

GRAVITY is distinguished into absolute and specific. Absolute Gravity is that which every body has in itself simply considered. Specific Gravity is that which is considered in a body compared with the gravity of any other, and is said to be either greater, equal to, or lesser than it. Thus, if the gravity of fine gold be 11, and that of fine silver 6, the specific gravities of gold and silver are said to be to each other as 11 to 6. Note.—In spaces void of air all bodies gravitate alike; or a feather and a stone, being let fall together, descend with equal velocity or swiftness.

MENSURABILITY is another universal property of bodies, for as all bodies are extended into the dimensions of length, breadth, and thickness, so it is possible for the contents or quantity of space included within those dimensions, or under the extremities of those bodies, to be compared, and the ratio or proportion between them found and determined, which is called the mensuration or measuring of bodies.

INACTIVITY or passiveness of matter, is its disposition to abide or continue in its state of motion or rest, till it is made to alter the same by the action of some external force. And from this principle are deduced those laws of motion, which are called the laws of Nature by Sir Isaac Newton, viz :

LAW I. All bodies continue in their state of rest or motion, uniformly in a right line, till they are obliged to change that state by the impression of external forces. Thus, a wheel whirled round would always continue that circular motion, were it not for the resistance it meets with from the air, and friction of the axle.

LAW II. All change of motion is proportional to the power of the force which causes it, and in the same direction with the said force. This law is as evident as that every effect is proportionable to its cause.

LAW III. Re-action is always equal and contrary to action, for when one body acts on another, that other body re-acts with equal force upon the first, and in a contrary direction. Thus, when a sledge strikes the anvil, the anvil returns an equal stroke on the sledge, and makes it rebound. So when a horse draws