

of all kinds formed by living organisms on its exposed portions ; further by the changes, the upheavals, the accumulations, the subsidences and excavations produced in its thickness by volcanoes and earthquakes. Under these manifold influences it must certainly have undergone, in its condition and in the nature of its parts, variations which but for these different causes could never have taken place. All composite bodies tend to decay into their component constituents. Yet the visible crust of the earth consists almost entirely of compound materials. How is this fact to be accounted for ? There must be, he thought, some other potent force in Nature which acts antagonistically to the tendency towards the resolution of combinations into their component constituents, and he believed this force to be supplied by living organisms, or by what he calls the *Pouvoir de la Vie*. Having long watched the operations of living plants and animals, he saw that the organic action of living bodies unceasingly forms combinations of substances, which, without this action, would never have come into existence. From this well-founded observation, however, he leaped to the astounding generalisation that "the compound mineral substances, which are to be found in almost every part of the outer crust of the globe and form most of its composition, while at the same time they are continually modifying it by the changes they undergo, are all, without exception, the result of the remains and debris of living bodies." He had broached this view more than eighteen years earlier and he now complains that so striking a truth, only discoverable by observation,