

Special Article

A Biographical Portrait of Edward Hartley Angle, the First Specialist in Orthodontics, Part 3

Sheldon Peck^a

BIOGRAPHICAL CHRONOLOGY, 1855–1930

Date	Event
June 1, 1855	Edward Hartley Angle born to Philip Casebeer Angle (1820–1907) and Isabel Erskine Angle (1824–1908) in District 1 “Ballibay,” Herrick Township, Bradford County, Pennsylvania. The fifth of seven children. Demonstrates early talent for using tools and devising and constructing machinery, including a hay rake (at age 11); attends high school in Canton, Pennsylvania.
1874–1876	Apprentices with a local dentist in Herrick.
Fall 1876– February 1878	Attends the Pennsylvania College of Dental Surgery in Philadelphia, receiving DDS degree on February 28, 1878; begins practicing dentistry in Towanda, the county seat of Bradford County, Pennsylvania. Here he develops an interest in orthodontia.
Spring 1881	Develops a chronic respiratory ailment, called pleural pneumonia, probably tuberculosis.
Autumn 1881	Moves to Minneapolis, Minnesota, for health reasons. Within months, his health recovers and he returns to Pennsylvania briefly to join his older brother Mahlon and friends in planning a sheep-raising venture in Montana.
Late 1881	Moves to Montana with associates to enter the sheep-ranching business.
Early 1882	The severe winter of 1882 kills their sheep flock and dooms the venture financially.
1882–1883	Relocates to Minneapolis and resumes the private practice of dentistry; continues his interest in orthodontia.
1886	Accepts position as professor of histology and lecturer on comparative anatomy and orthodontia in the Dental Department of the Minnesota Hospital College in Minneapolis. Two years later, it becomes part of the University of Minnesota, and he is elevated to professor of orthodontia. Maintains his part-time private practice of dentistry.
March 1887	Marries Florence A. Canning (1865–?) of Minneapolis, sister of his machinist John E. Canning.
September 8, 1887	Presents his first major address describing aspects of the Angle System of Regulating Appliances before the 9th International Medical Congress in Washington, DC. Angle’s originality is challenged in the heated discussion that ensues. Angle later considers a 14-page extract of this paper, published without discussion in an 1887 textbook by Loomis P. Haskell, as the “first edition” of the seven American editions of his famous book.
December 3, 1887	Daughter Florence Isabel Angle is born in Minneapolis. (She died in 1970 in Morgan-ton, North Carolina.)
1888	Elected president of the Minneapolis City Dental Society.
March 5, 1889	Patents a jack-screw mechanism, the first of 46 patents held by Angle.
1890	“Second edition” of his book is published, as a 30-page appendix to the second edition of a dental laboratory handbook by Loomis P. Haskell.

^a Secretary, The Edward H. Angle Society of Orthodontists (EHASO) and The E.H. Angle Education and Research Foundation. Clinical Professor of Developmental Biology, The Harvard School of Dental Medicine, Boston, Mass. Private practice, Newton, Mass.
Corresponding author: Dr Sheldon Peck, Clinical Professor of Developmental Biology, The Harvard School of Dental Medicine, Boston, MA 02115
(e-mail: peckslam@att.net or speck@hms.harvard.edu)

Accepted: February 2009. Submitted: February 2009.

© 2009 by The EH Angle Education and Research Foundation, Inc.

- 1892 Resigns from the faculty at the University of Minnesota; limits his practice exclusively to orthodontia, thus becoming ostensibly the world's first specialist in orthodontia.
- 1892 Hires Anna Hopkins (1872–1957) of Minneapolis as his secretary and office assistant.
- 1892 Publishes third edition, a 51-page pamphlet entitled, *The Angle System of Regulation and Retention of the Teeth*.
- 1892–1898 Professor of orthodontia at the American College of Dental Surgery (later merging into Northwestern University School of Dentistry) in Chicago.
- 1894 Appointed Surgeon to the Great Northern Railroad for the treatment of fractures of the maxillae.
- 1895 Fourth American edition is published, a 112-page hardcover book now titled, *The Angle System of Regulation and Retention of the Teeth and Treatment of Fractures of the Maxillae*.
- 1895 Relocates to St Louis, Missouri (with his wife Florence, his daughter Florence Isabel, and his secretary-assistant Anna Hopkins); sets up a private practice there limited to orthodontia.
- 1896–1899 Professor of orthodontia in the Dental Department of Marion-Sims College of Medicine, St Louis.
- 1897–1898 Teaches in the Dental Department of Washington University, St Louis.
- 1897 Fifth American edition is published by SS White, Philadelphia; also, a German translation of his fourth (1895) American edition is published by SS White Co, Berlin.
- 1897 Is awarded MD degree from Marion-Sims College of Medicine.
- 1899 *Dental Cosmos* publishes Angle's "Classification of Malocclusion," his most important journal article to date.
- 1899 Claudius Ash publishes Gustave Darin's French translation of Angle's book under the title *Methode du Professeur Angle Pour la Régularisation et le Traitement des Dents et Pour le Traitement des Fractures des Maxillaires*.
- June 6, 1899 Patents the E-Arch, his expansion archwire mechanism.
- August 1899 Angle's paper on orthodontia prepared for presentation at the National Dental Association meeting at Niagara Falls is bypassed at the last minute by program officials. This personal slight fuels Angle's desire to found a postgraduate school of orthodontia and a professional society devoted to orthodontia.
- November 1899 Teaches a postgraduate course on orthodontia in his office in the Olivia Building, St Louis. Attending are Thomas B. Mercer, Henry E. Lindas, Herbert A. Pullen, and Milton T. Watson.
- December 8, 1899 Resigns his appointment at Marion-Sims College of Medicine.
- 1900 Finds the Angle School of Orthodontia; first 5-week course is held from May 1 through early June 1900 in the Odeon Building, St Louis.
- July 1900 Separates from wife Florence Canning Angle.
- October 1900 Publishes sixth edition, a 315-page work, *Treatment of Malocclusion of the Teeth and Fractures of the Maxillae. Angle's System*.
- Early 1901 Finds the Society of Orthodontists (antecedent of the American Association of Orthodontists) and serves as its first president.
- Early 1901 Finds the Society of Dental Science of St Louis.
- July 1901 First meeting of the Society of Orthodontists (renamed in 1902, the American Society of Orthodontists) is held in St Louis, Missouri.
- 1902 With Angle's encouragement, Anna Hopkins graduates from the University of Iowa with a DDS degree.
- December 1902 Offered the editorship in orthodontia of the *International Dental Journal*; Angle declines the offer.
- August 29–September 3, 1904 Chairman of Section VI (Orthodontia) of the Fourth International Dental Congress, St Louis.

