1. Record Nr. UNINA9910148692503321

Titolo	Appalachian tectonics / / edited by Thomas H. Clark
Pubbl/distr/stampa	[Toronto, Ontario] : , : University of Toronto Press, , 1967 ©1967
ISBN	1-4426-5288-8
Descrizione fisica	1 online resource (112 pages) : illustrations, maps
Collana	Special publications (Royal Society of Canada), no. 10. ; ; no. 10
Disciplina	551.809714
Soggetti	Geology, Structural - Canada Geology, Structural - Appalachian Mountains Electronic books. Appalachian Mountains
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Frontmatter -- Preface -- Contents -- Contributors -- Klippen in Northern Newfoundland -- Platform and Klippe Tectonics of Western Newfoundland: A Review -- The Appalachian Region of Québec: Some Aspects of its Divisions and Geology -- The Taconic Unconformity in the Gaspé Peninsula and Neighbouring Regions -- Tectonics of Part of the Sillery Formation in the Chaudiere-Matapedia Segment of the Québec Appalachians -- Tectonics of Part of the Appalachian Region of Southeastern Québec (Southwest of the Chaudière River) -- Contributions from Systematic Studies of Minor Structures in the Southern Québec Appalachians -- Geosynclinal Setting of the Appalachian Mountains in Southeastern Quebec and Northwestern New England -- Gravity Measurements in Appalachia and their Structural Implications -- Some Geological and Tectonic Considerations of Eastern Canadian Earthquakes -- Some Implications of New Ideas on Ocean-Floor Spreading upon the Geology of the Appalachians
Sommario/riassunto	Mountain ranges are the most conspicuous elements of the earth's architecture, and the manner in which the architectural units are arranged or disarranged has become the study of a subdivision of geology known as Tectonics. A hundred years ago James Hall attempted the first scientific synthesis of the steps in the building of

the eastern North American mountains, the Appalachians. His initial hypothesis of 1857, expanded and broadened by J.D. Dana during the decade which followed, laid the foundation for our modern geosynclinal theory of mountain building. During the last century of modifications and refinements were contributed concerning the roles played by crustal compression, sub-crustal convection currents, batholiths, metamorphism, gravity sliding, and isostasy. In recent years detailed mapping, supplemented by studies of turbidity currents, paleomagentism, stable isotopes, and radio-activity have helped to unravel the history of mountain building, but today there are as many questions unanswered as there are those for which there are tentative solutions.Aspects of Appalachian orogeny was a suitable subject for the symposium of the Royal Society of Canada Annual Meeting in 1966 at Sherbrooke, Quebec—a city within the Appalachian Mountain System. This book assembles the papers of this symposium, dealing with gravity sliding, studies of sedimentation and structure in limited areas, comparisons with the Appalachians of the United States, the bearing of gravity measurements upon our understanding of mountain structure, earthquakes, and a broad, general view of the tectonic pattern of the earth of which this mountain-built belt is but a small part.Such a comprehensive volume, bringing together a variety of points of view of some of the foremost scholars in the field, indicates the vastness of the subject, the significant progress made thus far, the necessity for new and progressive methods of exploration, and above all the interdependence of all the workers in the field, no matter how seemingly unrelated their specialities are.