and Maloy. This book should be of particular value to the student working for his qualifying examinations, and, though it will not teach him the art of obstetrics, it should be of considerable help in the final days of preparation for his examinations.