

no shadows can be seen. This is the case with a pane of glass: where the shadows from the sash-bars do not reach, there no colours can be seen, there all the colours and atmosphere are obliterated, and they together form common light.

There are four light penumbra shadows, and four dark umbra shadows; the light of the eye cuts off, or obliterates, a portion of all these shadows, by its brilliancy, but the prism, by its dimness, restores it again.

As it appears that the light of the eye and the light of the universe, by their fineness or brilliancy, are capable of obliterating, and do obliterate all shadows and all distinctions of colours between them, so, it is highly essential to the discernment of shadows or colours, contained in the atmosphere, that the light of the universe should be lowered in its brilliancy by virtue of some shadow, and that the light of the eye should be lowered in its brilliancy by looking through a crystallized prism, by which means we have the light of the eye brought down near enough to a level (but not exactly so), but to a fit state of taking cognizance of the colours contained in the shady places of the atmosphere, that is, to such a state that neither of those lights should possess the power of passing through those colours without a touch.

It is now necessary to take a view of the position of the shadows, and observe how they have been formed, particularly the light penumbra shadow, as it is formed by the light in front of the sash-bar; its breadth will be greatest towards the inside of the window, and, consequently, every particle of colour will point its shadow in the same direction, that is, inwards and downwards.