It then gives an introduction to direct current engineering. This is followed by a chapter entering very fully into the question of illumination. We next have alternating current engineering, including mercury rectifiers, and finally the practical theory of telegraphy and telephony.

Except in a few appendices, only elementary theorems of the calculus are used. Numerical examples are given at the ends of the chapters. The author writes very lucidly, and the theoretical matter given is not too difficult. His main object is to help the serious electrical student, and he has been successful. There is little to criticise anywhere in the book. The notation and nomenclature are practically always those adopted internationally. Where they differ from international usage there is good reason for the alteration. On p. 790 we do not see much use in having a special notation for the arithmetic mean of a harmonically varying quantity. With the possible exception of a few classical scholars, the readers of this work will have difficulty in understanding what the author means when he says that (H) eta is the English pronunciation of η, H, the seventh letter of the Greek alphabet. The book is cheap and should prove useful to many.

Optische Methoden der Chemie. Von Prof. Fritz Weigert. Pp. xvi + 632 + 16 Tafeln. (Leipzig: Akademische Verlagsgesellschaft, m.b.H., 1927.) 38 gold marks.

PROF. WEIGERT'S book is a guide to the use of optical methods in the study of chemical problems. It is therefore a practical rather than a theoretical book, and may be regarded as a specialised form of the "Hand- und Hilfsbuch zur Ausführung physikochemischer Messungen" which was produced by Ostwald many years ago, and of which a recent edition was reviewed in these columns in 1926. The similarity of type of the two books may also be inferred from the fact that Prof. Weigert has dedicated his own volume to Prof. Luther, now joint author of the "Handund Hilfsbuch."

The scope of Prof. Weigert's book is indicated clearly by the headings of the chapters, which deal with optical instruments, light sources, light filters, photographic processes, spectroscopy, photometry, spectrophotometry, colorimetry and nephelometry, colour measurement, energy measurements, photochemical measurements, microscopy and ultramicroscopy, the measurement of refraction, the analysis of polarised light, and the study of phosphorescence and fluorescence and the like. These chapters provide full information as to the instruments and processes that are available for each type of measurement. The descriptions are illustrated by 300 figures in the text, and by 16 plates at the end of the volume. There is also an appendix, in which the wave-lengths and intensities of the principal spectral lines are given.

The book is obviously useful, and can be commended without hesitation to all laboratories in which optical methods of investigation are used; and it should clearly find a place on the shelf on which books of numerical data are kept for immediate reference in the laboratory. T. M. L.

The Thirsty Earth: a Study in Irrigation. By E. H. Carrier. Pp. 222 + 8 plates. (London: Christophers, 1928.) 10*s.* 6*d.* net.

THIS book gives a general account of irrigation suited to the reader who wishes to know something of its effects and of the way it is done without going into too much technical detail. The author begins with a statement of the changes in climate which make land formerly humid become more arid: this is largely based on Ellsworth Huntington's conclusions, though reference is given to the views of Stein and of Burrard; he then gives some account of the methods of irrigation in the ancient world and in the modern world. The remainder of the book, and by far the largest part, is taken up with a description of the irrigated areas in Europe, America, Australia, and Africa, both north and south.

The author has collected much useful information especially geographical, and he gives numerous references which are particularly helpful, as this branch of the literature of the subject is not too well known. There is one notable omission, which should be remedied if a second edition is called for: there is no discussion of the relation of irrigation to malaria. Whenever irrigation is started in a dry region there is always the danger of malaria, and indeed this has probably been a factor in the break up of old irrigation communities. Some reference should have been made to the excellent work of Sir Malcolm Watson and those associated with him in the Malay Peninsula, and to the investigations of Prof. K. B. Williamson on the suitability of certain waters for the development of the mosquito.

Psychology of Infancy and Early Childhood. By Prof. Ada Hart Arlitt. (McGraw-Hill Euthenics Series.) Pp. xi + 228. (New York: McGraw-Hill Book Co. Inc.; London: McGraw-Hill Publishing Co., Ltd., 1928.) 10*s.* net.

THE recent formation of a Child Guidance Clinic under the Child Guidance Council, and with the approval of the London County Council, is an indication of the increasing importance attached to the mental care of the pre-school child in England. Miss Arlitt's book comes at a very opportune moment, and might with advantage be read by all parents who take a real interest in the mental welfare of their children. It is perhaps rather technical for the average reader, but there is a tremendous amount of straightforward material in the book which will point the way to train the pre-school child. If all mothers and fathers could be brought to carry out the training of the young children on the lines indicated, there would undoubtedly be a considerable lessening of the number of neurotics and psychoneurotics in England, and to a less extent a reduction in the number of cases of frank mental disorder of purely mental origin. The chapters on habit formation and on social attitudes in the preschool period and the development of personality strike us as the two most useful chapters in a well-written and evenly balanced book.

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