

**WORKSHOP
MATHEMATICS,
PART II**

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Workshop Mathematics, Part II by Frank Castle

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BY

FRANK CASTLE, M.I.M.E.

MECHANICAL LABORATORY, ROYAL COLLEGE OF SCIENCE, SOUTH KENSINGTON.
LECTURER IN MATHEMATICS, PRACTICAL GEOMETRY, MECHANICS, ETC.,
AT THE MORLEY COLLEGE, LONDON

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PREFACE

To intelligently perform his work, an artizan must have a knowledge of Elementary Mathematics. When he comes to appreciate this fact for himself the workman generally finds that even the arithmetic he learnt at school has left him, and that he remembers little more than four simple rules and the multiplication table. Teachers soon discover that though anxious to learn, a student of this kind does not wish to lose contact with the practical requirements of the workshop,—he is impatient of “pure” mathematics,—so the question arises how to teach him mathematics enough, by dealing with the calculations themselves which he is actually called upon to make at his work.

The plan which is found most successful is a compromise. It is useless to say that all students ought to learn the broad principles of mathematics first, and apply them afterwards. Experience has proved that most artizans will not attend classes where the authorities decide that this is the only course.

To meet the difficulty classes in Workshop Arithmetic, Workshop Calculations and Practical Mathematics, have grown up, and it is to provide for young workmen beginning to attend one of these classes that this little book has been prepared. It will form with Part I, an introduction to my larger volume on “Practical Mathematics” which has been received very

favourably, and will, I trust, prove serviceable to a class of students who deserve every assistance.

A long experience in my own classes has convinced me that the solution of a large number of carefully graduated exercises of a practical kind is the best way to maintain the interest of the student. It will consequently be found that the most prominent characteristics of the present book, and also of Part I., is the subordination of rigid mathematical proof to the provision of numerous problems drawn from the student's everyday experience.

FRANK CASTLE.

LONDON, *August*, 1900.

CONTENTS.

CHAPTER I.

Duodecimals,	Page 1
------------------------	--------

CHAPTER II.

Logarithms. Multiplication and Division by Logarithms,	5
--	---

CHAPTER III.

Involution and Evolution by Logarithms. Common and Napierian Logarithms,	13
--	----

CHAPTER IV.

The Slide Rule,	23
---------------------------	----

CHAPTER V.

Circumference of a Circle and an Ellipse. Length of a Circular Arc,	30
---	----

CHAPTER VI.

Area of a Circle and Ellipse. Area of a Sector of a Circle. Area of an Annulus,	36
---	----

CHAPTER VII.

Areas of Irregular Figures. Trapezoidal and Simpson's Rules. Planimeters. Centre of Gravity,	44
--	----