BIBLIOGRAPHY FOR THE HISTORY OF RESONANCE

JORDAN BELL

Truesdell on Leonardo [155, pp. 18–20]: Leonardo first to use a "light rider" to demonstrate sympathetic vibration (MS A 22v.)

Truesdell [156, p. 108]

Zubov [173, p. 88]: Paris Manuscript A, 22v; MacCurdy 267

Philoponus [134, pp. 46, 135]

Plotinus [147, p. 155]

Grosseteste's commentary on Aristotle's *Posterior Analytics*, book 2, chapter 4.

Chinese [142, pp. 14,15,1814]

Bibliotheca mathematica 3. Folge vol. 4, p. 378; 3. Folge vol 6, pp. 32, 48, 42, 22, 33, 50; vol. 7, pp. 148, 152; 3. Folge vol. 9, p. 349; 3. Folge vol. 12, p. 240

Grendler [79, p. 11]

Thorndike [151, p. 600]

Pohl and Deans [135, p. 259]

Chapman [28, Chapter 10]

Whewell [165, p. 297]

Finlay-Fruendlich [65, pp. 95, 117]

Barker [12, p. 116]

Folta [66, p. 103]

Handbuch der Physik, Festkörpermechanik I, Volume 1, p. 156

Francis Bacon [63, pp. 141–152]

Commercium p. 243

Bibliotheca Mathematica, p. 240, 1912

Euler on tides E57 [59, pp. 300–304]

Courant [42, p. 514]

Hargreave [84, p. 102]

Olenick [127, p. 400]

Sambursky [138, pp. 9, 41–42], and on Philoponus and Theon of Smyrna [139, pp. 100–104]

Newton's notebooks [115, p. 310]

Truesdell [154, pp. 22, 170–178]

Kassler [95, pp. 53, 57]

Whiteside [167, p. 335]

Commercium [64, pp. 54, 58, 304, 305, 695]

Commentationes mechanicae ad theoriam corporum fluidorum pertinentes 2nd part, p. LXII

Louise Diehl Patterson, *Hooke's Analysis of Simple Harmonic Motion*

Zeidler [172, §5.9]

Lynn White [166, pp. 126–127]

Schaffer [140, p. 157]

Greenberg [78, p. 548]

A history of science and technology, Volume 2 p. 368, Robert James Forbes, Eduard Jan Dijksterhuis

Resonance in watches, p. 325 vol. 146 No. 9 September 2004, Horological Journal

The application of the pendulum to timekeeping (Huygens, 1656-57) gave us for the first time an oscillating controller with its own natural frequency. (The verge-and-foliot mechanism of the early clocks oscillated at a frequency that was in large part a function of the driving force, which has implications for perturbation and irregularity.)

Mahoney [111, p. 303]

Cross [46, p. 227]

G. W. Krafft, *Observatio eclipseos solaris d. 25 Iulii 1748 Tubingae facta*, Novi Commentarii, tom. I, among his instruments was a horologium portatile Londinense

Commercium [41, p. 77]

R. 2642, Letter 122, Teplov

Euler, Opera omnia, Vol. II, p. 54, 58

Euler to Lambert letter, R. 1408, p. 243 of Index

Hund [92, p. 170]

Todhunter [153, p. 39]

Mach [110, p. 272]

Sommerfeld [146]

Truesdell [159, p. 309] writing about the Euler-Daniel Bernoulli correspondence states that it is unclear from the summaries of the letters whether Bernoulli understood Euler's discovery of resonance. Truesdell [159, p. 323] in his review of Opera omnia II.10-11, states that E126 contains the first analysis of a single harmonically driven oscillator.

Truesdell on moment of momentum [157, pp. 239–271], "Whence the law of moment of momentum?"

