a matter much more dense than any known, it would necessarily occur, that every time we descended to moderate depths, we should weigh much more, and the motion of pendulums would be more accelerated than in fact they are when carried from an eminence into a plain: thus, we may presume that the internal part of the Earth is filled with a matter nearly similar to that which composes its surface. What may complete our determination in favour of this opinion is, that in the first formation of the globe, when it took its present spheroidical figure, the matter which composed it was in fusion, and, consequently, all its parts were homogeneous, and nearly equally dense. From that time the matter on the surface, although originally the same with the interior, has undergone a variety of changes by external causes, which has produced materials of such different densities; but it must be remarked, that the densest matters, as gold and metals, are also those that are most seldom to be met with, and consequently the greatest part of the matter at the surface of the globe has not undergone any very great changes with relation to its density; the most common materials, as sand and clay, differ very little, insomuch, that we may con-