# ELECTRIC LIGHT ARITHMETIC

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649398072

Electric Light Arithmetic by R. E. Day



Edited by Trieste Publishing Pty Ltd.
Cover @ 2017



www.triestepublishing.com

R. E. DAY

# ELECTRIC LIGHT ARITHMETIC

Trieste

# ELECTRIC LIGHT ARITHMETIC.

# ELECTRIC LIGHT ARITHMETIC

BY

R. E. DAY, M.A.,

EVENING LECTURER IN EXPERIMENTAL PHYSICS
AT KING'S COLLEGE, LONDON.

London:
MACMILLAN AND CO.
1883.

London:
R. Clay, Sons, and Taylor,
Bread Street Hill, E.C.

# PREFACE.

SINCE the year 1878, when I undertook the direction of the Evening Classes in Physics at this College, I have sedulously encouraged the working out by the students themselves of numerous arithmetical examples having a direct bearing upon the particular course of experimental lectures which, at the time, they are attending, and I find that by doing so they rapidly acquire a firm grasp of the principles of the subject, as well as a knowledge of its details, which it would be almost impossible for them to get by any other means.

That the students themselves are conscious of this is, I think, established by the fact that within less than four years the attendance at our Evening Classes in Physics has increased more than fourfold.

We have naturally had to pay a good deal of attention of late to the principles and practice of Electric Lighting, and it has been suggested to me that the arithmetical examples on this subject, which I

have drawn up for the use of my own classes, might be of some service to a wider circle of students.

In compiling these problems I have always had to keep in view the fact that the majority of our evening students are engaged during the daytime at other pursuits, so that they cannot devote much time to going deeply into the subject, and also that as a rule they have but a slight acquaintance with mathematics, so that no examples must be introduced which require for their solution anything beyond decimal fractions and elementary algebra.

In the statements of the problems and in their solutions I have not thought it necessary to go into minute details about electrical formulæ and theories because these will be found in all the recognised text-books on the subject, and this collection of examples is not intended to replace but to supplement whatever text-book on electricity the student may be using.

R. E. DAY.

KING'S COLLEGE,
*June*, 1882.

# CONTENTS.