cede exact knowledge and civilization, and arise spontaneously among savage peoples. They are the solvent of the chaos, as which the outer world first presents itself to our eyes and hands, and they are the fabric of all theologies.

As civilization has progressed, these early hypotheses have received endless criticism, and their definition has been continually sharpened. Meantime natural science has sought and provided ever more accurate accounts of the phenomena which first suggested them to man, and of countless other forms and transformations of matter and energy, and the discovery of laws of nature has steadily changed once quite mysterious order and purpose into the plainest of necessary results.

Upon the advent of modern science order speedily began to receive its true account when, after only a half century of progress, dynamics through Newton provided a formulation of the laws which govern the most striking of all the orderly phenomena of nature.¹ Since Newton's day the explana-

¹"Die Newton'schen Principien sind genügend, um ohne Hinzuziehung eines neuen Princips jeden praktisch vorkommenden mechanischen Fall, ob derselbe nun der Statik oder der Dynamik angehört, zu durchschauen. Wenn sich hierbei Schwierigkeiten ergeben, so sind dieselben immer nur mathe-