Steele [148, p. 349]

Euler and modern science, p. 228, 226, 171

Newton Principia, Section VII, Book II, Proposition XXXVIII, Theorem XII

Die Werke Von Johann I Und Nicolaus II Bernoulli, p. 8

Procés-verbaux des séances de l'Académie impériale des sciences depuis sa fondation jusqu'à 1803, Tome I, p. 522, 554

Pesic [133, p. 22]

Kaye [97, p. 287] on Jean de Jandun's *Tractatus de laudibus Parisius*

References

1. Gabriela Buendia Abalos and Gisela Montiel Espinosa, *From history to research in mathematics education: socio-epistemological elements for trigonometric functions*, Recent Developments on Introducing a Historical Dimension in Mathematics Education (Victor Katz and Constantinos Tzanakis, eds.), Mathematical Association of America, 2011, pp. 67–82.
2. David Acheson, *From calculus to chaos: An introduction to dynamics*, Oxford University Press, 1997.
3. Robyn Adams and Lisa Jardine, *The return of the Hooke folio*, Notes and Records Roy. Soc. London **60** (2006), no. 3, 235–239.
4. Joseph Agassi, *Science and its history: A reassessment of the historiography of science*, Boston Studies in the Philosophy of Science, vol. 253, Springer, 2008.

5. Tom Archibald, *Differential equations: a historical overview to circa 1900*, A History of Analysis (Hans Niels Jahnke, ed.), History of Mathematics, vol. 24, American Mathematical Society, 2003, pp. 325–353.

6. Piero E. Ariotti, *Galileo on the isochrony of the pendulum*, Isis **59** (1968), no. 4, 414–426.

7. _____, *Aspects of the conception and development of the pendulum in the 17th century*, Arch. Hist. Exact Sci. **8** (1972), no. 5, 329–410.

8. Robert G. Arns and Bret E. Crawford, *Resonant cavities in the history of architectural acoustics*, Technology and Culture **36** (1995), no. 1, 104–135.

9. Martin Ball, *The early balance spring watch: A brief history*, Antiquarian Horology **29** (2005), no. 6, 760–774.

10. O. Bar-Yosef, *The walls of Jericho: An alternative interpretation*, Current Anthropology **27** (1986), no. 2, 157–162.

11. Patrizio Barbieri, *"galileo's" coincidence theory of consonances, from Nicomachus to Sauveur*, Recercare **13** (2001), 201–232.

12. Andrew Barker, *Greek musical writings, vol. ii: Harmonic and acoustic theory*, Cambridge Readings in the Literature of Music, Cambridge University Press, 2004.

13. H. Bateman, *The influence of tidal theory upon the development of mathematics*, National Mathematics Magazine **18** (1943), no. 1, 14–26.

14. Dorothea Baumann, *Musical acoustics in the middle ages*, Early Music **XVIII** (1990), no. 2, 199–212.

15. Silvio A. Bedini, *The pulse of time: Galileo Galilei, the determination of longitude, and the pendulum clock*, Leo S. Olschki, Florence, 1991.

16. J. A. Bennett, *Robert Hooke as mechanic and natural philosopher*, Notes and Records Roy. Soc. London **35** (1980/81), no. 1, 33–48.

17. Dave Benson, *Music: a mathematical offering*, Cambridge University Press, Cambridge, 2007.

18. Klaas van Berkel, *Isaac Beeckman on matter and motion: Mechanical philosophy in the making*, Johns Hopkins University Press, 2013, Translated from the Dutch by Maarten Ultee.

19. Daniel Bernoulli, *Excerpta ex litteris a Daniele Bernoulli ad Leonhardum Euler*, Commentarii academiae scientiarum imperialis Petropolitanae **13** (1751), 3–15, Werke 2, pp. 81–93.

20. R. E. D. Bishop and D. C. Johnson, *The mechanics of vibration*, Cambridge University Press, 1960.

21. Giuseppe Brusa, *Early mechanical horology in italy*, Antiquarian Horology **18** (1989), no. 5, 485–525.

22. Eric Bruton, *The history of clocks and watches*, Orbis, London, 1979.

23. Gabriela Buendía and Francisco Cordero, *Prediction and the periodical aspect as generators of knowledge in a social practice*, Educational Studies in Mathematics **58** (2005), no. 3, 299–333.

