

when they have maintained, for instance, that every bone existing in any Vertebrate must have its counterpart in every other species of that type. To assume such a uniformity among animals, would amount to denying to the Creator even as much freedom in expressing his thoughts as man enjoys.

If it be true, as pointed out above, that all animals are constructed upon four different plans of structure, in such a manner that all the different kinds of animals are only different expressions of these fundamental formulæ, we may well compare the whole animal kingdom to a work illustrating four great ideas, between which there is no other connecting link than the unity exhibited in the eggs in which their most diversified manifestations are first embodied in an embryonic form, to undergo a series of transformations, and appear in the end in that wonderful variety of independent living beings which inhabit our globe, or have inhabited it from the earliest period of the existence of life upon its surface.

The most surprising feature of the animal kingdom seems, however, to me to rest neither in its diversity, nor in the various degrees of complication of its structure, nor in the close affinity of some of its representatives, while others are so different, nor in the manifold relations of all of them to one another and the surrounding world, but in the circumstance that beings endowed with such different and such unequal gifts should nevertheless constitute an harmonious whole, intelligibly connected in all its parts.

SECTION VI.

VARIOUS DEGREES AND DIFFERENT KINDS OF RELATIONSHIP AMONG ANIMALS.

The degrees of relationship existing between different animals are most diversified. They are not only akin as representatives of the same species, bearing as such the closest resemblance to one another; different species may also be related as members of the same genus, the representatives of different genera may belong to the same family, and the same order may contain different families, the same class different orders, and the same type several classes. The existence of different degrees of affinity between animals and plants which have not the remotest genealogical connection, which live in the most distant parts of the world, which have existed in periods long gone by in the history of our earth, is a fact beyond dispute, at least, within certain limits, no longer controverted by well informed observers. Upon what can this be founded? Is it that the retentive capacity of the memory of the physical forces at work upon this globe is such, that after bringing forth a type according to one pattern, in the infancy of this earth, that pattern was adhered to under conditions,