Das Relativitätsprinzip. Eine Einführung in die Theorie.
  Von A. BRILL. Leipzig, B. G. Teubner, 1912. 3+28 pp.

THIS short brochure by Brill is merely a reprint of his article
in volume 21 of the *Jahresbericht der deutschen Mathematiker-
Vereinigung*, with a short preface, table of contents, and index
added. The treatment is mathematical and didactic, without
pretense of originality, and directed toward giving a brief
account of the kinematics and dynamics of a particle from the
point of view of relativity; electromagnetic phenomena and
the theory of radiant energy are omitted.* It will doubtless
be advantageous to many to be able to procure the reprint
separately; but it is a rather doubtful policy for any journal
to undertake to review such brochures, no matter how valuable
they be.

E. B. WILSON.

Vorlesungen über technische Mechanik. Von A. FÖPPL.
  Erster Band: *Einführung in die Mechanik.* 4te Auflage.
  Leipzig, B. G. Teubner, 1911. xv+424 pp.

EXCEPT for a more elaborate treatment of friction and a
few minor changes, the fourth edition of the first volume of
Föppl's lectures on mechanics does not differ from the second
edition. Even figure 7, page 71, remains blocked on the wrong
line. It will therefore be sufficient merely to cite our earlier
reviews.†

E. B. WILSON.

Die Theorie der Wechselströme. Von E. ORLICH. Leipzig,
  B. G. Teubner, 1912. 94 pp.

THIS is the twelfth tract in Jahnke's series of Mathematisch-
Physikalische Schriften für Ingenieure und Studierende. It
contains that sort of treatment of alternating current phe-
nomena for which we in America look to the works of Stein-
metz. The work is elementary and straightforward. The
algebra of rotating vectors and the geometrical representations

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* The reader who desires to see these matters treated by four-dimen-
sional, non-euclidean, vectorial methods may consult Wilson and Lewis,
"Relativity," *Proceedings of the American Academy of Arts and Sciences*,
volume 48, pp. 389–507.

† This BULLETIN, volume 9, pp. 25–35, volume 13, p. 520, volume 17,
p. 548.

therewith connected are carefully explained. There is a treatment of the elements of Fourier series, from the practical rather than theoretical point of view. Single phase and multiple phase systems are discussed. At the close there are a few words about skin effect. The work will appeal to engineers more exclusively than many of the other texts in the series.

E. B. WILSON.

NOTES.

THE opening (January) number of volume 35 of the *American Journal of Mathematics* contains the following papers: "Groups containing a given number of operators whose orders are powers of the same prime number," by G. A. MILLER; "Normal congruences determined by centers of geodesic curvature," by F. W. BEAL; "A theory of geometrical relations—continued," by A. R. SCHWEITZER; "The double tangents of a binodal quartic," by H. BATEMAN; "Involutorial transformations," by F. M. MORGAN; "A theorem for the development of a function as an infinite product," by A. F. CARPENTER. The frontispiece of the volume is a portrait of CAMILLE JORDAN.

AT the January meeting of the London mathematical society the following papers were read: By J. C. FIELDS, "Proofs of certain general theorems relating to orders of coincidence"; by W. E. H. BERWICK, "The reduction of ideal numbers"; by A. E. H. LOVE, "Notes on the dynamical theory of tides"; by W. H. YOUNG, "Uniform oscillation of the first and second kind"; by H. BATEMAN, "Some definite integrals occurring in the harmonic analysis connected with a circular ring."

THE United States Bureau of Education has just published a Bibliography of The Teaching of Mathematics covering the period from 1900 to 1912, by DAVID EUGENE SMITH and CHARLES GOLDZIHER. This Bulletin gives 1849 titles of books and articles on the teaching of mathematics that have appeared since 1900. The Bulletin will be sent gratis upon application to the United States Commissioner of Education, Washington, D. C.