24. M. F. Burnyeat, *How much happens when Aristotle sees red and hears middle C? remarks on* de anima 2.7–8, Essays on Aristotle's *De Anima* (Martha C. Nussbaum and Amélie Oksenberg Rorty, eds.), Oxford University Press, 1999, pp. 421–434.

25. John T. Cannon and Sigalia Dostrovsky, *The evolution of dynamics: Vibration theory from 1687 to 1742*, Studies in the History of Mathematics and Physical Sciences, vol. 6, Springer, 1981.

26. Fritjof Capra, *The science of Leonardo: Inside the mind of the great genius of the Renaissance*, Anchor, 2008.

27. David Edgar Cartwright, *Tides: A scientific history*, Cambridge University Press, 2001.

28. Allan Chapman, *England's Leonardo: Robert Hooke and the seventeenth-century scientific revolution*, Institute of Physics Publishing, Bristol and Philadelphia, 2005.

29. Joseph C. Y. Chen, *Early Chinese work in natural science: A re-examination of the physics of motion, acoustics, astronomy and scientific thought*, Hong Kong University Press, 1996.

30. Valentin L. Chenakal, *Watchmakers and clockmakers in Russia, 1400 to 1850*, Antiquarian Horological Society, 1972, Translated from the Russian by W. F. Ryan.

31. Thomas Christensen (ed.), *The cambridge history of western music theory*, Cambridge University Press, 2002.

32. Thomas Christensen, *Rameau and musical thought in the Enlightenment*, Cambridge Studies in Music Theory and Analysis, Cambridge University Press, 2004.

33. Carlo M. Cipolla, *Clocks and culture: 1300-1700*, W. W. Norton & Company, 2003.

34. Marshall Clagett, *The science of mechanics in the middle ages*, The University of Wisconsin Publications in Medieval Science, vol. 4, University of Wisconsin Press, Madison, 1959.

35. C. Clutton, *The pocket watch*, Antiquarian Horology **11** (1978), no. 2, 206.

36. H. F. Cohen, *Quantifying music: The science of music at the first stage of scientific revolution, 1580–1650*, The University of Western Ontario Series in Philosophy of Science, vol. 23, Kluwer, 1984.

37. H. Floris Cohen, *Galileo Galilei*, Number to Sound: The Musical Way to the Scientific Revolution (Paolo Gozza, ed.), The Western Ontario Series in Philosophy of Science, vol. 64, Springer, 2000, pp. 219–232.

38. ———, *Isaac Beeckman*, Number to Sound: The Musical Way to the Scientific Revolution (Paolo Gozza, ed.), The Western Ontario Series in Philosophy of Science, vol. 64, Springer, 2000, pp. 233–264.

39. ———, *How modern science came into the world: Four civilizations, one 17th-century breakthrough*, Amsterdam University Press, 2011.

40. Satis N. Coleman, *Bells: their history, legends, making, and uses*, Rand McNally, Chicago, 1928.

41. Pierre Costabel, Asot T. Grigorijan, and Adolf P. Juskevic (eds.), *Leonhardi Euleri Opera omnia. Series quarta A: Commercium epistolicum. Volumen sextum: Correspondance de Leonhard Euler avec P.-L. M. de Maupertuis et Frédéric II*, Birkhäuser, Basel, 1986.

42. Richard Courant, *Differential and integral calculus, vol. i*, second ed., Blackie & Sons, London, 1937.

43. Henry J. Cowan, *An historical outline of architectural science*, Elsevier, 1966.

44. David Creese, *The monochord in ancient Greek harmonic science*, Cambridge Classical Studies, Cambridge University Press, 2010.

45. A. C. Crombie, *Science, optics, and music in medieval and early modern thought*, Hambledon Press, London, UK, 1990.

46. Anthony Cross, *"by the banks of the Neva": Chapters from the lives and careers of the British in eighteenth-century Russia*, Cambridge University Press, 2007.

47. Olivier Darrigol, *Worlds of flow: a history of hydrodynamics from the Bernoullis to Prandtl*, Oxford University Press, 2005.

