

positive success in three centuries. Such a history no doubt depends upon the very nature of the situation; upon the inherent and inevitable weakness, within the domain of science, of vitalistic views.

Experience seems to show that the only kind of hypothesis which can find conclusive scientific support, or sound basis in the phenomena of matter and energy, is a mechanistic hypothesis. Exact and positive knowledge can demonstrate scientifically the truth of no other hypothesis with the finality which characterizes its proof of a mechanistic theory. Hence, so far as it ventures into the field of science at all, a vitalistic theory, when attacked by science, cannot effectually avail itself of the weapons of the assailant, and can never make a powerful counter attack. Its only method consists in a determined resistance, yielding little by little before the advance of positive knowledge and never gaining new territory, nor, except by accident, regaining what it has lost. Where this process is to end; in what respect and how far life is destined ever to remain a scientific riddle, can only be surmised.

The chief definitive triumphs of the mechanistic view are two: the elimination of vital force and of a belief in peculiarity of chemical