him in his office of president of the Hull Playgoers' Society. Properly speaking, theatrical history in Hull does not begin until 1767, except for an ordinance of the Mayor and Corporation forbidding burgesses to attend performances of the players in 1599. Nor does Hull itself contribute much to the history of the drama, although Beverley, which comes within Mr. Sheppard's area, celebrated Corpus Christi with the usual plays and gild processions, and is also credited with the first mention of miracle plays. Mr. Sheppard has drawn liberally on the material available from York, Chester, and elsewhere in elucidating the early stages of his subject. No Corpus Christi plays are recorded in Hull; but it is interesting to note that there was a performance of the Noah play on Plough Monday in medieval and later times, when a large ship which hung suspended in the transept of Holy Trinity Church was taken down, dragged round the town, and then served as the ark of the play in front of the church. Mr. Sheppard describes a Ploughboys' Monday celebration which he himself saw in his early youth, when a group of rustic players went from house to house and acted a play which seems to have been of the usual folk drama type, culminating in the killing of one of the characters.

The Mathematics of Engineering. By Prof. Ralph E. Root. Pp. xiii + 540. (London: Baillière, Tindall and Cox, 1927.) 34*s.* net.

AMERICAN text-books of mathematics rarely find favour in Great Britain, and this work, written by a professor of the U.S. Naval Academy to meet the requirements of student officers, is scarcely likely to prove an exception. The tendency throughout is to give an empirical and mechanical knowledge of the subject, so that the engineer uses his mathematics merely as a tool. This is typified by the fact that a student is encouraged at an early stage in his mathematical career to rely on a table of integrals, rather than to acquire the facility for evaluating them independently. The degree to which the subject has been condensed may be judged from the fact that the theory of errors, method of least squares, and curve fitting have been dismissed in 42 pages.

The printing is marred by the rendering of all letters used as symbols in ordinary Roman characters instead of in the customary italics. In these days of monotype setting such an innovation cannot be defended on the grounds of economy, and, as it increases the difficulty of reading, it is to be hoped that other publishers will not follow suit.

L. J. C.

Spherical Harmonics: an Elementary Treatise on Harmonic Functions, with Applications. By Prof. T. M. MacRobert. Pp. xii + 302. (London: Methuen and Co., Ltd., 1927.) 15*s.* net.

THE object of this work is to provide a text-book on the elements of the theory of spherical harmonics with applications to mathematical physics so far as this can be done without employing contour integration. Within these limitations the author has certainly provided a useful book. The actual treatment of spherical harmonics occupies ten chapters with gravitational, electric, and magnetic applications. There is also a treatment of spheroids. No applications to hydrodynamics are mentioned. Chap. i. contains an account of Fourier expansions subject to Dirichlet's conditions, which should prove useful. Chap. ii. deals with the conduction of heat, and in Chap. iii. an interesting discussion of the vibrations of harp, violin, and piano strings is given, which offers a striking contrast in the effect of initial conditions. The last three chapters of the book give a valuable account of Bessel functions and their applications to the vibrations of a circular membrane and the flow of heat.

L. M. M.-T.

Mathematical Statistics. By Prof. Henry Lewis Rietz. (The Carus Mathematical Monographs, No. 3.) Published for the Mathematical Association of America. Pp. xi + 181. (Chicago and London: The Open Court Publishing Co., 1927.) 10*s.* net.

PROF. RIETZ aims at explaining the mathematical theory underlying modern statistical analysis, and in particular to correct misleading impressions as to the place and importance of probability theory. He has succeeded in giving an admirable and connected survey of the more important methods, including an account of the Lexis theory. The mathematics used are elementary and the style elegant, but the language is that of the mathematician, and it is doubtful whether the author will succeed in reaching those whose knowledge is confined to the elements of the infinitesimal calculus. From the point of view of readers of this class, the book would have been improved by a list of definitions of the terms employed. To those of mathematical tastes the book can be recommended as offering a convenient conspectus of an important field of thought. L. M. M.-T.

Studies in Psychology: Memory, Emotion, Consciousness, Sleep, Dreams, and allied Mental Phenomena. By Dr. William Elder. Pp. xv + 212. (London: William Heinemann (Medical Books), Ltd., 1927.) 8*s.* 6*d.* net.

DR. ELDER writes very sincerely as a neurologist who is much interested in psychological theory but is quite unable to think of a mind without a brain. He has no sympathy with modern psycho-analytic theory and writes as a whole-hearted behaviourist. He looks on sleep as an instinct which has become a habit. Dreams are to him easily explained on old-fashioned lines without any need to invoke the aid of the censor, the symbol, manifest or latent contents, or any other Freudian concept. The author very sensibly points out that the interpretation of dreams must by their very nature be largely a matter of guess-work and far removed from any claim to scientific accuracy. Altogether a most refreshing book in an age where one has almost forgotten the existence of any other dream theories than those of Freud, Jung, Adler, and Rivers.