48. ———, *The acoustic origins of harmonic analysis*, Arch. Hist. Exact Sci. **61** (2007), no. 4, 343–424.

49. ———, *A history of optics from Greek antiquity to the nineteenth century*, Oxford University Press, 2012.

50. Michael A. B. Deakin, *Euler's invention of integral transforms*, Arch. Hist. Exact Sci. **33** (1985), no. 4, 307–319.

51. W. Derham, *Experiments about the motion of pendulums in vacuo*, Phil. Trans. **24** (1704), 1785–1789.

52. A. D. Dimarogonas, *The origins of vibration theory*, Journal of Sound and Vibration **140** (1990), no. 2, 181–189.

53. Sigalia Dostrovsky, *Early vibration theory: physics and music in the seventeenth century*, Arch. History Exact Sci. **14** (1975), no. 3, 169–218.

54. Ruxu Du and Longhan Xie, *The mechanics of mechanical watches and clocks*, History of Mechanism and Machine Science, vol. 21, Springer, 2013.

55. René Dugas, *A history of mechanics*, Dover, 2011.

56. John Ellicott, *An account of the influence which two pendulum clocks were observed to have upon each other*, Phil. Trans. **41** (1739), 126–128.

57. André Englebert (ed.), *Die Werke von Daniel Bernoulli, Band 7: Technologie I*, Springer, 1994.

58. Veit Erlmann, *Descartes's resonant subject*, differences **22** (2011), no. 2–3, 10–30.

59. Leonhard Euler, *Inquisitio physica in causam fluxus ac refluxus maris*, Pièces qui ont remporté le prix de l'académie royale des sciences, en M. DCC. XL. Sur le Flux & Reflux de la Mer, G. Martin, J. B. Coignard, & les Freres Guerin, Paris, 1741, pp. 235–350.

60. ———, *De integratione aequationum differentialium altiorum graduum*, Miscellanea Berolinensia **7** (1743), 193–242, Opera omnia I.22, pp. 108–149.

61. ———, *De novo genere oscillationum*, Commentarii academiae scientiarum Petropolitanae **11** (1750), 128–149, Opera omnia II.10, pp. 78–97.

62. Leonhardus Eulerus, *Opera omnia. Series secunda. Opera mechanica et astronomica. Vol. XI. Sectio prima Commentationes mechanicae ad theoriam corporum flexibilium et elasticorum pertinentes. Vol. posterius. Sectio prima*, Societas Scientiarum Naturalium Helveticae, Lausanne, 1957.

63. Marta Fattori (ed.), *Francis Bacon: terminologia e fortuna nel XVII secolo*, Edizioni dell'Ateneo, Rome, 1984.

64. E. A. Fellmann and G. K. Mikhajlov (eds.), *Leonhardi Euleri Opera omnia. Series quarta A: Commercium epistolicum. Volumen secundum: Briefwechsel von Leonhard Euler mit Johann I Bernoulli und Niklaus I Bernoulli*, Birkhäuser, Basel, 1998.

65. Erwin Finlay-Fruendlich, *Celestial mechanics*, Pergamon Press, 1958.

66. Jaroslav Folta, *Mysterium cosmographicum 1596–1996*, Acta historiae rerum naturalium necnon technicarum, vol. 2, National Technical Museum in Prague, 1998.

67. John Freely, *Flame of Miletus: The birth of science in ancient Greece (and how it changed the world)*, I.B. Tauris, 2012.

68. A. P. French, *Vibrations and waves*, M.I.T. Introductory Physics Series, W. W. Norton & Company, New York, 1971.

69. Elizabeth Garber, *The language of physics: The calculus and the development of theoretical physics, 1750–1914*, Birkhäuser, 1999.

70. W. J. Gazeley, *Clock & watch escapements*, Robert Hale, 1992.

71. Penelope Gouk, *Acoustics in the early Royal Society 1660–1680*, Notes and Records Roy. Soc. London **36** (1982), 155–175.

