

cannot be considered as a character of branches, nor of classes; let us now examine, further, whether it is a character of species. A rapid review of some of the best known types of the animal kingdom, embracing well-defined genera with many species, will at once show that this cannot be the case, for such species do not generally show the least difference in their forms. Neither the many species of Squirrels, nor the true Mice, nor the Weasels, nor the Bears, nor the Eagles, nor the Falcons, nor the Sparrows, nor the Warblers, nor the genuine Woodpeckers, nor the true Lizards, nor the Frogs, nor the Toads, nor the Skates, nor the Sharks proper, nor the Turbots, nor the Soles, nor the Eels, nor the Mackerels, nor the Sculpins, nor the genuine Shrimps, nor the Crawfishes, nor the Hawkmoths, nor the Geometers, nor the Dorbugs, nor the Spring-Beetles, nor the Tapeworms, nor the Cuttlefishes, nor the Slugs, nor the true Asterias, nor the Sea-Anemones, could be distinguished among themselves, one from the other, by their form only. There may be differences in the proportions of some of their parts, but the pattern of every species belonging to well-defined natural genera is so completely identical that it will never afford specific characters. There are genera in our system which, as they now stand, might be alluded to as examples contrary to this statement; but such genera are still based upon very questionable features, and are likely to be found in the end to consist of unnatural associations of heterogeneous species: at all events, all recent improvements in Zoölogy have gone to limit genera gradually more and more in such a manner, that the species belonging to each have shown successively less and less difference in form, until they have assumed, in that respect, the most homogeneous appearance. Are natural genera any more to be distinguished by their form one from the other? Is there any appreciable difference in the general form,—I say purposely general form, because a more or less prominent nose, larger or smaller ears, longer or shorter claws, etc., do not essentially modify the form,—is there any real difference in the general form between the genera of the most natural families? Do, for instance, the genera of Ursina, the Bears, the Badger, the Wolverines, the Raccoons, differ in form? Do the Phocoidæ, the Delphinoidæ, the Falconinæ, the Turdinæ, the Fringillinæ, the Picinæ, the Scolopacinæ, the Chelonioidæ, the Geckonina, the Colubrina, the Sparoidæ, the Elateridæ, the Pyralidoidæ, the Echinoidæ, etc., differ any more among themselves? Certainly not; though to some extent, there are differences in the form of the representatives of one genus when compared to those of another genus; but when rightly considered, these differences appear only as modifications of the same type of forms. Just as there are more or less elongated ellipses, so do we find the figure of the Badgers somewhat more contracted than that of either the Bears, or the Raccoons, or the Wolverines, that of the Wolverines somewhat more elongated than that of the Raccoons; but the form is here as completely typical