

BOOK REVIEWS

Preying Insects

Parasitic Insects. R. R. Askew, D.Phil., F.R.E.S. (Pp. 316; £3.50.) Heinemann. 1971.

The author wrote this book because, as he says in his preface, there is no other devoted exclusively to parasitic insects, which prey upon animals of other phyla and upon other insects. It is intended primarily for undergraduate and postgraduate students specializing in entomology, parasitology, and related subjects. It is concerned chiefly with ecology, but there is some anatomy, much physiology, and description of insect habits. The writing is clear, and most of the many line drawings are exquisite.

Naturally, the author describes insects of medical and veterinary importance. Most of these are parasites in their adult stage, usually on birds or mammals, which they do not kill. Some of them are vectors of pathogenic organisms, though this is not an essential function. Other insects are parasitic in their immature stages, usually on other insects, which are almost invariably killed in the process. The author describes the whole subject in a broad way, discussing the various orders briefly but tellingly in a setting which far exceeds the narrow reference to man.

He reminds us, indirectly, that biology, like any other subject, is extremely complicated, and that simple answers to biological problems are very rare indeed. For this reason I think that medical and veterinary librarians should consider buying this book.

There are some errors: *Hymenolepis nana* is said to be transmitted by fleas, but it has no vector; epidemic typhus is equated with Brill's disease, which is only one, non-epidemic, form; *Triatoma* species are said to transmit encephalomyelitis, *Stomoxys* to transmit poliomyelitis, and *Culicoides* to transmit *Onchocerca*; monkeys are said not to be affected by yellow fever, whereas they die from it in large numbers in Central America; yellow fever is said not to be present from West Africa eastwards to South America, whereas there have been at least two enormous epidemics in the Sudan and Ethiopia in recent years, and it is enzootic in the monkeys of tropical Africa. Spellings are not always accurate: *Xenopsylla cheopsis* for *cheopis*, *Phlebotomus parfiliewi* for *perfiliewi*, *Eretmopodites* for *Eretmapodites*.

Insects have no consciences. "The queens of *Bothriomyrmex decapitans* . . . allow themselves to be carried into the nests of

Tapinoma nigerrimum by workers of that species. Once inside the *Tapinoma* nest, the queen *Bothriomyrmex* takes refuge on the back of the queen *Tapinoma* and starts to chew at the neck of its host, eventually decapitating it." The ant *Formica sanguinea* makes slaves of another ant, *F. fusca*, using press-gang methods—and yet it need not do so.

But foraging insects are sometimes cunningly deceived. The ant-lion larva is a predator, and a chalcid (*Lasiochalcidia igliensis*) provokes it into emerging from its burrow and seizing its (the chalcid's) legs, whereupon the chalcid retaliates by inserting its ovipositor into the membrane between the head and the thorax of its assailant, and depositing its egg there. Instances are multiplied. No wonder that T. H. Huxley was revolted at the (unconscious) cruelty of the cosmic process, and contended that the ethical progress of society depends in combating this process.

But to read this interesting book has a fascination, and to study such habits must be a delight. To achieve a philosophy is more difficult.

CHARLES WILCOCKS

Medical Manpower in the U.S.A.

Financing Medical Education. An Analysis of Alternative Policies and Mechanisms. Rashi Fein and Gerald I. Weber. (Pp. 279; \$6.95.) McGraw-Hill. 1971.

Since the United States has no health service it is less surprising that American hospitals depend on graduates from Taiwan and South Korea than that the casualty departments for which our Health Department is responsible operate only by courtesy of the universities of Madras and Dacca. And if the American shortfall of doctors is more daunting than ours, the vigour of the efforts made to meet it is much more impressive: between 1951 and 1967 the number of full-time members of medical faculties increased from 3,600 to no less than 22,200.

This book presents the economic problems concerned in training the increased number of doctors required to meet America's needs and outlines various ways in which these problems could be met. Some of the difficulties are much the same on both sides of

the Atlantic, others are more specific to the American situation. Even in Britain medical schools have too few students from low-income families, but in the United States medical students' fees alone average more than 1,000 dollars a year in State and nearly 2,000 in private medical schools. There is no general student grant system, and despite the possibly astronomical earnings of the big-city specialist, uncertainty about early income deters many who might otherwise enter medicine. In this context things are easier in Britain, though some features of the American situation can be recognized here in recruitment for entrepreneurial professions like the Bar and architecture.

