

appears to return to its former state of repose; but may not some extraordinary cause produce in it some derangement which may go on increasing till the waters all rush one way, and thus drown the highest mountains? And if we are safe from this danger, what are the conditions by which we are so secured?

The illustration which we have employed obviously suggests the answer to this question; namely, that the equilibrium is unstable, so long as the solid parts are of such a kind as to float in the fluid parts; and of course we should expect that the equilibrium will be stable whenever the contrary is the case, that is, when the solid parts of the earth are of greater specific gravity than the sea. A more systematic mathematical calculation has conducted Laplace to a demonstration of this result.

The mean specific gravity of the earth appears to be about *five* times that of water, so that the condition of the stability of the ocean is abundantly fulfilled. And the provision by which this stability is secured was put in force through the action of those causes, whatever they were, which made the density of the solid materials and central parts of the earth greater than the density of the incumbent fluid.

When we consider, however, the manner in which the wisdom of the Creator, even in those cases in which his care is most apparent, as in the structure of animals, works by means of intermediate causes and general laws, we shall not be ready to reject all belief of an end in such a case as this, merely because the means are mechanical agencies. Laplace says, "in virtue of gravity, the most dense of the strata of the earth are those nearest to the centre; and thus the mean density exceeds that of the waters which cover it; which suffices to secure the stability of the equilibrium of the seas, and to put a bridle upon the fury of the waves." This statement, if exact, would not prove that He who subjected the materials of the earth to the action of gravity did