

**CONCRETE-BLOCK
MANUFACTURE;
PROCESSES AND
MACHINES**

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Concrete-block manufacture; processes and machines by Harmon Howard Rice

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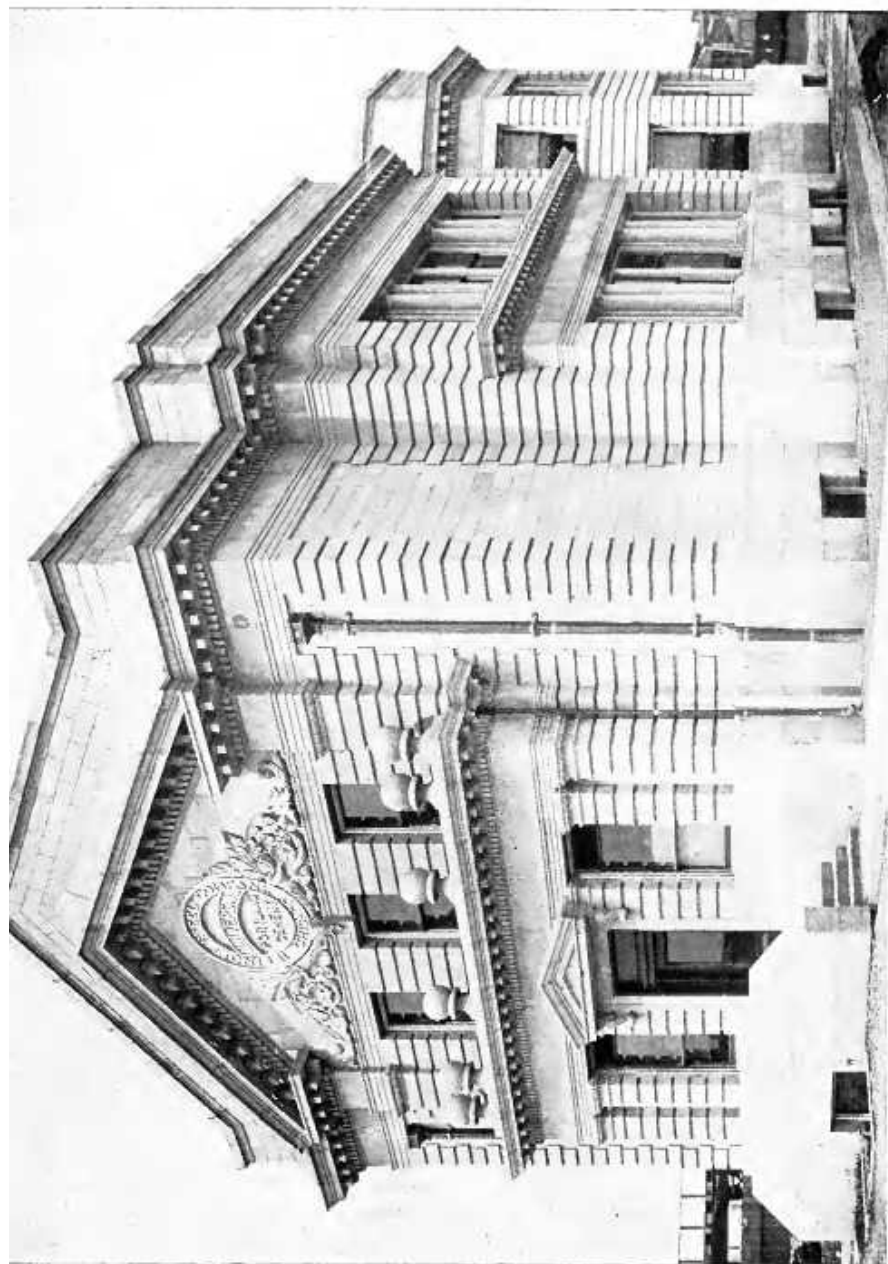
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HARMON HOWARD RICE

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Office Building of the Burlington Cement Plant of the Illinois Steel Co.

Frontispiece.

CONCRETE-BLOCK MANUFACTURE

PROCESSES AND MACHINES

BY
HARMON HOWARD RICE

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PREFACE.

THE object of this book is to present in a simple manner those well-established principles of concreting which practice has shown applicable to the manufacture of concrete blocks for building hollow walls.

