

**ELEMENTARY SCIENCE
APPLIED TO SANITATION
AND PLUMBERS' WORK.
SECOND EDITION**

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Elementary science applied to sanitation and plumbers' work. Second edition by A. Herring-Shaw

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A. HERRING-SHAW

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APPLIED TO SANITATION
AND PLUMBERS' WORK

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PREFACE TO SECOND EDITION

IN presenting the Second Edition of *Elementary Science applied to Sanitation and Plumbers' Work*, the author desires to express his hearty thanks to all who were kind enough to offer criticisms and express opinions as to the value of the book.

On mature consideration it has been thought advisable to include a varied and extensive series of questions and answers in the mensuration section, which will doubtless be useful to teachers and taught.

The calculations on heating and ventilation have been extended, and several pages added to the mechanics section, in addition to alterations and extensions in other parts of the book.

To the publishers the author's thanks are due for the skill and care bestowed in the production of this edition, and, combined with the extensions and alterations effected in the text, it is hoped the sphere of usefulness of the work will be greatly extended.

A. HERRING-SHAW.

MUNICIPAL SCHOOL OF TECHNOLOGY,
MANCHESTER, 1910.

PREFACE TO FIRST EDITION

THE object of the author in compiling the matter contained in the following pages, is to produce a book on Elementary Science, fully treated (in its fundamental principles, and application to Sanitation and Plumbers' work) in such a manner as will be readily understood by all students. The price has been fixed at a low figure, to bring the

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book within the reach of all classes. It will be found useful to students preparing for the Examinations of the City and Guilds of London Institute, the Registered Plumbers' Company, and the Royal Sanitary Institute of Great Britain. The examiners to these institutions, almost without exception, complain of the lack of knowledge of Elementary Science on the part of candidates who take the above examinations.

The author hopes that the contents will be of material assistance in raising the standard of the work done by students of Sanitary Engineering. Should a student find any difficulty in thoroughly grasping any of the principles set forth in this book, the author will be pleased to afford him assistance, if it be in his power to do so.

The sincere thanks of the author are due to Professor J. Radcliffe, M.Sc.(Tech.), and the members of the staff of the Municipal and Sanitary Engineering Department, Municipal School of Technology, Manchester, for valuable suggestions and assistance, and also to various firms for the loan of electros.

A. HERRING-SHAW.

MUNICIPAL SCHOOL OF TECHNOLOGY,
MANCHESTER.

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