Available early in 1971:

A LIST OF THESES IN THE HISTORY OF SCIENCE

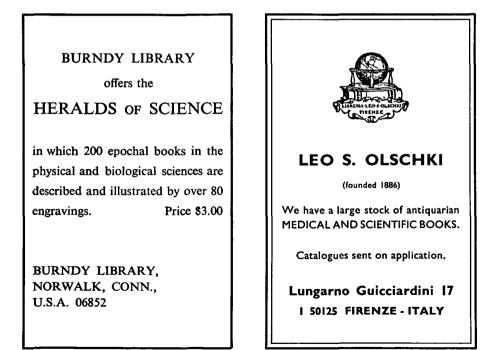
-being those in preparation in universities in the United Kingdom.

The list is free to members of the Society, but is available only on application to

The Assistant Secretary, British Society for the History of Science, Canterbury House, 393 Cowley Road, OXFORD England

The charge (inclusive of postage) to non-members is 8 shillings (40p) or \$1.50 (U.S.)

Enquiries about membership should also be addressed to the Assistant Secretary.



ISIS JOURNAL OF THE HISTORY OF SCIENCE SOCIETY

- has recently expanded by about 100 pages
- is publishing the annual Critical Bibliography in a separate, fifth issue for greater convenience
- has just compiled a Directory of Members, indexed by areas of interest

To become a member of the History of Science Society and receive *Isis*, the Critical Bibliography, and the Directory of Members, send \$12.00 to

Robert P. Multhauf, Editor *Isis* Smithsonian Institution Washington D. C. 20560

giving your name and address and indicating when you want the subscription to begin (we will assume it is for calendar year 1970 if no other preference is mentioned). The Directory will be sent by return mail.

Journal for the History of Astronomy

Edited by M.A. Hoskin, Lecturer in History of Science, University of Cambridge

Editorial Board Angus Armitage University College, London E. G. Forbes Edinburgh University Owen Gingerich Harvard University A. J. Meadows Leicester University G. J. Whitrow Imperial College, London

This important journal—the first to cover the history of astronomy, astrophysics and cosmology from the earliest civilisations to the present day—has had a very successful first year. Articles have included David Pingree's 'The Classification of Indian Planetary Tables', M. A. Hoskin's 'The Cosmology of Thomas Wright of Durham', and Stanley L. Jaki's 'New Light on Olbers's Dependence on Cheseaux'.

Because of the journal's success, and the pressure of contributions, it has been decided to increase the frequency of publication in 1971. Three issues a year will be published, in February, June and October. The price for a single issue will be £3, while the price for a year's subscription will be £5.

Copies of the two 1970 issues are still available, at $\pounds 2$ for a single issue, and $\pounds 4$ for both.

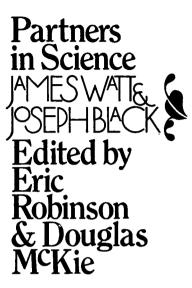
Mts

MACDONALD PLACE YOUR SUBSCRIP-TiON ORDER NOW Technical & Scientific 49/50 Poland Street, London W1A 2LG

Partners in Science AMESWATT& PSEPHBACK Edited by Eric Robinson & Douglas MCKie

"The 260 letters in this collection document the friendship between three of the most important Scottish men of science of the eighteenth century: Joseph Black, James Watt and John Robison, All known letters between Black and Watt and those between Watt and Robison are produced in full, together with a few other relevant letters and documents, of which the most valuable is undoubtedly a previously unpublished notebook containing (among other things) Watt's record of his little-known experimental work on the latent heat of condensation of steam. A small number of the letters in this volume have been published before, but most of them are printed here for the first time.

"Although this book will be of greatest value as a standard source for the scholarly work of historians, it contains much that should commend it to



readers with less specialised interests . . . Many an appetite will be whetted by this admirable volume." *Robert Fox, Nature*

"There is a great deal of scientific and technical information in the letters . . . The publishing of this correspondence makes available an important primary ground for the historian of science." Science Journal

"... any such careful edition (as this undoubtedly is) must immediately become a standard text for the historian of science or technology." The Times Literary Supplement

"An original source book of the widest interest and of the first importance." L. T. C. Rolt, Birmingham Post

528 pages, ISBN 0 09 451640 5 84s, £4.20, published by CONSTABLE

The British Journal for the Philosophy of Science

Vol. 21, No. 3. August 1970

Articles

H. DINGLE Causality and Statistics in Modern Physics

SAMUEL GOROVITZ Inscriptionalism and the Objects of Explanation

- J. GIEDYMIN The Paradox of Meaning Variance
- J. P. CLEAVE The Notion of Validity in Logical Systems with Inexact Predicates

