

Achievement. Some Contributions of Animal Experiment to the Conquest of Disease. By Geoffrey Lapage. (Cambridge: Heffer & Sons, Ltd.) 1960.

The subtitle of this book gives a good idea of its contents. It describes some of the experiments of the last 100 years which led, first to understanding the cause of many diseases of man and animals, and more recently provided effective cures for a lot of them. There are ten chapters, the first two being introductions on the nature of experiment and upon the natural defences of animals against diseases. There is then a chapter on experiments done with men (often the experimenters themselves) instead of animals as the victims, and three chapters about diseases caused by bacteria, rickettsia, viruses and other parasites. The next three chapters touch upon hormones, drugs, poisons in industry, suture materials, anaesthetics, tissue grafts, tumours, and vitamins, with special sections on diseases of the eye, the ear, and domestic pets. The final chapter is a summary, and there are appendices on the vivisection laws, and on the breeding and care of laboratory animals.

So much ground is covered in 250 pages that the author has not been able to go into any single topic at length. There is hardly sufficient detail to arouse, and certainly insufficient to satisfy, a reader's intellectual curiosity. It is like a view of mountains from a high aeroplane: they look rocky but flat, and in the same way this book makes animal experimentation look difficult but astonishingly uninteresting.

I have difficulty with the author's style. He probably takes great pains in order to achieve clarity, but it is the pains that are most evident in the product. The proofs cannot have been too carefully read, for there is a line or more missing on p. 58 and many minor misprints.

Animal experimentation has not stopped, and more and more of its benefits will be lapped up by a public whose spinster aunt supports the cause of anti-vivisection. It is probably always worth setting out evidence to demolish that cause, and this book will serve as a useful guide to the relevant sources, for it has a good bibliography. But even for this limited function it has a defect. Anti-vivisectionists are prone to claim that vaccines and the like are sometimes positively harmful, and they are right—very rarely things do go wrong and illness or death are caused in this way. There is not much about this in Lapage's book, but then he explains in the preface that he is going to state the *benefits* to man resulting from experiment, and accidental death can hardly be counted a benefit. Which reminds me of the story (I can't swear to its truth) about some cases of polio caused by one of the early anti-polio vaccines. The committee in charge of the investigations hired statisticians to find out if the vaccine afforded protection. School children were duly vaccinated, and their every sniffle investigated from three weeks after the vaccination onwards, three weeks being the earliest time at which any vaccine can fairly be expected to afford protection. It was left to the ever-vigilant American Press to notice a small number of cases of polio occurring soon after vaccination, and presumably caused by it. The statisticians muttered, "but you said *Protection*," and the committee did the only thing committees are any good at and manfully shouldered the blame.

Even in this case it turned out that the vaccination was on the whole a benefit, for the number of cases caused by the vaccine was far smaller than the number of people saved from a natural attack of the disease in the year following the vaccination. Can one not trust people to understand this sort of thing? Must one pretend that the pill is *all* sugar?

I have a personal feeling that the vivisection issue in its original form is no longer very interesting, but that there are other consequences of the material discussed in this book which are. Have our social values adjusted themselves to the fact that our contemporaries die less often, and on the roads more often than in their beds? Is contraception a moral necessity, rather than a practical desideratum, now that over-population is a world danger? What would we think of monkeys—suitably brain-operated and brain-washed to make them docile—taking the place of foreign girls in the life of Cambridge (I am thinking of the domestic life of senior married members only, of course)?

The book under review will give its readers a bird's-eye view of the present fruits of vivisection, but will not give much hint of the future. The publishers are to be congratulated on its appearance and layout.

H. B. BARLOW.