

Mahan's stretcher for transportation of wounded on boardship is described by Dr. C. V. Gravatt. The description given by Captain G. J. Newgarden of an emergency litter is too long to be here quoted—it is made of the half of a shelter tent which each U. S. A. soldier carries with him, and with little trouble it can be converted into a cot, a litter, or a small tent. Major T. J. Sullivan's article on a "Primary Antiseptic Dressing" contains nothing new, but bears testimony to the value of the first aid dressing. In an article on contagious disease among troops, Dr. C. P. Wertenbaker, of the United States Marine, gives practical advice on the management of contact and suspect camps, but the article has nothing very original in it. We note that the suspects camp is to be placed to the windward of the contagious camp, probably on account of the possible convection of small-pox by the wind. For cholera he recommends mosquito-curtains and war against flies—which he recognises correctly as possible conveyers of the virus. Lieutenant-Colonel A. A. Woodhull, Deputy Surgeon-General, a well-known writer on medico-military matters, gives an interesting account of the way a general hospital in the field should be "run."

Dr. John V. Shoemakes' article deals with the care of the sick and wounded after the war, and Major N. Del Rio, an Army Surgeon of Mexico, gives a chapter on tetanus in military surgery. He points out the dangers of dirt infection of wounds, specially ground on which horses have been camped. He also alludes to the danger of tetanus in wounds produced by the Chigoe or Jigger, "nearly one-half of the cases I have observed in Vero Cruz have been due to Chigoes." In the discussion on this paper, Colonel Nicolas Senn stated that the tetanus microbe being anærobic, it does not flourish in superficial wounds in the presence of oxygen, but rather in deep penetrating wounds. Senn gave us his opinion that the anti-tetanic serum was useless, and that he had more faith in parenchymatous injections of a 5 per cent. solution of carbolic acid.

Captain W. C. Borden's paper on military surgery gained the Sander gold medal in 1900. It is too long to give even a brief synopsis of—but it deals in a very complete way with modern rifle bullet wounds and is admirably illustrated. He gives a rule in italics as follows:— "*A lodged missile should never be removed in the field unless aseptic technique is available, or the danger arising from its presence is greater than that likely to result from the infection which will occur as the result of operating under septic conditions.*" As regards the use of the X-rays, he notes that "the X-ray apparatus is an additional incentive to surgeons to operate under conditions not ade-

quately aseptic." The X-rays should *not* be used at the front or in the field hospitals. (See above, p. 466.)

There are many other articles in this valuable collection which we would be glad to quote from, but want of space forbids. The whole volume is good, and we strongly recommend it to the attention of military surgeons in India.

Elements of Practical Medicine. By DR. A. H. CARTER, M.D. 8th Edition. Crown 8vo. Price 10s. 6d. London: H. K. LEWIS, 1901.

FOR the last twenty years Carter's "*Elements of Practical Medicine*" has been well-known to many generations of medical students. It is almost superfluous to say another word in its favour, but a perusal of the eighth edition enables us to say that the volume has improved even on its predecessors, and more than ever fulfils the design of its author to provide a simple introduction to the study of medicine as distinguished from a mere epitome. Large portions of the eighth edition have been re-written to bring it up to modern requirements. The section on skin diseases is very good, it has been written for the author by Dr. W. D'Este Emery, and is an admirably simple and clear description of all the ordinary diseases of the skin. The section devoted to nervous diseases is also good, and the student who has mastered it is well prepared to study the subject further in more pretentious treatises. The special subjects of tropical disease are well handled if briefly; but it is strange to read a chapter on malaria in 1901 in which the word 'mosquito' is neither mentioned nor referred to, otherwise the clinical aspects of the malarial fevers are briefly and clearly given. As in former editions, there is an ample therapeutic index, providing samples of prescriptions found useful by the author and others. This usually proves of interest to students. We have no hesitation in recommending this volume as a very sound introduction to the study of medicine, and congratulate Dr. Carter on its continued popularity in the face of many rivals.

Malarial Fevers and Malarial Parasites in India. By Major ANDREW BUCHANAN, I.M.S., M.A., M.D., Offg. Civil Surgeon, Nagpur, C. P. Nagpur, October 1901, Central Jail Press.

WE have much pleasure in introducing this small but valuable book to our readers. Major Andrew Buchanan, I.M.S., of Nagpur, has, it is known, been working enthusiastically at the question of malaria for the past few years, and the present volume is the result of his labours. Much has been written on malaria within recent years, and our columns have chronicled many interesting observations and discoveries, but no book has seen the light which professed

to be based on actual experiences and observations made in India, and to deal with the malarial fevers as we see them daily in India. Major A. Buchanan's book is not, of course, a complete record of the malarial fevers of all parts of India, but it is an account of careful and continued observations on them in the Central Provinces. Perhaps one of the most remarkable features in the preface is the acknowledgment of the help given the author by six Burman prisoners of the Central Jail, Nagpur. The preface says "a number of Burmese prisoners were trained to use the microscopes, and they very soon became expert in detecting and distinguishing the various kinds of parasites. Others were trained to take temperatures so that the record of parasites could easily be compared with the record of temperatures; one Burman, Ko Tha Aung, took an exceptionally keen interest in the subject, and carefully studied most of the literature that has appeared in medical journals on malaria." We, therefore, cordially support Major Buchanan's suggestion that something might be done to lessen the term of imprisonment of such useful men.

