

rated motion, till they meet at a point, exactly intermediate to those at which they first started; and the inference from this experience is, that the two balls exert a mutual and equal attractive force, which causes them to move towards each other. If the ball B, be twice the size of the ball A, the two balls will mutually approach each other as before; but, in this instance, instead of moving with equal velocity, while the ball A, moves two feet, the ball B, will only move one foot; or taking an extreme case, and supposing the ball B, to be indefinitely larger, say a million times larger, than the ball A, they will mutually influence and mutually move towards each other as before; but the motion of the ball B, will be so minute as to be insensible, while that of the ball A, will be the greatest possible. Here we have instances of the *inertia*, (inactivity, opposing force, &c.) and of the activity, (force of attraction, force of gravitation, &c.) which all matter exerts reciprocally, and mutually towards all other matter: and the laws of these forces, and the laws of the motions connected with them, as deducible from the circumstances stated, or from others, which it would be foreign to our present purpose to enter upon, may, in general terms, be given as follows:

“The mutual attraction of two bodies increases, in the same proportion as their masses are increased, and as the square of their distance is