A Text Book of Trigonometry:
for Colleges and Engineering Schools. By William H. H. Cowles and James E. Thompson. Pp. x+373. (London: Chapman and Hall, Ltd., 1936.) 12*s.* 6*d.* net.

So many books on trigonometry are published that, when a new one makes its appearance, especial characteristics are naturally looked for. The present volume is much larger than usual, but it surveys a wider field as the course is intended to be a preparation for the study of higher mathematics, physical science and engineering. The authors state that several new and unique features are developed in the presentation of the subject, and this claim is well substantiated, for the fundamental principles of trigonometry are not dealt with in a piecemeal fashion so common in many books. Circular functions are, for example, defined generally at the beginning; radian measure, too, is introduced at once and used throughout the course. The discussion of complex numbers, expansions in series and general analytical trigonometry is not only thoroughly sound, but also is more interesting and complete than is usual. Two chapters are devoted to the manifold applications of the subject to surveying, mechanics, geodesy and astronomy. Instructive chapters are also given on logarithmic computation and the use of the slide rule, whilst emphasis is rightly laid upon accuracy, precision and significant figures in all numerical work. Considerable attention is also directed to the analysis of problems and the reduction of the formulæ deduced to a suitable form for numerical evaluation.

The student is provided with a large number of varied exercises to which answers are supplied, and some very useful tables are given at the end. The book is certainly well adapted to the purpose for which it was written, and reveals that trigonometry is something far more interesting than the mere solution of plane triangles.

F. G. W. B.

Moeurs et coutumes des indiens sauvages de l'Amérique du sud
Par Marquis de Wavrin. (Bibliotheque scientifique.) Pp. 656+16 plates. (Paris: Payot et Cie, 1937.) 60 francs.

In this impressive work of more than six hundred closely printed pages, the Marquis de Wavrin has embodied the results of fifteen years of travel and observation on five journeys of exploration among the less-known Indians of South America. He has covered a wide territory, for there is scarcely a part of the continent which he has not visited in that period; but his most entertaining and informative (in the anthropological sense) material is drawn from the various peoples of the Amazonian region. His method is anecdotal rather than systematic, except that he has classified his data into chapters according to subject, covering material culture, social organization, relations of the sexes, religious beliefs and folklore.

Although amusing and instructive enough to read, the unfortunate lack of method, by which the data from widely separated tribes are massed together without order or discrimination, makes it a source book for the delver after facts, rather than an ethnographical treatise. This is especially to be regretted as the author is an acute and careful observer. Perhaps he will conform to the suggestion made by M. de Créqui-Montfort in the preface, and produce a more formal account of his results later.

Thermodynamic Theory of Affinity:
a Book of Principles. By Prof. Th. De Donder and Prof. Pierre Van Rysselberghe. Pp. xx+142. (Stanford University, Calif.; Stanford University Press; London: Oxford University Press, 1936.) 13*s.* 6*d.* net.

THEORIES of affinity have interested physical chemists for a considerable time; moreover, greater recognition is now being given to such concepts as aids in the interpretation of experimental results.

The book now before us represents an essentially synthetic outlook, and the introduction of the terms "uncompensated heat" and "degree of advancement of a reaction" gives the basis upon which it is written. The former expression is simply the dQ' of Clausius under a slightly new guise, the latter (ξ), however, is decidedly interesting as representing the state of a chemical system; its time-derivative is a rate, which leads at once to a criterion of equilibrium. These two quantities are combined in the fundamental hypothesis that $dQ'/d\xi$ is independent of any particular relation between the pressure, temperature and "degree of advancement" during a reaction. A detailed analysis leads the authors to identify this coefficient with the affinity.

In general, the treatment developed in these pages is suitable for obtaining straightforward solutions to problems like Le Chatelier's principle; another volume is promised, to deal with applications and numerical examples. F. I. G. R.

Freud and Marx:
a Dialectical Study. By R. Osborn. Pp. 285. (London: Victor Gollancz, Ltd., 1937.) 8*s.* 6*d.* net.

IN this comparative study—the first of its kind to be undertaken—the author emphasizes the importance of a closer study of psycho-analysis by Marxists, of Marxism by psycho-analysts and of both by the general public. He maintains that as psycho-analysis teaches us to recognize that unconscious motives are at work in us all, the curriculum of the Marxist should include a study of the unconscious mind, both Freud and Marx being pioneers in revolutionary psychological discoveries.

The work contains a study of the relationship between Freudian and Marxist theories regarding primitive society, the materialistic conception of history, religion and dialectical materialism. In conclusion, the author declares that "the Marxist without knowing something of the subjective side of man's life will remain one-sided, as will the Freudian who misconceives the objective situation in which man's subjective life expresses itself".