

process, without partisanship or bias. The reader must not seek here for any panacea for the many ills arising out of the clash of cultures and ideals from which we are at present suffering in many parts of the world. This study is purely analytical. As the author points out, it is incomplete in the sense that further research is needed and consideration of the data available must be carried further in later volumes. The method is capable of an application wider than the mission field, and therefore deserves the careful consideration of all who are interested in the urgent problem of the future of primitive peoples.

*Mechanical Design of Overhead Electrical Transmission Lines.* By Edgar T. Painton. Pp. viii + 274 + 26 plates. (London: Chapman and Hall, Ltd., 1925.) 21s. net.

THE successful transmission of thousands of electrical horse-power by overhead wires over hundreds of miles is not only feasible, but has also been proved in almost every country to be attractive from the commercial point of view. Satisfactory operation has been attained by the continual attention that electrical engineers have been paying to the technique of design, and to the improvement of the quality of the materials used in construction. Continuous laboratory research and long experience have enabled them to anticipate operating difficulties, and combat them by selecting suitable materials and altering the design so as to raise the factor of safety. Of recent years long reports, papers, and patent specifications have been issued almost daily, and there are few who have the ability and the time to separate the grain from the chaff. This volume describes the latest constructional details, and makes references to the latest specifications issued by the British Engineering Standards Association, the American National Electric Light Association, and the Verband Deutscher Elektrotechniker. References are also given to many important papers published in the transactions of scientific institutions both at home and abroad. Novel data in connexion with steel cored aluminium conductors are given. These conductors are being extensively used, and necessitate changes in the details of transmission line design. This book can be recommended to both the practical and the academic engineer. The latter will see how many theorems given in examination papers have been modified to make them useful in practice.

*Round the World in Folk Tales: a Regional Treatment.* Sixteen Stories from Various Lands, with a Chapter on their Meaning. Compiled and edited by Rachel M. Fleming. (Folk Stories for the Geography, History, and Reading Lesson.) Pp. xi + 49 + 8 plates. (London: B. T. Batsford, Ltd., 1924.) 2s. net.

THE value of folk tales as illustrative material in education is now generally recognised. Miss Fleming has added to the indebtedness of teachers to her by the publication of this third collection of stories. It comprises sixteen stories drawn from widely scattered areas—Australia, Melanesia, Japan, China, America, Africa, Russia, and Brittany, to name some of the sources only. The bearing of the stories upon points of geography is perhaps more apparent than it was in the earlier volumes, and is further emphasised in an

introductory note. For example, "The Legend of the Flowers" from Australia is made to illustrate the effect of climate on vegetation and animal life, and in the same way, one of the Russian stories, extremes in climatic variation. Again character and quantity of food supply is a not unimportant feature which receives frequent mention, while the stories from Ireland and Brittany show the effect of the introduction of Christianity. The Bushman boy's account of some of the things told him by his mother might very well be used as the basis of a contrast in educational methods among civilised and uncivilised peoples. The bibliographical references are a useful guide for further study and add to the value of a book which should be widely used. The illustrations are interesting and well chosen, but might with advantage have been reproduced on a larger scale.

*The Principles of Thermodynamics.* By George Birtwistle. Pp. ix + 163. (Cambridge: At the University Press, 1925.) 7s. 6d. net.

THIS admirable little book, based on lectures given by the author in the University of Cambridge to students of varied scientific interests, contains an account of the fundamental principles of thermodynamics and their main applications to the various branches of science. It opens with a brief account of the historical preliminaries leading to the two fundamental laws and the idea of entropy. After an account of the chief characteristic equations for fluids, the usual mathematical relations involving the thermodynamic potentials are discussed and applied to the more elementary cases of simple and compound systems. The book closes with four chapters dealing respectively with osmotic and vapour pressure, thermoelectric phenomena, specific heats, and radiation.

The whole treatment of the subject is brief and almost sketchy; but it is up-to-date, well-balanced, and wholly adequate, as no essential step is missed either in the physical argument or its mathematical development. The author has had the courage to cut out ruthlessly all matter which is irrelevant to his main theme, and the result is a thorough but handy account of the subject, in which the component parts are presented in their true aspect. No attempt is made at a critical survey of the fundamental ideas or at a discussion of the extensive statistical side of the subject; but these would obviously have been out of place in a first book on the subject. We may, perhaps, hope that the author has intentions of writing a second volume.

G. H. L.

*Drogen und Drogenhandel im Altertum.* Von Dr. Alfred Schmidt. Pp. viii + 136 + 8 Tafeln. (Leipzig: J. A. Barth, 1924.) n.p.

IT has been well said that no branch of knowledge can be adequately understood without an acquaintance with its history, and this applies in full measure to a knowledge of drugs. The study of the history of drugs, cosmetics, balsams, unguents, spices, etc., from the earliest written records to the present time, is so intensely interesting as to make it appear strange that so few pharmacognosists have devoted themselves to it. True, Tschirch, Schelenz, and a few others have collected data, but they have, as a rule, failed to present them in an attractive form.