

**REINFORCED CONCRETE;  
MECHANICS AND  
ELEMENTARY DESIGN**

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Reinforced concrete; mechanics and elementary design by John P. Brooks

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**JOHN P. BROOKS**

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## REINFORCED CONCRETE

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# REINFORCED CONCRETE

MECHANICS AND ELEMENTARY  
DESIGN

BY

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## P R E F A C E

THIS volume is designed primarily to supplement the usual college work in mechanics and masonry design. With this end in view there is herein no duplication of these subjects. The reader is referred to sources of information regarding the results of tests on reinforced concrete material and only such quotations are given as serve to illustrate principles. The details of reinforced concrete construction are constantly changing and the latest designs are to be found in the engineering periodicals; consequently, matter of this character is not given.

As a guide to the selection of proper constants in designing, much of the report of the "Joint Committee" is given without change, and frequent references to the same are made throughout the book.

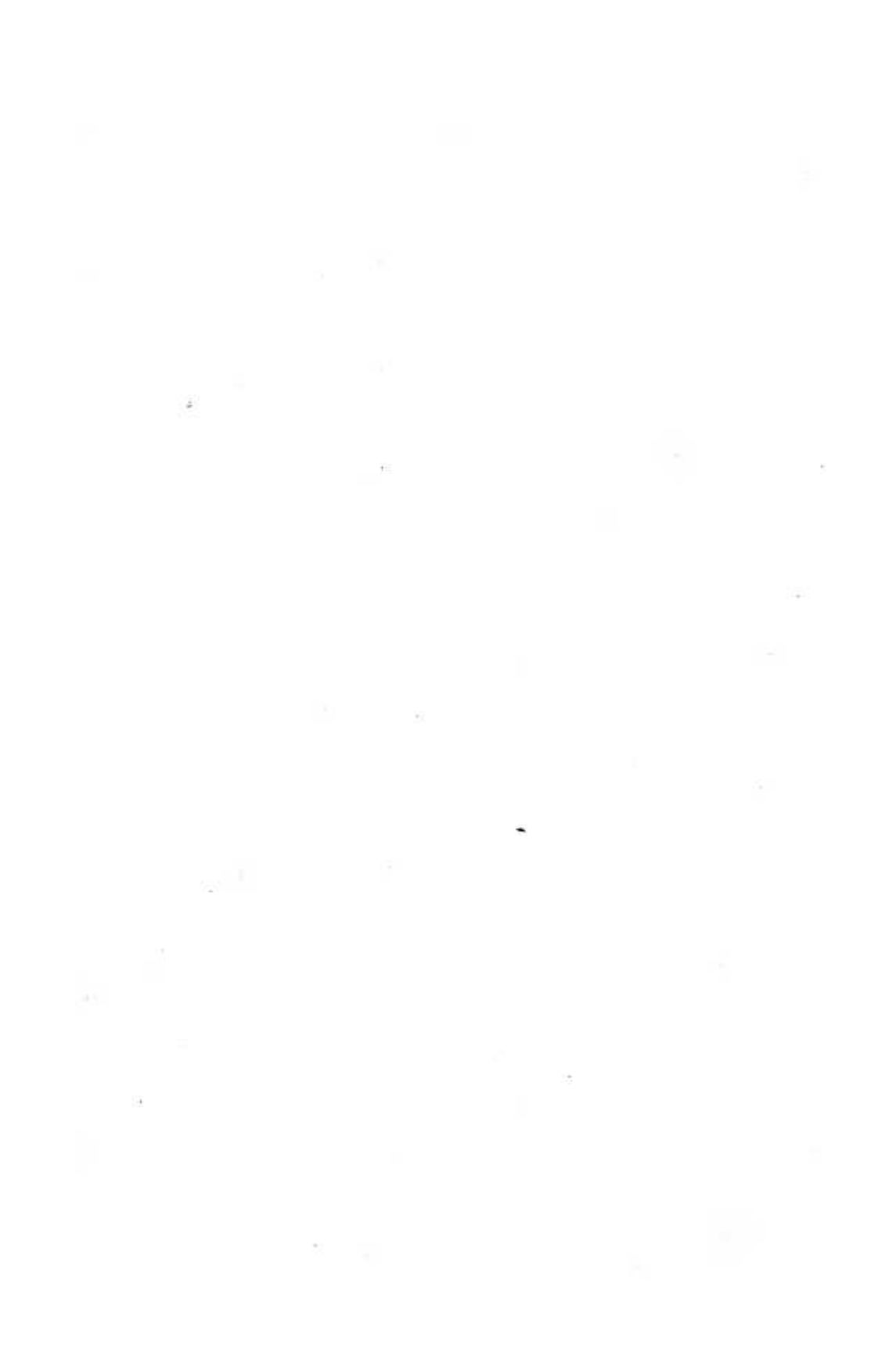
The nomenclature is, usually, made up of initials of the words indicated, and for this reason it was thought best to use  $S_t$  rather than  $f_s$  for the tensile stress in the steel. In general, the nomenclature is that in common use.

Several designs of reinforced concrete structures are worked out in detail with particular reference to the proper sequence of computation. The principles of economy in design are set forth and the diagrams in use lead to the proper selection of steel and concrete dimensions.

It is hoped that the book may enable the reader or student to become familiar with the methods of analysis and design of reinforced concrete structures with as little unnecessary work as possible.

J. P. B.

POTSDAM, NEW YORK  
September, 1911.



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