

be very elastic, since light, the only part of it we are acquainted with, seems by its effects to be perfectly so. I cannot, I own, determine whether it be by the one or the other of these reasons, that the direction of the first motion of the impulse of the planets has changed, but they suffice to shew that such an alteration is not only possible but even probable, and that is sufficient for my purpose.

But, without dwelling any longer on the objections which might be made, or on the proofs that analogy might furnish in support of my hypothesis, I shall pursue the subject and draw the fair conclusions : let us, therefore, first see what might happen when these planets, and particularly the earth, received their impulsive motion, and in what state they were, after having been separated from the sun. The comet, having by a single stroke communicated a projectile motion to a quantity of matter equal to the 650th part of the sun's mass, the light particles would of course separate from the dense, and form by their mutual attraction globes of different densities : Saturn being composed of the most gross and light parts, would be the most remote from the sun : Jupiter being more dense than Saturn would be less distant, and so on. The larger
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