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PREPARED IN THE EXTENSION DIVISION OF THE UNIVERSITY OF WISCONSIN

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GEORGE A. HOOL

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ENGINEERING EDUCATION SERIES

REINFORCED CONCRETE CONSTRUCTION

VOLUME I. FUNDAMENTAL PRINCIPLES

INCLUDING

NUMEROUS TABLES AND DIAGRAMS TO FACILITATE THE CALCULATION AND DESIGN OF REINFORCED CONCRETE STRUCTURES

PREPARED IN THE

EXTENSION DIVISION OF

THE UNIVERSITY OF WISCONSIN

BY

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PREFACE

This volume forms the first part of the regular course on Reinforced Concrete Construction offered by the Extension Division of The University of Wisconsin and, in common with a number of the other structural engineering courses offered, presupposes a knowledge of the elements of structures. It has been written primarily to meet the needs of those who desire to take up the study of this subject by correspondence, but the author sees no reason why a text of this nature may not be employed for other purposes.

The complete text for the course in Reinforced Concrete Construction is in three volumes: one on the fundamentals, one on the design and construction of retaining walls and buildings, and one on the design and construction of bridges and miscellaneous structures. The present volume on fundamentals omits, for simplicity, the flat-slab type of floor construction—a subject reserved for thorough treatment under the heading of concrete floors in Volume II. The text is intended to be supplemented with such material as is suited to the special needs of the individual student.

Information on the subject has been drawn from many sources but it should be stated that the text-books, "Principles of Reinforced Concrete Construction" by Turneaure and Maurer (Copyright, 1907, 1909 by F. E. Turneaure and E. R. Maurer) and "Concrete Plain and Reinforced" by Taylor and Thompson (Copyright, 1905, 1909 by Frederick W. Taylor) have been referred to constantly.

The author wishes to express his indebtedness to Mr. F. C. Thiessen for his excellent work in preparing the illustrations and for his help with the computations.

The photographs of the beam and column tests were kindly lent by Mr. M. O. Withey, Assistant Professor of Mechanics in The University of Wisconsin.

G. A. H.

The University of Wisconsin,
Madison, Wisconsin,
June 1, 1912.

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