

found to be the same. The heat of vegetables and the organs of life being less powerful than those of shell animals, the vegetables can produce only a small quantity of stones, which are frequently found in its fruits ; but it can and does convert a great quantity of air, and a still greater of water into its substance. It may be asserted, without fear of contradiction, that the fixed earth it appropriates, and which serves as a base to these two elements, does not make the hundredth part of its mass ; hence, the vegetable is almost entirely composed of air and water, transformed into wood, or a solid substance, which is afterwards reduced into earth by combustion and putrefaction. The same may be said of animals ; they not only fix and transform air and water, but fire, and in a much greater quantity than vegetables. It appears, therefore, to me, that the functions of organized bodies are the most powerful means made use of by Nature for the conversion of the elements. We may regard each animal, or vegetable, as a small particular centre of heat or fire that appropriates to itself the air and water which surround it, assimilates them to vegetate or nourish, and live on the productions of the earth, which are themselves only air and water previously fixed. It also appropriates to itself a small quantity of earth,  
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