

tion the recently discovered changes which must occur in bodies moving at speeds nearly comparable with that of light. It turns out in fact that both Shape and Mass are functions of Velocity. As the speed increases; the mass increases and the shape is distorted, though under ordinary conditions only to an infinitesimal extent.

So far I agree; I agree with the statement of fact; but I do not consider it so revolutionary as to overturn Newtonian mechanics. After all, a variation of Mass is familiar enough, and it would be a great mistake to say that Newton's second law breaks down merely because Mass is not constant. A raindrop is an example of variable mass; or the earth may be, by reason of meteoric dust; or the sun, by reason of radioactivity; or a locomotive, by reason of the emission of steam. In fact, variable masses are the commonest, for friction may abrade any moving body to a microscopic extent.

That Mass is constant is only an approximation. That Mass is equal to ratio of Force and Acceleration is a definition, and can be absolutely accurate. It holds perfectly even for an electron with a speed near that of light; and it is by means of Newton's second law that the varia-