The best way to give our readers an idea of the amount of valuable matter in this book is to very briefly run it through chapter by chapter. The first begins by giving a clear account of the different malarial parasites, each being well illustrated by a series of original coloured drawings. The next chapter deals with the classification of the parasites, and Major A. Buchanan states that the kinds of malaria found in Nagpur tally almost exactly with those found in Italy, he having found quartans, benign tertians, malignant tertians and pigmented quotidian. One form was not found at Nagpur, *viz.* the unpigmented quotidian. The chapter then goes on to state the differences between these forms and classifies their distinguishing characters. Chapter IV is an important one. It has generally been believed till recently that Dr. Crombie's statement as to the rarity of the quartan varieties was true, but during the past year this has been proved not to be the case. We have already published several cases of quartan fever found in the Calcutta Medical College Hospital, recorded by Dr. U. N. Bramachari, and have records in our box of several more cases (soon to be published) from the same hospital, and in the volume under review we have an account of nine more cases of quartan, with drawings of the parasites and with the temperature charts, which Major A. Buchanan has met with in Nagpur. Another point of considerable clinical interest is that, contrary to a somewhat general belief, these quartans are particularly amenable to quinine, hence many a case viewed only clinically, may well have had its development put an end to by a timely large dose of quinine.

Chapters V and VI deal with the benign tertian parasites, and it is shown that in their earlier stages these parasites are easily distinguishable from the quartan variety. It is noted that flagella are not often seen in benign tertians; a curious contrast is also noted between the benign and malignant tertian parasites: the benign parasites causes the invaded corpuscle to swell, whereas the malignant tertian causes it to undergo a sort of crenation. The important points about benign tertian fever are (1) the tendency for the paroxysms to recur, and (2) the tendency for the temperature to run up high, temperatures of 105°F. and 106°F. not being uncommon (see charts in book), but to deserve the name benign, on the other hand, the duration of the paroxysm is much shorter, and it is rare to find fever on the intervening days, moreover the body weight decreases little if at all. In tertians too the day may change, which, it is here shown, is also true of the tertian fever of sparrows.

Chapters VII to X deal with the important subject of the wrongly named "æstivo-autumnal fevers," due to the malignant tertian parasites. These parasites are found in four distinct stages or conditions illustrated in the book, *viz.* (1) young forms, unpigmented and pigmented, (2) the crescent bodies, (3) the flagella bodies, and (4) the rosettes. The rosette stage is very seldom seen in the peripheral blood in malignant tertian cases, Major Buchanan having only seen it two or three times in several hundred specimens examined. Chapter VIII deals with the interesting subject of the stage of what our author has called the "flagellar fever" of malignant tertians, a subject he has already discussed in our columns this year (*supra*, pp. 164 and 256). No attempt that we have seen has been made to upset the truth of these observations of Major Andrew Buchanan on this "flagellar fever," though it is obviously of considerable importance, and in opposition to the well-known statement of Manson that exflagellation *always* occurs after the blood has been drawn. We recommend all interested in the subject to carefully read Chapter X in which our author has attempted to reconcile the various views regarding malignant tertian fever.

Chapter XI is devoted to malaria in sparrows, and points out the extraordinary number of similarities between the quartan and benign tertian infections in man and in sparrow. Our author does not say directly that the malaria of sparrows is the same as that of man, but hints that if the parasite is the same (with differences owing to the different blood of sparrows) it might account for the number of cases of men attacked with fever who have been working in the jungles or on *shikar* in places far away from human habitation.

In the previous chapter and in No. XII Major Buchanan deals with the "antiplasmodists,"

chief among whom is Dr. E. Lawrie, late of Hyderabad. It was hardly necessary; Dr. Lawrie on malarial questions is in the minority which consists of one.

Chapter XIV discusses the question, to which we have devoted much space during the past year, *viz.*, mosquito malaria. Major A. Buchanan gives tables showing from October 1900, till October 1901, that the monthly total of admissions from fever in the Central Jail, Nagpur, closely coincided with the total numbers of anopheles caught. From February to July there was hardly an anopheles to be caught, they began to appear about the middle of August, and by the end of August the malarial fevers began to prevail. The seasonal prevalence of fevers in Nagpur closely corresponds to that of Rome, only that in Rome the maximum is attained in August, in Nagpur in September or October; just as Captain Liston, I.M.S., pointed out was the case in Ellichpur—(*I. M. G.*, October 1901).

