ON LIGHT.

wall, is heard, though with diminished intensity, on the other side,—we have the analogue to the partial reflexion of a beam of light at a transparent surface; and on the other hand, in the deadening of sound in passing through woolly or puffy substances, while it is transmitted with exceeding sharpness and distinctness through compact solids or through water, we have the parallel to the absorption of light in some media, and its copious transmission through others.

(61.) The explanation of refraction on the undulatory theory is exceedingly simple. Suppose a plane wave to sweep obliquely along the surface BE of a medium capable of propagating within it the luminiferous undulation, and let it be supposed at equal intervals of time



Fig. 4

(successive seconds, for instance) to assume successive positions B b, C c, D d, E e, arriving in succession at equidistant points B C D E of the surface. So soon as

277