72. _____, *Music, science and natural magic in seventeenth-century England*, Yale University Press, 1999.

73. _____, *Music in Francis Bacon's natural philosophy*, Number to Sound: The Musical Way to the Scientific Revolution (Paolo Gozza, ed.), The Western Ontario Series in Philosophy of Science, vol. 64, Springer, 2000, pp. 135–152.

74. Penelope M. Gouk, *The role of acoustics and music theory in the scientific work of Robert Hooke*, Ann. of Sci. **37** (1980), no. 5, 573–605.

75. Edward Grant, *Nicole Oresme and his De proportionibus proportionum*, Isis **51** (1960), no. 3, 293–314.

76. _____, *Bradwardine and Galileo: Equality of velocities in the void*, Arch. Hist. Exact Sci. **2** (1965), no. 4, 344–364.

77. Roger Mathew Grant, *Ad infinitum: Numbers and series in early modern music theory*, Music Theory Spectrum **35** (2013), no. 1, 62–76.

78. John L. Greenberg, *The problem of the earth's shape from Newton to Clairaut: the rise of mathematical science in eighteenth-century Paris and the fall of "normal" science*, Cambridge University Press, 1995.

79. Paul F. Grendler (ed.), *Encyclopedia of the renaissance, vol. I*, Charles Scribner's Sons, 1999.

80. John Guckenheimer and Philip Holmes, *Nonlinear oscillations, dynamical systems, and bifurcations of vector fields*, Applied Mathematical Sciences, vol. 42, Springer, 2002.

81. A. R. Hall, *Robert Hooke and horology*, Notes and Records Roy. Soc. London **8** (1951), no. 2, 167–177.

82. Louis N. Hand and Janet D. Finch, *Analytical mechanics*, Cambridge University Press, 1998.

83. Bert Hansen, *Science and magic*, Science in the Middle Ages (David C. Lindberg, ed.), University of Chicago Press, 1976, pp. 483–506.

84. David Hargreave, *Thomas Young's theory of color vision: Its roots, development, and acceptance by the British scientific community*, Ph.D. thesis, University of Wisconsin–Madison, 1973.

85. Eric J. Heller, *Why you hear what you hear: An experiential approach to sound, music, and psychoacoustics*, Princeton University Press, 2012.

86. Mary B. Hesse, *Forces and fields: the concept of action at a distance in the history of physics*, Thomas Nelson and Sons, London, 1961.

87. _____, *Hooke's vibration theory and the isochrony of springs*, Isis **57** (1966), no. 4, 433–441.

88. Harro Heuser, *Gewöhnliche Differentialgleichungen: Einführung in Lehre und Gebrauch*, sixth ed., Vieweg+Teubner, 2009.

89. Heinrich Hoffmann, *Descriptio penduli, quod suas exacte numerat vibrationes simplices*, Miscellanea Berolinensia **1** (1710), 321–325.

