

HINDU ASTRONOMY.

TRANSLATION

OF THE

SÛRYA-SIDDHÂNTA,

A TEXT-BOOK OF HINDU ASTRONOMY;

WITH NOTES, AND AN APPENDIX,

CONTAINING ADDITIONAL NOTES AND TABLES, CALCULATIONS OF
ECLIPSES, A STELLAR MAP, AND INDEXES.

By REV. EBENEZER BURGESS,

FORMERLY MISSIONARY OF THE A. B. C. F. M. IN INDIA;

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INTRODUCTORY NOTE.

Soon after my entrance upon the missionary field, in the Marátha country of western India, in the year 1839, my attention was directed to the preparation, in the Maráthi language, of an astronomical text-book for schools. I was thus led to a study of the Hindu science of astronomy, as exhibited in the native text-books, and to an examination of what had been written respecting it by European scholars. I at once found myself, on the one hand, highly interested by the subject itself, and, on the other, somewhat embarrassed for want of a satisfactory introduction to it. A comprehensive exhibition of the Hindu system had nowhere been made. The *Astronomie Indienne* of Bailly, the first extended work upon its subject, had long been acknowledged to be founded upon insufficient data, to contain a greatly exaggerated estimate of the antiquity and value of the Hindu astronomy, and to have been written for the purpose of supporting an untenable theory. The articles in the *Asiatic Researches*, by Davis, Colebrooke, and Bentley, which were the first, as they still remain the most important, sources of knowledge respecting the matters with which they deal, relate only to particular points in the system, of especial prominence and interest. Bentley's volume on Hindu astronomy is mainly occupied with an endeavor to ascertain the age of the principal astronomical treatises, and the epochs of astronomical discovery and progress, and is, moreover, even in these respects, an exceedingly unsafe guide. The treatment of the subject by Delambre, in his *History of Ancient Astronomy*, being founded only upon Bailly and the earliest of the essays in the *Asiatic Researches*, partakes, of course, of the incompleteness of his authorities. Works of value have been published in India also, into which more or less of Hindu astronomy enters, as Warren's *Kāla Sankalita*, Jervis's *Weights Measures and Coins of India*, Hoisington's *Oriental Astronomer*, and