

of the incident light. In this case, the ordinary ray has been refracted ordinarily, and preserves its situation; the extraordinary extraordinarily, but its displacement by the second refraction being exactly equal and opposite (in consequence of the now reversed position of the refracting rhomb) to that by the first, it is brought to coincidence with the other, and the two united form one image.

(123.) The opposite sides of a rhomboid being parallel, both the ordinary and extraordinary rays after transmission emerge parallel to the incident ray, by a necessary consequence of that general law of retroversion, in virtue of which a ray of light, whatever path it may have pursued from one point to another, can always retrace that path; the opposite faces being symmetrically situated with respect to the axis. And the same is true for a parallel plate of this or any other crystallized substance artificially cut and polished, whatever be the position which such plate may have held in the interior of the crystal from which it is cut. Now it is found, by cutting from rhombs of Iceland spar parallel plates in various directions, that there is one through which a ray of ordinary light can be transmitted perpendicularly without being divided into two. This is the case when the faces of the plate are at right angles to the line above designated as the *axis* of the rhomboid. And generally that a ray which within the crystal pursues a path parallel to this axis, will emerge from it single, whatever be the situation of the surface of emergence. The axis, then, is a *line of no double refraction*, and in the case of