

JOHN HENRY (DOC) HOLLIDAY
A BRIEF, RELEVANT HISTORY OF TIME
Bobby M. Collins, DDS, MS

- 1728 Pierre Fauchard “Le chirurgien dentiste” *The Surgeon Dentist* (complete scientific explanation of dentistry)
- 1796 Edward Jenner develops smallpox vaccination method utilizing cowpox
- Cowpox & Bacille-Calmette-Guerin (from *M. bovis*, vaccine unavailable ‘til 1921,1928) linked in med hist
- 1799-1800 – Humphry Davy announces the anesthetic properties of nitrous oxide
- 1816 René Laennec, a French physician, invents stethoscope (advanced understanding of cirrhosis, melanoma, “consumption”), died of “consumption” age 45 in 1826 (his nephew used the stethoscope for diagnosis of uncle)
- 1831 Trichloromethane (Chloroform) prepared by American chemist Samuel Guthrie as “pesticide”
- 1839-40 First Dental School, Baltimore College of Dental Surgery (merges w/ Univ of Maryland 1926)
- First National Dental Society -American Society of Dental Surgeons is founded
- 1839 Johan Lukas Schönlein renames consumption “tuberculosis”, because of gross nodularity noted in lungs
- 1842 Ether as general anesthetic –Crawford W. Long, MD (cousin, cleft surgeon of J.H. Holliday 1851)**
- 1844 Dr. Horace Wells Nitrous Oxide as anesthetic
- Dr. Samuel Stockton (S.S.) White commercial manufacturer of porcelain teeth in attic in Philadelphia, PA
- 1846 Wm. Morton 1st to publish anesthetic properties of Nitrous Oxide
- 1847 Ignaz Semmelweis discovers prevention of puerperal fever (handwashing w/ chlorinated lime water)
- Scottish physician, James Y. Simpson used Chloroform as anesthetic, dripped liquid onto cloth over nose
- 1851 John Henry Holliday born in Griffin, GA**
- New York Times publishes first edition
 - First use of vulcanized rubber for denture bases
- 1853 C.G. Pravaz and A. Wood develop syringe
- 1855 Development of silver-tin-mercury amalgam for dental restorations
- 1856 Pennsylvania College of Dental Surgery founded (Holliday entered in 1870, graduated 1872)
- Merged with University of Pennsylvania School of Dental Medicine in 1878
- 1857 Louis Pasteur IDs germs as cause of disease
- 1859 Organization of the American Dental Association
- 1861-1865 American Civil War (The War of Northern Aggression) ether and chloroform used extensively for surgical anesthesia
- 1861 James E. Hanger CSA, cannonball injury to leg results in amputation (Hanger Prosthetics is born)
 - 1862 Yellow Fever epidemic Wilmington, NC
 - 1863 Battle of Gettysburg
 - 1864 Sherman’s Atlanta Campaign
- 1864 Introduction of dental rubber dam isolation by Dr. Sanford G. Barnum
- Introduction of “anatomical articulator” by Dr. Wm. Bonwill
- 1865-1877 Post Civil War Reconstruction
- 1865 Hunter Holmes McGuire becomes chair of surgery at MCV
- 1867 Joseph Lister describes antiseptic surgical methods
- Harvard School of Dental Medicine opens, the first associated w/ a university
 - Yellow Fever epidemic in Galveston, TX
- 1868 Georgia (and NC) readmitted to Union with ratification of 14th Amendment – rights of citizenship
- 1869 Completion of first transcontinental railroad –“Pacific RR”/“Overland Route”
- Oral Surgery established as a specialty, formally recognized in 1918
- 1870 Robert Koch and Louis Pasteur germ theory of disease
- John Henry Holliday enters dental school Pennsylvania College of Dental Surgery in Sept.
- 1871 Manufacture of foot-treadle dental engine, or drill – Dr. James B. Morrison
- Marked improvement upon unwieldy British Windup “clockwork” drill 1864, and “Hand crank” Drill 1778

1872 Reconstruction officially ends in GA, January 12
 -JH Holliday graduates from dental school (PCDS) in March, returns to Georgia to practice in Atlanta

1873- Global Recession begun in Europe spreads to US (“The Panic of 1873”)
 - JH Holliday learns he has consumption and leaves Atlanta for Dallas
 - Yellow Fever epidemic Shreveport, LA

1879, 81, 82 Vaccines for cholera, anthrax, rabies

1879 Earps arrive in Tombstone, a silver mine town – “Boomers”, opportunists, Doc Holliday arrives in Spring 1881

1881 (October 26) Gunfight at the OK Corral, Tombstone, Arizona Territory

1882 Robert Heinrich Hermann Koch discovers Tuberculosis bacillus
 -Explanation of bacterial cause of dental caries by Dr. Willoughby D. Miller

1884 Demonstration of injection local anesthesia Dr. William S. Halstead

1887 John Henry Holliday dies of chronic pulmonary tuberculosis in Glenwood Springs, CO
 -Frank Ritter (Germany) develops first dental treatment chair

1889-90 “The Microorganisms of the Human Mouth” by W.D. Miller published

1891 Rationale for scientific method of dental cavity preparation Greene Vardiman Black

1893 Atlanta Dental College founded (1917 merges with Southern Dental College , 1944 Atlanta-Southern merges with Emory University)
 -MCV-VCU School of Dentistry opens in Richmond ,VA

1895 W.C Roentgen discovers x-rays

1896 First vaccine for typhoid fever
 -Adaptation of diagnostic x-ray technology for dental use
 -University of Pittsburgh Dental College opens

1899 Dentists’ Supply Company, later Dentsply incorporated in NYC

1901 K. Landsteiner introduces blood group designations
 -Orthodontics recognized as a dental specialty

1907 Demonstration of accurate method for casting dental gold onlays (centrifugal casting machine)

1921 Banting and Best discover insulin and in 1922 use bovine insulin extract to treat DM

1921, 1928 First vaccine for tuberculosis, not widely accepted initially

1928 Alexander Fleming discovers penicillin

1929 Alexander Limberg defines geometric surgical parameters of Z-plasty (first used in 1837 by Horner, 1854 by Denonvilliers as a surgical treatment for lower lid ectropion (blepharoplasty)). 1913 McCurdy -treatment for contracture at oral commissure was first Z-plasty reference in American literature

1931 Fluoride identified as cause of mottled enamel

1935 (1937) Max Theiler develops safe and effective vaccine for yellow fever

1943 S.A. Waksman discovers Streptomycin – used in treatment of TB

1948 Oral (and Maxillofacial) Pathology officially organized, 1950 formally recognized as a specialty by ADA

1952 Isoniazid (INH) Roche labs Rimifon used to treat Navajo community

1957 Ultraspeed (400,000 rpm) turbine dental handpiece, “Airotor” Dr. John Borden (sold by DENTSPLY)

References:

Kelsey, Charles C. *Milestones in the History of American Dentistry*. Jnl. Mich. Dent. Assoc. 58:382-388, Jul-Aug 1976

Ring, Malvin E. *Dentistry: An Illustrated History*. Harry N. Abrams, INC. New York and C.V. Mosby St Louis 1985

Roberts, Gary L. *Doc Holliday: The Life and Legend*. John Wiley and Sons 2006

Medical Milestones- The Past 500 years. <http://www.medicinenet.com>

History of Medicine Timeline. <http://www.datesandevents.org>

Brinker, Shannon P. *The History, Evolution, and Necessity of Dental Handpieces* . www.cpsmagazine.com

Little, David. *Rethinking the Dental Handpiece* Compendium 31:9, Nov/Dec 2010