

## EARLY HISTORY OF GALOIS' THEORY OF EQUATIONS.

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THE first part of this paper will treat of Galois' relations to Lagrange, the second part will sketch the manner in which Galois' theory of equations became public. The last subject being intimately connected with Galois' life will afford me an opportunity to give some details of his tragic destiny which in more than one respect reminds one of the almost equally unhappy lot of Abel.\* Indeed, both Galois and Abel from their earliest youth were strongly attracted toward algebraical theories; both believed for a time that they had solved the celebrated equation of fifth degree which for more than two centuries had baffled the efforts of the first mathematicians of the age; both, discovering their mistake, succeeded independently and unknown to each other in showing that a solution by radicals was impossible; both, hoping to gain the recognition of the Paris Academy of Sciences, presented epoch making memoirs, one of which

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\* Sources for Galois' Life are :

1° *Revue Encyclopédique*, Paris (1832), vol. 55.

*a* *Travaux Mathématiques d'Évariste Galois*, p. 566-576. It contains Galois' letter to Chevalier, with a short introduction by one of the editors.

*β* *Ibid.* *Nécrologie, Évariste Galois*, p. 744-754, by Chevalier. This touching and sympathetic sketch every one should read.

2° *Magasin Pittoresque*. Paris (1848), vol. 16. *Évariste Galois*, p. 227-28. Supposed to be written by an old school comrade, M. Flaugergues, an ardent admirer of Galois.

3° *Mes Mémoires*, A. Dumas, (père). Paris (1869), vol. 8, p. 159-161 and p. 166-169. Gives an account of the notorious affair of the Vendanges de Bourgogne and of Galois' first trial.

4° *Journal de Mathématiques*, (1846), v. 11. *Oeuvres Mathématiques d'Évariste Galois*, p. 381-444. The *avertissement* is by Liouville and contains some personal notes about Galois.

5° *Nouvelles Annales de Mathématiques*. Paris (1849), vol. 8, p. 452. A few lines only.

6° *Annales de l'École Normale*. Paris (1896), 3 Ser. vol. 13, p. 197-266. *La Vie d'Évariste Galois*, by P. Dupuy, professor of history in the École Normale. This is the most extensive biography of Galois. It contains all that is essential in the five preceding references and an immense amount of other matter. It goes without saying that I am indebted to it for many of the details here given.

7° *Oeuvres Mathématiques d'Évariste Galois*. Paris, 1897. The introduction by Picard contains interesting remarks.