BIBLIOGRAPHY.

Jacobi, *Fundamenta Nova.*
Cayley, *A memoir on the transformation of elliptic functions, Collected Math. Papers*, vol. 9, p. 113.
Clifford, *On the transformation of elliptic functions*, PROCEEDINGS OF THE LONDON MATH. SOC., vol. 7, 1875.
Darboux, *Sur une classe remarquable de courbes et de surfaces algébriques.*
Moutard, *Recherches analytiques sur les polygones simultanément inscrits et circonscrits à deux coniques.* Note added to Poncelet, *Applications d'analyse et de géométrie*, vol. 1.

UNIVERSITY OF CALIFORNIA,
BERKELEY, CALIFORNIA,
January 11, 1921.

BACHMANN ON FERMAT'S LAST THEOREM.

Das Fermatproblem in seiner bisherigen Entwickelung. By Paul Bachmann. Berlin and Leipzig, Walter de Gruyter, 1919. pp. viii + 160.

This volume reproduces to a considerable extent most of the important contributions which have so far been made toward a proof of Fermat's last theorem. It is far more complete than anything of the sort heretofore published. In particular, a reader of the book will find therein an account of the main results of Kummer, with proofs in most cases set forth in full. The writer wishes to call attention to the fact, however, that a number of references to articles bearing directly on some of the work given in the text have been omitted by Bachmann, a few of which will be noted, in detail, presently. If a better historical perspective is desired, it would be well for a reader to examine at the same time chapter 26, volume 2, of Dickson's *History of the Theory of Numbers.*

I shall now point out some parts of the text which give an account of results not given in detail elsewhere, aside from the original articles.* Consider

$$x^p + y^p + z^p = 0, \tag{1}$$

where x, y and z are rational integers, prime to each other, and p is an odd prime. The assumption that xyz is prime to p

* For an account of the more elementary results regarding the theorem, cf. Carmichael, *Diophantine Analysis*, chap. 5, or Bachmann, *Niedere Zahlentheorie*, vol. 2, chap. 9.