

comparatively obvious,—the discovery unexpected and abstruse. And as men descend in the scale of accomplishment or intellect, a nearer and yet nearer approximation takes place between their conceptions of the causes of the occult processes of nature, and the common and obvious motives which influence large masses of their fellows ; until at length the sublime contrivances of the universe sink, in their interpretation of them, into the clumsy expedients of a bungling mechanism.

Tested by their reading of the phenomena on this principle, we find curious gradations between the higher and the humbler orders of minds. The vortices of Descartes, for instance, involve but a simple idea, that might have been struck out by almost any individual of a tolerably lively fancy, who had walked by the side of a winding river, and seen sticks and straws revolving in its eddies. But no fancy, however active, or no reach of mere common sense, however respectable, could have originated, or conducted to a successful conclusion, that profound contemplation into which Newton fell in the garden at Woolsthorpe, when he saw the loosened apple drop from the tree, and succeeded in demonstrating that the planets are retained in their orbits by the same law which impels a falling pebble towards the ground. So little obvious, indeed, was the Newtonian scheme, that most of the contemporary generation of philosophers,—some of them, such as Fontenelle and his brother academicians of France, men of no mean standing,—died rejecting it. And the objections of Turretine to the motion of the earth on its axis are, we find, still more obvious than even the idea of the vortices. It does at first seem natural enough to suppose, that if the earth's surface be speeding eastwards at the rate of several hundred miles in the hour (a thousand miles at the equator), the birds which flutter over it should be somewhat in danger of being left behind ; and that atoms and down-