

human powers less advantageously and agreeably than an alternation of sixteen and eight. A creature which could employ the full energies of his body and mind uninterruptedly for nine months, and then take a single sleep of three months, would not be a man.

When, therefore, we have subtracted from the daily cycle of the employments of men and animals, that which is to be set down to the account of habits acquired, and that which is occasioned by extraneous causes, there still remains a periodical character; and a period of a certain length, which coincides with, or at any rate easily accommodates itself to, the duration of the earth's revolution. The physiological analysis of this part of our constitution is not necessary for our purpose. The succession of exertion and repose in the muscular system, of excited and dormant sensibility in the nervous, appear to be fundamentally connected with the muscular and nervous powers, whatever the nature of these may be. The necessity of these alternations is one of the measures of the intensity of those vital energies; and it would seem that we cannot, without assuming the human powers to be altered, suppose the intervals of tranquillity which they require to be much changed. This view agrees with the opinion of some of the most eminent physiologists. Thus Cabanis* notices the periodical and isochronous character of the desire of sleep, as well as of other appetites. He states also that sleep is more easy and more salutary, in proportion as we go to rest and rise every day at the same hours; and observes that this periodicity seems to have a reference to the motions of the solar system.

Now how should such a reference be at first established in the constitution of man, animals, and plants, and transmitted from one generation of them to another? If we suppose a wise and benevolent

* *Rapports du Physique et du Moral de l'Homme*, II. 371.