

ERRATA.

PART I.

P. 143, l. 3, *for* affraiant, *read* effraiant.

Note from HENRY BROUGHAM, JUN. Esq. author of the paper on the inflection, reflection, and colours of light. See page 227, &c.

“ Owing to an error which crept into the integral calculus by which the problems on
 “ the trajectory of light were resolved, two of these solutions are erroneous, and must be
 “ corrected thus : 1. When the bending force is inversely as the distance, the curves to be
 “ squared are, a conic hyperbola, and a logarithmic, $y^2 = \frac{1}{l} \frac{a}{x}$. The trajectory, there-
 “ fore, cannot be found in finite terms; its equation is $y^2 l \frac{a}{x} = x^2$; and the sub-
 “ tangent is to the subnormal as 1 to $l \frac{a}{x}$. 2. When the bending force is inversely as
 “ the square of the distance, the curves to be squared are a cubic hyperbola, $y = \frac{1}{x^2}$,
 “ and a cubic conchoid, $y^2 = \frac{x}{a-x}$; therefore the equation to the trajectory is
 “ $(a-x) y^2 = x x^2$, which belongs to a *cycloid*, the radius of whose generating circle is
 “ a . In general, if the force be inversely as the m th power of the distance, the equation
 “ of the trajectory will be $(a^{m-1} - x^{m-1}) y^2 = x^{m-1} x^2$, which agrees also with the
 “ first case, where m being = 1, a^{m-1} , may be esteemed the hyperbolic logarithm
 “ of a .”

H. BROUGHAM.

Edinburgh,
 July 2, 1796.