

# THE BRITISH JOURNAL FOR THE HISTORY OF SCIENCE

Volume IV

Part I

No. 13

JUNE 1968

Price : £1 4s. or U.S. \$3.00  
inclusive of postage

(FREE TO MEMBERS OF THE SOCIETY)

PUBLISHED BY

THE BRITISH SOCIETY FOR THE HISTORY OF SCIENCE

*Registered Office: SCIENCE MUSEUM, SOUTH KENSINGTON, LONDON, S.W.7*

**OFFICERS AND COUNCIL OF THE BRITISH SOCIETY  
FOR THE HISTORY OF SCIENCE**

**1967-1968**

*President:* **PROFESSOR A. R. HALL**

*Vice-Presidents:* **F. H. C. BUTLER, Esq.**

**DR. A. C. CROMBIE**

**DR. W. P. D. WIGHTMAN**

*Hon. Secretary:* **J. A. CHALDECOTT, Esq.**

*Hon. Treasurer:* **D. CHILTON, Esq.**

*Hon. Editor:* **DR. M. P. CROSLAND**

*Hon. Publications Secretary:*

**DR. J. D. NORTH**

*Hon. Programme Secretary:*

**H. G. L. BEVAN, Esq.**

*Council:*

**DR. D. S. L. CARDWELL**

**DR. E. S. CLARKE**

**DR. W. S. C. COPEMAN**

**A. M. DUNCAN, Esq.**

**DR. E. G. FORBES**

**F. GREENAWAY, Esq.**

**J. W. HERIVEL, Esq.**

**DR. M. A. HOSKIN**

**DR. D. M. KNIGHT**

**DR. L. L. LAUDAN**

**DR. C. A. RUSSELL**

**G. L'E. TURNER, Esq.**

**Ex-libris**

**WILLIAM C. WAKE**

# THE BRITISH JOURNAL FOR THE HISTORY OF SCIENCE

---

VOL. IV

JUNE 1968

Part I, No. 13

---

## CONTENTS

The Background to the Discovery of Dulong and Petit's Law. ROBERT FOX . . . . .	1
The Cause of Refraction in Medieval Optics. DAVID C. LINDBERG . . . . .	23
The Third Law in Newton's Mechanics. RODERICK W. HOME . . . . .	39
Notes and Communications: Lavoisier's Early Career in Science: An Examination of Some New Evidence. J. B. GOUGH . . . . .	52
Babbage and Moll on the State of Science in Great Britain: A Note on a Document. NATHAN REINGOLD . . . . .	58
"Chemistry in Space" and the Complex Atom. W. V. FARRAR . . . . .	65
Book Reviews (for details see next page):	
Seventeenth Century . . . . .	68
Nineteenth Century . . . . .	77
Twentieth Century . . . . .	79
History of Mathematics . . . . .	82
History of Crystallography . . . . .	88
History of Medicine . . . . .	89
History of Botany . . . . .	90
Books Received . . . . .	91
Notes on Contributors . . . . .	94

PUBLISHED BY THE BRITISH SOCIETY FOR THE  
HISTORY OF SCIENCE

*Registered Office:* SCIENCE MUSEUM, SOUTH KENSINGTON, LONDON, S.W.7

## BOOK REVIEWS

PAGE

## SEVENTEENTH CENTURY

WALTER PAGEL: <i>William Harvey's Biological Ideas. Selected aspects and historical background</i> , rev. by GWENETH WHITTERIDGE	68
P.-H. MICHEL (Ed.): <i>Galilée, Dialogues and Lettres choisies</i> . ALEXANDRE KOYRÉ: <i>Études Galiléennes</i> , rev. by A. RUPERT HALL	69
RAYMOND J. SEGER: <i>Galileo Galilei, his life and his works</i> , rev. by J. R. RAVETZ	71
C. H. JOSTEN (Ed.): <i>Elias Ashmole. His Autobiographical and Historical Notes, his Correspondence, and Other Contemporary Sources Relating to his Life and Work</i> , rev. by C. WEBSTER	72
ROBERT HUGH KARGON: <i>Atomism in England from Harriot to Newton</i> . ROBERT HUGH KARGON (Ed.): <i>Physiologia Epicuro-Gassendo-Charltoniana</i> , by Walter Charleton (Reprint), rev. by J. E. McGUIRE	73
MARGERY PURVER: <i>The Royal Society: Concept and Creation</i> , rev. by MARIE BOAS HALL	76

## NINETEENTH CENTURY

HAROLD HARTLEY: <i>Humphry Davy</i> , rev. by C. A. RUSSELL	77
R. A. R. TRICKER: <i>The Contributions of Faraday and Maxwell to Electrical Science</i> , rev. by L. PEARCE WILLIAMS	78

## TWENTIETH CENTURY

RENÉ TATON (Ed.): <i>A General History of the Sciences: Science in the Twentieth Century</i> , rev. by BERNARD S. FINN	79
D. TER HAAR (Ed.): <i>The Old Quantum Theory</i> , rev. by THOMAS S. KUHN	80
C. W. KILMISTER: <i>Sir Arthur Eddington</i> , rev. by G. J. WHITROW	81

## HISTORY OF MATHEMATICS

D. T. WHITESIDE (Ed.): <i>The Mathematical Papers of Isaac Newton, Vol. I: 1664-1666</i> , rev. by J. D. NORTH	82
C. J. SCRIBA: <i>Studien zur Mathematik des John Wallis (1616-1703)</i> , rev. by D. T. WHITESIDE	84
AUGUSTUS DE MORGAN: <i>Arithmetical Books from the Invention of Printing to the Present Time</i> (Reprint with introdn. by A. Rupert Hall), rev. by CHRISTOPH J. SCRIBA	85
H. HALBERSTAM and R. E. INGRAM (Eds.): <i>The Mathematical Papers of Sir William Rowan Hamilton. Vol. III, Algebra</i> , rev. by T. G. COWLING	86

## HISTORY OF CRYSTALLOGRAPHY

JOHN G. BURKE, <i>Origins of the Science of Crystals</i> , rev. by D. C. GOODMAN	88
--	----

## HISTORY OF MEDICINE

<i>Bulletin de la Société Française d'Histoire de la Médecine</i> . Reprint of Vol. I (1902), rev. by MAURICE CROSLAND	89
--	----

## HISTORY OF BOTANY

WILLIAM T. STEARN, <i>Botanical Latin</i> , rev. by BRIAN T. STYLES	90
---	----