90. Douglas Hughes, *Bells and bellfounding*, Antiquarian Horology **3** (1959), no. 4, 96–101.

91. _____, *Bells and bellfounding*, Antiquarian Horology **5** (1965), no. 7, 233–240.
92. Friedrich Hund, *Geschichte der physikalischen Begriffe. Teil 1: Die Entstehung des mechanischen Naturbildes*, Bibliographisches Institut, 1978.
93. Frederick V. Hunt, *Origins in acoustics: the science of sound from antiquity to the age of Newton*, Yale University Press, 1978.
94. Hans Niels Jahnke, *Algebraic analysis in the 18th century*, A History of Analysis (Hans Niels Jahnke, ed.), History of Mathematics, vol. 24, American Mathematical Society, 2003, pp. 105–136.
95. Jamie C. Kassler, *The beginnings of the modern philosophy of music in England: Francis North's "A Philosophical Essay of Music" (1677) with comments of Isaac Newton, Roger North and in the "philosophical transactions"*, Ashgate Publishing, 2004.
96. Victor J. Katz, *The calculus of the trigonometric functions*, Historia Math. **14** (1987), 311–324.
97. Joel Kaye, *A history of balance, 1250–1375: The emergence of a new model of equilibrium and its impact on thought*, Cambridge University Press, 2014.
98. Johannes Kepler, *The harmony of the world*, Memoirs of the American Philosophical Society, vol. 209, American Philosophical Society, 1997, Translated into English with an introduction and notes by E. J. Aiton, J. V. Field and A. M. Duncan.
99. Frederick G. Kilgour, *Vitruvius and the early history of wave theory*, Technology and Culture **4** (1963), no. 3, 282–286.
100. G. W. Krafft, *De novo oscillationum genere*, Commentarii academiae scientiarum Petropolitanae **10** (1747), 200–206.
101. Eva Küllmer, *Mitschwingende Saiten: Musikinstrumente Mit Resonanzsaiten*, Verlag für Systematische Musikwissenschaft, 1986.
102. Karl-Eugen Kurrer, *The history of the theory of structures from arch analysis to computational mechanics*, Ernst & Sohn, 2008.
103. John G. Landels, *Music in ancient Greece and Rome*, Routledge, 2001.
104. D. S. Landes, *Hand and mind in time measurement: The contributions of art and science*, Notes and Records Roy. Soc. London **43** (1989), no. 1, 57–69.
105. Flora R. Levin, *plēgē and tasis in the Harmonika of Klaudios Ptolemaios*, Hermes **108** (1980), no. 2, 205–229.
106. _____, *Greek reflections on the nature of music*, Cambridge University Press, 2009.
107. R. Bruce Lindsay, *The story of acoustics*, J. Acoust. Soc. Am. **39** (1966), no. 4, 629–644.
108. Ll. S Lloyd, *Musical theory in the early* philosophical transactions, Notes and Records Roy. Soc. London **3** (1940/1941), 149–157.
109. L. P. Look, *Understanding pendulums: A brief introduction*, History of Mechanism and Machine Science, vol. 12, Springer, 2011.
110. Ernst Mach, *The principles of physical optics: An historical and philosophical treatment*, Dover, 2003, Translated from the German by John S. Anderson and A. F. A. Young.
111. Michael S. Mahoney, *Drawing mechanics*, Picturing Machines 1400–1700 (Wolfgang Lefèvre, ed.), MIT Press, 2004, pp. 281–308.
112. Jack M. Manley, *The concept of frequency in linear system analysis*, IEEE Communications Magazine **20** (1982), no. 1, 26–35.
113. Thomas Mathiesen, *Apollo's lyre: Greek music and music theory in antiquity and the middle ages*, University of Nebraska Press, 1999.
114. Michael R. Matthews, *Time for science education: how teaching the history and philosophy of pendulum motion can contribute to science literacy*, Innovations in Science Education and Technology, Kluwer, 2000.
115. J. E. McGuire and Martin Tamny, *Certain philosophical questions: Newton's Trinity notebook*, Cambridge University Press, 2002.
116. Domenico Bertoloni Meli, *Thinking with objects: The transformation of mechanics in the seventeenth century*, Johns Hopkins University Press, 2006.
117. Willis I. Milham, *Time & timekeepers*, Macmillan, New York, 1923.
118. Daniele Molinini, *Learning from Euler. From mathematical practice to mathematical explanation*, Philos. Sci. (Paris) **16** (2012), no. 1, 105–127.
119. Francis C. Moon, *The machines of Leonardo da Vinci and Franz Reuleaux: Kinematics of machines from the renaissance to the 20th century*, History in Mechanism and Machine Science, vol. 2, Springer, 2007.

120. Albert E. Moyer, *Robert Hooke's ambiguous presentation of "Hooke's law"*, Isis **68** (1977), no. 2, 266–275.

121. Ron Naylor, *Galileo's tidal theory*, Isis **98** (2007), no. 1, 1–22.

122. Joseph Needham, *Science and civilisation in China, vol. II: History of scientific thought*, Cambridge University Press, 1956.

123. ———, *Science and civilisation in China, vol. iv: Physics and physical technology, part 1: Physics*, Cambridge University Press, 1962.