The theoretical and technical questions which arise in connection with the industry are only considered in so far as benefit may result to the operator in the actual manufacture of blocks and their use in construction.

The conclusions which have been reached are the result not only of the author's experience in actual work, but of a careful consideration of the successes and failures of a large number of operators throughout a series of years, supplemented by a careful weighing of the many articles bearing on particular phases of the subject which have been published in cement, engineering, and building magazines.

To many it will appear that this book is unduly critical. For this no apology is offered. As the industry grows much of the evil herein criticised will pass away, and it is hoped that this work may, in some measure, aid in giving to the weaknesses of the industry that prominence which can alone secure their eradication, to the end that concrete blocks may universally attain that high regard now accorded in localities where they are manufactured by really able hands.

As no allusion to patents is made in the text, the author deems it but fair to here state that very many of the designs and machines shown are protected by letters patent.

To those manufacturers whose ready cooperation has been both a powerful stimulus and a substantial aid in the production of this work grateful acknowledgment is rendered. To those who have so generously furnished illustrations of the machines they make, and of the buildings, blocks, and special members produced in machines or molds of their manufacture, the author's thanks are due. This list is as follows: The Winget Concrete Machine Co., Columbus, Ohio, Figs. 11 and 18; The Cement Working Machinery Co., Detroit, Michigan, Fig. 44; Kells' Foundry and Machine Co., Adrian, Michigan, Fig. 5; Miracle Pressed Stone Co., Minneapolis, Figs. 10, 13, 38, and 39; H. S. Palmer Hollow Concrete Building Block Co., Washington, D. C., Figs. 3, 14, and 15; J. B. Prescott & Son, Webster, Massachusetts, Fig. 40; White Cement Machinery Co., Jackson, Michigan, Fig. 43; The Hayden Automatic Block Machine Co., Columbus, Ohio, Figs. 17 and 34; Contractors' Supply and Equipment Co., Chicago, Fig. 1; Municipal Engineering and Contracting Co., Chicago, Fig. 2; Ideal Concrete Machinery Co., South Bend, Indiana, Figs. 28, 30, 31, and 35; Simpson Cement Mold Co., Columbus, Ohio, Fig. 45; The American Hydraulic Stone Co., Denver, Colorado, Figs. 6, 7, 8, 9, 12, 19, 21, 23, 24, 25, 27, 29, 32, 33, 36, and 37; The Pettyjohn Co., Terre Haute, Indiana, Figs. 16, 22, and 26; Concrete Block Machine Co., Auburn, Indiana, Fig. 4; Century Cement Machine Co., Rochester, New York, Figs. 41 and 42; Chase Foundry and Manufacturing Co., Columbus, Ohio, Fig. 20. The frontispiece is presented by courtesy of *The Cement Age*, New York.

HARMON HOWARD RICE.

DENVER, COLO., March 1906.

CONTENTS.

CHAPTER I.

CONCRETE.

	PAGE
Definition.....	1
General theory.....	2
Monolithic construction.....	2
Advantages of block construction.....	3

CHAPTER II.

CEMENT.

History of hydraulic cements.....	4
Puzzolan cement.....	4
Natural cement.....	5
Portland cement.....	6
Processes of manufacture.....	7
Testing cement.....	7

CHAPTER III.

AGGREGATE.

Definition.....	9
Sand.....	9
Gradation of sizes.....	10
Screenings.....	11
Gravel and broken stone.....	11
Cinders.....	12

CHAPTER IV.

WATER.

	PAGE
Purity.....	13
Quantity.....	13
Water in curing.....	14
In winter work.....	14

CHAPTER V.

OTHER INGREDIENTS.

Lime.....	16
Hydrated lime.....	17
Chemical adulterants.....	18
Waterproofing compounds.....	18
Coloring-matter.....	19

CHAPTER VI.

PROPORTIONING.

Methods of expressing.....	20
Importance of ascertaining local conditions.....	20
Theory of correct proportions.....	21
Determination by specific gravity.....	21
Determination by the water method.....	22
Determination by relative volume.....	22

CHAPTER VII.

MIXING.

Importance of thorough manipulation.....	24
Method of hand-mixing.....	25
Power-mixing.....	26
Continuous <i>vs.</i> batch mixers.....	27

CHAPTER VIII.

SHAPE OF BLOCKS.

Advantages of hollow space.....	31
Description of representative types.....	33