AN INTRODUCTION TO ASTRONOMY, TO WHICH IS ADDED AN ASTRONOMICAL VOCABULARY

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649055708

An Introduction to Astronomy, to Which Is Added an Astronomical Vocabulary by J. R. Hind

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Edited by Trieste Publishing Pty Ltd. Cover @ 2017

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AN ASTRONOMICAL VOCABULARY

CONTAINING AN EXPLANATION OF TERMS ...
IN USE AT THE PRESENT DAY.

BY

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THIRD EDITION.
REVISED AND GREATLY ENLARGED.

LONDON: HENRY G. BOHN, YORK STREET, COVENT GARDEN. 1863.



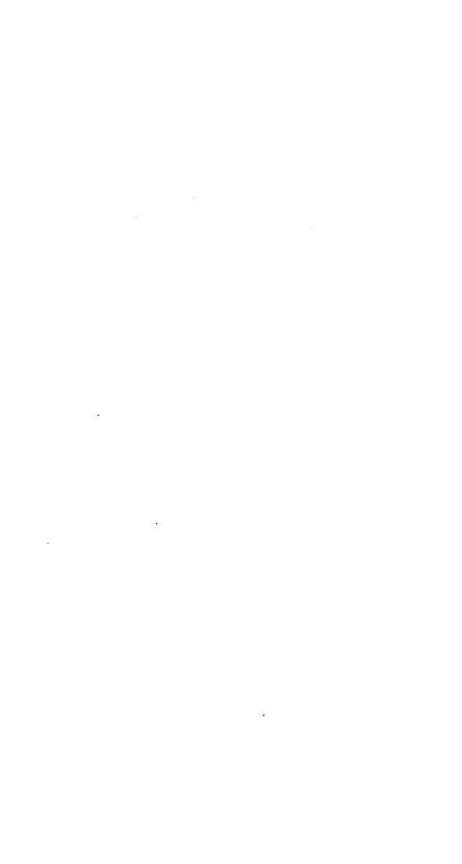
PRINTED BY TAYLOR AND FRANCIS, RED LION COURT, PLREY STREET.

PREFACE.

The 'Introduction to Astronomy' and 'Astronomical Vocabulary,' which together form the present Volume, were originally published separately, but have been for some time out of print. The 'Introduction' having had a large sale in this country, and been translated into several foreign languages, I have thought the plan of the work concise as it is, sufficiently approved, and have only made such alterations as were rendered necessary by the progress of Science. The 'Vocabulary,' however, has been considerably enlarged, and, it is hoped, thereby rendered additionally useful. The object of both works is to convey the fullest information in the fewest words consistent with a clear understanding of the subject.

J. R. HIND.

Mr. Bishop's Observatory, Twickenham, August 1863.



EXPLANATION OF

ASTRONOMICAL SYMBOLS AND ABBREVIATIONS.

Signs of t	he Zodiae.
Aries Υ	Libra
Taurus 8	Scorpio
Gemini	Sagittarius
UNING 1877 - 1817 UNING BANGMAN DISHE SIRTE N	Capricornus
Leo Ω	Aquarius
Virgo 哎	Pisces
The Sun and P	rincipal Planets.
The Sun ⊙	Mars
The Moon	Jupiter
Mercury Ş	Saturn
Venus 9	Uranus
The Earth ⊖ or 5	Neptune
Var	ious.
& Ascending 1	Node.
98 Descending	Node.
d Conjunction	
8 Opposition.	
D Quadrature	•
o Degree.	
/ Minute of A	1rc.
" Second of A	
h Hour.	THE CO.

Minute of Time.
Second of Time.

A or a	Right Ascension.	
8	Declination. + North; - South.	
	North Polar Distance.	
r	Radius Vector.	In Cometary or Planetary
Δ	Distance from the Earth.	
I	Intensity of Light.	calculations.
п.р	North preceding.	
n.f	North following.	
s.p		
s.f		
G.M.T	Greenwich Mean Time.	
S.P	Sub polo.	
M.Eq	Mean Equinox.	

CORRIGENDA.

Page 94, line 8 from bottom, and page 95, line 8 from top, for eventy-five road seventy-eight.

Page 128, the figure of the constellation Orion is accidentally inverted as regards its appearance to an observer in northern latitudes; it is correct for the southern hemisphere.

FIRST INTRODUCTION TO ASTRONOMY.

PRELIMINARY DEFINITIONS.

Astronour is that branch of natural science which treats of the heavenly bodies, describing their apparent and real magnitudes, distances, and motions, and the laws by which they are governed. The wonderful facts it reveals to us respecting the mechanism of the heavens, the grandeur and illimitable extent of the starry universe, and the beautiful harmony and regularity which prevail in the varied phenomena of the skies, have well entitled it to be called "the sublime science."

The determination of the apparent and real magnitudes and distances of the heavenly bodies, their orbits or paths in space, and every thing relating to description or observation, form what is called *Plane* or *Practical* Astronomy; the latter term is sometimes more especially applied to the management of astronomical instruments, and the explanation of the processes of calculation which attend their use.

The investigation of the causes operating in the motions and phenomena of celestial bodies constitutes Theoretical or Physical Astronomy—an abstruse and difficult study, which involves mathematical reasoning of the highest order, and is consequently suited only to the comprehension of the few.

In the present treatise we have to explain the principles of Plane Astronomy, and to place before the learner an outline of the most remarkable discoveries of ancient and modern times in this interesting science,