124. Ronald Newburgh, *The pendulum: a paradigm for the linear oscillator*, The Pendulum: Scientific, Historical, Philosophical and Educational Perspectives (Michael Matthews, Colin F. Gauld, and Arthur Stinner, eds.), Springer, 2005, pp. 37–48.

125. Stephen A. Norwick, *The history of metaphors of nature, vol. i*, Edwin Mellen Press, 2006.

126. Horst Nowacki, *Leonhard euler and the theory of ships*, Journal of Ship Research **52** (2008), no. 4, 274–290.

127. Richard P. Olenick, Tom M. Apostol, and David L. Goodstein, *The mechanical universe: Introduction to mechanics and heat*, Cambridge University Press, 1985.

128. Claude V. Palisca, *Scientific empiricism in musical thought*, Seventeenth Century Science and the Arts (Hedley Howell Rhys, ed.), Princeton University Press, 1961, pp. 91–137.

129. ———, *Music and ideas in the sixteenth and seventeenth centuries*, Studies in the History of Music Theory and Literature, University of Illinois Press, 2006.

130. Paolo Palmieri, *Re-examining Galileo's theory of tides*, Arch. Hist. Exact Sci. **53** (1998), no. 3/4, 223–375.

131. Louise Diehl Patterson, *Pendulums of Wren and Hooke*, Osiris **10** (1952), 277–321.

132. Peter Pesic, *Hearing the irrational: Music and the development of the modern concept of number*, Isis **101** (2010), no. 3, 501–530.

133. ———, *Music and the making of modern science*, The MIT Press, 2014.

134. John Philoponus, *On Aristotle's physics 2*, Ancient Commentators on Aristotle, Cornell University Press, 1993, Translated by A. R. Lacey.

135. Robert Wichard Pohl and Winifred Margaret Deans, *Physical principles of mechanics and acoustics*, Blackie & Son, 1932.

136. J. Ravetz, *The representation of physical quantities in eighteenth-century mathematical physics*, Isis **52** (1961), 7–20.

137. A. L. Rawlings, *The science of clocks and watches*, Pitman Publishing Corporation, New York, 1944.

138. Samuel Sambursky, *Physics of the Stoics*, Routledge, London, 1959.

139. ———, *The physical world of late antiquity*, Routledge & Kegan Paul, London, 1962.

140. Simon Schaffer, *The show that never ends: Perpetual motion in the early eighteenth century*, Br. J. Hist. Sci. **28** (1995), no. 2, 157–189.

141. Brajendranath Seal, *The positive sciences of the ancient Hindus*, Longmans, Green and Company, 1915.

142. Helaine Selin (ed.), *Encyclopaedia of the history of science, technology, and medicine in non-Western cultures, vol. I*, second ed., Springer, 1997.

143. A. A. Shabana, *Theory of vibration, vol. I*, Mechanical Engineering Series, Springer, 1991.

144. Kàroly Simonyi, *A cultural history of physics*, CRC Press, 2012.

145. Nancy G. Siraisi, *The music of pulse in the writings of Italian academic physicians (fourteenth and fifteenth centuries)*, Speculum **50** (1975), no. 4, 689–710.

146. Arnold Sommerfeld, *Mechanics. Lectures on theoretical physics, vol. I*, Academic Press, 1952, Translated from the fourth German edition by Martin O. Stern.

147. Richard Sorabji, *The philosophy of the commentators, 200-600 AD: A sourcebook. Volume 2: Physics*, Cornell University Press, 2005.

148. Brett D. Steele, *Muskets and pendulums: Benjamin Robins, Leonhard Euler, and the ballistics revolution*, Technology and Culture **35** (1994), no. 2, 348–382.

149. István Szabó, *Geschichte der mechanischen Prinzipien und ihrer wichtigsten Anwendungen*, Birkhäuser, 1996.

150. Gerald Teschl, *Ordinary differential equations and dynamical systems*, Graduate Studies in Mathematics, vol. 140, American Mathematical Society, Providence, RI, 2012.

