

almost exactly equidistant, exceedingly minute, non-reflective grooves, and when, if held close to the eye, a candle is seen in it reflected, its image is accompanied with two lateral and very vivid spectra of similar origin, and an impression of the surface taken on black sealing-wax presents the same phenomenon.

(111.) When, as occasionally happens, the eyes are suffused with a nebulous film (due to the presence in the lacrymatory secretion of extremely minute globular particles of equal size), the image of a candle in a dark room some feet distant is seen surrounded with two or three broad circular halos of rainbow colours alternately ruddy and green. Similar halos are formed round the candle when viewed through two pieces of clear glass between which has been placed a little oil mixed with the delicate powder of the common puff-ball or *Lycoperdon*, reduced to a thin even film by pressure and gently rubbing them together. In this case they are much more vivid and beautiful, the tints being those of the colours of thin plates beginning from the centre, only more dilute, so that it is difficult to discern more than a feeble indication of the fourth ring. Their diameters, however, unlike those of the coloured rings figured in Fig. 6, increase in arithmetical progression, or nearly so; that of the first or smallest, reckoned to the minimum of illumination, being  $21^{\circ} 36'$  or thereabouts. They owe their origin to the exceeding minuteness, uniformity of size and sphericity (or at least circularity) of outline (if flat discs) of the spores of this fungus.

(112.) The explanation of these and of other phæno-