Page 365. In formulæ (268) read $f_u = \bar{f}_u \cdot \cos^2 \alpha =$ etc.

Page 393. In the first term on the right-hand side of formula (298) in the denominator read $n_k - 1$ instead of n_{k-1}.

Page 414. In the second and third equations on this page, read $\Delta \dfrac{n \cdot \delta u}{uu}$ instead of $\Delta \dfrac{n \cdot \delta u}{u}$.

Page 414. In the fifth equation on this page, insert a minus sign before d_{k-1}.

Page 439. In the second term of formula (323), read $\bar{R}_m'$ instead of R_m'.

Page 461. In the third formula on this page, on the right-hand side, insert a multiplication-dot before the expression in brackets.

Page 462. At the top of this page, strike out the first line, and insert in place thereof the following:
> If we neglect the terms of the 3d order, the direction-cosines of the incident ray may be regarded as 1, b/n, c/n; so that the approximate equations of the incident ray BH are:

Page 462. In the denominator of the fraction on the right-hand side of the equation in the 6th line read $n^2(y_h^2 + z_h^2)$ instead of $y_h^2 + z_h^2$.

Page 465. In the last expression in the last term of the first of equations (355) read J_k^3 instead of J_k.

Page 465. In the second of equations (355) in the first term on the right-hand side read $(y_1^2 + z_1^2)z_1$ in place of $(y_1^2 + z_1^2)y_1$; and after the $+$ sign before the last term insert $\frac{1}{2}$.

Page 467. In the second of equations (357), in the numerator of the fraction in the first term on the right-hand side read $(y_1^2 + z_1^2)z_1$ instead of $(y_1^2 + z_1^2)y_1$.

Page 604. §122. Read Chap. I instead of Chap. II.

SHORTER NOTICES.

A Treatise on the Analytic Geometry of Three Dimensions. By GEORGE SALMON, late Provost of Trinity College, Dublin. Fifth edition, revised by R. A. P. ROGERS, Fellow of Trinity College, Dublin. Volume 1. London, Longmans, Green and Company, 1912. 8vo. xxii+470 pages, and two plates.

THE first edition of Salmon's Geometry of Three Dimensions was published in 1865. It formed the closing volume of an extensive treatise on algebraic geometry, two volumes of which were concerned with plane geometry, while the third contained a development and interpretation of the theory of linear transformations, from the standpoint of invariants, then just becoming known.

While many of the facts were known before, the point of view was a new one, and the great mass of material was