universally known as a tuberculin syringe, he displays considerable optimism over the subject of sterilization, and fails to mention whether the vaccine should be given intradermally, subcutaneously, intramuscularly, or intravenously.

THERAPEUTIC USES OF INFRA-RED RAYS.—By Annandale Troup, M.C., M.B., Ch.B. (St. And.). Second Edition. 1933. The Actinic Press, Ltd., London. Pp. 90. Illustrated. Price, 6s. 6d.

THE reviewer did not have the privilege of seeing the first edition of this useful little book, but he gathers that the present edition is rather fuller than the first, though its form is much the same. Dr. Troup is a worthy champion of the infra-red rays; he thinks that the harmful effects attributed to them are often exaggerated, and he does not think that their value as a therapeutic agent has been sufficiently appreciated, the credit due to them often being claimed for other associated rays.

The book is essentially a 'primer' on infra-red rays; it tells in simple words all the medical man needs to know about them—their place in the spectrum, their physical properties, the methods by which they can be applied, their therapeutic indications, and their contra-indications. Their most important use is the alleviation of pain and the curing of painful conditions.

The simplicity of the book does at times border on naïveté, as in the following quotation:—'Infra-red rays, if administered in the form of general infra-red radiation, bring about a marked decrease of the white blood (leucopenia). They have therefore been used successfully in the treatment of leucæmia. Conversely, they should not be used in the treatment of a patient with a low white-cell count'.

To anyone with a strong feeling in favour of uniformity, the practice of printing 'I. R. radiation' on one line and 'infra-red radiation' on the next will not appeal; the abbreviation of so short a word is, in any case, hard to justify.

In order not to close on a querulous note let us repeat that this is a very practically useful book, and that we can recommend it to the practitioner.

A TRANSLATION OF 'MIDWIFERY FOR NURSES'. —By Russell Andrews (Telugu Edition). 1933. The Christian Literature Society for India, Madras. Pp. 269. Illustrated. Price, Re. 1-8

THE Christian Literature Society for India have undertaken the translation into the vernacular of the well-known book of Russell Andrews' 'Midwifery for Nurses'. Up-to-date textbooks in the vernaculars for pupil-midwives are not available, and the society, in endeavouring to place this book before the nurses, has taken pains to see that the translation has been done in an easy style which permits of its being easily understood. The book is got up neatly, with a few diagrams here and there. It is up to date and should prove of great value to midwives under training. The translator has done well in incorporating some of the technical words in the English language without a laborious attempt at translating them. This makes it easier for pupils to follow the class lessons and the day-to-day practice.

The book deserves a place in all teaching institutions where midwifery is taught in Telugu.

A. L. M.

EXTRACTION OF TEETH.—By F. Coleman, M.C., L.R.C.P., M.R.C.S., L.D.S. 1933. Third Edition. H. K. Lewis and Co., Ltd., London. Pp. vii plus 232, with 131 illustrations. Price, 12s. 6d.

CHAPTER I deals with extraction of teeth by what may be termed classical methods. Many valuable hints and examples are given: the author emphasizes the very true fact, that a tooth should be 'played' rather then subjected to force, especially sudden force without reference to the natural paths of least resistance.

Chapter II deals with difficulties and complications, this chapter deserves careful study.

Chapter III is on anæsthetics. It is to be regretted that the directions for injections are not given in more detail.

Chapter IV deals with surgical extractions and modern methods of diagnosis and treatment. If these methods are intelligently applied it will go far to make the difficulties and complications of extractions a thing of the past.

E. H. B.

CONSTITUTION AND HEALTH. PSYCHE MINIATURES. GENERAL SERIES. NO. 60.—By Raymond Pearl. 1933. Kegan Paul, Trench, Trubner and Co., Ltd., London. Pp. 97. Illustrated. Price, 2s. 6d.

