

# P05: Painting a New World with Sunbeams

## The Daguerreotype in America

WC 3948

In an article in *McClure's Magazine*, November 1896, Mrs. DT Davis<sup>1</sup> wrote a long and chatty article about the introduction of the Daguerreotype to America. Later criticised for omitting to mention any practitioners of the new art in Philadelphia, her article otherwise provides a friendly history of the arrival of photography in the US as well as providing what someone called a proper "rogues gallery" of the images of prominent Americans obtained with the first cameras to arrive from across the Atlantic.

American interest in the daguerreotype was attributed to Samuel Morse, the inventor of the "electric telegraph" and Morse Code. Mrs Davis begins her article with an account of how Morse met Daguerre and saw his earliest experiments:

*While in Paris in the spring of 1839, engaged in securing a patent on his telegraphic apparatus, Professor S.F.B. Morse became deeply interested in what he heard of the brilliant experiments of M. Daguerre, whose genius and perseverance had just brought to perfection one of the most important and astonishing discoveries of the age. An artist, as well as a scientist, Professor Morse was naturally anxious to hear more of this new art of painting with sunbeams, especially as he himself had made experiments to ascertain if it was possible to fix the image of the camera obscura, and had given the matter up as impracticable.*

*Having completed all arrangements in regard to his telegraph, Professor Morse had already made his plans to leave Paris for home, when, in conversation with the American Consul, Mr. Robert Walsh, he one morning remarked, "I do not like to go home without first having seen Daguerre's results." The consul thought the matter might be easily arranged, and suggested that Professor Morse invite M. Daguerre to see his telegraphic apparatus, in return for which courtesy M. Daguerre would doubtless invite Professor Morse to see his pictures.*

*The plan was, of course, entirely successful. Morse and his marvellous scientific achievements were already matters of European reputation, and M. Daguerre naturally lost no time in responding to the distinguished request. Immediately following this exchange of civilities, Professor Morse had the pleasure of seeing the wonderful results of the new discovery<sup>2</sup> at the*

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<sup>1</sup> The full text of this article is reproduced at the site of The Daguerrian Society at <http://www.daguerre.org/resource/texts/davis/davis.html>

<sup>2</sup> This is on 7 and 8 March 1839 – see <http://www.mathewbrady.com/history.htm>

*Diorama, where M. Daguerre had his laboratory, and where he gave frequent exhibitions of his pictures to the foremost scientific men of the day.*

*These pictures, the extreme beauty of which had surprised and delighted all who beheld them, bore no resemblance to anything that had been theretofore known; and the striking mystery about them was that they should have been produced by a clever manipulation of the forces of nature rather than by the artist's pencil. .... The pictures were mostly views of streets, boulevards, and buildings, those of the Louvre and Notre Dame being especially fine. Interiors, still life, groups of plaster casts, and other works of art were also most successfully treated by the new process. Daguerre had not succeeded in making portraits as yet, and he told Professor Morse that he doubted if it could be done.*

*Professor Morse's enthusiasm over these daguerreotypes was scarcely less than that which he felt for his beloved telegraph.... Unfortunately, the very next day, while Daguerre was with Professor Morse, witnessing the operations of his telegraph, the Diorama burned to the ground with all the beautiful specimens that Professor Morse had seen there the day before.*

Mrs Davis goes on to explain that Morse had to content himself with having seen the daguerreotypes because the inventor was still in negotiations with the French Government to make them available, for a price, to the people of the world. However, once the deal was done and the information announced publicly on August 19, 1839, the world changed:

*No sooner were Daguerre's pictures exhibited than scientific men the world over hastened to examine them, and it is safe to say that no previous discovery had awakened a more universal interest. Journals and periodicals were given up to exploiting the subject, and certain issues were delayed, in order to obtain more complete accounts of the famous "sun pictures." As an invention it was ranked in importance with the steam engine, and the most exaggerated panegyrics from poet and scientist alike were the order of the day.*

