The rest of the book is not very inspiring either; which is strange, for the author undoubtedly thinks clearly, has assimilated what he quotes of the work of others, and writes, with a pleasing balance of words, in reasonably short sentences.

This book gives a level-headed introduction to general psychopathology, but is not likely "to stimulate the student to see the problems of this science." The difficulty is that Dr. Fischer has written "An Interpretation of the Theoretical Foundations of Psychopathological Concepts" without the necessary inspiration for such an ambitious work.

C. E. H. Turner.

More about Psychiatry. By CARL BINGER, M.D. London: George Allen and Unwin, Ltd., 1951. Pp. 201. Price 10s. 6d.

In this book are delightful essays, collected into sections on psychosomatic medicine, psychiatry and the world situation. The essays on psychosomatic medicine are excellent, those on the world situation slightly less so; but to write sensibly on the world situation is even more difficult than to write sensibly on psychosomatic medicine.

Information, wisdom and humour are in these essays, which are written in good English; Dr. Binger's book is so rich in content, easily set forth, that one wishes to re-read it.

It is a book for a psychiatrist to give to a medical or lay friend whom he wishes to please and interest in psychiatry. Or, perhaps the psychiatrist would be lucky enough to have a wife who thought to make him a present of this little book.

C. E. H. TURNER.

Psychosomatics and Suggestion Therapy in Dentistry. By Jacob Stolzenberg, D.D.S. New York: Philosophical Library, 1950. Pp. 152. Price \$3.75.

This book is not a profound contribution to psychosomatic medicine. The author emphasizes instead, that patients do not look forward with pleasure to being in the dentist's chair. The dentist should therefore make himself presentable and use every possible device of suggestion, including, if need be, hypnosis, to set the patient at ease.

The book is simple, superficial and full of "pep." "It is almost unbelievable how simple it is for the dentist to treat the most neurotic patient if handled properly." The author's writing is sometimes stilted—"In a superficial way, I have touched upon the various segments that make up the whole cycle of integrate phases which will lead to successful practice with resulting contentment."

C. E. H. TURNER.

New Outlook on Mental Diseases. By F. A. Pickworth. Bristol: John Wright & Sons, 1952. Pp. 296, with 9 plates and 41 illustrations. Price 60s.

Dr. Pickworth has long been known as the initiator of a new conception of capillary function in the cerebral cortex, which he has studied for twenty-five years. A clear account of what he has found would therefore be sure of a welcome. His main thesis is that the cerebral capillary is not just a way for metabolites to and from the neuron but is an active agent in the cerebral dynamics, reacting to the patterns of incoming impulses and, by its active changes, affecting the patterns that develop.

The possibility has received little attention from other workers, but it should not be dismissed off-hand. Until recently we have not appreciated in the brain the truly amazing degree it achieves in what the electronic engineer calls "miniaturization." To the anatomist, the fact that the human brain can go into a halfgallon jar is a commonplace—to the designer of calculating machines it is a miracle. The brain works, in fact, on a scale of volume that is about a thousand-millionth part of that of the engineer. This tremendous compression suggests that the brain works with great efficiency, making every possible use of what it already has rather than adding a new part for every new requirement.

Now a fact on which Dr. Pickworth rightly lays emphasis is that while the times taken by the actions of neuron and fibre are measured in milliseconds, the times taken by the subsequent actions of the whole organism are measured in seconds, or even in minutes. To change the time-unit from millisecond to minute there must exist some slowing or delaying mechanism. What could be more suitable than the cortical capillary? It lies in intimate contact with the neurons, it is sensitive to many influences, it affects, or can be made to affect, the neuron's

activities in many ways, and its natural time-unit is of the right order of size. The thesis, then, is by no means unattractive.

Does Dr. Pickworth establish it? I have been quite unable to find out; for the book shows, if it shows nothing else, how necessary it is that an author, before he writes, should make up his mind what he is going to write about, and should then discipline himself ruthlessly to that end. Dr. Pickworth has collected, in his lifetime, a great number of facts, in case they should come in useful sometime, and he has now laid them all before us; but he has forgotten that myriads of facts, like armies of men, have to be marshalled with great care if they are not to degenerate into chaos. Page after page is filled with snippets, apparently a simple regurgitation en masse from the author's note-books and card-indexes. From this undigested material the reader is left to guess as best he can what the author intends to imply. At least one reader gave up the attempt, confessing that he could form no proper

judgment whether or not Dr. Pickworth had proved his thesis.

It might seem that so many facts would at least make the book worth while as an encyclopaedia, or as a work of reference; but testing shows it to be insufficiently accurate. A sentence such as "The wave-length calculates to about five thousand million a second," confusing wave-length and frequency, might be a mere slip; but unfortunately the book contains innumerable sentences that, though admittedly half true, are also half false, so that any reader who relies on a statement in the book does so at his peril. So much space is wasted on snippets like!" Arsenic . . . collects in the hair and skin following medication "—a fact known to every reader of thrillers, and mentioned in the book for no discoverable purpose (even the Index ignores it)—that there is no space for extra facts when they are clearly called for. Of innumerable examples where some qualification should have been added I select one. On page 201 the author quotes H.W. Freeman as authority to show that the schizophrenic's brain is "particularly normal," and he then uses this "fact" without qualification or comment. It seems to me that when a question has been so much disputed an author must, in fairness to his readers, either review it judicially and adequately, or describe it as uncertain, or omit it totally.

My experience in checking references proved most unsatisfactory. One paper is quoted in the book as saying that a reduction of 0.5 in the pH increased the threshold by \times 20 to \times 100, for it supports Dr. Pickworth's thesis. Reference to the original paper showed firstly that this increase occurred in the spinal reflexes only, and secondly that the motor cortex, more relevant to his thesis, showed an increase of only \times 2. The author can avoid the charge of deliberate falsification

only by pleading guilty to carelessness.

The second reference to be consulted was one quoted by him as evidence for his statement, "Electroconvulsive therapy . . . damages the pancreas . . . "The original paper, it is true, describes three cases with damage to the pancreas after electric shock: a man who was electrocuted accidentally by the mains, and two men who died after being struck by lightning! It is too late to hope that this review will overtake the book, so I suppose we must now resign ourselves to reading in every text-book of the next decade that E.C.T. sometimes damages the pancreas; and students, heaven help them, will be failed for not knowing it.

These were the only two references checked, but they were sufficient to show me that I dare not trust any statement the book makes. Then of what use is it to me? It is not sufficiently complete to be an encyclopaedia, it is not readable enough for a survey, and it is not accurate enough for a work of reference. I cannot avoid the

conclusion that the book's value is divorced from its price.

W. Ross Ashby.