experience of public work. Perhaps one of the most constructive steps that our major scientific professional institutions could now be taking would be to stimulate the interest of their younger members in public service and to assist them to gain the experience and the outlook which would enable them to make their particular and unique contribution most effectively.

## HUMAN PARASITES

Animal Parasites in Man

By Dr. N. H. Swellengrebel and M. M. Sterman. Pp. x+652. (Princeton, N.J.: D. Van Nostrand Company, Inc.; London: D. Van Nostrand Company, Ltd., 1961.) 67s. 6d.

T is difficult, as one reads through this book, to decide what type of reader its authors had in mind. First issued sixty years ago, it has now been re-written and enlarged, and its authors hope it will be useful to the physician and the biologist. For the physician seeking an introduction to this subject and information about the epidemiology and treatment of human parasitic infections it may well seem adequate; but the biologist or medical man who requires guidance and information on difficult points of detail or procedure may prefer one of the several text-books of medical parasitology which are available at not much greater cost. The biologist, moreover, may wish for more systematics than this book attempts to give and more on the features of the main groups of parasites. He may wonder, too, at some statements, such as the suggestion that all trematodes are flat "like a flatfish or the leaf of a tree": and why the authors have introduced into an otherwise excellent introduction such terms as "proliferous" and "non-proliferous" parasites, "initial aggressors" and the like; and at the division of the common parasites of man into the Protozoa, Metazoa and the "Scolecida, or lower worms"; one wonders, too, whether Sabin would nowadays agree with the statement attributed to him in 1953 that toxoplasmosis is an "almost perfect host-parasite relationship in which the parasite only rarely causes serious damage to its hosts, and the hosts are not too intent on destroying the parasite".

Apart, however, from points like these, the text is, as one would expect from a book bearing the highly respected name of Prof. N. H. Swellengrebel, accurate and as up to date as any book can, in these days of very rapid advances in knowledge, hope to be. Among the best sections are the new chapters on methods of examination of the excreta and blood for eggs and larvæ of parasites and on the methods for the enumeration of the eggs of parasites and on serological methods of diagnosis. The bibliographies at the end of each chapter will also be useful to readers who wish to extend their knowledge. The book is written in an easy style and shows the host and parasite in conflict with each other, a point of view which leads the authors to use such phrases as "the host's defense mechanism was kept constantly on the alert" (p. 127), or the host applies "topical" or "numerical" restraint on the parasite, phrases which are useful only if great care is taken not to mislead the reader. An odd feature is the disproportionate space given to the rare occurrence of Babesia bovis, a parasite of cattle, in splenectomized

human subjects. It is true that babesiasis may be a risk to which man, and especially splenectomized man, may rarely be exposed, and the space given to this disease would be justified in a large and comprehensive text-book; but it should be accompanied by a fuller consideration of the Babesiidae than is given here. It is difficult, too, to understand the statement (p. 127) that "calves are the only hosts to suffer" from Babesia bigemina, because they suffer less severely than adult cattle and it is explained on the same page that they acquire pre-immunity. It is implied, also, that Boophilus annulatus is the only invertebrate host of Babesia bigemina, whereas at least 10 ticks belonging to 3 genera have been recorded as its invertebrate hosts. The tick, moreover, is here described as the intermediate host, whereas it harbours the sexual phases of the Babesia and is therefore the definitive host.

Most of the numerous illustrations are taken from other text-books, and it is unfortunate that many have suffered much in the process of reproduction. Outstanding examples are the figures of *Echinococcus* granulosus (p. 267), and the black-and-white figures of the exo-erythrocytic stages of *Plasmodium inui* and *P. falciparum*, which give no idea of the clarity and draughtsmanship of the originals. These examples are the more regrettable because other figures are well reproduced.

The format of the book and its general make-up and print are attractive, but its price, compared with that of the bigger and more detailed text-books available, is high. G. LAPAGE

## CANCER OF THE RECTUM

## Cancer of the Rectum

Edited by Cuthbert E. Dukes. (Neoplastic Disease at Various Sites, Vol. 3.) Pp. xiii+304. (Edinburgh and London: F. and S. Livingstone, Ltd., 1960.) 50s. net.

HIS is the third volume of the series Neoplastic Disease at Various Sites under the general editorship of Prof. D. W. Smithers. In one way, at least, the volume is unique: eleven of the eighteen contributors are connected with St. Mark's Hospital, Londonseven as consultant surgeons, two as consultant pathologists, and two as research assistants. Not only are these contributors familiar with each others' views and methods, but also for many years the work of the surgeons has been co-ordinated through a single pathology department and follow-up system. In this connexion the immense and universally acknowledged contribution of Dr. Dukes himself is further made evident by the fact that his accurate observations, his plan for the examination of operation specimens and dissection of lymph nodes and blood vessels, his pathological classification, and his histological grading of rectal cancer, form the basis on which the contributing surgeons analyse their operative results, and are unquestionably the framework on which many of the recent advances in surgery of rectal cancer have been made.

Theoretically, at least, the fact that so many of the contributors have been working in close association with each other, carries with it the danger that the views expressed here are narrowed through inbreeding. Only in Chapter 13, written by Prof. J. C. Goligher of Leeds, is mention made of methods practised in other countries. Some may be surprised to read that