of them be slowly turned round in its own plane till its axis comes to be situate at right angles to that of the other, they will gradually decrease in intensity and at length disappear altogether when this rectangularity is precisely attained. In the first case, then, the rays have interfered—in the last, not: while in the intermediate states a partial interference takes place, the more complete the nearer the axes are to parallelism. How *this* is operated we shall now proceed to explain.

(148.) *Circular and elliptic polarization.*—If we regard the vibratory movement of any single particle of an elastic medium in its most general mode of conception, we shall find that it may always be considered as capable of resolution into three rectilinear vibrations in three planes at right angles to each other, each going on *as if* the others had no existence: and its place in space at any instant will be had by estimating its distance on one side or the other of its neutral or central position (those of perfect equilibrium and rest), reckoned along each of the three lines in which these planes intersect (which, after the manner of geometers, may be considered as three rectangular axes, or co-ordinate lines), which it would have attained at that instant in virtue of each separately, and independent of the others. This is nothing more than the enunciation of one of the simplest of mechanical laws, that of the composition and resolution of motions. But the theory of movements propagated through elastic media (a theory far too elevated and intricate to admit of any explanation in these pages, and whose results the reader must take for granted) further teaches us that a