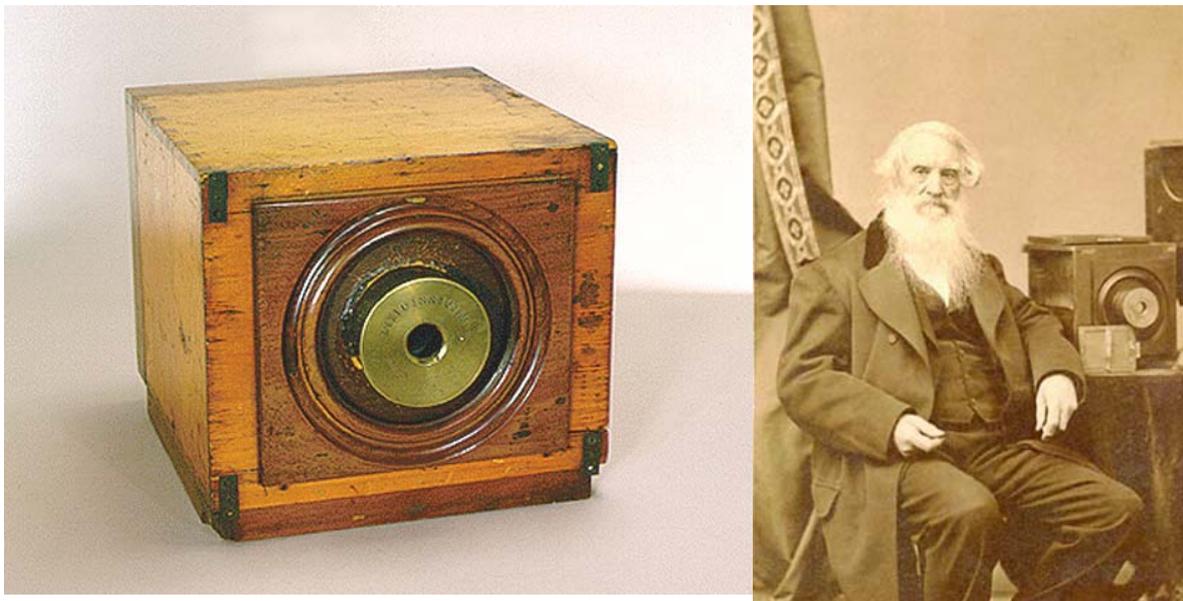
Daguerre, according to Mrs Davis, hastened then to give Morse all the necessary details and Morse began his own experiments, assisted by his brothers:

*His brothers Sidney E. and Richard C. Morse had a room with a glass roof erected on the roof of their new building at the northwest corner of Nassan and Beckman Streets, New York, and in this "palace of the sun," as they called it, made an American home for the new art. Until this room was ready for occupancy, Professor Morse continued his experiments with great success at the University of New York, in Washington Square. His first entirely successful picture was a view of the Unitarian Church, from the*

*window on the staircase of the third story of the University. This was taken in September, 1839, and was without doubt the first daguerreotype ever taken in America. The time of exposure was fifteen minutes.*

In his criticism of Mrs Davis' article, the *Philadelphian*, Julius F. Sachse, contests the September date, claiming that the details of the photographic process did not arrive in New York until October 14th, 1839 and that:

*Even Morse's view of the "old brick church" was made long after Joseph Saxton, of Philadelphia, had made his experimental exposures from the window of the United States Mint on Chestnut Street, the original of which is now in possession of the Historical Society of Pennsylvania.*



*A daguerreotype camera owned by Samuel Morse, the inventor of Morse Code. Below is an albumen print of Morse c. 1860 with his Camera on the table at his elbow (the camera is resting on its side.).*

