

is no diminution of the colours, or alteration of their forms. It is to the *interval between the surfaces* that we have to look for their origin.

(75.) Here, then, we have LIGHT brought face to face with SPACE, and no escape! What happens at or between these surfaces? How is it that while a single surface reflects a dispersed beam of light indifferently over its whole extent, this indifference is destroyed by placing another reflecting surface behind it; and the reflexion (at least the *effective reflexion as regards the spectator*) rendered impossible when the second surface is at a certain distance, *or at certain distances*, from the first; while if placed at intermediate distances, it is either not at all affected, or only to a certain extent enfeebled? and *that*, when there is nothing, or at least nothing realizable to any of our methods of observation, between them? This is the problem before us, reduced to its simplest terms,—a problem which the corpuscular theory of light resolves imperfectly and unsatisfactorily, and the undulatory fully and without reserve.

(76.) When instead of using the prismatic spectrum (of which it is next to impossible to insulate from the rest a ray of perfectly definite refrangibility) to illuminate the film, we employ artificial light (such as that of a spirit lamp with a salted wick, which may be considered as almost perfectly homogeneous), the rings are seen with extraordinary sharpness; their central spot and their divisions having the blackness of ink, and absolutely innumerable; being traceable with a magnifier when too close to be otherwise distinguishable, apparently without