

chiata especially; in the class of Cephalopoda, that of the Sepioids; in the class of Gasteropoda, that of the Nudibranchiata in particular; in the class of Acephala, that of the Ascidiæ and that of the Oysters in the widest sense; in the class of Echinoderms, those of Holothuriæ and Asterozooids; in the class of Acalephs, that of the Hydroids; in the class of Polyps, that of the Halcyonoids, of the Atræoids, etc., etc., deserve particular attention, and may be studied with great advantage in reference to the points under consideration. For everywhere do we observe in them, with reference to space and to time, the thoughtful combinations of an active mind. But it ought not to be overlooked, that while some types represent strikingly connected series, there are others in which nothing of the kind seems to exist, and the diversity of which involves other considerations.

### SECTION XIII.

#### RELATION BETWEEN THE SIZE OF ANIMALS, AND THEIR STRUCTURE.

The relation between the size and structure of animals has been very little investigated, though even the most superficial survey of the animal kingdom may satisfy any one, that there is a decided relation between size and structure among them. Not that I mean to assert that size and structure form parallel series, or that all animals of one branch, or even those of the same class or the same order, agree very closely with one another in reference to size. This element of their organization is not defined within those limits, though the Vertebrata, as a whole, are larger than either Articulata, Mollusks, or Radiata; though Mammalia are larger than Birds, Crustacea larger than Insects; though Cetacea are larger than Herbivora, these larger than Carnivora, etc. The true limit at which, in the organization of animals, size acquires a real importance, is that of families, that is, the groups which are essentially distinguished by their form, as if form and size were correlative as far as the structure of animals is concerned. The representatives of natural families are indeed closely similar in that respect; the extreme differences are hardly anywhere tenfold within these limits, and frequently only double. A few examples, selected among the most natural families, will show this. Omitting mankind, on account of the objections which might be made against the idea that it embraces any original diversity, let us consider the different families of Monkeys, of Bats, of Insectivora, of Carnivora, of Rodents, of Pachyderms, of Ruminants, etc., among Birds, the Vultures, the Eagles, the Falcons, the Owls, the Swallows, the Finches, the Warblers, the Humming Birds, the Doves, the Wrens, the Ostriches, the Herons,