As it happened, however, neither Morse nor Mr Saxon of Philadelphia made the first successful daguerreotype in America. That honour — making him America's first photographer — actually goes to DW Seager, an Englishman living in New York. Although historians seem unable to agree on the date when Seager actually took this photograph<sup>3</sup>, according to Helmut Gernsheim — whom I am inclined to take as the authority — the first American daguerreotype was made on 16 September 1839<sup>4</sup> using an exposure time of about 10 minutes in full sunshine. This picture of part of St. Paul's church and its surroundings was exhibited in the shop window of Dr James R Chilton's drug store at 263 Broadway on 26<sup>th</sup> September and reported in the *Morning Herald* four days later, on September 30th. Following the public interest aroused by this exhibition, on 5<sup>th</sup> October

<sup>3</sup> Some argue for 26<sup>th</sup>, others for 27<sup>th</sup> September, 1839.

<sup>4</sup> Gernsheim, H: *The Origins of Photography*, Thames and Hudson, 1982, p 99

Seager commenced a series of public lectures and demonstrations at the Stuyvesant Institute.

No one knows how Seager obtained his information about the daguerreotype process when it was not until 4 days after his daguerreotype was first seen in the drug-store window that the *British Queen* docked in New York bringing with it the newspapers containing the account of Arago's speech in Paris on August 19 announcing the invention and the release to the public of the process which allowed others, Morse included, to begin their own experiments. There are suggestions that Seager obtained an early account of the process possibly from newspaper accounts of Arago's speech sent to him by friends who knew of his interest in photography and carried on the *Great Western* which sailed on the 24<sup>th</sup> August. Seager did not long continue his experiments in photography but moved to Mexico where he worked as a dentist... But before he left, it must be said, he produced the world's first table of recommended exposure times!

Although he was not the first photographer in America, Morse was certainly the most influential and as the mentor of the young Matthew Brady, left among his many legacies to the world one of its greatest photographers. Brady, as we will see later, used his camera to document the American Civil War and was thus the first of the now long line of war photographers who, far from glorifying war as painters had previously done, brought its horror and brutality into the parlours of the nation.

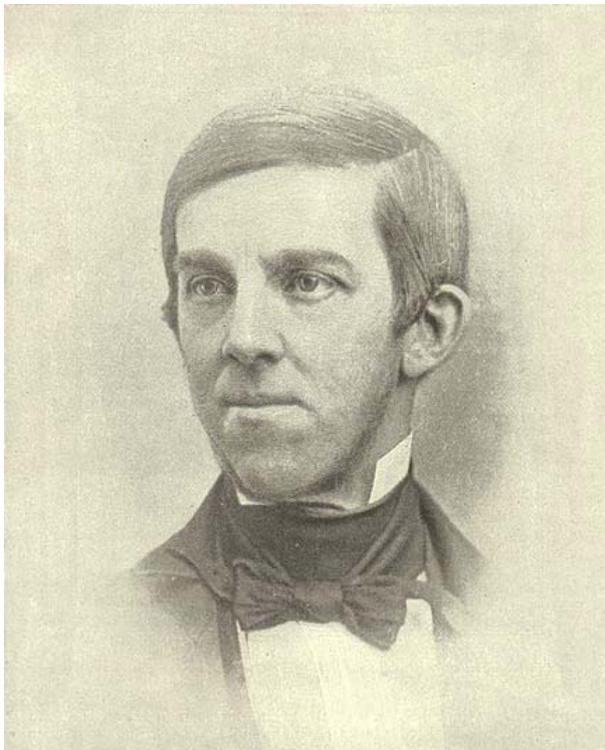
Significant to the development of photography in America was the arrival in New York City of one of Daguerre's disciples, François Gouraud, who brought with him cameras and equipment manufactured by the Parisian firm of Alphonse Giroux on whose behalf François Gouraud was acting. Some doubt (and dispute) surrounds the date of his actual arrival<sup>5</sup>, various sources saying he arrived on the *British Queen* on either her second or third voyage to New York, sometime between 21 September and 23 November 1839. He advertised his business thus:

*As the friend and pupil of Mr. Daguerre, I came from Paris by the British Queen, with the charge of introducing to the New World the perfect knowledge of the marvelous process ... Having the good fortune to possess a collection of the finest proofs which have yet been made, either by the most talented pupils of Mr. Daguerre, or by that great artist himself, I have thought it my duty, before showing them to the public, to give the most eminent men and distinguished artists of this City the satisfaction of having the first view ... on Wednesday next, the 4th of December .*

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<sup>5</sup> See the monograph R. Derek Wood: "The Arrival of the Daguerreotype in New York", *The American Photographic Historical Society*, January 1995, New York. On-line version at <http://www.midley.co.uk/daguerreotype/newyork.htm>

Through a series of exhibitions and public demonstrations, like his master back in Paris, he promoted and popularised the new art. Influential men such as Oliver Wendell Holmes<sup>6</sup>, Herman Melville, and Ralph Waldo Emerson attended his lectures and became involved in the new craze. For \$50 one could buy the



equipment and the necessary instructions to start up your own small business. Studios sprang up over night in Boston, New York City and Philadelphia and, because competition became stiff, improvements to make the sitter more comfortable as well as cheaper prices encouraged the momentum. The price for three small daguerreotypes in 1850 was about \$2.50, a price attractive to the middle classes who hitherto had not been able to afford painted portraits. Three years later there were 68 portrait studios in NYC alone and by 1856, more than \$15 million dollars were being spent by the American public on having their "likeness" taken.<sup>7</sup>

*Oliver Wendell Holmes — from a carbon reproduction by Sherman and McHugh of an original daguerreotype taken and then owned by Josiah J. Hawes, Boston (according to Mrs Davis' account).*

### **John William Draper and experiments in portraiture**

Morse, who himself was a well-known painter of portraits, found the daguerreotype unsuitable for portraiture and actually wrote to Daguerre to this effect, a view with which Daguerre himself seems to have agreed. The problem was that exposure times were too long and forced sitters to stare, unblinking, for uncomfortable and inordinate lengths of time. Morse himself took several portraits of his daughter and a friend, with their eyes shut, in full sunlight on the roof of the University building. It was not until some time later he realised that the length of time the expose took meant that blinking would not show up on the final exposure!

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<sup>6</sup> This is Oliver Wendell Holmes Senior (1809-1894), anatomist and writer and the father of the famous jurist, Oliver Wendell Holmes Junior (1841 –1935) who served on the Supreme Court of the United States 1902–32.

<sup>7</sup> [http://home.foni.net/~vhummel/Hawthorne/hawthorne\\_1.1.html](http://home.foni.net/~vhummel/Hawthorne/hawthorne_1.1.html)



**John William Draper (1811-1882) SI neg. #52,757**

However, one of Morse's colleagues at the University of New York was English-born John Henry Draper (1811-1882)<sup>8</sup>, the professor of chemistry, who made himself a camera out of an old cigar box and tried his hand at taking portraits. He claimed to have made the first portrait, posing his sister Catherine whose face he powdered with flour to enhance the exposure. This, he concluded, was not satisfactory!

However, Draper did realise several things which in the long run, made portraiture possible. First, he concluded that a better lens was necessary, one with a wider aperture to allow more light onto the sensitised plate. Second, he also realised that the lenses he had been using focussed the different wavelengths of light at

different points behind the lens so that the image was not only blurred but the exposure did not take full advantage of the value of the violet end of the spectrum which, remembering the discoveries of Scheele and Senebier near the end of the 18<sup>th</sup> Century, affected the silver iodide on the plate significantly faster than did the red wavelengths.

So he incorporated a spectacle lens which gave an aperture of about  $f1.4^9$  and placed the sensitised plate at the blue-violet focus and was thus able to reduce exposure times to a practicable minimum.

