

further extension of our knowledge or our means of gratification. The prolongation of their eyesight to the aged by means of convex lenses, made from a substance at once transparent and colourless—the force of steam with the manifold and ever-growing applications which are made of it—the discovery of platina, which, by its resistance to the fiercest heats, is so available in prosecuting the ulterior researches of chemistry*—even the very abundance and portability of those materials by which written characters can be multiplied, and, through the impulse thus given to the quick and copious circulation of human thoughts, mind acts with rapid diffusion upon mind though at the distance of a hemisphere from each other, conceptions and informations and reasonings these products of the intellect alone being made to travel over the world by the intervention of material substances—these, while but themselves only a few taken at random from the multitude of strictly appropriate specimens which could be alleged of an adaptation between the systems of mind and matter, are suf-

* “ This among many such lessons will teach us that the most important uses of natural objects are not those which offer themselves to us most obviously. The chief use of the moon for man’s immediate purposes remained unknown to him for five thousand years from his creation. And since it cannot but be that innumerable and most important uses remain to be discovered among the materials and objects already known to us, as well as among those which the progress of science must hereafter disclose, we may here conceive a well grounded expectation, not only of constant increase in the physical resources of mankind, and the consequent improvement of their condition, but of continual accessions to our power of penetrating into the arcana of nature, and becoming acquainted with her highest laws.” Sir John Herschel’s Discourse, p. 308, 309.