

as  $2\pi$ ,  $4\pi$ ,  $6\pi$ , etc., renders the number of non-equivalent classes of triangles with three fixed vertices finite, and Study's theorem is valid for all moduli.

Brief but artistic sections on analytic geometry of the plane (76 pages) and of space (72 pages) include much of value, as the elements of integration for volume, and the rotation groups of regular solids. A good index, and a full supply of clear diagrams, make this a valuable book of reference even for teachers who will read it but infrequently.

Of the third volume it is not too much to say that it contains a most valuable presentation of physical theories for mathematical teaching. That it is kept free from overloading of theory is seen perhaps in the fact that continuity and discontinuity are not mentioned in the index, nor critical states of matter. Half the volume is physics, vector geometry, analytical statics, dynamics, electricity and magnetism, and electromagnetism. Of the remainder, maxima and minima in geometry and capillarity fill 43 pages; probability and least squares, 40 pages; and a full and suggestive book on graphical statics the concluding 240 pages.

In a note appended to this volume, H. Weber reverts to the Mengenlehre of the first volume, cites Russell's paradox on the class of classes that do not contain themselves (which he identifies with one of Kant's antinomies); and gives an outline discussion of finite aggregates, free from objections, as he believes. These volumes certainly constitute a valuable work for every reference library.

H. S. WHITE.

*Leçons sur l'Intégration et la Recherche des Fonctions Primitives.*

Par HENRI LEBESGUE. Paris, Gauthier-Villars, 1904.  
8vo. viii + 138 pp.

SINCE the publication of Lebesgue's thesis in 1902 the originality and power of his methods have attracted increasing attention to the field in which he and Baire have made such important contributions. They have given to the study of discontinuous functions an impulse which is apparent on the most cursory survey of current mathematical periodicals, and of such recent treatises as those of Young and Hobson.

The present volume, one of the series of monographs published under the direction of Borel, reproduces a course of twenty lectures delivered at the Collège de France on the Peccot foundation. Within such limits one could hardly ex-