Théorie des Fonctions Algébriques et de leurs Intégrales. Par P. Appell et E.
Goursat. Tome I, *Étude des Fonctions Analytiques sur une Surface de Rie-
mann.* Deuxieme édition, revue et augmentée par P. Fatou. Paris, Gauthier-
Villars, 1929. xxxv+526 pp.

As the title indicates, this Tome I is a second edition of Appell and Gour-
sat's *Fonctions Algébriques*, with revisions by the late Fatou. Tome II, which
will be reviewed in a later number of this Bulletin, is a new treatise on auto-
morphic functions, composed entirely by Fatou.

The first edition of Appell and Goursat was published in 1895. Everybody
is familiar with its beautiful chapters, in which the theory of algebraic func-
tions and abelian integrals is developed with rare skill and consummate style.
The second edition closely follows the first. Since there is no preface to explain
the changes made, such changes can be determined only by a page to page com-
parison of the two editions. The most conspicuous modification is an improved
treatment, in Chapter VI, of the theorem that every algebraic curve is biration-
ally equivalent to a curve whose only singularities are double points with dis-
tinct tangents. There are other differences, but they are not fundamental.
Through a slip, the page numbering in the table of contents is that of the first
edition.

The republishing of this classic work will assure, for our younger students,
the possibility of reading the theory of abelian integrals with the same enjoy-
ment that their teachers derived from the original edition.

J. F. RITT