## Then and Now - Inventor - Daniel Davis Jr.

February 8, 1813 - March 22, 1887

### **Summary:**



Twin Sisters 00.360.1 - Distant Cousins to D. Davis - The PHS Has Over 20 Daguerreotypes From the Eleanor Llewellyn Collection

He was an American science instrument maker, electrical engineer, mechanic, photographer, daguerreotypist and ambrotypes. Through the course of his work, he became known for his practical knowledge and understanding of electromagnetic principles. He worked with college professors, notable electricians and popular scientists of the nineteenth century. He was consulted for practical knowledge on mechanics and electricity by inventors, including Samuel Morse for his telegraph and Elias Howe for his sewing machine. He was the first man in the United States to work with gold and silver electroplating, patented a method for coloring daguerreotypes through electroplating in 1842, and sold franchises to others for photographic studios. Davis published an exhaustive work on electromagnetism that became a textbook for academies, high schools, and colleges.

#### **Details:**

He was born in Princeton, of a mechanical family, worked on his father's farm until he was twenty-one, and went to Boston in 1833. His first work in that city was pumping soda for Mr. Darling, who then had a large soda factory in Franklin Avenue. Being greatly interested in electrical experiments, he soon became acquainted with Dr. William King, who had a shop on Cornhill, who manufactured static electrical machines and also constructed and put up lightning rods.

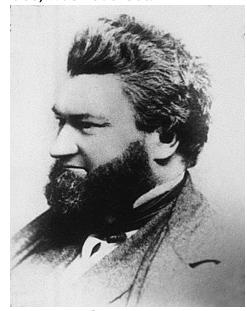
Mr. Davis soon found employment with him. His first job was constructing and putting up the rod on the courthouse in Boston. This was made of flat copper ribbon. He also constructed and put up the rods on the buildings in the Charlestown Navy Yard. In 1835 he began business for himself at No. 11 Cornhill, in partnership with the late John Temple, under the firm name of Davis & Temple. In 1837 Mr. Davis bought out the interest of his partner and commenced the manufacture of electro-magnetic apparatus. At that early day there was no practical use for electricity, and his principal business was manufacturing and constructing apparatus to illustrate the general principles of voltaic and dynamic electricity, and in connection with the late Dr. Charles G. Page invented many of the electric circuits, movements and machines that are now in use.

They continued their experiments together until the fall of 1839, when Dr. Page accepted a position in Washington as examiner of electric patents. Mr. Davis's business increased very rapidly, he being the only man in the United States at this time that made electro-magnetic apparatus.

He was a man who did not believe in patents. Had he patented some of his inventions he would have died a millionaire. He invented the art of electrotyping in copper, woodcuts and type such as are used to-day, and gave his invention to the world. In 1846 he electrotyped in copper the arm of a child, which has been lately claimed as a new invention. In 1840 Professor Gareaux of Paris arrived in Boston with the invention of Daguerre. Mr. Davis made a set of apparatus and probably took the first daguerreotype taken in this country. This first picture taken in Boston was the German Catholic church on Suffolk street, now Shawmut Avenue. At that time there were no houses in that vicinity. A gentleman who stood at the corner of the church when the picture was taken held his cane in his right hand, but when the plate was developed and finished, to the astonishment of all, the cane was in the left hand. This puzzled the operator some time, until he learned that the picture, being on an opaque surface, was reversed.

With the assistance of his brother, Ari Davis, Elias Howe, the famous sewing machine inventor, made his first machine in his shop.

Mr. Davis was also the first man in this country who did electro gold and silver plating, and taught the art. In 1844 Professor Morse had just introduced his telegraph, but it was a very rude and impracticable machine, and it was put into Mr. Davis's hands for improvement and he put it in its present state. He received several gold medals from various exhibitions for his inventions and skill as a manufacturer. His shop was the headquarters for professors, scientists and electricians for many years. It was frequented by Dr.



