The standard of typography is high. A few misprints may be noted however: On page 3 , line 7 , $\alpha n$ should read $\alpha_{n}$; on page 30 , line 6 , for $y \pm 2 k n$ read $y \pm 2 k \pi$; on page 59 , last line, read $a_{k}$ for $a_{\kappa}$; on page 85 in line 19, $a_{1} d-a_{1} d$ should read $a d_{1}-a_{1} d$. The proof of page 106 has not been well read. There occur three notations for the same function on this page, viz., $g(x), f^{\prime}(x)$, and $f_{2}(x)$. The order of $f$ is $m$ at the top of the page, is changed to $n$ at the middle and so used in two determinants, there being no comment on the change, and the order $m$ is restored at the bottom of the page. In line 3 from the bottom ( $1 / n^{n-1}$ ) $R\left(f_{2}, f_{1}\right.$ ) should be $\left(1 / n^{n-2}\right) R\left(f_{2}, f_{1}\right)$. Moreover it is not good usage, we believe, to begin a sentence with a mathematical symbol instead of a capitalized word, as is done in the theorem given at the top of this page. In line 11 of page 115 the last $\beta$ in the line is wrong font. On page 120 in line $15,2 \sqrt{\left(a_{1}{ }^{2}-a_{0} a_{1}\right) / a_{0}{ }^{2}}$ should be $2 \sqrt{\left(a_{1}{ }^{2}-a_{0} a_{2}\right) / a_{0}{ }^{2}}$. In line 3 from the bottom of page 122 read $a_{4}$ for $a_{6}$. In line 2 of page 123 read $x_{3} x_{4}$ for $x_{3} x_{6}$. The numbering of the formulas in the region of page 123 is confused. Equation (27) referred to in line 6 of this page does not occur in the chapter. This renders line 16 on page 125 unintelligible although it may be a misprint of "Nun liefert (21) wegen (23)." On page 213 in line 4 read $y_{2}$ for $y_{2}{ }^{\prime}$.

In the way of general criticism the reviewer thinks it might be urged that the treatment of invariants in the book is much too brief. Quite probably this subject is to be expounded at greater length in the volumes on geometry. But if it could have been found feasible to introduce the notions of invariancy in connection with the solutions of the equations of orders less than 5 , at sufficient length to show, for instance, that the roots of the resolvent cubic of the quartic equation are irrational invariants of index 2 , the rôle of invariants in the elements of algebra would have been rendered more evident.
O. E. Glenn.

Solid Geometry. By William Betz, A.M., and Harrison E. Webb, A.B. With the editorial cooperation of Percy F. Smith. Ginn and Company, 1916. xxii+177 pp. Price $\$ 0.75$.
On account of the existence of so many other interesting and important topics in mathematics which can be offered to the

