

which, by varied refractions and reflections, have the power so to turn and contort the rays of light as to produce the most complicated phenomena. All these several effects, from whatever cause they may proceed, are known under the general term Halo, but some persons have thought it necessary to make a distinction between those phenomena which result from solar, and those which depend on lunar light; the former are called Parhelia, the latter Parasefenæ.

CORONÆ.

The haloes which are produced round the sun by the intervention of thin fleecy clouds, have been called Coronæ, and are probably occasioned by the passage of light through very small drops of water, suffering the same change as it does in passing through thick plates. Coronæ round the sun are best seen by reflection from the surface of water, for the intensity of the beams prevents the observer from examining them without adopting some such means. Sir Isaac Newton was accustomed to make his observations in this manner. In one instance he observed the sun to be surrounded with three distinct rings; and, by adopting this method, detected their colours, and measured their diameters, which he has given in the following table:—

	Deg.
1st ring, blue, white, red,	Diameter, 5.6
2d ring, purple, blue, green, pale yellow, red,	Diameter, 9.33
3d ring, pale blue, pale red,	Diameter, 12

Haloes round the moon are sometimes very beautiful, generally appearing as luminous white circles, but at other times red or reddish green. We have more than once observed the corona to appear and disappear during the walk of a few miles, according as we have been in or above the mists which have been rising from the low grounds. This singular fact might lead us to theorize upon the formation of this curious phenomenon; but it may be doubted whether it is always produced by the same cause. Mariotte supposes coronæ to be formed by the refraction of light by small prismatic crystals of ice descending through the air in every possible direction. It is possible that this explanation may account for some of these appearances; but until the diameters of the coronæ can be determined, there will be no test for its accuracy.