

crete in Chapter III; Chapter IX on Proportioning; the enlargement of Chapters XIV and XV on Mixing and Depositing; the addition on pages 236 and 237 of tables for quantities of materials for rubble concrete; and the insertion of the most recent tests and conclusions on the strength and permeability of concrete. The list of references in Chapter XXXI has been increased over fifty per cent, new references having been carefully selected from the immense quantity of current literature published since the first issue of our book.

The large increase in the quantity of material has necessitated a rearrangement of the matter and beyond page 235 the pages have been renumbered. To simplify the formulas, the demonstrations have been placed as far as possible in footnotes or appendices. By the use of a thinner but higher quality of paper the book is increased but slightly in size.

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FREDERICK W. TAYLOR.
SANFORD E. THOMPSON.

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Deduction of Formulas for Chimney and Hollow Circular Beam Design.

APPENDIX IV

Method of Combining Mechanical Analysis Curves.

A Treatise on Concrete

CHAPTER I

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