

INTRODUCTION.

THE earliest and fundamental conceptions of men respecting the objects with which Astronomy is concerned, are formed by familiar processes of thought, without appearing to have in them any thing technical or scientific. Days, Years, Months, the Sky, the Constellations, are notions which the most uncultured and incurious minds possess. Yet these are elements of the Science of Astronomy. The reasons why, in this case alone, of all the provinces of human knowledge, men were able, at an early and unenlightened period, to construct a science out of the obvious facts of observation, with the help of the common furniture of their minds, will be more apparent in the course of the philosophy of science: but I may here barely mention two of these reasons. They are, first, that the familiar act of thought, exercised for the common purposes of life, by which we give to an assemblage of our impressions such a unity as is implied in the above notions and terms, a Month, a Year, the Sky, and the like, is, in reality, an *inductive act*, and shares the nature of the processes by which all sciences are formed; and, in the next place, that the ideas appropriate to the induction in this case, are those which, even in the least cultivated minds, are very clear and definite; namely, the ideas of Space and Figure, Time and Number, Motion and Recurrence. Hence, from their first origin, the modifications of those ideas assume a scientific form.

We must now trace in detail the peculiar course which, in consequence of these causes, the knowledge of man respecting the heavenly bodies took, from the earliest period of his history.