

understand how anything could get out of the way of anything else.

*Hermione.*—Do come back to our dear atoms. I love these atoms: the delicate little creatures! There is something so fanciful, so fairy-like about them.

*Hermogenes.*—Well they have their idiosyncrasies. I mean, they obey the laws of their being. They comport themselves according to their primary constitution. They conform to the fixed rule implanted in them in the instant of their creation. They act and react on each other according to the rigorously exact, mathematically determinate relations laid down for them *ab initio*. They work out the preconceived scheme of the universe by their—their——col——

*Hermione.*—Their? Stop, stop! my dear Hermogenes. Where will you land us? Obey laws! Do they know them? Can they remember them? How else can they obey them? Comport themselves according to their primary constitution! Well, that is so far intelligible: they are as they are, and not as they are not. Conform to a fixed rule! But then they must be able to apply the rule as the case arises. Act and react according to

number of human beings living at the end of the hundredth generation, commencing from a single pair, doubling at each generation (say in thirty years), and allowing for each man, woman, and child an average space of four feet in height, and one foot square, would form a vertical column, having for its base the whole surface of the earth and sea spread out into a plane, and for its height 3674 times the sun's distance from the earth! The number of human *strata* thus piled one on the other would amount to 460,790,000,000,000.