Discussions

H. A. C. DOBBS Reply to Professor Grünbaum
FREDERICK FERRÉ Grünbaum vs. Dobbs: The Need for Physical Transiency
DAVID L. HULL Morphospecies and Biospecies: a Reply to Ruse
G. SCHLESINGER On Irrelevant Criteria of Confirmation
D. STOVE Mr Gibson on Ravens and Relevance
I. J. GOOD A Suggested Resolution of Miller's Paradox

20s. net (\$3.00 in U.S.A.). Annual subscription 60s. net (\$9.50 in U.S.A.) for four issues An Index to Volumes 1-20 was published in Volume 21, No. 1

CAMBRIDGE UNIVERSITY PRESS

Bentley House, 200 Euston Road, London, N.W.1. American Branch: 32 East 57th Street, New York, N.Y. 10022

Jean D'Alembert

Science and the Enlightenment

Thomas L. Hankins

D'Alembert's career spanned the two worlds of the academies and society, and he played a part in many of the scientific controversies of his time. Professor Hankins elucidates D'Alembert's scientific thought and places it in the context of the intellectual world of Enlightenment France, showing how an individual genius interacted with his *milieu*. 10 text-figures 70/-

Aristotle's Physics Books I and II

Translated with an introduction and notes by **W. Charlton**

The first two books of Aristotle's *Physics* occupy an important place in the history of scientific thought. This close literal translation can be used by serious students without a knowledge of Greek. The introduction and commentary deal with the interpretation and assessment, from a philosophical standpoint, of what Aristotle says. 40/-, paper covers 20/- *Clarendon Aristotle Series*

Mind, Brain and Adaptation in the Nineteenth Century

Cerebral localization and its biological context from Gall to Ferrier

Robert M. Young

The author examines ideas of the nature and localization of the functions of the brain in the light of the philosophical constraints at work in the sciences of mind and brain in the nineteenth century. Particular attention is paid to phrenology, sensory-motor physiology, associationist psychology, and the theory of evolution as applied to the study of psychology. 65/-

Hegel's Philosophy of Nature

Being Part Two of the Encyclopaedia of the Philosophical Sciences (1830)

Translated from Nicolin and Pöggeler's edition (1959) and from the Zusätze in Michelet's text (1847) by A. V. Miller

Hegel's *Philosophy of Nature*, which attempts to interpret the varied phenomena of Nature from the standpoint of a dialectical logic, has long been neglected, mainly because the science on which it was based is outmoded. It is, however, integral to his philosophical system and deserves serious attention. 75/-, paper covers 38/-



OXFORD UNIVERSITY PRESS

Sir Humphry Davy's Published Works

June Z. Fullmer

This new annotated bibliography lists Davy's published writings that appeared during his lifetime and posthumously. Critical reviews in journals not exclusively devoted to scientific subjects have also been catalogued, for they frequently forced Davy to further publication. The pattern that prevails is important for what it tells of the fate of scientific news during the period. 63/- Harvard University Press

Historical Studies in the Physical Sciences

Volume 1. Edited by Russell McCormmach

The volumes in this new series devoted to the history of the physical sciences will contain articles on the intellectual and social history of the physical sciences as well as on historiography and on the current state of scholarship on topics in the field. Frontispiece. 80/- University of Pennsylvania Press

Mechanism and Materialism

British Natural Philosophy in an Age of Reason Robert E. Schofield

The author explores the national element of British experimental natural philosophy in the eighteenth century by tracing the influence of two opposing concepts of the nature of matter and its action. 90/-*Princeton University Press*

The Mechanization of the World Picture

E. J. Dijksterhuis

Translated by C. DIKSHOORN

This book defines and clarifies the term 'mechanistic' as applied to so-called classical physics, and gives an outline of the evolution of the sciences of inorganic nature from their origins to Newton, in whom the mechanistic world picture was finally realized. Paper covers 25/-Galaxy Books OUP New York





Mikhail Vasil'evich Lomonosov on the Corpuscular Theory

Translated with an introduction by Henry M. Leicester

Frontispiece 12 text-figures 95/- Harvard University Press

History and Philosophy of Science from Heinemann

THE NATURE OF LIGHT VASCO RONCHI

This major survey traces the development of significant lines of thought on the nature of light from Graeco-Roman times, to the present. Illustrated with colour plates, photographs, line drawings and facsimiles of original documents, the book will be the standard work on the subject for many years. 304 pages 48 pages of plates 5 colour plates £6.00 net

ATLAS OF THE PLANETS

VINCENT DE CALLATAY AND A. DOLLFUS An account of astronomical discoveries through the ages with a summary of our present state of knowledge. The eight major planets and the asteroids are considered, and modern concepts are explained. A major feature are the illustrations, many in colour, which appear on almost every page. 168 pages 130 illustrations £4.20 net To be published in 1971

