

Angewandte Potentialtheorie in elementarer Behandlung. Von E. GRIMSEHL. Sammlung Schubert XXXVIII. Leipzig, G. J. Göschen. Vol. 1, vii + 219 pp., 1905.

FOR those who desire to teach the potential theory for the sake of its applications and to classes of students of limited mathematical advancement, Grimsehl has done a real service in writing this book, and promises to do an additional service in the second volume. Starting with the ideas of force and work, the author develops the potential theories for particles of mass and applies the results to the discussion of the attraction due to spherical shells, spheres, and homologous ellipsoids; the conception of lines and tubes of force and of equipotential surfaces are appropriately treated. There immediately follows a discussion of the determination of the constant of gravitation, of the density of the earth, and of other similar problems. The next section of the book takes up electric potential and fields of force with the theory of electric images. The usual theory of conductors and condensers is given in detail and with great clearness, and considerable attention is paid to the quadrant electrometer. The second volume will set forth the applications of potential theory to magnetism, electromagnetic phenomena, and electric currents. It is certainly a great convenience for any teacher of elementary mathematical physics to have all these matters carefully collected, set in relation to one another, and thoroughly explained from the one unifying principle of potential.

E. B. WILSON.

NOTES.

THE Sixteenth Summer Meeting and Sixth Colloquium of the AMERICAN MATHEMATICAL SOCIETY will be held at Princeton University during the entire week, September 13-18, 1909. The first two days will be devoted to the regular sessions for the presentation of papers. At the Colloquium, which will open on Wednesday morning, the following courses of lectures will be delivered: Professor G. A. BLISS, "Existence theorems in analysis;" Professor J. H. JEANS, "Statistical mechanics;" Professor EDWARD KASNER, "Geometric aspects of dynamics."

The Annual Register of the AMERICAN MATHEMATICAL SOCIETY is now in preparation and will be issued in January.