

analysis appear to be no better than the one first mentioned.

While in our judgment Mr. Richardson's committee is all wrong, and will ultimately be admitted to be so, it is hardly to be expected that Mr. Eckel would do otherwise than he has; nevertheless the book, addressed as it is mainly to those who *use* cements, limes and plasters, while well-nigh complete in other respects, is deficient in respect to furnishing a method of chemical analysis that will give results that enable one to distinguish good cements from bad cements.

We congratulate those seeking information upon this interesting subject that Mr. Eckel has given them such a comprehensive and valuable work.

*A Treatise on Concrete, plain and reinforced; materials, construction and design of concrete and reinforced concrete.* With chapters by R. FERET, WILLIAM B. FULLER, SPENCER B. NEWBERRY. By FREDERICK W. TAYLOR, M.E., and SANFORD E. THOMPSON, S.B., Assoc. M. Am. Soc. C. E. New York, John Wiley & Sons. 1905.

The preface of this work states: "This treatise is designed for practising engineers and contractors, and also for a text and reference book on concrete for engineering students."

As hydraulic cement is the basis of all concrete structures, this announcement exhibits the book as designed to inform and instruct those who *use* cement. While many of the technical and engineering problems involved in the use of cement in mortar and concrete are of interest to us, we naturally turned to those portions of the book devoted to the chemistry of cements and cement mortars. A careful examination of the book reveals an exceedingly interesting chapter by Mr. Spencer B. Newberry (a very successful manufacturer of Portland cement), on the 'Chemistry of Hydraulic Cements.' We found nothing in this chapter especially designed to instruct the *users* of cement. We looked in vain through the body of the work for anything concerning the analytical examination of cements, cement mortars and concretes. In an appendix we

found the 'method suggested for the analysis of limestones, raw mixtures and Portland cements, by the committee on uniformity in technical analysis of the American Chemical Society, with the advice of W. F. Hillebrand.' As a method of ultimate analysis of the substances named the method proposed is well-nigh perfect; but for any purpose associated with the technical composition of cements, cement mortars and concretes, it has no value whatever.

The authors of this book are not chemists, hence they may be excused for any defects in the book involving a purely chemical problem; nevertheless, with all the good qualities the book possesses it is a defect that the book does not contain a scheme of chemical analysis by means of which good cements can be distinguished from bad cements and also by means of which the analyses of cements and cement mortars and concretes may be correlated with one another and with the physical tests of the cements used. We believe the time is not far distant when those who *use* cement will be brought to realize the supreme importance of such a method.

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*Technique de psychologie expérimentale* (Examen des sujets). In Toulouse's 'Bibliothèque internationale de psychologie expérimentale.' Toulouse, Vachide et Piéron. Paris, O. Doin. 1904. Pp. 335.

The scope of this work is much more limited than the first title would indicate; the subtitle indicates more exactly the ground covered; yet the scope is still narrower than this at first suggests. The book does not, of course, attempt to condense into one small volume the whole subject of experimental technique in psychology; it limits itself definitely to the technique of 'tests,' by which the mental traits of individuals are measured. But, further, the book makes no attempt to cover the already rather extensive literature of mental tests; it scarcely refers at all to other authors. Its sole and consistent purpose—a purpose which has guided the authors in several years of experimentation, of which this book presents the outcome—is to formulate a system of mental tests which shall take