can be represented as the potential due to a mass arranged as (1) a simple distribution along a segment of the Z-axis, (2) a simple distribution over a circular plate in the XY-plane ($x^2 + y^2 \leqq a^2$), and (3) one or more mass-points at the ends of certain segments or a radial double distribution on the circular plate.

The density of the mass distribution in the XY-plane and on the Z-axis is explicitly determined for the various feasible cases.

W. R. LONGLEY.

Das Schachspiel, und seine strategischen Prinzipien. VON M. LANGE. Zweite Auflage. No. 281, Aus Natur und Geisteswelt. Leipzig, Teubner, 1914. 108 pp. Mark 1.25. With portraits of E. Lasker and Paul Morphy.

THIS little volume, with the portrait of a mathematician as frontispiece, is included in the announcement of the series in which it appears among the mathematical works. While the strictly mathematical treatment is, of necessity, slight yet the attempt is seriously made to present an introduction to chess based upon somewhat fundamental, and partly mathematical, principles. The work marks a distinct advance, in a pedagogical way, in the literature of chess.

LOUIS C. KARPINSKI.

A Course in Descriptive Geometry and Photogrammetry for the Mathematical Laboratory. By E. LINDSAY INCE. Edinburgh Mathematical Tracts, No. 1. London, E. Bell and Sons, 1915. viii+79 pages, 42 figures.

THIS little book makes no claim of being a treatise, but endeavors to present the important features of descriptive geometry in such a manner that one may be instructed rapidly in the general processes employed. A short introduction sketches the whole problem as treated by the methods of orthogonal double projection, perspective and plane projection. Only about twenty pages are devoted to the treatment of lines and planes, yet in this short space many of the standard problems are well discussed. In the chapter on the applications to curves and surfaces no general statements are found, no attempts being made to have the processes apply to other surfaces than cones, cylinders, and spheres. The mathematical terms employed are used correctly, and empirical processes are designated as such. The chapter on perspective begins with the definite problem of drawing the picture of a cube in given position. This is followed by a very brief outline of the general theory, each step being developed directly from the preceding illustration. The entire process is then compared with the treatment of the same problem by the method of double orthogonal projection. The last few pages of this chapter proceed along lines similar to those in the opening chapters of Cremona's Projective Geometry, but are much more condensed. The last chapter in the book contains a short introduction to photogrammetry. The use of the art in military operations is attested, suggesting that the author's notes had been very recently revised. The fundamental problem is explained in detail, and a few refinements mentioned. Perhaps this is sufficient to comply with the avowed purpose of the Edinburgh Tracts, but to the reviewer it seems much too brief to be of greatest service. The page is attractively made up, the type very clear and not offensively prominent, and the figures well drawn. The book certainly succeeds in teaching the essential features of descriptive geometry in a remarkably small compass.

VIRGIL SNYDER.

NOTES.

THE thirty-seventh regular meeting of the Chicago Section, being the sixth regular meeting of the Society at Chicago, will be held at the University of Chicago on Friday and Saturday, April 21–22. The twenty-eighth regular meeting of the San Francisco Section will be held at the University of California on Saturday, April 22. A regular meeting of the Society will be held at Columbia University on Saturday, April 29.

THE April number (volume 38, number 2) of the *American Journal of Mathematics* contains: "On the classification and invariantive characterization of nilpotent algebras," by OLIVE C. HAZLETT; "Determination of the order of the groups of isomorphisms of the groups of order p^4, where p is a prime," by R. W. MARRIOTT; "Correspondences determined by the bitangents of a quartic," by J. R. CONNER; "Infinite groups