THE SOCIETY OF ARCUEIL MAURICE CROSLAND

A study of scientists in France during a period of outstanding achievement and in particular of the brilliant circle who met under the leadership of Berthollet and Laplace at Arcueil. 532 pages illustrated £4.20 net

HISTORICAL STUDIES IN LANGUAGE OF CHEMISTRY MAURICE CROSLAND

A history of the names and symbols used for chemicals from classical times to the nineteenth century—absorbing reading for scientists and laymen alike. 424 pages illustrated £2.50 net

AUGUSTINE TO GALILEO A. C. CROMBIE

This edition has been entirely reset. 'An excellent factual survey of the technology, science and natural philosophy of the Middle Ages, such as is to be found in no other English textbook.'—T.L.S.

Vol. 1: Science in the Middle Ages, 5th-13th Centuries.

 Vol. 2: Science in the Later Middle Ages and Early Modern Times, 13th-17th

 Centuries.
 2 volumes—£5.25 net
 New edition

FROM WATT TO CLAUSIUS D. S. L. CARDWELL

A brilliant study of the key technological advance of the industrial revolution —steam power—and of the related science of thermodynamics. 352 pages illustrated about £4.00 net



HEINEMANN EDUCATIONAL BOOKS

48 Charles Street, London, W1X 8AH

THE BRITISH SOCIETY FOR THE HISTORY OF SCIENCE

THE objects of the Society are to further the study of the history of science, by holding meetings for the reading and discussion of papers, and by facilitating the publication of relevant material.

The British Journal for the History of Science is the official organ of the Society.

Meetings are held in the Science Museum, Exhibition Road, South Kensington, London, S.W.7, usually in October, November, March and May. In addition a Winter Meeting is held in January and a Summer Meeting in June; neither of these meetings is necessarily held in London.

Membership is open to all persons approved by the Council of the Society, and elected at an Ordinary Meeting. The annual subscription is at present $\pounds 2$ 10s. (for Students $\pounds 1$ 10s.) and includes a free issue of the Society's Journal, which appears in June and December each year.

Those who wish to join the Society should write to the Assistant Secretary, British Society for the History of Science, 393 Cowley Road, Oxford.

Papers for inclusion in the Journal should be submitted to the Hon. Editor, Dr. M. P. Crosland, Department of Philosophy, The University, Leeds 2, from whom instructions may be obtained concerning the presentation and documentation of papers. All communications on editorial matters, and books for review, should be addressed to the Hon. Editor.

Particulars regarding advertising in the Journal may be obtained from the Assistant Secretary, B.S.H.S., 393 Cowley Road, Oxford.

The British Journal for the History of Science is published by the Society. Four parts constitute one Volume; each part contains approximately 100 pages. The cover of each issue has a consecutive number for ease of collation in subsequent binding, e.g. No. 16 is numbered: Vol. IV Part IV No. 16, and No. 17 is: Vol. v Part I No. 17.

Order Forms, with lists of contents of Parts already published, are obtainable from: British Journal for the History of Science, HEADLEY BROTHERS LTD., ASHFORD, KENT, ENGLAND, to whom Orders for the Journal should be sent.

Whole Cloth Binding Cases lettered in Gold on spine and particulars of binding costs may also be obtained from HEADLEY BROTHERS LTD.

THE BRITISH JOURNAL FOR THE HISTORY OF SCIENCE

Volume v	Part 11	December 1970	No. 18
SHEA, W. R. J.—Galileo's Claim to Fame: The Proof that the Earth Moves from the Evidence of the Tides 111–127			
PERRIN, CARLETON—Early Opposition to the Phlogiston Theory: Two Anonymous Attacks 128–144			
BRUSH, STEPHEN G.—The Wave Theory of Heat: A Forgotten Stage in the Transition from the Caloric Theory to Thermodynamics 145–167			
Teich, Mikul Motion	(š—Purkyně	and Valentin on C	iliary 168–177
Notes and Documents:			
McGuire, sophy''	J. E.—Newto	on's "Principles of P	hilo- 178–186
Book Reviews			187–208
Books Received			209–210
Report of Coun	cil		211–213
Financial Stater	nent		214–215
Notes on Contri	butors		216

PUBLISHED BY THE BRITISH SOCIETY FOR THE HISTORY OF SCIENCE

Registered Office: 393 Cowley Road, Oxford

Brit. J. Hist. Sci. 5 no. 18. Price £1 105. Free to Members of the Society. Published December 1970

> PRINTED IN GREAT BRITAIN BY HEADLEY BROTHERS LTD 109 KINGSWAY LONDON WC2 AND ASHFORD KENT