vibratory movement once set up and steadily maintained, according to a regular law of periodicity in any one molecule of such a fluid will, sooner or later (according to its distance and situation), reach every other, which from that moment will be agitated by a vibratory movement precisely similar in its phases (though of inferior extent in its excursions) to the original movement, and *performed in the same period of time.* It matters not whether the medium be or be not equally elastic in all directions. This will affect the *rate of progress* of a wave through it in different directions, and by consequence the form of the wave, and the length of time that has to elapse before the molecule in question begins its vibratory movement; but once set up in any molecule, that movement will be maintained, so long as it is, so to speak, fed from behind—so long as successive waves continue to pass through it. In the theory of light, the eye being insensible to vibratory movements in the direction of the ray, we have only to consider those components of the motion which lie in a plane at right angles to that direction, and which, for the present, we will suppose to be that of the paper before us.

(149.) Let us consider, then, the kind of motion which an ethereal molecule will assume, under the influence of two such vibratory movements simultaneously affecting it, in directions transverse or otherwise inclined to each other, but both directions lying in one common plane, that of the paper, or of the wave-surface; each of which will therefore represent the vibratory movement proper to a ray polarized in a plane at right angles to our paper,