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Autore	Pfeiffer Friedrich <1935->
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8.8 An LCP Formulation for Compression8.9 An LCP Formulation for Expansion; 8.10 Remarks on Impacts with Friction; 8.11 Example: Double Impact on a Rod; 8.12 Example: Poisson's Law in the Frictionless Case; 8.13 Example: Reversible Tangential Impacts; 8.14 Example: Poisson's Law and Coulomb Friction; 9 The Corner Law of Contact Dynamics; PART 2: Applications; 10 Introduction; 11 Applications with Discontinuous Force Laws; 11.1 Hammering in Gears; 11.1.1 Modeling; 11.1.2 Evaluation of the Simulations; 11.1.3 Results
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Sommario/riassunto

As mechanical systems become more complex so do the mathematical models and simulations used to describe the interactions of their parts. One area of multibody theory that has received a great deal of attention in recent years is the dynamics of multiple contact situations occurring in continuous joints and couplings. Despite the rapid gains in our understanding of what occurs when continuous joints and couplings interact, until now there were no books devoted exclusively to this intriguing phenomenon. Focusing on the concerns of practicing engineers, Multibody Dynamics with Unilateral Contact