

dow, I was struck with the appearance of something in the sky which seemed like a rainbow. Having never seen a rainbow by night, I thought it a very extraordinary phenomenon, and hastened to a place where there were no buildings to obstruct my view of the hemisphere; here I found that the phenomenon was no other than a lunar rainbow; the moon was truly 'walking in brightness,' brilliant as she could be; not a cloud was to be seen near her, and over against her was a rainbow, a vast arch, perfect in all its parts, not interrupted or broken, as rainbows frequently are. Its colour was white, cloudy, or grayish, but a part of its western leg seemed to exhibit tints of a faint sickly green."

Artificial rainbows are sometimes formed by the spray of a waterfall, and by the rising mist from the surface of seas and oceans. Sir David Brewster states, that in 1814, he saw at Berne a fog-bow, which resembled a nebulous arch, in which the colours were invisible.

Several writers have described the appearance of supernumerary rainbows, that is, a succession of coloured arches, usually purple and green, within and in immediate contact with the primary bow. These are accounted for by Dr. Young by the principle of interference.

#### HALOES.

There is yet one other class of atmospheric phenomena, exhibiting colour, to which we must refer before we leave the subject of this chapter. The sun and moon do not vary either in form or in colour, when the atmosphere is free from vapour and other extraneous substances. But when a body of vapour intervenes between the luminaries and the earth, they suffer an apparent alteration in both these particulars; and many curious phenomena are produced, according to the circumstances under which the cause operates. When the atmosphere is dry and arid, the sun appears to have a deep blood-red colour; when the atmosphere is loaded with vapour, he is shorn of the bright radiations which dazzle the eye of the observer, and presents only a colourless disk. The passage of a light cloud over the face of either of the luminaries is sufficient to change their appearance, and frequently causes the formation of coloured rings, which appear to surround them. But the most singular effect is produced when the atmosphere contains small particles of ice,