

THE STORY OF ECLIPSES

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649283569

The story of eclipses by George F. Chambers

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.

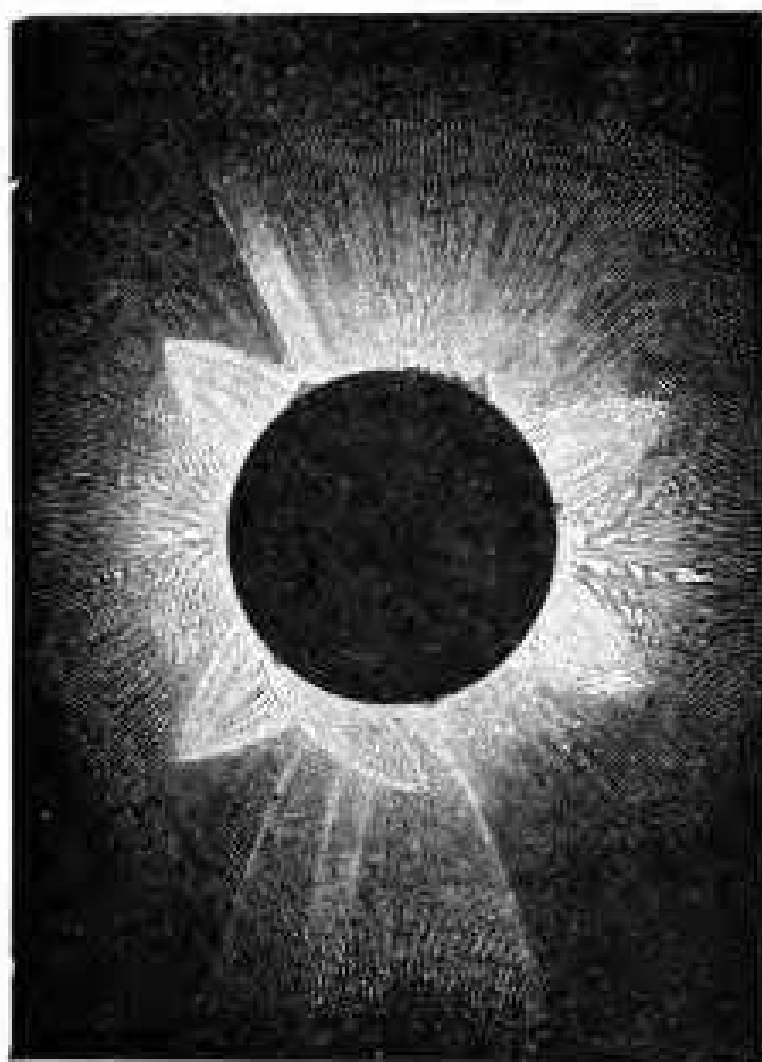
Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

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

GEORGE F. CHAMBERS

**THE STORY
OF ECLIPSES**



THE TOTAL ECLIPSE OF THE SUN, Sept. 7, 1858 (*Louis*).

THE STORY OF ECLIPSES

BY

GEORGE F. CHAMBERS, F. R. A. S.

OF THE ORDER YAMPIF, BANISTERDALAW

AUTHOR OF THE STORY OF THE SOLAR SYSTEM,

THE STORY OF THE STARS,

A HANDBOOK OF DESCRIPTIVE ASTRONOMY, ETC.

NEW YORK AND LONDON
D. APPLETON AND COMPANY

1912

COPYRIGHT, 1906, 1914, 1935
BY D. APPLETON AND COMPANY.

WORLD BOOK COMPANY
50 N. DEARBORN ST. CHICAGO, ILL.

Printed in the United States of America.

Sciences
Library

QB
541
C35s
1909

CONTENTS.

CHAPTER	PAGE
I. INTRODUCTION	9
II. GENERAL IDEAS	11
III. THE SAROS AND THE PERIODICITY OF ECLIPSES	17
IV. MISCELLANEOUS THEORETICAL MATTERS CON- NECTED WITH ECLIPSES OF THE SUN (CHIEFLY)	30
V. WHAT IS OBSERVED DURING THE EARLIER STAGE OF AN ECLIPSE OF THE SUN	35
The Moon's Shadow and the Darkness it causes	36
Shadow Bands	40
The Approach of Totality	43
The Darkness of Totality	46
Meteorological and other Effects	46
VI. WHAT IS OBSERVED DURING THE TOTAL PHASE OF AN ECLIPSE OF THE SUN	49
Baily's Beads	49
The Corona	53
VII. WHAT IS OBSERVED AFTER THE TOTAL PHASE OF AN ECLIPSE OF THE SUN IS AT AN END	63
VIII. ECLIPSES OF THE SUN MENTIONED IN HIS- TORY—CHINESE	65
IX. ARE ECLIPSES ALLUDED TO IN THE BIBLE?	74
X. ECLIPSES MENTIONED IN HISTORY—CLASSICAL	92
XI. ECLIPSES MENTIONED IN HISTORY—THE CHRISTIAN ERA TO THE NORMAN CON- QUEST	109
XII. ECLIPSES MENTIONED IN HISTORY—MEDIE- VAL AND MODERN	124
XIII. ECLIPSES MENTIONED IN HISTORY—NINE- TEENTH CENTURY	138
XIV. THE ELECTRIC TELEGRAPH AS APPLIED TO ECLIPSES OF THE SUN	152
XV. ECLIPSES OF THE MOON—GENERAL PRIN- CIPLES	158

13 Sept 33
D. 9-27-33
Scrib

206757 5

CHAPTER	PAGE
XVI. ECLIPSES OF THE MOON MENTIONED IN HISTORY	168
XVII. CATALOGUES OF ECLIPSES : AND THEIR CALCULATION	185
XVIII. STRANGE ECLIPSE CUSTOMS	190
XIX. ECLIPSES IN SHAKESPEARE AND THE POETS	194
XX. BRIEF HINTS TO OBSERVERS OF ECLIPSES	198
XXI. TRANSITS AND OCCULTATIONS	200

LIST OF ILLUSTRATIONS.

FIGURE	PAGE
1. Total Eclipse of the Sun, Sept. 7, 1858. <i>Frontispiece</i>	
2. Theory of Total Eclipse of the Sun	14
3. Theory of an Annular Eclipse of the Sun	15
4. Annular Eclipse of the Sun	15
5. Partial Eclipse of the Sun	16
6. Shadow Bands	41
7. Rays of Light seen during Totality	42
8. Brushes of Light	49
9. "Baily's Beads," Four Stages, at Brief Intervals (May 15, 1836)	50
10. Corona of 1882. Sun-spot Maximum	58
11. Corona of 1867. Sun-spot Minimum	60
12. Eclipse of Jan. 11, 689, B.C., at Jerusalem	86
13. Theory of an Eclipse of the Moon	159
14. Conditions of Eclipses of the Moon	161
15. Occultation of Jupiter, Aug. 7, 1889 (Immersion)	201
16. Occultation of Jupiter, Aug. 7, 1889 (Immersion)	201
17. Occultation of Jupiter, Aug. 7, 1889 (Emersion)	202
18. Occultation of Jupiter, Aug. 7, 1889 (Emersion)	202

