

a transparent body, the whole of the reflected light is polarized; while the whole of the transmitted light is also polarized; but *in a plane at right angles*, to that in which the reflected ray is polarized.

Such is the general law; and it may not be amiss to allude briefly to another familiar illustration of it. Every one is acquainted with the mineral called Iceland spar, and with the singular property which this mineral possesses of forming a double image of objects seen through it, or its property of double refraction; in other words, when a ray of light falls on a crystal of such spar in a particular direction, the ray is separated into two. Now it is a remarkable fact that if these two rays be examined in the way before directed, when speaking of reflected and transmitted light; it will be found that both are polarized, but that the two rays are polarized in planes *at right angles to each other*: that is to say, the ordinary transmitted ray is polarized like the ordinary ray, transmitted through the bundle of glass plates; while the extraordinary transmitted ray is polarized like the ray reflected from these plates. Many bodies are similarly constituted; while others have two or more planes or axes of double refraction, giving origin to a variety of curious and beautiful properties; which it would be quite foreign to our present purpose to detail further.