coincide. *Every progress is not a differentiation, and every differentiation is not a progress.*

As regards the law of *Progress* or *Perfecting*, naturalists, guided by purely anatomical considerations, had already set forth the law that the perfecting of an organism certainly depends, for the most part, upon the division of labour among the individual organs and parts of the body, but that there are also other organic transformations which determine a progress in organization. One, in particular, which has been generally recognized, is the *numerical diminution of identical parts.* If, for example, we compare the lower articulated animals of the crustacean group, which possess numerous pairs of legs, and also the centipedes (Myrapoda), with spiders which never have more than four pairs of legs, and with insects which in all cases possess only three pairs of legs, we find this law, for which a great number of examples could be adduced, confirmed. The numerical diminution of pairs of legs is a progress in the organization of articulated animals. In like manner the numerical diminution of corresponding vertebral joints in the trunk of vertebrate animals is a progress in their organization. Fishes and amphibious animals with a very large number of identical vertebral joints are, for this very reason, less perfect and lower than birds and mammals, in which the vertebral joints, as a whole, are not only very much more differentiated, but in which the number of corresponding vertebræ is also much smaller. Further, according to the same law of numerical diminution, flowers with numerous stamens are more imperfect than the flowers of kindred plants with a smaller number of stamens, etc. If, therefore, originally a great number of homogeneous parts exist in an