in various ways. Most marine animals living in extreme climates, lay their eggs in winter, when the variations of external influences are reduced to a minimum. Everywhere we find evidence that the phenomena of life, though manifested in the midst of all the most diversified physical influences, are rendered independent of them to the utmost degree, by a variety of contrivances prepared by the animals themselves, in self-protection, or for the protection of their progeny from any influence of physical agents not desired by them, or not subservient to their own ends.

## SECTION XIX.

## DURATION OF LIFE.

There is the most extraordinary inequality in the average duration of the life of different kinds of animals and plants. While some grow and reproduce themselves and die in a short summer, nay, in a day, others seem to defy the influence of time.<sup>1</sup>

Who has thus apportioned the life of all organized beings? To answer this question, let us first look at the facts of the case. In the first place, there is no conformity between the duration of life and either the size, or structure, or habitat of animals; next, the system, in which the changes occurring during any period are regulated, differs in almost every species, there being only a slight degree of uniformity between the representatives of different classes, within certain limits.

In most Fishes and the Reptiles proper, for instance, the growth is very gradual and uniform, and their development continues through life, so much so that their size is continually increasing with age.

In others, the Birds, for instance, the growth is rapid during the first period of their life, until they have acquired their full size, and then follows a period of equilibrium, which lasts for a longer or shorter period in different species.

In others still, which also acquire within certain limits a definite size, the Mammalia, for instance, the growth is slower in early life, and maturity is attained, as in man, at an age which forms a much longer part of the whole duration of life.

In Insects, the period of maturity is, on the contrary, generally the shortest, while the growth of the larva may be very slow, or, at least, that stage of development last for a much longer time than the life of the perfect Insects. There is no

Thier- und Pflanzenreich, Tübingen, 1831, 8vo.—Quetelet, (A.,) Phénomènes périodiques, Ac. Brux.

<sup>&</sup>lt;sup>1</sup> Schübler, (Gust.,) Beobachtungen über jührliche periodisch wiederkehrende Erscheinungen im