of colour, it must present to his eyes what we should be disposed to call a hideous monotony—light and shade only revealing the forms of objects as in an engraving. Yet what we never knew we never miss. There may, and not improbably do, exist beings in other spheres, if not here on earth, whose vision is sensitive to those rays of the spectrum which extend far beyond the violet or its *lavender* prolongation, and which we know at present only by their powerful photographic activity, and by their agency in producing that singular species of phosphorescence in certain media to which Professor Stokes has given the name of Fluorescence. By these properties, the solar spectrum is proved to be prolonged far beyond its visible limits at its most refracted extremity; as it is by *other invisible rays* OF HEAT, which have been traced up to nearly an equal distance beyond the extreme red in the opposite direction.* All, however, whether of heat or chemical influence, conform each for itself, and according to its own special "refractive index," to the same general *law of the sines*, as well as to every other of those singular and complicated relations of the luminous rays, we shall hereafter have to describe; and both the one and the other extending into and thinning out as it were in the luminous region, just as we have described the spectra of the primary colours into those of each other. Such, and so wondrously complex a compound is a sunbeam!

* See my paper in the Phil. Trans. R. S. 1842, "On the Action of the Solar Rays on Vegetable Colours."