

**STRENGTH OF MATERIALS;
A
MANUAL FOR STUDENTS
OF ENGINEERING**

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Strength of materials; a manual for students of engineering by William Charles Popplewell

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WILLIAM CHARLES POPPLEWELL

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STRENGTH OF MATERIALS

A MANUAL FOR STUDENTS
OF ENGINEERING

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GENERAL

PREFACE

THE greater part of the matter contained in the following pages is based on the notes of lectures given to the day and evening students at the Manchester Municipal School of Technology during the last five sessions.

The book is intended for the use of those students of engineering who are desirous of obtaining a working knowledge of the fundamental principles involved in problems of machine and structural design. It should be found useful to candidates for the Third and Honours stages of the Examinations of the Board of Education, the examination for the admission of Associate Members to the Institution of Civil Engineers, as well as the examinations in the Engineering Schools of the Universities.

It will be seen that special attention has been paid to the unequal distribution of stress, and to the limits of elasticity in iron and steel. Many of the examples quoted are taken from experimental results obtained by the writer or his students. It is also to be noted that the majority of the proofs given are similar to those used in most of the text-books.

The author desires to acknowledge his indebtedness to the many writers of books and scientific papers to which he has referred in collecting these notes.

W. C. P.

MANCHESTER, 1907.

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