Major A. Buchanan's well-known experiments on experimental malaria are here detailed (see also *I. M. G.*, 1901, p. 127). It is also to be noted that though these experiments were successful with benign certain parasites, they failed entirely in nine experiments on quartan fever in men who volunteered. The exact species of anopheles experimented with was not noted at the time, but the following anopheles species are usually found in Nagpur, *viz.*, *A. costalis*, *funestus*, *superpictus*, and *Rosii*.

The seasonal prevalence of the various types of infection may be roughly given as follows: quartan from August to April; benign tertian from September to end of January; malignant tertian, August till end of February; quotidian were very rare, only a few cases being found in September.

We have not space to give details of Major A. Buchanan's views on treatment and prophylaxis, we may note however a fact (which is in exact accordance with a recent control experiment of our own at Alipore) that for prophylaxis big doses of quinine alone are useful, a few grains daily are not so good, in our experience, as two xv grain doses a week. In Nagpur also experiments were made on keeping a certain number of prisoners inside mosquito nets from sundown to daybreak, and though their blood was carefully examined, none of those using mosquito curtains have had fever.

We have now sufficiently indicated the amount of valuable information in this little volume, it is one which we can strongly recommend to our readers. It is most creditable to Major Andrew Buchanan that, in addition to his numerous other duties as civil surgeon of a large station like Nagpur, he had the energy and found the time to conduct such a long series of important and valuable observations

on a subject which is of the utmost importance to all residents in India.

Current Literature.

OBSTETRICS AND GYNÆCOLOGY.

Post-partum Hæmorrhage.—Under the name paralysis of the region of placental insertion, O. Schulze describes a case of post-partum hæmorrhage of peculiar origin. He refers to the fact that during pregnancy the uterine wall develops less in the portion where placenta is attached than elsewhere, and that when the placenta is adherent, the portion of uterine wall left after its separation is thin. Failure of this thin area to contract produced hæmorrhage in the case he reports, though the uterus was contracted and bleeding from other points was excluded. A soft, depressible portion of the uterine wall was then felt posteriorly and to the left. Internal examination revealed the presence of this area and absence of retained secundines. It did not contract when stimulated. Hæmorrhage was finally arrested by uterine tamponade with solution of ferric chloride.—(*American Journal of Obstetrics*, August 1901.)

Evils of the Ovarian Pedicle.—Rosen shows from statistics that the usual pedicle of an ovarian tumor or of a diseased tube or extra-uterine sac, tied in one piece, is a source of danger. Hæmorrhage, free and fatal or else in the form of a hæmatoma liable to suppurate, is not rare. Obstruction usually late has been noted nine times in 685 recent cases. Parametric and peritoneal exudations are very common in thick pedicles and greatly retard convalescence. Jordan of Cracow modifies the customary treatment of the pedicle. It is held with one or two forceps and divided on the distal side of these. The big vessels are then secured, forceps relaxed and any vessel that bleeds, is tied. The peritoneal folds of the pedicle are sewn over its bare surface. The advantages of the new method are self-evident.—(*British Medical Journal*, August 31st.)

K. N. DAS, M.D.

ANNUAL REPORTS.

THE GENERAL HOSPITAL, MADRAS.

The annual report on this institution is as usual full of medical and surgical interest. The hospital is a large one having had in 1900 a daily attendance of 439 out-patients, and some 404 in-patients, the highest figures ever recorded in this hospital. Out of 7,613 in-patients 605 died or 7.9 per cent. A special register is kept of "moribund and septic" cases, 82 deaths from these conditions are noted, more than half being due to tetanus and cancrum oris. The total number of operations was 5,958, omitting unimportant ones, the greater operations of surgery have not decreased.

The changes in the medical staff are many, no less than 32 names being given in the Report (p. 11). Turning to statement III A (p. 22) we find the following more important operations mentioned among a host of lesser ones; excision of tumours, 69; abscesses, 1,166; excision of lymphatic glands, 102; erosion of glands, 32; neurectomy, 1; removal of bone fragments, 100; wiring of bones, 5; arthrotomy, 13; arthroctomy, 9; amputations, 83; operations on brain and skull, 19; tracheotomy, 3; pleural paracentesis, 28; laparotomy, 24; gastrostomy, 1; enterectomy, 1; enterotomy, 2; colotomy, 2. For hernia, by herniotomy, 21; by taxis, 3; radical operation, 60; abscess of liver, 18 (of which 7 were cured) (of the 60 radical hernia operations only 1 died). Cholecystotomy, 2; perisplenic abscess, 1; exploration of renal tumour, 2; nephrolithotomy, 1; omentum sewn to wall for ascites, 1 (relieved). Operations for fistula in ano, 32; for piles by ligature, 3; by excision, 7; by cauterization, 23. For stone, 1 suprapubic, 3 by litholapaxy. For urethral stricture by gradual dilatation, 33; by forcible dilatation, 18; by internal urethrotomy, 4; by external urethrotomy, 35. Circumcision for phimosis, 106; paraphimosis,