the analyzing plate), and differing in phase, will interfere and give rise to the phænomena of coloration in the manner already sufficiently explained. It remains now to account for the colours being arranged in regular succession in rings round the centre of the black cross (which corresponds to the axis of the crystal). Now the colour developed, or the *order of the tint*, in the series of the Newtonian rings, increases with the difference of phase, and this difference increases with the difference of velocities of the two pencils within the crystal, and with the length of the path traversed with those velocities. Both these increase with the inclination of the visual ray to the axis of the crystal: since along the axis there is no double refraction, which increases gradually from that direction outwards up to a right angle. This, then, explains the progressive increase of colour or order of tint in proceeding from the centre outwards. The circular arrangement is a consequence of the symmetry of the crystalline plate in all directions around its axis; the amount of double refraction being the same at equal obliquities to that line in all directions around it, as also the increase of thickness traversed by rays equally oblique in all directions to the surfaces of the plate. It only now remains to explain how it happens that, in this situation of the analyzing plate (at right angles to the polarizing one), the tints are those of the *reflected*, not of the transmitted series in the Newtonian rings. And the reason is very similar to that by which, in the colours of thin plates, the difference of phase is assumed (justifiably assumed) to commence, not from