

quences, by many naturalists, of the highest eminence, on the continent. As the facts on which this hypothesis is supported, and the views which it unfolds, are highly deserving of attention, I shall here briefly state them; but in so doing I shall beg to premise the caution that these views should, for the present, be regarded as hypothetical, and as by no means possessing the certainty of philosophical generalizations.

The hypothesis in question is countenanced, in the first place, by the supposed constancy with which, in all the animals belonging to the same natural group, we meet with the same constituent elements of structure, in each respective system of organs, notwithstanding the utmost diversity which may exist in the forms of the organs, and in the uses to which they are applied. This principle has been most strikingly exemplified in the osteology of vertebrated animals; but its truth is also inferred from the examination of the mechanical fabric of Insects, Crustacea, and Arachnida; and it appears to extend also to the structures subservient to other functions, and particularly those of the nervous system. Thus Nature has provided for the locomotion of the serpent, not by the creation of new structures, foreign to the type of the vertebrata, but by employing the ribs in this new office; and in giving wings to a lizard, she has extended these same bones to serve as supports to the superadded parts. In arming the elephant with tusks, she has merely caused two of the teeth in the upper jaw to be developed into these formidable weapons; and in providing it with an instrument of prehension, has only resorted to a greater elongation of the snout.

The law of *Gradation*, in conformity to which all the living, together with the extinct races, of organic nature, arrange themselves more or less, into certain regular series, is one of the consequences which have been deduced from the hypothesis we are considering. Every fresh copy taken of the original type is supposed to receive some additional extension of its faculties and endowments by the graduated