

scarcely possible such singularities should stand in no natural connexion. Between two of the cases adduced the connexion had been proved by himself. It remained to enquire whether the third could be brought into obvious relation to the other two. Accordingly on the 14th of March 1823, having prepared a long spiral coil of copper wire enclosed in an earthenware tube, furnished with a polarizing reflector at one end and an analyzer at the other; by the kindness of the late Mr Pepys, he was permitted to bring the coil into connexion with the great magnetic combination of the London Institution, consisting of one enormous couple, expressly arranged for producing the greatest possible magnetic effect. His expectation was that light would appear in the dark polarized field on making the contact, and be maintained during its continuance. The experiment, however, proved unsuccessful. No *direct* action upon *light* could so be made manifest. At a later period, however (1845), by introducing into a similar coil a certain highly refractive glass consisting chiefly or wholly of borate of lead, as well as a variety of other solids and liquids (water among others), Professor Faraday succeeded in communicating, temporarily, and during the continuance of the passage of the current, the property in question to them.

(169.) *Biaxal Crystals*.—By far the greater number of crystallized substances do not present that *single symmetry* (symmetry on all sides of a single central line or axis), which we have spoken of as indicative of a single axis of double refraction, and of a spherical propagation