

## SECTION III.

## DIFFERENCES BETWEEN ANIMALS AND PLANTS.

49. At first glance, nothing would seem more widely different than animals and plants. What is there in common, for instance, between an oak or an elm, and the bird which seeks shelter amid their foliage ?

50. The differences are usually so obvious, that this question would be superfluous if applied only to the higher forms of the two kingdoms. But this contrast diminishes, in proportion as their structure is simplified ; and as we descend to the lower forms, the distinctions are so few and so feebly characterized, that it becomes at length difficult to pronounce whether the object we have before us is an animal or a plant. Thus, the sponges have so great a resemblance to some of the polypi, that they have generally been classed among animals, although in reality they belong to the vegetable kingdom.

51. Animals and plants differ in the relative predominance of the elements, oxygen, carbon, hydrogen and nitrogen, of which they are composed. In vegetables, only a small proportion of nitrogen is found ; while it enters largely into the composition of the animal tissues.

52. Another peculiarity of the Animal Kingdom is, the presence of large, distinctly limited cavities, usually intended for the lodgment of certain organs ; such is the skull and the chest in the higher animals, the cavity of the gills in fishes, and of the abdomen, or general cavity of the body, which exists in all animals, without exception, for the purpose of digestion, or the reception of the digestive organs.

53. The well-defined and compact forms of the organs