151. Lynn Thorndike, *A history of magic and experimental science, vol. vii*, Columbia University Press, 1958.

152. Stephen P. Timoshenko, *History of strength of materials*, Dover, 1983.

153. Isaac Todhunter, *Natural philosophy for beginners, part II: Sound, light, and heat*, Macmillan, London, 1877.
154. Clifford Truesdell, *Leonhardi Euleri Opera omnia, series II, volumen XI, sectio secunda: The rational mechanics of flexible or elastic bodies 1638–1788. Introduction to Leonhardi Euleri Opera omnia vol. X et XI seriei secundae*, Orell Füssli, Zürich, 1960.
155. ———, *The mechanics of Leonardo da Vinci*, Essays in the History of Mechanics (Clifford Truesdell, ed.), Springer, 1968, pp. 1–83.
156. ———, *A program toward rediscovering the rational mechanics of the Age of Reason*, Essays in the History of Mechanics (Clifford Truesdell, ed.), Springer, 1968, pp. 85–137.
157. ———, *Whence the law of moment of momentum?*, Essays in the History of Mechanics (Clifford Truesdell, ed.), Springer, 1968, pp. 239–271.
158. ———, *The influence of elasticity on analysis: the classical heritage*, Bull. Amer. Math. Soc. **9** (1983), no. 3, 293–310.
159. ———, *An idiot's fugitive essays on science: methods, criticisms, training, circumstances*, Springer, 1984.
160. Andreas Verdun, *Leonhard Euler's early lunar theories 1725–1752*, Arch. Hist. Exact Sci **67** (2013), no. 5, 477–551.
161. F. Wadsworth, *Watches prior to 1750*, Antiquarian Horology **11** (1978), no. 2, 180–183.
162. Benjamin Wardhaugh, *Formal causes and mechanical causes: the analogy of the musical instrument in late seventeenth-century natural philosophy*, Philosophies of Technology: Francis Bacon and His Contemporaries, vol. 1 (Claus Zittel, Gisela Engel, Romano Nanni, and Nicole C. Karafyllis, eds.), Intersections : Yearbook for Early Modern Studies, vol. 11, Brill, Leiden, 2008, pp. 411–428.
163. ———, *Music, experiment and mathematics in England, 1653–1705*, Ashgate, 2008.
164. Ulrich Wenzel, *The notion of causality in Aristotle and the medieval philosophy of nature: a developmental approach*, Concepts of Nature: A Chinese-European Cross-Cultural Perspective (Hans Ulrich Vogel and Gunter Dux, eds.), Brill, 2010, pp. 161–180.
165. William Whewell, *History of the inductive sciences, from the earliest to the present times, vol. II*, John W. Parker, London, 1837.
166. Lynn White, *Medieval technology and social change*, Oxford University Press, 1966.
167. D. T. Whiteside (ed.), *The mathematical papers of Isaac Newton*, vol. VI, Cambridge University Press, 1974.
168. Derek Thomas Whiteside, *Patterns of mathematical thought in the later seventeenth century*, Arch. Hist. Exact Sci. **1** (1961), 179–388.
169. E. Williams, *Hooke's law and the concept of the elastic limit*, Ann. of Sci. **12** (1956), no. 1, 74–83.
170. Michael Wright, *Robert Hooke's longitude timekeeper*, Robert Hooke: New Studies (Michael Hunter and Simon Schaffer, eds.), The Boydell Press, Woodbridge, UK, 1989, pp. 63–118.
171. Joella G. Yoder, *Unrolling time: Christiaan Huygens and the mathematization of nature*, Cambridge University Press, 2004.
172. Eberhard Zeidler, *Applied functional analysis: Applications to mathematical physics*, Applied Mathematical Sciences, vol. 108, Springer, 1999.
173. Z. P. Zubov, *Leonardo da Vinci*, Harvard University Press, 1968, Translated from the Russian by David H. Kraus.

E-mail address: jordan.bell@gmail.com

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF TORONTO, TORONTO, ONTARIO, CANADA