BOOK REVIEWS

Uses of Epidemiology. By J. N. Morris. (Pp.viii+135; illustrated. 19s. 6d.) Edinburgh and London: E. & S. Livingstone. 1957.

One of the many odd things about social medicine is that it has three legs to stand on. In this it has been fortunate indeed for the tripod of public health, medical sociology, and epidemiology has withstood some recent serious attempts to dislodge it from the medical curriculum, and even from medicine itself. The subject has so far been least successful in holding its own in London, but now it may be making a come-back. Dr. Morris's book is the second of a string of books on social medicine promised for this year from London medical schools and research units. The first* was reviewed here recently.

Though he is obviously well qualified to discuss all three legs of his subject, Dr. Morris's main interest is epidemiology. In this book he sets out to describe the rapid broadening of the subject which has taken place recently by showing some of the ways in which the method has been used.

The new epidemiology is very broad indeed. "If it moves, salute, and if it doesn't, paint it white", is perhaps a good enough classification for those entering the Army! "If it's one patient, it's clinical, and if it's more than one it's epidemiological" seems to be the new and equally rough classification in medicine. In fact, the term may be in danger of losing rather than gaining from the very wide interpretations of today. However, some broadening was obviously necessary, if only because epidemiologists do such queer things these days, and the older interpretations left important gaps which had to be filled.

When it is examined closely, both inside Dr. Morris's book and in the world outside, it is seen that what epidemiology really does in observing community disease patterns is to define in various ways vulnerable groups of people. These detailed descriptions of the characteristics of sick people in time or space, by age, sex, or by some social yardstick—such as our own crude yet invaluable "social class" (or even such esoteric classifications as "culture pattern"), can be used in many ways. First, and most important, of course, it is used in the search for the "causes" of disease. Half of this book is rightly devoted to showing how the characteristics of vulnerable groups can be used to provide links in the causal chain—"hunches", as the author would say—as to how the thing works. Dr. Morris is rightly reserved in his use of the word "cause" for there can be few diseases left in which the clear pattern of cause and effect is found today as it was by our predecessors of the

nineteenth century. The "new" diseases have a multitude of interacting causes and some of the difficulty in unravelling them comes from the poor definition of syndromes by clinicians. Another use, then, of epidemiology is to help to define more clearly syndromes in current use. With the clarification of syndromes and the breaking down of large disease groups such as peptic ulcer and atherosclerosis into their constituent and differently behaving entities more is learned not only of causes, but also of the "community need" for medical care. Information about the functioning of health services and how well these "community needs" are met is a first step towards the assessment of the quality of medical care, "evaluation" as the Americans call it, and epidemiology can help us here. For example, the discovery of different mortality rates in similar age/sex groups for the same disease in different types of hospital immediately raises the question of the quality of care in the two places. The epidemiologist, having been caught like this before, re-examines his populations while speculating about the quality and number of staff in the hospitals.

The increasing importance for health of personal behaviour, particularly in the new industries, in leisure activity, and in diet, is emphasized by the striking differences in individual chances or expectations of encountering disease. Epidemiology with its new ways of looking at the cohort, the life table, and the fashionable "prospective" study can help to define these critical features of our lives.

This is a fascinating and, at the same time, an irritating book. It is just what we have all wanted, but it is far too short to do justice to the subject (rather over 55 pages of large type, excluding tables, appendices, etc.). A few of the figures and some unimportant details of text and presentation could well be improved. But this is real social medicine and shortcomings of production are of small import beside the author's enthusiasm and flow of ideas. Obviously the new epidemiology reflects the new medicine, and it is very exciting.

E. MAURICE BACKETT

Pneumoconiosis: Industrial Diseases of the Lung Caused by Dust. By P. F. Holt. (Pp. 268; illustrated. 50s.) London: Edward Arnold. 1957.

Pneumoconiosis, of which the most familiar varieties are pneumoconiosis of coalworkers, silicosis, and asbestosis, is the most serious occupational disease. It affects a wide range of workers—male and female—in mines and factories throughout the world. While many of the hazards have been recognized for nearly two centuries, new ones continue to arise from new processes and new

* *Principles of Epidemiology.* Taylor and Knowelden, Churchill, 1957.