The authors emphasize the need for medicine to cast a wider net to obtain enough recruits of adequate quality, quite apart from the cardinal American principle of equality in educational opportunity. All medical schools should receive increased financial support from the State in which they are situated, geared to the State's physician

requirements. Increased Federal aid is also required especially in the poorer States where the need is greatest, and for a nation-wide scheme of postgraduate training. Medical education grants are needed for students from the lower income groups and particularly to encourage the black and underprivileged. For any who wish to make use of it, a long-term loan system should be organized on the basis of an "educational opportunity bank." Finally, the salaries of junior doctors should be substantially raised by charging the hospitals a realistic rate for their services.

These recommendations and the data on which they are based are presented with a wealth of factual and statistical detail. The problems of medical man-power in the United States are formidable, but they are the subject of intense public concern, expert study, and massive investment. By comparison our own efforts in this field seem somewhat half-hearted.

HENRY MILLER

Experts Talking to Non-experts

The Scientific Basis of Medicine Annual Reviews 1971. Ed. Ian Gilliland, M.D., F.R.C.P., and Jill Francis. (Pp. 397; £3.50.) The Athlone Press. 1971.

Invite an articulate expert in a developing or otherwise fashionable field to give a highly

prestigious lecture reviewing his subject to an intelligent but non-expert audience. If the expert is well-chosen the result is likely to be an important contribution, possibly a landmark in the subject in question. Predictably that reliable formula has worked again in the latest series of lectures entitled

the Scientific Basis of Medicine.

Here is an important collection of lectures each illuminating an area of current interest and all, so far as any one reader can judge, of uniformly high standard. The spread of subjects chosen for discussion is very wide. Each lecture is complete in itself

and can only be judged in isolation. Combined together as separate chapters in this book they make a strange potpourri. It is stated in the preface that the book contains something for all specialists. Unfortunately, the corollary is also true that there is not very much for anybody. There is an obvious need for a widely published permanent record of the lectures so that they may take their place in the literature, and together they will form an historical commen-

tary on contemporary interests. But who is to buy this book to read it from cover to cover? Twenty chapters include such diverse titles as "The present status of fluoridation," "The biochemical pharmacology of tolerance to opioid analgesics," "The ageing eye," and "Recent advances in the understanding of the muscle spindle." The combined summaries might be required reading for some nightmare postgraduate cocktail party.

The need to keep on a general front is

accepted in the age of increasing specialization, but who in active practice has time enough or is sufficiently motivated to encompass more than one or two of these? In any case, a serious effort to keep up must be much more systematic than awaiting the inevitably random offerings of this high-powered medical "Readers' Digest."

M. J. CHAMBERLAIN

Advice on Inheritance

Genetic Counselling. Alan Curruth Stevenson, F.R.C.P., and B. C. Clare Davison, M.D. (Pp. 355; £2.75.) Heinemann. 1970.

The purpose of this book is primarily to help general practitioners, paediatricians, and other clinical specialists to give genetic advice to patients and their families. The authors do not think it important which doctor explains the advice, but do feel that the counsellor should be medically qualified—mainly because exact diagnosis is an essential prerequisite. The book should certainly help the family doctor who wishes to include genetic counselling within his framework of family care (and who is better placed to give this advice?). But a word of warning to any reader: if not already cognisant of the geneticist's jargon, work through the early explanatory chapters first, otherwise the distinction between mutant and segregant heterozygote—and much else of potential value—will be missed.

The section of the book accorded the most thorough treatment is that on risk estimates, incorporating the concept of prior and posterior probabilities and methods of combining pedigree and biochemical information.

The theoretical considerations in these chapters and appendices are designed rather for the medical geneticist—others may find the detail irksome. For instance, there are 40 pages devoted to counselling in X-linked traits. In contrast, the practice—one might say the art—of counselling is allocated a meagre three pages. This is sad in view of the considerable experience these authors have.