Meanwhile, back in Philadelphia, Joseph Saxton, an employee of the United States Mint, succeeded in taking the picture referred to by Sachse in his criticism of Mrs Davis' account of the history of photography in the United States published in *McClure's Magazine*. This was a tiny photo measuring 2.8cm x 3.8cm (1 1/8 x 1 1/2 inches). Taken from a window in the Mint, it shows part of the old arsenal and the cupola of the local high school and was taken on October 16, a month after Seager claimed he took the first photograph in America. "Claimed", because there

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<sup>8</sup> Draper rose to fame in his chosen field and is remembered as a "Landmark" in the history of chemistry in America having been the first president of the American Chemical Society.

<sup>9</sup> The lens was 5 inches in diameter and had a focal length of 7 inches.

is no guarantee that the photo displayed in the drug-store window as reported by the *Morning Herald* on September 30 was actually that "first" photo — quite possibly, Seager took several more, improving as he went, and the daguerreotype shown to the public was taken on or just before 26<sup>th</sup> September as many historians claim.

Although Sachse's claim that Saxton took the first photograph in America is clearly not true, his tiny daguerreotype of a Philadelphia street is actually the oldest daguerreotype still in existence and is preserved in the Historical Society of Pennsylvania.

Sachse continued his rebuttal of the claims by Mrs Davis — always by citing the prior claims of what he called "The Quaker City" —

*As a matter of fact, the first portrait of a human being was taken in Philadelphia in November, 1839, by Robert Cornelius, and was exhibited before the American Philosophical Society, as is noted in the minutes of the Society, December 6, 1839. This identical portrait is now in possession of the writer. Further, a studio for "Daguerreotype Miniatures" was*

**CHASE'S  
DAGUERREOTYPE ROOMS,  
257 Washington Street, Boston.**

THE MOST DESIRABLE LOCATION FOR THIS BUSINESS IN THE CITY: **ONE FLIGHT OF STAIRS.**  
**Over Haskell & Howland's Large Silk and Shawl Store,**  
IN THE NEW AND SPLENDID STONE BUILDING, JUST ERECTED, AND ENTIRELY FREE FROM THE MANY OBJECTIONS AND ANNOYANCES INSEPARABLE FROM PROCURING LIKENESSES AT MANY OTHER PLACES.

THE PROPRIETOR'S AIM WILL BE TO MAKE HIS ROOMS A GENTLE AND FASHIONABLE PLACE OF RESORT, WHERE THE PUBLIC ARE GUARANTEED AS GOOD PICTURES AS THIS BEAUTIFUL AND VALUABLE ART CAN PRODUCE, AND HIS OBJECT BEING TO **EXCEL**, NO PAINS OR EXPENSE WILL BE SPARED TO SECURE THE MOST COMPETENT SKILL IN EVERY THING APPERTAINING TO THE BUSINESS, AND HE WOULD BE GLAD OF EVERY OPPORTUNITY TO

**COMPARE HIS WORK, OR PUT HIS SKILL IN COMPETITION WITH OTHERS.**  
**MR. SNOW**, DIRECT FROM MR. PLUMBER, WHERE HIS LONG EXPERIENCE AND UNPARALLELED SUCCESS PROVE HE **CANNOT BE EXCELLED**, WILL CONDUCT THE OPERATING DEPARTMENT. PERSONS DESIROUS OF HAVING LIKENESSES ARE RESPECTFULLY INVITED TO CALL, AND THE MOST FAVORABLE SHALL BE RETURNED, OR NO CHARGE.

INSTRUCTION GIVEN, APPARATUS AND STOCK FURNISHED, AND **WARRANTED SUCH AS REPRESENTED.**  
**NO PICTURES TAKEN IN ANY WEATHER.**

*established and was in successful operation long before either Draper or Morse claim to have made their first successful attempt.*

Mr Sachse's protestations to the contrary, the first studio was opened in New York at the beginning of March 1840 by a former manufacturer of dental supplies, Alexander S. Wolcott and his partner, John Johnson, initially at 52 First Street but moved a few days later to what was then the new Granite Building at the corner of Broadway and Chambers. There, for a cost of \$3, Wolcott offered to make "Sun Drawn Miniatures" which were as accurate as Nature herself, in the space of three to five minutes.

