

nanced than otherwise by the seemingly incidental way in which the telescope was discovered. The observation of the polarity of the magnet is an example of the same kind—and with the same result, in multiplying, by an enlarged commerce the enjoyments of life, and speeding onward the science and civilization of the globe. There cannot a purer instance be given, of adaptation between external nature and the mind of man—than when some material, that would have remained for ever useless in the hands of the unintelligent and unthoughtful, is converted, by the fertility and power of the human understanding, into an instrument for the

conspicuous star which, without a near rival, attracts even the eye of the vulgar, and shows the north to the wanderer on the wilderness or on the ocean, is in like manner a beneficent arrangement. Those who would spurn the supposition that the celestial locality of a sun immeasurably remote from our system, should have reference to the accommodation of the inhabitants of a planet so inconsiderable as our own, forget the style of the Divine Works, which is, to serve some great or principal end, compatibly with ten thousand lesser and remote interests. Man if he would secure the greater, must neglect or sacrifice the less; not so the Omnipotent Contriver. It is a fact full of meaning, that those astronomical phenomena (and so others) which offer themselves as available for the purposes of art, as for instance of navigation, or geography, do not fully or effectively yield the end they promise, until after long and elaborate processes of calculation have disentangled them from variations, disturbing forces and apparent irregularities. To the rude fact, if so we might designate it, a mass of recondite science must be appended, before it can be brought to bear with precision upon the arts of life. Thus the polarity of the needle or the eclipses of Jupiter's moons are as nothing to the mariner, or the geographer, without the voluminous commentary furnished by the mathematics of astronomy. The fact of the expansive force of steam must employ the intelligence and energy of the mechanicians of an empire, during a century, before the whole of its beneficial powers can be put in activity. Chemical, medical, and botanical science is filled with parallel instances; and they all affirm, in an articulate manner, the two-fold purpose of the Creator—to benefit man and to educate him.