In the clinical section, they cover every condition likely to be met in the average practice, and a good few which never will. (But one subject a family doctor might well be asked about is not mentioned—presumably because of its nonsignificance—that is, the inheritance of skin colour.) One applauds their efforts to give a single risk figure whenever possible; but the recurrence risks of 1 in 10 and 1 in 15 after sporadic cases of tuberous sclerosis and osteogenesis imperfecta respectively are perhaps rather gloomy. The value of illustration is exemplified on page 216; one immediately identifies this particular variant of Treacher Collins with families in one's own experience. More photographic illustrations would have been welcome.

Some subjects are particularly well dis-

cussed—for example, cleft lip and palate—and there are few statements with which to quarrel. One is that it is the simple imperforate anus—probably "covered anus" is meant here—that may include an X-linked form. Again, on page 229, there is confusion in the polycystic kidney section, and in the "familial form" it is the enlarged kidneys which may obstruct labour; the cysts are uniformly small. It would be nice to see more encouragement for the application of new techniques in counselling. For instance, one would surely discuss amniocentesis with a D/G translocate mother, if she very much wanted her own child, as well as assessing risk figures. The possibility is mentioned later, on page 292, but not with any enthusiasm.

This informative account is written by physicians with much practice in giving advice on genetics. They anticipate the difficulties and offer solutions from their own experience, and have gone to considerable trouble to ensure the accuracy of the risk figures. It is a book which can safely be recommended to those for whom it was designed.

HELEN BLYTH

About Hallucinogenic Drugs

Psychedelics: The Uses and Implications of Hallucinogenic Drugs. Ed. Bernard Aaronson and Humphrey Osmond. (Pp. 512; £3.15.) The Hogarth Press. 1971.

This is unquestionably, as the publisher claims, a wide ranging and serious book. Written primarily for the layman by a distinguished team of transatlantic authors, it contains fascinating accounts of the psychedelic experience itself, and of its relationship to different societies, to religion, to mental order and disorder, and even to its "non-drug analogues"—hypnosis and meditation.

The chapter on therapeutic applications ranges from individual and group psychotherapy, through alcoholism, to concepts of death and architectural design. Wide rang-

ing indeed, but some medical readers will no doubt be surprised to learn that "every scientist using psychedelic therapy with alcoholics found the same proportion of recoveries . . . about 50 per cent were able to remain sober or to drink much less" (page 361). The concluding chapters are in similarly approving vein. Three accounts of the current scene contain more criticism of society than of drug-taking as a means of opting out of it; and, as for the future, we are led to believe that psychedelics provide a chance—though "perhaps only a slender one"—for man to reform before it is too late.

There is no doubting the fascination of all this. The book is intensely thought-provoking on many of the most serious problems confronting us today. It should be widely

read, but only by those prepared to keep their critical wits about them. Gullible or unwary readers may find themselves being taken on a mind-boggling trip by guides who seem blissfully unaware that this form of transport may carry a greater risk of serious accidents en route than of arriving—at an uncertain destination.

This lack of critical appraisal and balance spoils an otherwise worthy enterprise, the first of a new series on the science of human behaviour. I hope later volumes will be better balanced. They may be equally broad and serious, but I doubt if any will be more readable—or more provoking.

GEORGE BIRDWOOD

SELECTED NEW TITLES

Regeneration of Liver and Kidney. *New England Journal of Medicine* Medical Progress Series. Nancy L. R. Bucher, M.D., and Ronald A. Malt, M.D. (Pp. 278; £6.) Churchill Livingstone. 1971.

Laboratory Aids in Diagnosis. Stephen H. Holt, M.D. (Pp. 185; £4.) Churchill Livingstone. 1971.

J. W. Ballantyne M.D., F.R.C.P. Edin. F.R.S.E. 1861-1923. Helen Russell, M.D. (Pp. 34; 50p.) The Royal College of Physicians of Edinburgh. 1971.

Sjögren's Syndrome. Vol. 2 In the series Major Problems in Internal Medicine. Martin A. Shearn, M.D. (Pp. 262; £4.90.) W. B. Saunders. 1971.

Clinical Laboratory Statistics. Roy N. Barnett, M.D. (Pp. 197; £7.) Churchill Livingstone. 1971.