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  $(x^2 + y^2 \le a^2)$ , 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 mathe-