

paper, hath the same relations and properties with the triangle which comprehends any portion however large of immensity. It is enough that what is predicated of the line which extends but a few inches may also be predicated of the same line when prolonged to the outskirts of creation. And thus it is, that after observation hath done its work and collected what may be styled the facts of Astronomy, there is a capability in the human spirit, and upon no other materials than what may lie within the compass of a table, to unravel the principles of its wondrous mechanism—and in the little chamber of thought, to elaborate a doctrine which shall truly represent the universe and is realized in its most distant processes.

19. Now whence were the mathematics by which he made an achievement so marvellous—whence were these mathematics derived? For our purpose it is a sufficient answer to this question that he had not to go abroad for them. They may have enabled him to scan the cycles of heaven—but most certainly heaven's lofty concave is not the page from which his geometry was drawn. To obtain the necessary mathematics he has not to travel beyond the limits of his own humble apartment—and though in person he may have never wandered from the secluded valley that bounds his habitation, yet, such is the power of this home instrument, that it can carry him in thought through the remotest provinces of nature, and give him the intellectual mastery over them. He needs not have gone half-a-mile in quest of those conceptions which lie in little room within the receptacle of his