Daniel\_Davis\_Jr\_c1870

Hare, Professors Webster, Hitchcock, Silliman, Henry, Abbott, Farmer and Channing and most of the scientific men of the time. Mr. Davis would be in his shirtsleeves trying some new experiment, with the professors crowding around him as much interested in his work as himself.

At that time probably no man in this country had such a thorough practical knowledge of electricity, and he will long be remembered through his work on magnetism entitled "A Manual of Magnetism, including Galvanism, Magnetism, Electro-Magnetism, Electro-Dynamics, Magneto-Electricity and Thermo-Electricity." It contained about 180 original illustrations.

The first edition came out in 1842; but it ran through several editions, and is now out of



Electro-Magnetic Machine - PHS Collection 00.13

print. Originally published more to advertise the wares of Mr. Davis, and as a means of calling attention to his business, than as a textbook of electro-technics. its value as a vademecum of electrical information was at once seen and it appeared that he had built better than he knew. The first edition of 1842, and the second edition, which was published in 1847, were both written under the supervision of Drs. John

Bacon, Jr., and William F. Channing, and hence acquired an elegance of style and a perspicuity of language, which, combined with the practical knowledge of Mr. Davis, assured the success of the book. It was adopted as a textbook by many colleges and high schools, becoming a great favorite especially in the United States Military Academy at West Point, for the sake of the many practical demonstrations shown within its pages. It has become extremely scarce, but it has ever been valued by those fortunate enough to possess a copy of it, and even now many of our ablest electricians are not ashamed to confess that they have learned much from Davis' Manual of Magnetism.

In 1852 Mr. Davis retired to his farm in Princeton, where he passed the remainder of his days in agricultural pursuits.

#### **Resources:**

- <a href="http://waywiser.fas.harvard.edu/people/2208/daniel-davis-jr">http://waywiser.fas.harvard.edu/people/2208/daniel-davis-jr</a>
- <a href="http://waywiser.fas.harvard.edu/people/2208/-">http://waywiser.fas.harvard.edu/people/2208/-</a>
  /objects/images;jsessionid=CD2C743C44B4B0F1620A874FD47ED770?page=2
- <a href="https://physics.kenyon.edu/EarlyApparatus/Daniel Davis Apparatus/Daniel Davis Apparatus/Daniel Davis Ir. Portrait/Davis Portrait.html">https://physics.kenyon.edu/EarlyApparatus/Daniel Davis Apparatus/Daniel Davis Apparatus/Daniel Davis Ir. Portrait/Davis Portrait.html</a>
- <a href="https://www.uvm.edu/~dahammon/museum/davisbio.html">https://www.uvm.edu/~dahammon/museum/davisbio.html</a>
- <a href="https://dbpedia.org/page/Daniel\_Davis\_Jr">https://dbpedia.org/page/Daniel\_Davis\_Jr</a>.
- <a href="https://en.wikipedia.org/wiki/Daniel\_Davis\_Ir">https://en.wikipedia.org/wiki/Daniel\_Davis\_Ir</a>.

# 40+ <u>Apparatus Made by Daniel Davis</u> <u>https://physics.kenyon.edu/EarlyApparatus/Titlepage/Davis.html</u>

The Davis Family lived on Old Mill Rd., which was off the end of Lovers Lane bordering Quinapoxet Resevoir and connected to Overlook Rd. in Rutland. Old Mill Rd. is discontinued.

Built: c. 1785

Obadiah Thacher of Attleboro 1795 - 1803 had a Saw and Grist Mill

Joshua Temple c. 1809

Daniel Davis c. 1813 - 1847

Daniel Davis c. 1813 - 1833 1852 - 1887

Miss Florence Davis 1898

----Blanchard

Mrs. Gray and son

Myra E. Blum 1920 torn down by City of Worcester Water Dept 1953

Assembled by William "Bud" Brooks in 2024 using information from the Internet and images from the PHS archives.