1035-01-592 **Craig G. Fraser*** (cfraser@chass.utoronto.ca), Inst. Hist. Phil. Sci. Tech., Victoria College, University of Toronto, Toronto, Ontario M5S1K7, Canada. Jacques Hadamard (1865-1963) and the Calculus of Variations. Preliminary report.

Jacques Hadamard's *Leçons sur le calcul des variations* was published in 1910 with the assistance of his former student Maurice Fréchet (1878-1793). This work included advanced topics in Weierstrass's theory of sufficiency, the study of constrained extrema and the existence of solutions to problems of optimization. Although the subject at this period was dominated by German researchers, Hadamard's book also drew on contributions of his fellow countrymen Joseph Serret (1819-1885), Camille Jordan (1838-1922),Gaston Darboux (1842-1917), and Edouard Goursat (1858-1936) as well as dynamical work of Paul Appell (1855-1930) and Henri Poincaré (1854-1912). The paper provides an account of Hadamard's *Leçons*, situating his theoretical conceptions in the context of contemporary research in the calculus of variations. (Received September 11, 2007)