either to leave the existence of this periodical constitution doubtful, or to entitle us to suppose that the day might be considerably lengthened or shortened without injury to the vegetable kingdom.

Here then we have an adaptation between the structure of plants, and the periodical order of light and darkness which arises from the earth's rotation; and the arbitrary quantity, the length of the cycle of the physiological and of the astronomical fact, is the same. Can this have occurred any otherwise than by an intentional adjustment?

Any supposition that the astronomical cycle has occasioned the physiological one, that the structure of plants has been brought to be what it is by the action of external causes, or that such plants as could not accommodate themselves to the existing day have perished, would be not only an arbitrary and baseless assumption, but moreover useless for the purposes of explanation which it professes, as we have noticed of a similar supposition with respect to the annual cycle. How came plants to have periodicity at all in those functions which have a relation to light and darkness? This part of their constitution was suited to organized things which were to flourish on the earth, and it is accordingly bestowed on them; it was necessary for this end that the period should be of a certain length; it is of that length and no other. Surely this looks like intentional provision.

Animals also have a period in their functions and habits; as in the habits of waking, sleeping, eating, &c. and their well-being appears to depend on the coincidence of this period with the length of the natural day. We see that in the day, as it now is, all animals find seasons for taking food and repose, which agree perfectly with their health and comfort. Some animals feed during the day, as nearly all the ruminating animals and land birds; others feed only in the twilight, as bats and owls, and are called *crepuscular*; while many beasts of prey, aquatic