

summer is simply a dry fog where the impurities in the atmosphere remain a long time owing to the absence of rain. The greater part of the impurities are from forest fires.

Of atmospheric optics a few words may be said. Of these the most familiar phenomenon is the rainbow. It is simply a color sensation due to the double refraction and reflection of the sun's rays by globules of water situate in the surface of a cone of which the eye is the apex. The higher the sun the lower the bow, and the greatest bow possible is a semi-circle, when the sun is just rising or setting. Theoretically no two observers see the same rainbow, for the bow has no real or material existence.

Rings around the sun and moon are divided into two classes—the corona of small diameter and the halo of greater diameter. The corona is a diffraction phenomenon, while the halo is due to reflection and refraction of the light by the ice crystals or ice needles in the higher regions of the cirrus clouds. There is a great variety in the distribution of halos—sometimes the rings are wholly separate and sometimes they intersect. The points of intersection are usually more or less light patches, and are called mock suns, or sun dogs or parhelia; for the moon, paraselenae.

When one layer of air lies in contact with another of different temperature and density, the bounding surface between the two, if sharply defined will reflect light perfectly and hence images of objects become visible. This phenomenon is called mirage, and I have frequently seen it in the Alaskan archipelago and less frequently on the plains of our North-west.

There is no problem in the wide range of science in the public eye that admits of so ready solution as weather. Is the pseudo-scientist, the charlatan,—who surrounds himself with a halo of scientific terms, favorite ones being opposition and conjunction of planets—writes of astronomical computations, et cetera, that misleads the public through his bold and at times