- 1904 German translation of his fifth (1895) American edition is published by SS White Co, Berlin.
- 1905 Contributes chapter on orthodontia in Edward C. Kirk's *American Textbook of Operative Dentistry* (also in 1911 edition, revised).
- Spring 1906 Resigns membership in American Society of Orthodontists; encourages establishment of The Alumni Society of the Angle School of Orthodontia (earliest forerunner of The Edward H. Angle Society of Orthodontists).
- Winter 1906–1907 Retires from practice of orthodontia in St Louis; focuses on writing seventh American edition of *Treatment of Malocclusion of the Teeth, Angle's System* (628 pages).
- 1907 Father Philip Casebeer Angle dies, age 87.
- May 1907 Incorporates the E.H. Angle Regulating Appliance Co, in St Louis, Missouri.
- June 1907 Finds *The American Orthodontist*, the first journal in the world devoted exclusively to orthodontics (discontinued in 1912); it is the forerunner of *The Angle Orthodontist*.
- 1908 Mother Isabel Erskine Angle dies, age 84.
- May 1908 Divorces Florence Canning Angle in Minneapolis, Minnesota.
- June 27, 1908 Marries Anna Hopkins in St Louis, Missouri.
- Summer 1908 Moves from St Louis with wife Anna H. Angle to Larchmont, New York.
- September 15–October 31, 1908 The Angle School of Orthodontia is in session in New York City for a 6-week course, in an office building at the corner of West 72nd Street and Broadway.
- Fall 1908 Hermann Mueser publishes Josef Grünberg's German translation of Angle's sixth (1900) American edition under the title *Behandlung der Okklusionsanomalien der Zähne*.
- April 1909 Purchases home at 58 Bellevue Place, New London, Connecticut.
- July 1909 Wins patent infringement suit against appliance manufacturer Julius Aderer.
- October–December 1909 The Angle School of Orthodontia moves to New London, Connecticut; course session lengthened to 9 weeks, given in the Munsey Building.
- July–September 1911 Second (final) course session in New London at the Harbor School, after which Angle closes Angle School of Orthodontia due to his declining health.
- 1913 Revised and expanded German edition of Angle's book (1907 American edition) is published with new chapters by Josef Grünberg and Albin Oppenheim (778 pages).
- February 22, 1915 Awarded Honorary ScD degree by the University of Pennsylvania.
- Late 1916 Angle moves to southern California for health reasons; purchases home at 1025 North Madison Avenue, Pasadena.
- 1917 At request of James C. Angle (no relation), he reopens the Angle School of Orthodontia at his home in Pasadena.
- 1922 Edward H. Angle Society of Orthodontists is started in California by graduates of the Angle School of Orthodontia.
- 1922–1923 Grateful students fund construction of a building in Pasadena for the Angle School of Orthodontia at 550 Jackson Street, next to Angle's home; it is dedicated on January 8, 1923.
- 1924 The Angle College of Orthodontia and Infirmary is chartered by California. No tuition is charged for the College's 12-month program (which is followed with periodic faculty supervision during the first year of private practice). All patients are treated free of charge.
- September 15, 1925 Patents the edgewise arch mechanism.
- Late 1927 The Angle College of Orthodontia closes unofficially due to Angle's deteriorating health.
- August 11, 1930 Edward H. Angle dies in Santa Monica, California, at age 75 from heart failure; burial at Mountain View Cemetery, Altadena, California.
- November 17, 1930 *The Angle Orthodontist*, a scientific journal devoted exclusively to orthodontics, is founded in Chicago in Dr. Angle's memory by the newly reorganized Edward H. Angle Society of Orthodontia.