

READY REFERENCE TABLES. VOLUME I. CONVERSION FACTORS. BY CARL HERING, M.E. New York: John Wiley and Sons. 1904. xviii + 196 pp. Price, \$2.50.

This excellent little volume is the first one of a proposed series, which are intended to aid mechanical and electrical engineers rather than chemists, and yet the chemist will often find the work useful. First, there is a table of the fundamental physical quantities and relations defined in terms of length, mass and time. Then follow tables of weights and measures of electrical, thermal and photometric units, etc., each one being given in several equivalent forms, with the corresponding logarithms. For example, one meter is defined in millimeters, centimeters, inches, decimeters, feet, yards, fathoms and kilometers, and so on with other standards of metrology. Another table gives conversion factors for various weights and volumes of water, and another is devoted to thermometric scales, the absolute, the centigrade, the Fahrenheit and the Réaumur. Several pages relate to money, and two of these tables are rather novel. Thus one pound per kilogram is defined in terms of marks per kilo, cents per ounce, shillings per pound, etc. Commercial calculations, such as the verification of bills for supplies, or the comparison of contracts, are thus much facilitated. The strength of the volume, if such a term is admissible, is to be found in its electrical data, which are given with great thoroughness. The tables, it must be borne in mind, are not tables of constants for individual substances, but tables of conversion factors with their logarithms, and thus fill a place not occupied by any previous compilation.

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