RAYMOND PEARL is a biologist, and as such claims it as 'his inalienable right to study man, the most interesting of all animals'. He goes further, he assumes the right to criticize the physician on his own ground, in his attitude towards disease as exhibited in that most aberrant of animals, man. It would be churlish to grudge him his right which he has most assuredly earned by the assistance that he has already rendered to medical science; few medical libraries worthy of the name have no copy of *Medical Biometry and Statistics* on their shelves.

Though we do not grudge him the right to criticize, we do not entirely agree with his criticism. For example, we do not think that his estimate of the attitude of the average physician, as viewing disease as something separate from man, superimposed on a normal individual, attacking and invading the healthy body, and not as an aberrant reaction of the constitution, is correct; it may have been true of the physician of 20 years ago when the bacteriological phase of medical philosophy was at its height but not of the physician of to-day. Nor does he act on this principle in the majority of cases; even when he employs so-called specific treatment, he does not picture the 'invaders' as being knocked out one by one by the drug he is giving—but perhaps we are taking the argument too far; the biological mind does not take much account of treatment.

It is, we hope, needless to point out that we are not criticizing this stimulating little book. It can be read comfortably at one sitting, but its value cannot be judged by its size, as it is of the nature of a catalytic agent, and will excite as much thought as the average thousand-paged textbook.

L. E. N.

THE HISTORY OF MALARIA IN THE ROMAN CAMPAGNA FROM ANCIENT TIMES.—By the Late Angelo Celli. Edited and enlarged by A. Celli-Fraentzel. 1933. John Bale, Sons and Danielsson, Ltd., London. Pp. vi plus 226. Price, 10s. 6d.

DURING recent years there has been a considerable amount of imaginative writing regarding the part played by malaria in bringing about the downfall of Rome. The author of this book, who has spent his life fighting malaria in the Roman Campagna and who cannot therefore be accused of underrating the importance of this disease, deals with facts, as far as history can be said to provide facts, and does not subscribe to this romantic view of the destiny of this once great empire. The history of Rome, the city, has on the other hand been largely written by the anopheles mosquito. Rome itself has always been comparatively free from malaria, but its compass has been rigorously limited, as every attempt at expansion has had, sooner or later, to be given up; the suburbs of Rome have throughout the centuries seen a series of palaces, built and then abandoned and allowed to fall into ruins. Many emperors and the majority of the popes have made some attempt to deal with the

problem; some of them have had apparent, temporary successes, but in the end they have had to admit defeat. There seems to be little support for the suggestion, obviously made by their enemies, that the popes have deliberately neglected the Roman Campagna so that the miserable condition of this country should form a contrast to the grandeur of the Holy See.

This history is divided into periods—the pre-Roman, the republics, the empire, the early and later middle ages, the modern period, and the latest history, even this last chapter only takes us up to the discovery of the mosquito carrier of malaria; with true Italian courtesy, not always reciprocated, the writer gives the major credit of this discovery to Ross. It is a matter of great regret that Professor Angelo Celli did not live to finish his work. His story of the campaign, which is now being so successfully waged in the Roman Campagna and in the inauguration of which he himself played so strenuous a part, would have formed an invaluable final chapter. The chapter contributed by the editor, his widow, gives us a glimpse at the results that are being obtained, but little in the way of detail as to how this swamp that has defied emperors and popes for twenty centuries is now being turned into a prosperous and fertile country-side.

The book is a most entertaining and scholarly production; it cannot fail to interest the physician, the malariologist, the historian, and in fact anyone who is interested in human welfare. There are about forty pages of references; large numbers of these are to British writers. There is no suggestion that the book is a translation, but it is written in irreproachable English.

L. E. N.

HADWEN OF GLOUCESTER, MAN, MEDICO, MARTYR.—By B. E. Kidd and M. E. Richards. 1933. John Murray, London. Pp. x plus 345. Illustrated. Price, 7s. 6d.

A CRANK has been defined, probably by Bernard Shaw, champion of all cranks, as a person who holds and acts upon an opinion that is contrary to orthodox teaching, but it is claimed directly he has converted a sufficiently large number of his fellows to his point of view he ceases to be a crank.

