

While they cannot be further separated they can be combined with each other, and it is this combination in various relations of the atoms to each other of these sixty or seventy elementary substances in nature that form all of the numerous compound substances: and their name is legion. These elemental atoms may be driven from one combination to another in thousands and thousands of ways, but no one of them is ever lost. As atoms they may be hidden from our view when combined with other atoms to form molecules of new substances, but the chemist by well-known processes can bring them out from their hiding-places and force them back to their elemental homes. Here we must stop.

Matter, like energy, then, is indestructible, and the two are so related to each other in some mysterious bond that we cannot think of the one dissociated from the other. We speak of "dead matter," although in actual fact all matter is associated with an ever-present force that keeps its ultimate particles in a continuous state of activity. By dead matter we mean that which is inanimate and not incorporated in a living organism. By long study and contemplation one may be able to get a mental picture of the difference between what we call animate and inanimate matter, but no language has ever yet been invented that is able to transfer a correct pho-