

*In the fifth place, the laws of anatomy have always been the same since organic structures began to exist.*

It had long been known that the organs of animals were beautifully adapted to perform the functions for which they were intended. But it was not till the investigations of Baron Cuvier, within the last half century, that it was known how mathematically exact is the relation between the different parts of the animal frame, nor how precise are the laws of variation in the different species, by which they are fitted to different elements, climates, and food. It is now well known, that each animal structure contains a perfect system of correlation, and yet the whole forms a harmonious part of the entire animal system on the globe. But the language of Cuvier himself will best elucidate this subject, so far as it is capable of popular explanation.

“Every organized individual,” says he, “forms an entire system of its own; all the parts of which mutually correspond, and concur to produce a certain definite purpose, by reciprocal re-action, or by combining towards the same end. Hence none of these separate parts can change their forms without a corresponding change in the other parts of the same animal, and consequently each of these parts, taken separately, indicates all the other parts to which it has belonged. Thus, if the viscera of any animal are so organised as only to be fitted for the digestion of recent flesh, it is also requisite that the jaws should be so constructed as to fit them for devouring prey; the claws must be constructed for seizing and tearing it to pieces; the teeth for cutting and dividing its flesh; the entire system of the limbs, or organs of motion, for pursuing and overtaking it; and the organs of sense, for discovering it at a distance. Nature, also, must have endowed the brain of the animal with instinct sufficient for concealing itself, and for laying plans to catch its necessary victims.

“In order that the jaw may be well adapted for laying hold of objects, it is necessary that its condyle should have a certain form; that the resistance, the moving power, and the fulcrum, should have a certain relative position with respect to each other, and that the temporal muscles should be of a certain size; the hollow, or depression, too, in which these muscles are lodged, must have a certain depth; and the zygomatic arch, under which they pass, must not only have a certain degree of