

the substance in question (or of any crystallized body whose *primitive* form is the acute or obtuse rhomboid, the regular hexagonal prism, and some others, comprising all those primitive forms which can be described as *symmetrical to one line and to one only*) it is the only direction endued with this property. And on the other hand, the amount of the double refraction or the angular separation of the two rays into which the incident ray is divided, is greatest when they lie in a plane perpendicular to this axis. On account of these properties, the line in question is sometimes called the *optic axis* of the crystal.

(124.) If a crystal of Iceland spar, or any similar body, be cut into the form of a prism, in such a manner as to have its refracting edge parallel to its optic axis, neither of the two refracted rays will emerge parallel to the incident one, or to each other. They will diverge, including an angle between them, greater as the refracting angle of the prism is greater, exactly as if the medium had two different refractive indices. And in this particular case both refractions follow the ordinary "law of the sines," and there is no deviation of either ray from the plane of incidence. And what is extremely remarkable, not only the refractive indices, but the dispersive powers of the two refractions differ, in some cases widely, so as to give two spectra (when a sunbeam is refracted) of very different lengths. In the case of Iceland spar, the respective refractive indices for the ordinary and extraordinary ray are 1.654 and 1.483. It is in consequence of this great difference that the two images of a