This is seldom true, as all worthy cranks have more than one arrow in their quiver. They have made the discovery that the majority is not always right; they assume illogically that the majority is never right, and so oppose all generally-accepted theories. In mediæval days religion provided the best gymnasium for the antics of the crank, but nowadays there is no 'kick' to be got out of religious unorthodoxy and, as his chances of being burnt at the stake have finally disappeared, the crank usually turns to medicine, a vast field in which he can display his perversity almost endlessly.

Dr. Hadwen was the complete crank; he was a disbeliever in the 'germ theory' of disease, an anti-vivisectionist, an anti-vaccinationist, and an anti-everything that was generally accepted by the medical profession. He caused a great deal of trouble and did much harm, but on the other hand there is no doubt that he did some good; it is very good for the medical profession to have their accepted theories questioned; it shakes their complacency and makes them think. Also there seems to be little doubt that Dr. Hadwen was a sincere, if misguided, man. He had a full life, which extended beyond the allotted span, and a comfortable death. What more could any man, medico, or martyr wish for?

No cause is so forlorn that its champion will not collect a number of disciples; the more forlorn the cause the larger will be the percentage of women amongst these. Dr. Hadwen was always sure of his women supporters, and after his death they have not altogether failed him, but the writers of this biography have not presented a very good case. Had the book ended at frontispiece, which is the photograph of a white-haired, kindly-faced, old man, it would have left a better impression.

L. E. N.

Abstracts from Reports

ABSTRACT OF THE ANNUAL REPORT OF THE PUBLIC HEALTH COMMISSIONER WITH THE GOVERNMENT OF INDIA FOR 1931

VOLUME II

THE Report contains sections on the Health of the British and Indian Armies in India. Owing to the precision and care which are devoted to the health of these two large bodies of picked men, the report necessarily contains much that is of scientific interest to the general practitioner in India, and also to the scientific medical worker and the hygienist. Some of the more general matters will be of interest to the readers of the *Gazette*.

Malaria continues to be far and away the chief cause of sickness in the British Army in India.

Over 6,200 admissions for malaria occurred in 1931. There are two interesting observations on the 'carrier' question. In Wellington, a hill station hitherto considered to be malaria free, *A. maculipalpis* was found to be the carrier; near Rangoon, which is itself considered to be malaria free, at Mingaladon, infections occur and *A. hyrcanus* was proved to be a carrier there. An investigation into 'missed' cases of malaria showed that only 1 per cent of the total admissions might be considered to be 'missed'—a satisfactory conclusion.

The presence of urobilinuria as an aid to diagnosis in malaria was investigated; the result is as yet indeterminate. The presence of albuminuria in malaria was shown to be common but of a transient nature. It was not due to the quinine given. As the results of trial a combination of atebrin for 5 and 7 days, followed by plasmoquine in convalescence, seems to be suggested as a cure for the individual attack and the infection.

Annual malarial surveys are being done all over India and much useful information collected. A 'weekly dry day' is proving very efficacious in Kohat and similar places. All artificial collections of water in and around cantonments are dried up for the whole or part of a day each week.

Interesting notes on the treatment of nullahs, on spraying, and on the use of mosquito nets and mosquito-proof tents in the field are given.

Enteric fever.—The group is of all importance to the army. There appears to be a slight progressive decrease in the incidence and in the severity of the disease in British troops. In the Indian Army however in 1931 there was a rise both in the case mortality and in the incidence. In both armies, typhoid fever is the commonest type, followed by para A and B. There were 4 cases of 'C' type in the Indian troops. Eighty per cent of cases were diagnosed by blood culture, 25 per cent would have been diagnosed by fæces culture alone and 7.5 per cent by urine culture alone. Wilson and Blair's medium does not seem to give as good results in fæces culture as it does in sewage and water. An estimation of the 'O' and 'H' agglutinins has been carried out for some time. The results with the 'H' agglutinins are in consonance with work elsewhere