Notes, which were widely circulated but which have been unavailable for quite some time.

Chapter 6, which deals with three-dimensional problems, is also new. The basic approach involves the expression of the components of displacement in terms of four arbitrary harmonic functions. Treated here are cases of concentrated loading, the problem of Boussinesq, the equilibrium of the sphere, thermoelastic problems, vibration problems and others.

G. E. HAY

La géométrie des groupes classiques. By Jean Dieudonné. Berlin, Springer, 1955. 7+115 pp. 19.60 DM.

This book gives an excellent survey of recent work on classical groups, simplifying and unifying the results of many authors. No attempt is made to cover all of the voluminous literature on classical groups; the author deals with only that portion of the subject which can be handled by the methods of linear algebra. By thus restricting his scope, he is able to include proofs of most of the results described, thereby making the book more self-contained than most Ergebnisse tracts.

While the book is written on an advanced level, it presupposes only some familiarity with linear algebra. However, a reader with a minimum background will have to work hard to master this book, which cannot be skimmed lightly. By use of a highly-condensed method of presentation, and omission of many routine details of proofs, the author has succeeded in packing a large amount of information into relatively few pages. The average reader will want to keep pencil and paper handy, in order to work through most of the proofs. There were several places where this reviewer would have been grateful for a few extra lines of exposition.

Chapter I (Collineations and correlations, pp. 1–35). By a *collineation* of an n-dimensional vector space E over a skew-field K is meant a one-to-one semi-linear map of E onto itself. The group $\Gamma L_n(K)$ of all such collineations contains the group $GL_n(K)$ of linear one-to-one maps of E onto itself. The "projective" groups are defined as groups modulo their subgroups of homothetic maps ($x \rightarrow xa$, $a \in K$). The beginning sections take up the concepts of dilatations and transvections (these are collineations leaving a hyperplane pointwise fixed), involutions and semi-involutions (these are collineations u for which $u^2(x) = x$ or xc ($c \in K$), respectively), and their centralizers in $P\Gamma L_n(K)$, the group of projective collineations.

By a *correlation* is meant a one-to-one semi-linear map ϕ of E onto