Differentiation. Chapters 2, 4, and 6 consist entirely of illustrative examples worked out in complete detail, 138 such examples in all. While their value cannot be questioned, most American teachers would probably prefer to have some exercises left for solution by the student. The seventh and last chapter is entitled *Applications.* It seems to have absorbed the chapter which we might expect on integration. In it we find the theorems of Gauss and Stokes, and the usual applications of the differential and integral calculus of vectors to theoretical mechanics. One wonders why the author did not (in accordance with the plan adopted in the earlier chapters) follow Chapter 7 by a chapter of examples illustrating the theory. Such a chapter would have been most valuable.

The appearance of the book is up to the high standard maintained by its publishers. Fortunately the reader will not be greatly troubled by the following omissions and misprints which have been noted by Professor Currie, a colleague of the reviewer.

On page 115, line 11, primes have been dropped from y' and z'.

On page 144, in the formula for S_1^2, a minus sign should obviously be replaced by a plus.

On page 146, in Example 48, one should read "the (sum of the) squares." The words in parentheses are omitted.

On page 229, in line 6, the symbols $/\partial x$ have been dropped in two places.

On page 230, in line 4, a plus sign should be replaced by a minus.

On page 233, in line 4, the symbol $\times$ should be replaced by $+$, and the same error occurs in line 6, page 249.

On page 234, near the bottom of the page, a symbol has been dropped, and the sense destroyed.

L. L. DINES

Darstellende Geometrie. By Robert Haussner and Wolfgang Haack. III, *Zylinder, Kegel, Kugel, Rotations und Schraubenflächen, Schattenkonstruktionen, Axonometrie,* Berlin and Leipzig, Walter de Gruyter, 1931. 141 pp., 65 figures. M. 1.80.

This is volume 144 of the Sammlung Göschen and contains an elementary treatment of quadric and other simple surfaces, their intersection and development, etc., by descriptive geometric methods. The contents are those of the customary elementary text on descriptive geometry and are presented in a clear and pleasing manner.

One important feature, often neglected in elementary descriptive geometry texts, is the systematic application of affine relations between horizontal and vertical projection of a plane figure, of projection and rabattement, etc. There are many teachers of descriptive geometry who do not realize the enormous advantage of this method for constructive purposes. Moreover it opens the way to an intelligent understanding of important geometric relations, especially the idea of transformation.

From this standpoint the little book may be recommended to teachers and students alike.

ARNOLD EMCH