# COLLIN'S ELEMENTARY SCIENCE SERIES; AN ELEMENTARY HANDBOOK OF APPLIED MECHANICS

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649508877

Collin's Elementary Science Series; An Elementary Handbook of Applied Mechanics by William Rossiter

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

WILLIAM ROSSITER

# COLLIN'S ELEMENTARY SCIENCE SERIES; AN ELEMENTARY HANDBOOK OF APPLIED MECHANICS

Trieste

### Collins' Elementary Science Series.

AN

### ELEMENTARY HANDBOOK

OF.

## APPLIED MECHANICS,

#### WITH 88 DIAGRAMS.

BY

#### WILLIAM ROSSITER,



LONDON AND GLASGOW: WILLIAM COLLINS, SONS, AND COMPANY. 1873.

186. g. 6g.

¥ 3

#### I OFFER THIS LITTLE BOOK

.

- 1

33

.

**5**2

÷....

8 040 21

TO

#### PROFESSOR HUXLEY, F.R.S.,

PRINCIPAL

-

SOUTH LONDON WORKING MEN'S COLLEGE

(1)

<u>83</u>

93 9**8** 70 • • •

> 2250 2340 243

> > ω.

25 (NE) 18 -

i,

(R)

### PREFACE.

.

1

.

÷.,

To explain in simple language so much of the science of Applied Mechanics as is required for the Elementary Examinations in that subject, is all that is attempted in this little book, and this has been done with more cspecial reference to the Examination of the Science and Art Department.

In the diagrams I have tried only to illustrate the text, which will account for their simplicity.

W. R.

WORKING MEN'S COLLEGE, BLACEFRIARS' ROAD, LONDON December, 1872.

## CONTENTS.

INTRODUCTION,	4			Si	÷	598	7 <b>%</b>	9 9
		CHA	PTER	. I.	23			
etones, .	. <b>.</b>	۲	5			•	8	21
	3	CHAI	PTER	Ц,				
NRTALS, .		•		3 <del>.</del>			8	35
	0	HAP	TER	ш,				
FUEL AND FUEL	ACES,	33 <b>8</b>	2	642	з¥	•3	•	60
	è	THAT	TER	IV.				
TIMBER, .	6	8			٠	1	•	70
	i i	CHAI	PTER	₹,				
DECAY AND PRI	CSERVA	TION	OF	MATE	RTALS,	•		78
	Ģ	CHAR	TER	VI.				
STRENGTE OF M	ATERI	ALS,	•2	•		•3		82
	C	HAP	TER	VIL				
MECHANICAL PO	WERS,		<b>1</b> 6	387	¥.	•	3 <b>9</b> 7	110
(1)								

Si (0)

82