## A SHORT HISTORY OF APPLIED MECHANICS: FROM LAZARE CARNOT TO PONCELET

Oliveira, Agamenon R. E.

Federal University of Rio de Janeiro Department of Mechanics and Structures Polytechnic School

P. Ó Box 68536-21941-590 - Ilha do Fundão, Rio de Janeiro, R.J.-Brazil agamenon@rionet.com.br

Abstract. A serious problem faced by rational mechanics until the end of the eighteenth century was its incapacity to create a general theory consistent with machines. This was despite the enormous store of empirical knowledge about machines that had been accumulated since antiquity. Added to this was the fact that during this period the theory of mechanics made a considerable advance with the Lagrangean formulation in 1788. This works tries to show this dilemma, the development of a general theory for machines prepared by Lazare Carnot in 1803 and later developments among the following generation of polytechnic engineers. Keywords. History of Mechanics, History of Mathematics, Industrial Revolution, the Enlightenment.