

ment when we pass from the mathematics of the one department to the mathematics of the other. There is, no doubt, in one respect, a very wide transition; when instead of a triangle, whose base-line is taken by a pair of compasses from the Gunter scale, or even measured by a chain on the surface of the earth, we are called to investigate the relations of a triangle whose base-line is the diameter of the earth, or perhaps the diameter of the earth's orbit. There is doubtless a very wide transition from the objects of the terrestrial to those of the celestial physics; when, instead of three indivisible points on the parchment that lies before us, or three signposts of observation that wave on mountain-tops within sight of each other, we have three planetary bodies that, huge though they be in themselves, shrink into atoms when compared with the mighty spaces that lie between them. The fields of observation are wholly different; but it is by the very same trigonometry that we achieve the computation of the resulting triangles. And we again repeat that, sublime as the ascent may be from the facts or data of the one computation to those of the other, there is no gigantic or impracticable stride in their mathematics—that if able to trace certain curves in the page which lies before us, we are further able to scan the cycles of astronomy—that, widely apart as are the revelations of this wondrous science from the conceptions of our first and ordinary experience, yet grant but the facts, and it is by the dint of a familiar and ordinary mathematics, that the mind can ascend to them. It is thus that though