

## CHAPTER I.

## EARLIEST STAGES OF ASTRONOMY.

*Sect. 1.—Formation of the Notion of a Year.*

THE notion of a *Day* is early and obviously impressed upon man in almost any condition in which we can imagine him. The recurrence of light and darkness, of comparative warmth and cold, of noise and silence, of the activity and repose of animals;—the rising, mounting, descending, and setting of the sun;—the varying colors of the clouds, generally, notwithstanding their variety, marked by a daily progression of appearances;—the calls of the desire of food and of sleep in man himself, either exactly adjusted to the period of this change, or at least readily capable of being accommodated to it;—the recurrence of these circumstances at intervals, equal, so far as our obvious judgment of the passage of time can decide; and these intervals so short that the repetition is noticed with no effort of attention or memory;—this assemblage of suggestions makes the notion of a *Day* necessarily occur to man, if we suppose him to have the conception of Time, and of Recurrence. He naturally marks by a term such a portion of time, and such a cycle of recurrence; he calls each portion of time, in which this series of appearances and occurrences come round, a *Day*; and such a group of particulars are considered as appearing or happening *in* the same day.

A *Year* is a notion formed in the same manner; implying in the same way the notion of recurring facts; and also the faculty of arranging facts in time, and of appreciating their recurrence. But the notion of a *Year*, though undoubtedly very obvious, is, on many accounts, less so than that of a *Day*. The repetition of similar circumstances, at equal intervals, is less manifest in this case, and the intervals being much longer, some exertion of memory becomes requisite in order that the recurrence may be perceived. A child might easily be persuaded that successive years were of unequal length; or, if the summer were cold, and the spring and autumn warm, might be made to believe, if all who spoke in its hearing agreed to support the delusion, that one year was two. It would be impossible to practise such a deception with regard to the day, without the use of some artifice beyond mere words.