The new studio in the Granite Building had adjustable mirrors fixed to an outside window which allowed the photographers to reflect sunlight into the studio. The light was filtered through a glass tank containing a solution of copper sulphate in water, the blue colour of which allowed only the fastest — ie, most actinic — light to illuminate the sitter. The sitter's head was kept immobile by a head-rest while sitting for the requisite few minutes in front of a plain background.

By this time, Morse was convinced that portraiture was practicable and proposed a joint venture with Wolcott (which was refused) and then with Draper — which was accepted. In April 1840 they opened a studio similar to Wolcott's at the University where, on sunny days, they took portraits at \$4 each and on dull days, taught the Daguerreotype process. The combination of artist and scientist was a

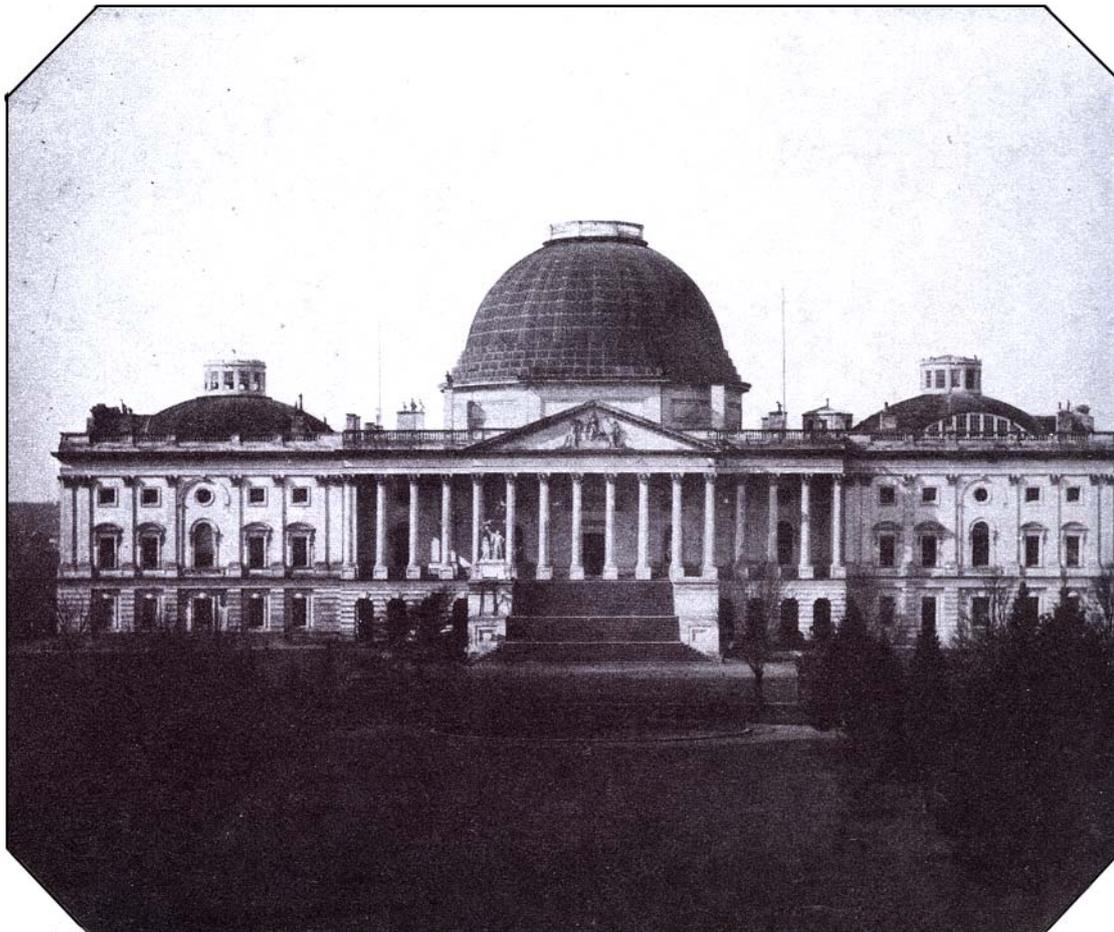


very successful one — even a Vice-Presidential candidate had his portrait taken by them — although it seems that the photography courses were more popular than the portrait business itself. Although written by Draper in April or May, a paper on making portraits with the daguerreotype process was published in September, 1840 in the *London and Edinburgh Philosophical Magazine*. This was the first account of this kind to be published in Europe where portraiture was still problematic.

*Daguerreotype by JW Draper of his sister, Dorothy Catherine Draper, June 1840.*

Draper retired from this photographic business later that year in order to concentrate on his scientific researches. However, on 27 July 1842 he took the first photograph of the solar spectrum, a daguerreotype which he sent to Sir John Herschel who later wrote a memoir called *On the action of the rays of the solar spectrum on the daguerreotype plate*. Draper also took the first photograph of the lunar surface. However, it is really for his portrait of his sister, Dorothy Catherine Draper, which was taken sometime in June-July 1840 that he is remembered best in the history of photography. Wolcott might have taken satisfactory portraits earlier, but none of his have survived and Draper's photograph of his sister remains the earliest satisfactory portrait.

Without Draper as his partner, Morse moved his studio to the New York *Observer* building where he continued his researches with the daguerreotype, not so much as an end in itself but as an aid to painting portraits. He also continued to offer instruction in the process at \$25–40 a course. It was then that Matthew B. Brady and others destined to become leading photographers of their day first had their introduction to this new art. Brady had begun as a manufacturer of daguerreotype cases but after learning the trade under Morse, established his *Daguerrean Gallery* in New York. These days, 311 of his daguerreotypes are in the collection of the Library of Congress.



