

Hypo-elasticity

C. TRUESDELL

Graduate Institute for Mathematics and Mechanics, Indiana University, Bloomington, Indiana*

CONTENTS

1. Definition of the hypo-elastic bodies.....	83
2. Isotropic hypo-elastic bodies.....	85
3. Relation to the theory of elasticity.....	87
4. Some special hypo-elastic bodies.....	88
5. Some properties of $\tilde{\mathbf{s}}$	89
6. Homogeneous stress.....	91
7. Hydrostatic stress.....	92
8. Simple shear of compressible bodies.....	98
9. Simple shear of incompressible bodies.....	119
10. Simple extension of compressible bodies.....	120
11. The kinematics and dynamics of torsion.....	125
12. Remarks on the torsion of compressible hypo-elastic bodies of grade one	126
13. Torsion of an incompressible hypo-elastic body of grade zero.....	128
14. Concluding remarks.....	131

1. Definition of the hypo-elastic bodies. In the paper called *The mechanical foundations of elasticity and fluid dynamics*¹ I drew attention toward the concept

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¹ See Chapter IV-D as revised, pp. 603-609 of Vol. 2 of this *Journal* (1953). The present memoir is to be taken as correcting in some respects and especially as simplifying and broadening the ideas of the passage quoted. The ground thought has been explained more fully in a note called *The simplest rate theory of pure elasticity*, presented at the Second Ordnance Symposium, Chicago, April, 1954. This preliminary note, which concerns only what are here called *bodies of grade zero* (§4), is to appear in the *Communications on Pure and Applied Mathematics N. Y. U.*, Vol. 8, No. 1, January, 1955.