

emplified in all the sciences, in the economical, and the mental, and the physical, and most of all in the physico-mathematical—as when Newton, on the calculations and profound musings of his solitude, predicted the oblate spheroidal figure of the earth, and the prediction was confirmed by the mensurations of the academicians, both in the polar and equatorial regions; or as, when abandoning himself to the devices and the diagrams of his own construction, he thence scanned the cycles of the firmament, and elicited from the scroll of enigmatical characters which himself had framed, the secrets of a sublime astronomy, that high field so replete with wonders, yet surpassed by this greatest wonder of all, the intellectual mastery which man has over it. That such a feeble creature should have made this conquest—that a light struck out in the little cell of his own cogitations should have led to a disclosure so magnificent—

all the more difficult applications of exact calculation to her phenomena.” p. 33.

“Almost all the great combinations of modern mechanism, and many of its refinements and nicer improvements, are creations of pure intellect, grounding its exertion upon a very moderate number of elementary propositions, in theoretical mechanics and geometry.” p. 63.

The discovery of the principle of the achromatic telescope, is termed by Sir John, “A memorable case in science, though not a singular one, where the speculative geometer in his chamber, apart from the world, and existing among abstractions, has originated views of the noblest practical application.” p. 255.