*John Plumbe: Daguerreotype of the unfinished Capitol Building, Washington DC 1846.*

Three other practitioners of the Daguerrean art should be mentioned: one is John Plumbe, a Welshman by birth, who opened his *Plumbe National Daguerrian Gallery* in Boston in 1841. By September 1845 his empire had grown to a chain of 14 studios across the country, from Boston to St Louis. In 1845 he became the official daguerreotypist in Washington DC where he not only opened yet another portrait studio but photographed many public buildings. Where the father of photography, Niépce, had failed, Plumbe employed lithographers to convert

daguerreotypes into lithographs which he sold as *Plumbeotypes*. However, he over-reached himself and went bankrupt in 1847.



*A box-in-box camera manufactured for John Plumbe, Boston, MA, based on the design of the world's first production camera, the French Giroux of 1839, but in reduced scale.*

Another daguerreotypist who stands out from the crowd of men operating the hundreds of Daguerrean Parlours as the studios were called was Platt D. Babbitt although in his case, his "parlour" was

more like a pavilion set up overlooking Niagara Falls. There he waited all day, his camera trained on the look-out point, taking photos of sightseers. Unaware they had been photographed, most it seems



*Platt D. Babbitt: daguerreotype of Niagara Falls 1853*

were happy to pay for the memento of their visit when he later showed it to them. More memorable, however, was the occasion when two men were washed over the Falls. One went instantly but the second clung to a log for more than 18 hours

while all attempts to rescue him failed. Babbitt took several daguerreotypes of the man clinging for dear life in the raging torrent before, exhausted, he too plunged to his death. These, as Gernsheim points out, were probably the first news photographs<sup>10</sup>.



The third daguerreotypist I want to single out from the crowd was the Boston partnership of Albert Sands Southworth and Josiah Johnson Hawes. This partnership lasted from 1843 to 1862 and produced what many consider some of the greatest daguerreotypes in American history. In 1999 a hoard of 240 daguerreotypes made by Southworth and Hawes was auctioned by Sotheby's and sold for more than US\$3.3 million.



