"Lambert's treatment with brave doses of belladonna, hyoscine and drastic purgatives," etc.; but all these methods are more or less of academic interest and cannot be used without danger by a general practitioner to whom the addicts generally come and appeal for help.

R. N. C.

THE CARDIAC CYCLE.—By Harrington Sainsbury, O.B.E., M.D., F.R.C.P. Bristol: John Wright & Sons, Ltd., 1931. Pp. 79, with 1 diagram. Price, 5s. net.

IN his prefatory note Dr. Sainsbury affirms his belief that "the attributes and affinities of matter, as we know them in the external world, when they make entrance into the composition of the living organism, are not put off, but continue to operate in obedience to the same laws, whilst within the new sphere of action, as governed their activities outside that sphere; consequently that the physiologist, when he comes to view the behaviour of the newly incorporated substance, must ever have in mind the laws of physics and of chemistry as still in force."

True to this belief, he has undertaken a description of the cardiac cycle, treating the subject as a problem in hydrodynamics rather than in physiology. This point of view imposes certain limitations on the discussion—we could find no mention, for example, of the part played by the cardiac nervous mechanism in the control of the heart. Again, there is enunciated a theory of the origin and propagation of the pulse wave which is not in harmony with current teaching.

Dr. Sainsbury's views will be sharply contested by the majority of cardiologists but his book should be read if only for its presentation of a difficult subject in a novel light. The size of the book makes such a reading possible in the course of an evening.

J. M. H.

PRACTICAL RADIATION THERAPY.—By Ira I. Kaplan, B.S., M.D., with a special chapter on Applied X-Ray Physics by Carl B. Braestrup, B.Sc., P.E. Philadelphia and London: W. B. Saunders Company, 1931. Pp. 354, with 227 illustrations. Price, 27s. 6d.

As the author points out in his foreword the practical side of radiation therapy has not been adequately dealt with in the English language although several useful treatises have been written in other languages. The author has therefore attempted to present in as simple and practical a manner as possible the principles of radiation therapy as applied in cases of malignant disease. No attempt has been made to describe all the methods known to be in use, nor to compare the various methods employed by other radiologists. The book under review merely offers a description of radiation therapy including radium and x-rays as practised at the Bellevue Hospital, New York City, and the treatments described therein are the actual methods used by the writer in his everyday practice.

After a brief historical note and two chapters on the definition, action and production of x-rays and radium, there comes a valuable chapter on applied x-ray physics.

The question of dosage is then considered and reference is made to the international physical unit of x-rays, designated as the "R-unit." The biological unit also receives consideration. This is apparently the standard used at the Bellevue Hospital. The x-ray therapy used in the treatment described in this book is apparently of two types, (1) superficial or moderate-voltage x-rays produced by 90–100 K. V. and 4 M. A., and (2) deep high-voltage x-rays produced by 180–200 K. V. and 4 M. A.

In considering treatment by radium, use is made of radium element and radium emanation; radium element is preferred by the writer. Under the head of practical radiation a series of cases are described, with photographs of the lesions before and after treat-

ment. The description includes the result of biopsy, and the factors used in treatment whether by x-rays or radium.

The book is profusely illustrated and should prove most valuable, not only to the radiologist, but also to the general practitioner who can see therefrom the results to be expected from the treatment of malignant disease by radiation therapy.

J. A. S.

A MANUAL OF TUBERCULOSIS FOR NURSES.—By E. A. Underwood, M.A., B.Sc., M.B., Ch.B., D.P.H. (U. Glas.). Edinburgh: E. & S. Livingstone, 1931. Pp. vii plus 272. Illustrated. Price, Rs. 4-14. Available from Butterworth and Co. (India), Ltd., Calcutta.

HEALTH exhibitions and intensive campaigns by the various tuberculosis associations in India are slowly but surely instilling into the minds of the populace that there is such a disease as tuberculosis, that the infection is widespread, that if taken early it is a curable disease, and that it is a preventable disease. With this gradual awakening of the masses and a corresponding desire for treatment and information as to how to avoid infection, the demand for nurses and health visitors skilled in tuberculosis work is bound to increase by leaps and bounds. This book is just what is needed as a textbook on the subject for those taking up this line of work. Although its title suggests that it is only for nurses, yet even medical students could read the book with much profit to themselves and their future patients. We know of no other book of a similar size and scope dealing with the subject so well. It is written in a readable and interesting style, the language is simple and where scientific terms have had to be introduced these have either been fully explained in the text or in a glossary at the end of the book. The only criticisms to be made are small and unimportant. On page 156 it states that miliary tuberculosis "is a result of the bursting of a *healed* focus of the disease into a blood vessel—usually a vein." This could be expressed in a less ambiguous manner. On page 161 it states that lumbar puncture is usually performed between the 4th and 5th lumbar vertebræ. The usual level is between the 3rd and 4th lumbar vertebræ. On page 197 in the section dealing with the light treatment of tuberculosis the author mentions that "exposure to ultra-violet rays causes an increase in the red and white corpuscles which circulate in the blood." In the days when ultra-violet light was boomed for every known disease this was thought to be true, but the most recent work on the subject tends to show that no permanent effect on blood formation is brought about, and that anæmia is uninfluenced by irradiation. It is a good book and at 6s. 6d. is really excellent value.

J. F. C.

BLOOD GROUPING IN RELATION TO CLINICAL AND LEGAL MEDICINE.—By L. H. Snyder, Sc.D. London: Baillière, Tindall and Cox, 1929. Pp. xi plus 153, with 4 plates and 28 figures in the text. Price, 22s. 6d. net.

THE subject of blood groups has of late become so extensive and in parts obscure that it is now no easy matter to write a balanced book doing justice to the clinical, genetic, medico-legal and anthropological applications, and also to include an adequate account of the technical methods employed in the determination of the groups themselves. Professor Snyder has, however, by the use of an agreeably terse style succeeded in presenting in an able manner the main facts in quite a short work. We may also commend his judgment in omitting the non-essential.

The author, as he himself says in his preface, has treated the subject largely from the point of view of the geneticist and physiologist. The chapters on the heredity of blood groups are excellent. The author's name is here a landmark, for it was by his careful