THE STRENGTH OF MATERIALS

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The Strength of Materials by J. A. Ewing

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THE
STRENGTH OF MATERIALS

BY

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PREFACE TO THE FIRST EDITION.

IN modern schools of Engineering a student acquires his knowledge of the Strength of Materials and of its application in design, partly by hearing lectures, partly by making experiments in the laboratory, and partly by working out examples in the drawing-office. The present treatise is an attempt to set forth briefly a lecture-room treatment of the subject, which to be effective must be supplemented by laboratory and drawing-office work. Indications are also given of some laboratory experiments in elasticity, and a number of pieces of apparatus are described which have proved serviceable at Cambridge.

I am indebted to Messrs A. and C. Black for permission to use the substance of the article "Strength of Materials" which I wrote for the Ninth Edition of the *Encyclopaedia Britannica*. Also to Professor Unwin, and his publishers Messrs Longmans, for the illustrations on page 77, which are taken from his valuable Treatise on the Testing of Materials. To Mr T. Peel of Magdalene College I owe much for his kindness and care in reading the proofs of these sheets.

J. A. EWING.

ENGINEERING LABORATORY, CAMBRIDGE.
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