*Southworth and Hawes:  
(Left) Vignette of a Woman with Veil (possibly the poet and author Lydia H. Sigourney)<sup>11</sup>  
(Right) Woman in Floral Bonnet and Zig-Zag Dress<sup>12</sup>*

These photographs show not only the technical excellence of the Southworth and Hawes team but also how far the art of *painting with sunbeams*, to use Mrs Davis' poetic phrase, had come in just a very few years. Both these photographs are well exposed, there is ample detail in the highlights and shadows, and there is no blurring because the sitter was not required to keep still for unduly long exposures.

<sup>10</sup> Gernsheim, H: *The Origins of Photography*, Thames and Hudson, 1982, p 119.

<sup>11</sup> Now in the collection of the American Museum of Photography – <http://www.photographymuseum.com/lydial.html>

<sup>12</sup> <http://www.photographymuseum.com/zigzagl.html>



The technical skill of the Southworth and Hawes firm attracted a new kind of customer: the bride on her big day! Grown now to the bread and butter of suburban photographers — and the bane of those who consider it kitch — the bridal photo is a well established part of Western culture.

However, the bridal photos of Southworth and Hawes, like all their other carefully and sensitively made daguerreotypes could never be called *kitch*. A review of the time commented thus on the output of these dedicated men:

*One of the oldest practitioners in the United States, and probably the very oldest in Boston, is Albert Southworth, now, and for several years past of the firm of Southworth & Hawes, Tremont Row. To their honor be it said, they have never lowered the dignity of their Art or their profession by reducing their prices, but their fixed aim and undeviating rule has been to produce the finest specimens, of which they were capable,—the finest in every respect, artistic, mechanical, and chemical; graceful, pleasing in posture and arrangement, and exact in portraiture. Their style, indeed, is peculiar to themselves; presenting beautiful effects of light and shade, and giving depth and roundness together with a wonderful softness or mellowness. These traits have achieved for them a high reputation with all true artists and connoisseurs.*

Although Hawes maintained his devotion to the daguerreotype until his death in 1901, it is Southworth who has remained with us in history as one of the wise elders of photography. For example, when speaking at the National Photographic Association in 1873, he said:

*"Learn to look and see the difference under different lights in the same faces. Learn to see the fine points in every face, for the plainest faces in the world are human faces, belonging to human beings... "*

— A. S. Southworth, 1873<sup>13</sup>

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<sup>13</sup> <http://www.photographymuseum.com/dkvig1.html>

And, at the same Association three years earlier, in 1870, he gave the following good advice to all who would pose sitters for their portraits,

*"What is to be done is obliged to be done quickly. The whole character of the sitter is to be read at first sight; the whole likeness, as it shall appear when finished, is to be seen at first, in each and all its details, and in their unity and combinations."*

—A. S. Southworth, 1870<sup>14</sup>

Nowhere, including France where the technology was born, did the daguerreotype reach the height of popularity or artistic excellence that it did in America. But, despite the beauty of a well-made daguerreotype, the process survived for only a few short years. After its introduction to the New World in the Fall of 1839, it reached its peak by 1853 and had almost disappeared completely by 1860. In its hey-day it has been estimated that more than 10,000 people were occupied making daguerreotypes and a further 5,000 earned their living from allied industries such as preparing the chemicals, manufacturing the cameras and other equipment, metal plates, presentation cases and so on. More than 3 million daguerreotypes were made each year and sold to an eager public often for less than \$2...

And a further but usually overlooked legacy of the daguerreotype began in New York in November 1850 with the publication of *The Daguerreian Journal*. This, as it happened, was the world's first photographic magazine.

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<sup>14</sup> Albert S. Southworth, Comments at the National Photographic Association, 1870 quoted at <http://www.photographymuseum.com/lydial.html>.