A TREATISE ON CEMENT SPECIFICATIONS:
INCLUDING THE GENERAL USE, PURCHASE,
STORAGE, INSPECTION AND TEST
REQUIREMENTS OF PORTLAND, NATURAL,
PUZZOLAN (SLAG) AND SILICA (SAND)
CEMENT AND METHODS OF TESTING AND
ANALYSIS OF PORTLAND CEMENT

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A Treatise on Cement Specifications: Including the General Use, Purchase, Storage, Inspection and Test Requirements of Portland, Natural, Puzzolan (Slag) and Silica (Sand) Cement and Methods of Testing and Analysis of Portland Cement by Jerome Cochran

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JEROME COCHRAN

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AND

METHODS OF TESTING AND ANALYSIS OF PORTLAND CEMENT

BY

JEROME COCHRAN, B.S., C.E., M.C.E.

Author of A. Inspection of Concrete Construction" and Numerous Technical Contributions



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PREFACE

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In the preparation of this treatise on specifications for cement (one of the most important materials used in construction work of any magnitude) the constant aim has been to present a set of specifications that would not only be consistent throughout, but which, at the same time, conforms to modern practice. The author is well aware of the fact, however, that no specifications for cement will ever be devised which will meet all mental conditions of engineers and all constructional and manufacturing conditions of actual work, and the following specifications do not perform the impossible, as there are a few matters of detail embraced herein where there is difference of opinion among able engineers, many of whom are at least as competent as the author to determine what is best. It is not expected that all the provisions found herein will be applicable to every class of construction work. A careful study must be made, for reasons which will suggest themselves, of the surrounding conditions and limitations, and these specifications modified in accordance.

In the preparation of these specifications the endeavor has been to observe a logical order and a due proportion between different parts. Great care has been taken in classifying and arranging the specifications and it will be helpful to the reader to notice that they are divided successively into parts, sections and paragraphs. Every precaution has been taken to present the specifications in a form for convenient practical use and ready reference. The table of contents shows the general scope of the specifications and a very full index makes everything in the specifications easy of access.

The engineering periodicals and transactions contain a large number of articles wherein specification requirements for cement play a very important part in construction work, and hence numerous but carefully selected references to them are made a prominent feature of this work. Besides directing the student and young engineer in his preparation of similar specifications, they encourage him to form the habit of consulting these great cyclopedias of engineering practice. No attempt is made to refer to all the engineering periodicals published in this country nor to include every article on the subject to be found in the periodicals selected. The aim has been merely to give a sufficient number of selected references, to enable the student or young engineer to study the methods employed by others in drawing up cement specifications.

While this work is in some respects imperfect and there is no doubt room for the addition of much information, there has not heretofore been anything like as complete a presentation of the subject; and in consideration of this fact the reader is requested not to be too critical.

JEROME COCHRAN, C.E.

DETROIT, MICHIGAN, May, 1912.

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