

XIII.

ON THE ABSORPTION OF LIGHT BY COLOURED MEDIA,

VIEWED IN CONNEXION WITH THE UNDULATORY THEORY.*



THE absorption of light by coloured media is a branch of physical optics which has only since a comparatively recent epoch been studied with that degree of attention which its importance merits. The speculations of Newton on the colours of natural bodies, however ingenious and elegant, can hardly, in the present state of our knowledge, be regarded as more than a premature generalization; and they have had the natural effect of such generalizations, when specious in themselves and supported by a weight of authority admitting for the time of no appeal, in repressing curiosity, by rendering further inquiry apparently superfluous, and turning attention

* The substance of this paper was read before the Section of Physics of the British Association, at Cambridge, 1833. Some inaccuracies of wording are corrected, but nothing *introduced* bearing on the views more recently entertained as to the conversion of motion into *heat-vibration*.