

for consideration by the author will show the scope of the book; he deals with loud-speaker horns, electrical transmission lines, alternating current density and skin effect in wires, electric furnaces of eddy current type, etc. Another group of subjects covers the vibration of stretched membranes, the lateral vibrations of a conical bar and the 'virtual mass' added to a body when accelerating through a fluid. On these subjects the book is adequately self-contained.

The general pattern of the chapters is a beginning of theory and an ending of examples. The latter are very numerous—some six hundred in all. The author's statement that the book has been used with success for a course of lectures to practising engineers can readily be accepted as true, but the question still remains as to what the author meant by the expression "for engineers". Probably Dr. McLachlan had in mind the textbook by G. N. Watson as one suitable for mathematicians rather than engineers since a considerable analytical skill is required to extract working formulæ from that treatise. On the other hand, there is the book by Gray, Mathews and MacRobert, and we should hesitate to describe that as unsuitable for engineers; in fact, almost the whole of the theoretical part of Dr. McLachlan's book is to be found in the same form in MacRobert's, but in the latter there is

additional matter with engineering applications. Such extra matter covers the addition theorems and the contour integrals which Dr. McLachlan deliberately leaves out. Such integrals are not obtrusive in MacRobert's work and the general arrangement of the theoretical part in that work may be preferred to that of the new volume. It may be that familiarity with the older work has produced a bias in its favour.

It is pleasing to find the author stressing his belief that "it is rather hazardous to solve practical problems with a book in one hand and a pen in the other without a proper knowledge of the processes involved"; and within its admitted limitations the whole book satisfies the criterion laid down by giving adequate discussion of the theory behind the applications.

The book ends with certain tables of Bessel functions comparable in value to the tables in Jahnke and Emde and much less accurate than those of Watson and MacRobert. Perhaps a textbook on Bessel functions is no longer a suitable place for it, but a comprehensive collection—not limited to four significant figures—would be welcomed by some engineers. Lack of even a moderately complete set of tables seems to detract appreciably from the practical value of Dr. McLachlan's book. L. B.

Short Notices

Neuroanatomy: a Guide for the Study of the Form and Internal Structure of the Brain and Spinal Cord. By Prof. J. H. Globus. Sixth edition, revised and enlarged. Pp. xv+240 (53 plates). (London: Baillière, Tindall and Cox, 1934.) 16s.

TEXTBOOKS of neuroanatomy are rather apt to become redundant. "Neuroanatomy" by Prof. J. H. Globus was first published in 1915, and we now have the sixth edition. This edition has a method of dissection, and we can rest assured that any student who follows these dissections carefully and discusses the questions asked at the end of each 'assignment' will have a knowledge of the anatomy of the nervous system which will be enduring and at the same time exhaustive.

The book is divided into two parts, the first dealing with the description of the various parts of the brain together with the directions for dissection, etc. The second part consists of the plates, fifty-three in number: these can be detached and after completion by the student replaced in the book by adhesive paper. There are thirty-six figures in part one, all of which are original. The descriptions are extremely lucid and well done, and we congratulate the author on making what is really a very dry and difficult subject to most students into a fascinating and most interesting study.

There is an excellent index.

Nervous Breakdown: its Cause and Cure. By Dr. W. B. Wolfe. Pp. xv+260. (London: George Routledge and Sons, Ltd., 1934.) 7s. 6d. net.

THE question of the nervous breakdown is always with us, and few people realise the amount of time and money lost to the nation each year by people who have personal problems to solve and difficulties to meet that are too much for them. How many people lose heart in the struggle in unhappy homes with individuals they have learnt to hate and end it all in the river or what is nowadays much more comfortable—the gas stove. It is so easy, such a relief from torment. Fifteen people commit suicide in England every day. How many try but do not succeed and how many consider it, and say they have not the pluck to do it? To all these struggling individuals this book is addressed, and there is no doubt that it will be a great help, but how many are likely to read it? Few, we fear.

The author has shown himself a deep student of human nature and its weaknesses. How many of us are striving to save our 'face'! In his "plain words to parents" there is much worldly wisdom. To learn a funny story and tell it until you make someone laugh is good advice, but does not mean carrying *Punch* under your arm every day as one man used to do until he became an unsufferable bore!