same variable, then $dy, dz, dw, \ldots$ are expressions ***proportional*** to the derived functions of $y, z, w, \ldots$ whatever may be the variable of which they are common functions. Hence $\frac{dy}{dz} = \frac{Dy}{Dz}$; and if y be a function of x, or $= \varphi\,(x)$, then $\frac{dy}{dx} = \frac{D\varphi\,(x)}{Dx} = D\varphi\,(x)$ and $\therefore\ dy = dx \,.\, D\varphi\,(x)$.

Moreover, since the derived functions are in the limiting ratio of the increments, so also are the fluxions. From this consideration we can in the applications of analysis, ***practically*** determine the ratio of the fluxions, when the derived functions are unknown.

ERRATA.

Page 72, line 20, for ***parts***, read ***part***.
—— 73, line 3, for ***between***, read ***below***.
—— 98, line 4 from bottom, dele the comma after A.
—— 101, line 6 from bottom, dele BH.
—— 102, line 4, for ***axes***, read ***axis***.
—— 164, line 11, dele the comma between m and n.
—— 174, line 7, for ***consisted of***, read ***consisted in***.
—— ——, line last, for m, n, read m, m.
—— 191, line 13, for $\varphi\overset{-1}{\varphi}\, x$, read $\overset{-1}{\varphi}\, \varphi x$.
—— 213, line 14, for $\psi^{p}\, \psi\,(x, y)$, read $\varphi^{p}\, \psi\,(x, y)$.
—— 214, line 10, dele "*in an infinite number of ways*".
—— 224, line 22, for $f\,(a)$, read $f\,(x)$.
—— 226, line 24, for $= x$, read $= z$.
—— 232, line 16, ***in the denominator***, for $1 -$, read $1 +$.
—— ——, line 18, *ditto*, *ditto*, for $1 -$, ***read*** $1 \pm$.
—— 251, line 9, for $\frac{d\psi\; x, \frac{1}{y})}{dx}$ read $\frac{d\psi\;(x, \frac{1}{y})}{dx}$
—— ——, line 11, for d ***in both numerator***, read d^2.
—— —— line 13, for $\left(\frac{x}{y}\right)$ read $x\,\varphi\left(\frac{x}{y}\right)$.