# GAS MEASUREMENT AND GAS METER TESTING

Published @ 2017 Trieste Publishing Pty Ltd

#### ISBN 9780649481392

Gas Measurement and Gas Meter Testing by F. W. Hartley

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

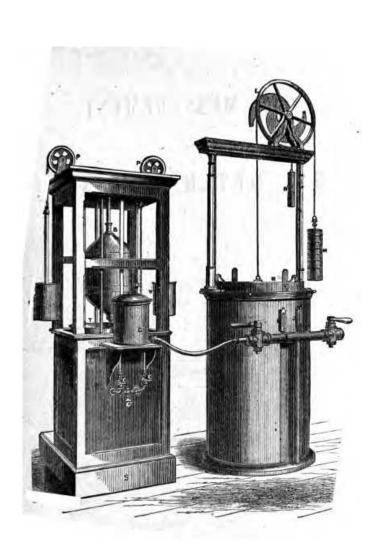
This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this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

www.triestepublishing.com

#### F. W. HARTLEY

# GAS MEASUREMENT AND GAS METER TESTING





#### GAS MEASUREMENT

AND

### GAS METER TESTING.

BY

F. W. HARTLEY, A.I.C.E.,

HON. M. GAS INSTITUTE.

FOURTH EDITION REVISED AND EXTENDED.

Entered at Stationers' Juli.

SIU PAZ Ego: FIRM

E. AND F. N. SPON, 16, CHARING CROSS.
NEW YORK: 44, MURRAY STREET.

1882.

101 . 183

E. BLANCHARD & CO., PRIETRES, 8 & \$. Little College Street, and \$. Cowley Street, Westminster.

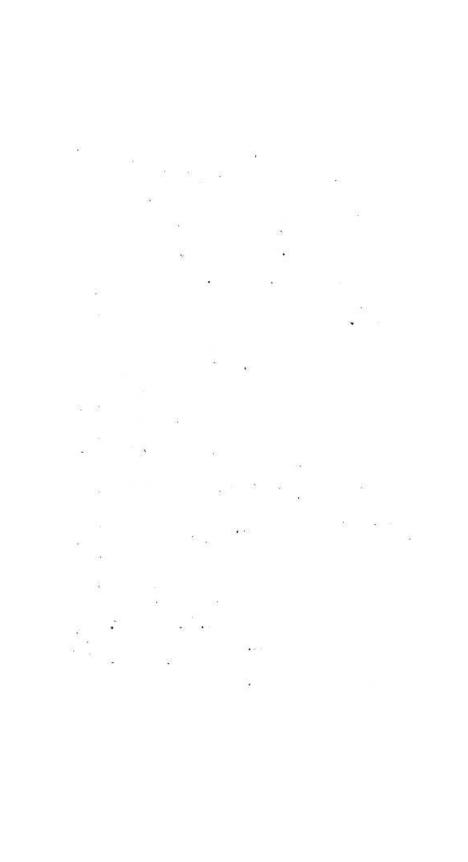
#### PREFACE.

A CONSIDERABLE part of the matter contained in this little book was first published in the year 1862, under the title of "Gas Meter Testing," and the ready Sale of that Edition satisfied me that by its issue I had really met a pressing want. Two other editions followed the first: the book with each issue being extended somewhat in its matter, so that during twenty years three thousand copies have been exhausted, while it is still in demand. Having regard to the purely technical character of the Work, this is a somewhat surprising fact, but one which is very satisfactory to me.

The present Edition contains much more in the way of general information than its predecessors, and if it be found that much of such information is merely historical, and much of it purely elementary, I trust none of my readers will think worse of the book on that account, but remember that this, like most text books, is intended to instruct those who are not well informed, as well as to serve as a reference book to those who are so.

F. W. HARTLEY.

London, July 12th, 1882.



### CONTENTS.

•								
								PAR.
	INTRODUCTORY		200	2010				1-4
	GRADUATION OF MEASURE	<u> </u>						
	Prior to 1861	***	144	1646	***			5-10
	Since 1861	***	***	***	***		***	39-43
	SALES OF GAS ACT				1.484	11	14, 45	, 46, 67
	Probable Amendu	nent of			***		•••	125
	STANDARD MEASURES-		3.5					
	Cubic Foot	***	-14	***	1	6, 39-	-43, 1	17-121
	Gasholders	~0	164	400	348		6, 17-	<b>—23, 63</b>
	,, Compe	neation	ı of	100	2.5	22.	21,	123, 124
	Gas Meters	- 70	955	***	1775	7.3	24	<b>38, 88</b>
	KINDS OF METERS TO BE	TEST	ED					
	Wet, Ordinary	ete:	255	179.5	8,000	5550	***	46-49
	" Station	***	2555	-555	1855	515(1)	51	55, 92
	Dry	***						50, 103
	APPARATUS REQUIRED-							
	Gasholders, &c.	1474	300	***	000	•••	ini	56-63
	TESTING OPERATIONS-							- 2
	Wet Meters	20000	20000	3335	5200	61	, 69,	94-102
	Dry ,,		23.5%	0.000	10.5	***	65,	68, 103
	Soundness Test	***	***		***		71	<b>—73</b> , 94
	Excess, or Fast T	est	***	***	74,	75, 78	3, 79,	97-103
	Deficit, or Slow T	est	***					76-78
	Effect of Presence		300	1387	8		41 1	06-119

						T AM
TEMPERATURE-						
Uncertainty of Correction	a	300	***	2000	0.00	80-82
Effect on Gaseous Volume	in.	(998)	***	200	83, 1	18-116
Rules for Correcting for	***	***	***	85-	-87, 1	13—116
THE TEST METER-						84
Description of		***	***	***	***	24-38
Mode of Adjusting	•••	395		***	3999	8891
" Application	ter.	900	***	491	200	92, 93
. ,, Testing with	**	***		***	***	94-103
GAS OR AIR-						
For Meter Testing	***	***	2006	33.66	79,	104, 105
Effect of Temperature on	***	***	20040		89, 1	13-116
" Pressure on	***		222		41, 1	06-112
AMENDMENT-						
Of the "Sales of Gas Act	*	***	***		1	25-130
FORMS OF BOOKS-						
Certificates, &c	er	***	0000	***	1	31-137
Free-			· ·			
For Testing Meters	•••	***		144		138
PER-CENTAGE OF ERROR TABLES	***	30.00	***	]	Pages	78-91