The section devoted to the discovery of the elements, which follows an account of Mendeléeff's periodic law and other generalisations under the title " Atoms and Ions," is perhaps not so useful as it might have been. Here the references to the literature are quoted in a confusing manner. Frequently the year, volume, or page (sometimes two) are omitted, and German titles are occasionally misspelt (*e.g.* Poggendorff's *Annalen der Physik*), and the reference (p. 144) for ' the octet theory of valency ' (Abegg. *Zelt. An. Org. Chem.*, **39,** 330) will irritate those who desire to consult the original.

In spite of this minor defect, the book presents a useful survey of the origins and development of chemical science.   J. G. F. DRUCE.

Introduction à l'étude de la physique théorique. Par Prof. René Fortrat. Fascicule 6 : *Mécanique statistique.* Pp. ii + 100. (Paris : J. Hermann, 1927.) 10 francs.

IT is always rather difficult to estimate the value of one detached section of a larger work, for the scale and plan of the whole work can only be guessed. This difficulty is particularly noticeable in attempting to review on its own merits this section of Prof. Fortrat's work entitled " Statistical Mechanics."

To write a successful fairly elementary account of statistical mechanics in a hundred small pages is a task requiring great delicacy of judgment in selecting material. On such questions of taste one need not ask for complete agreement, but the reviewer is forced to admit that he finds the author's judgment poor. In the first place, the last forty pages of the book are devoted to two chapters on the older quantum theory of the atom, too slight to be of much value in themselves and entirely irrelevant to the professed subject matter. They contain, incidentally, statements about the discrepancy between the magnetons of Bohr and of Weiss which might lead an unwary reader to suppose, contrary to the facts, that there is a real difficulty and that the Weiss magnetism is still of some theoretical importance.

The remaining relevant sixty pages are rather good and rather unusual. The subject is treated from the conventional probability point of view, but the ideas and computations of the theory of probability are presented in detail and well illustrated in a way which owes much to Langevin. The applications of the theory have the pleasing and unusual feature of being mainly to magnetic phenomena. There are good short accounts of Langevin's theory of paramagnetism and Weiss's theory of ferromagnetism. If the rest of the book were of the same standard, it could be warmly praised.   R. H. F.

The Mechanics of Rowing. By W. B. Coventry. Pp. viii + 70. (London : E. and F. N. Spon, Ltd. ; New York : Spon and Chamberlain, 1928.) 4*s.* 6*d.* net.

THIS is an interesting addition to the literature of rowing, and the work is soundly based on Newtonian mechanics. The terms used are carefully explained, as is also the fundamental problem of connecting the equation of motion of the blade of the oar with the equation of motion of the boat. The variable nature of the effective propelling force is dealt with by the introduction of a constant ' mean effort ' operating from the catch to the finish of a stroke.

In the application of the theory to definite examples, it is rightly recognised that, in the last resort, the solution depends on the ' personal equation ' of the oarsman. Discussion of such subjects as the length of the stroke, the sliding seat, the weight of the crew and of the coxswain, indicates the practical interest in the racing ' eight ' round which the book centres. The effect of the density of the water is dealt with, and perhaps reference might have been made to Thomson's theorem and its application to the hydrodynamical problem of rowing a boat in shallow or deep water. The book concludes with emphasis on stamina and quickness as more valuable assets than big muscles.
                    H. D. A.

Eutychus : or the Future of the Pulpit. By Winifred Holtby. (To-day and To-morrow Series.) Pp. 142. (London : Kegan Paul and Co., Ltd. ; New York : E. P. Dutton and Co., 1928.) 2*s.* 6*d.* net.

MISS HOLTBY'S clever book, which reminds one occasionally of Oscar Wilde, is well worth reading. Students of science are perhaps not much interested in the future of the pulpit, and may agree with Anthony, the young intellectual, that " the pulpit has no future because religion has no future." But the book does, among other things, present an accurate picture of a certain type of vulgar sentimentality which pervades large sections of a modern community. Men of science for the most part are quite unaware of its existence, since their work only brings them into touch with intelligent people. In this dialogue, Eutychus is the exponent of popular religious notions, the devotee of what we may call ' Abide-with-me ' religion, with its cinema mentality and vulgar emotionalism. Moreover, Eutychus feels that he holds all the cards. " Whatever the sermon is to be you may be sure that it depends upon just how much I and my friends can stand . . . you've got to pay attention to what we stand for," says he. No wonder that Fénelon, the exponent of Catholic orthodoxy in this dialogue, sums up the situation by saying, " It is the influence of Eutychus which alarms me most."   J. C. H.

A First Book of Experimental Science. By W. A. Whitton. (First Books of Science Series.) Revised and enlarged edition. Pp. vii + 194. (London : Macmillan and Co., Ltd., 1928.) 2*s.* 6*d.*

A WELCOME will be given to this enlarged edition of a school book which has already proved its worth. As to standard, it suits candidates for the junior local examinations ; and as to scope, it deals with hydrostatics, mechanics, heat, and a little chemistry.