CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

CAMBRIDGE LIBRARY COLLECTION

Books of enduring scholarly value

Cambridge

The city of Cambridge received its royal charter in 1201, having already been home to Britons, Romans and Anglo-Saxons for many centuries. Cambridge University was founded soon afterwards and celebrates its octocentenary in 2009. This series explores the history and influence of Cambridge as a centre of science, learning, and discovery, its contributions to national and global politics and culture, and its inevitable controversies and scandals.

A History of the Study of Mathematics at Cambridge

For centuries, Cambridge University has attracted some of the world's greatest mathematicians. This 1889 book gives a compelling account of how mathematics developed at Cambridge from the middle ages to the late nineteenth century, from the viewpoint of a leading scholar based at Trinity College who was closely involved in teaching the subject. The achievements of notable individuals including Newton and his school are set in the context of the history of the university, its sometimes uneasy relationship with the town community, the college system, and the origin and growth of the mathematical tripos.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Cambridge University Press has long been a pioneer in the reissuing of out-of-print titles from its own backlist, producing digital reprints of books that are still sought after by scholars and students but could not be reprinted economically using traditional technology. The Cambridge Library Collection extends this activity to a wider range of books which are still of importance to researchers and professionals, either for the source material they contain, or as landmarks in the history of their academic discipline.

Drawing from the world-renowned collections in the Cambridge University Library, and guided by the advice of experts in each subject area, Cambridge University Press is using state-of-the-art scanning machines in its own Printing House to capture the content of each book selected for inclusion. The files are processed to give a consistently clear, crisp image, and the books finished to the high quality standard for which the Press is recognised around the world. The latest print-on-demand technology ensures that the books will remain available indefinitely, and that orders for single or multiple copies can quickly be supplied.

The Cambridge Library Collection will bring back to life books of enduring scholarly value across a wide range of disciplines in the humanities and social sciences and in science and technology.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

A History of the Study of Mathematics at Cambridge

WALTER WILLIAM ROUSE BALL

CAMBRIDGE
UNIVERSITY PRESS

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

CAMBRIDGE UNIVERSITY PRESS

Cambridge New York Melbourne Madrid Cape Town Singapore São Paolo Delhi

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org
Information on this title: www.cambridge.org/9781108002073

© in this compilation Cambridge University Press 2009

This edition first published 1889
This digitally printed version 2009

ISBN 978-1-108-00207-3

This book reproduces the text of the original edition. The content and language reflect the beliefs, practices and terminology of their time, and have not been updated.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

A HISTORY

OF THE STUDY OF

MATHEMATICS AT CAMBRIDGE.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

London: C. J. CLAY AND SONS,
CAMBRIDGE UNIVERSITY PRESS WAREHOUSE,
AVE MARIA LANE.

Cambridge: DEIGHTON, BELL, AND CO.
Leipzig: F. A. BROCKHAUS.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

A HISTORY

OF THE STUDY OF

MATHEMATICS AT CAMBRIDGE

BY

W. W. ROUSE BALL,

FELLOW AND LECTURER OF TRINITY COLLEGE, CAMBRIDGE;
AUTHOR OF A HISTORY OF MATHEMATICS.

Cambridge:
AT THE UNIVERSITY PRESS.
1889

[*All Rights reserved.*]

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Cambridge:

PRINTED BY C. J. CLAY, M.A. AND SONS,
AT THE UNIVERSITY PRESS.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

PREFACE.

THE following pages contain an account of the development of the study of mathematics in the university of Cambridge, and the means by which proficiency in that study was at various times tested. The general arrangement is as follows.

The first seven chapters are devoted to an enumeration of the more eminent Cambridge mathematicians, arranged chronologically. I have in general contented myself with mentioning the subject-matter of their more important works, and indicating the methods of exposition which they adopted, but I have not attempted to give a detailed analysis of their writings. These chapters necessarily partake somewhat of the nature of an index. A few remarks on the general characteristics of each period are given in the introductory paragraphs of the chapter devoted to it; and possibly for many readers this will supply all the information that is wanted.

The following chapters deal with the manner in which at different times mathematics was taught, and the means by which proficiency in the study was tested. The table of contents will shew how they are arranged. Some knowledge of the constitution, organization and

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

general history of the university is, in my opinion, essential to any who would understand the way in which mathematics was introduced into the university curriculum, and its relation to other departments of study. I have therefore added in chapter XI. (as a sort of appendix) a very brief sketch of the general history of the university for any of my readers who may not be acquainted with the larger works which deal with that subject. I hope that the addition of that chapter and of the similar chapter dealing with the organization of studies in the mediæval university will sufficiently justify me in the use in the earlier chapters of various technical words, such as regents, caput, tripos, prævaricator, &c.

I have tried to give references in the footnotes to the authorities on which I have mainly relied. In the few cases where no reference is inserted, I have had to compile my account from various sources. Of the numerous dictionaries of biography which I have consulted the only ones which have proved of much use are the *Biographica Britannica*, six volumes, London, 1747—66 (second edition, enlarged, letters *A* to *Fas* only, five volumes, 1778—93); the *Penny Cyclopaedia*, twenty-seven volumes, London, 1833—43; J. C. Poggendorff's *Biographisch-Literarisches Handwörterbuch zur Geschichte der exacten Wissenschaften*, two volumes, Leipzig, 1863; and the new *Dictionary of national biography*, which at present only contains references to those whose names commence with one of the early letters of the alphabet. To these four works I have been constantly indebted: I have found them almost always reliable, and very useful,

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

not only where no other accounts were available, but also for the verification of such biographical notes as I had given, and often for the addition of other details to them.

No one who has not been engaged in such a work can imagine how difficult it is to settle many a small point, or how persistently mistakes if once printed are reproduced in every subsequent account. In spite of the care I have taken I have no doubt that there are some omissions and errors in the following pages; and I shall thankfully accept notices of additions or corrections which may occur to any of my readers.

W. W. ROUSE BALL.

TRINITY COLLEGE, CAMBRIDGE.
May, 1889.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

TABLE OF CONTENTS.

Chapter I. Mediæval mathematics.

Chapter II. The mathematics of the renaissance.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Chapter III. The commencement of modern mathematics.

Chapter IV. The life and works of Newton.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Chapter V. The rise of the Newtonian school.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Chapter VIII. The organization and subjects of education.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Chapter IX. The exercises in the schools.

Chapter X. The mathematical tripos.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

Chapter XI. Outlines of the history of the university.

© in this web service Cambridge University Press www.cambridge.org

CAMBRIDGE

Cambridge University Press
978-1-108-00207-3 - A History of the Study of Mathematics at Cambridge
Walter William Rouse Ball
Frontmatter
More information

ERRATA.

Page 14, line 3. After *under* insert *the.*
Page 34, line 8. For *powers* read *power.*
Page 38, lines 3 and 5. For *Bulialdus* read *Bullialdus.*
Page 91, line 12. For *seventeenth* read *eighteenth.*
Page 92, line 4 from end, and page 95, line 5 from end. For *Lahire* read *La Hire.*
Page 115, line 12. For *His* read *Cavendish's.*
Page 183, line 20. For *T. Bowstead* read *Joseph Bowstead.*

© in this web service Cambridge University Press www.cambridge.org