Henry Hunt Snelling, “Looking Back: or, the Olden Days in Photography” (profile of John A. Whipple) 22 September 1888
(keywords: Henry Hunt Snelling, John Adams Whipple, James Wallace Black, steam, history of the daguerreotype, history of photography)

THE DAGUERREOTYPE: AN ARCHIVE OF SOURCE TEXTS, GRAPHICS, AND EPHEMERA
The research archive of Gary W. Ewer regarding the history of the daguerreotype
http://www.daguerreotypearchive.org
EWER ARCHIVE P8880001

Published in:

LOOKING BACK; OR, THE OLDEN DAYS IN PHOTOGRAPHY.

BY H. H. SNELLING.

In looking back upon this early period in the history of photography, we find it claiming the attention of our most learned scientists as an aid to the study of the sciences, particularly in astronomy and terrestrial phenomena, anatomy and diseases, and proved of great aid in their study. The most notable practical Daguerreans, who devoted most of their time in investigating photography as an aid to science and the fine arts, and gave the most practically valuable results, were Messrs. Whipple and Black, of Boston, who spent much time and money in their experiments. They accomplished feats in telescopic photography that were a marvel at that time, and which gained for them a high reputation throughout the scientific world. We are indebted to them largely for the position that photography took in its application to scientific investigation, particularly after the discovery of the collodion film.

One of the most notable and important discoveries made during the first decade in photographic history was the application of blue glass to skylights and in the camera, as mentioned in our article on the “Relation of Colored Glass to Photography and the Eye,” in your Annual of this year, a subject to which we shall return as soon as our eyes will permit; a subject admitting of much further investigation, particularly in relation to the eye. The fact that blue glass cuts off the retarding action of colored rays was a great improvement in time and worth thousands of dollars to the practice of the art, yet our suggestion brought us no practicable acknowledgment; it cannot even be set down as the counterpart of poor Archer’s great discovery. Freely it was given and freely it was received, but it is something to have the pleasure of giving and making others happy. Like Paul, the aged, I have done a little boasting here; I suppose it is the old men’s privilege; anyhow it seems to be their infirmity.

Among the many Daguerreans who flourished at this time and had a reputation for excellent and artistic daguerreotypes, we certainly should place A. J. Whipple, of Boston, as the head of the class, because he not only executed the best of pictures, but because he devoted so much of his time and money in experimental photography for its improvement and advancement. His services in this respect deserve special mention, and a first place in our record of the men who saved the character of the art from the false position it would have taken in the hands of the charlatans who infested the country.
Mr. Whipple was born in Grafton, and at an early age manifested his love for study, and his pocket money went for books instead of for toys, confectionary, cigars and other indulgences common to boys. Chemistry was his favorite branch, and he pursued it indomitably. The announcement of the discovery of Daguerre in this country at once fascinated his mind and set his wits to work in devising the way by which he might practically test it. With a candle box for a camera and a silver spoon for a plate he made his first experiments.

At the age of eighteen, being ambitious as well as studious, he left his country home for Boston to seek a business congenial to his taste and aspiration.

A casual acquaintance with a gentleman met in a store and who was searching for chloride of iodine, gave him his start in business. The gentleman told him that he had searched all Boston for the chemical without finding it. Mr. Whipple offered to make him some. The gentleman accepted the offer gladly. Mr. Whipple went to work, and in a few hours it was delivered and paid for. This was the first money earned by his chemical knowledge and was the first step to his success in business. The daguerreotype was yet a new thing and the chemicals used in it were difficult to obtain. From this time he supplied the Daguerreans of Boston with this chemical, making good profit. But his health soon began to fail and he was obliged to relinquish his manufacture of chemicals for other business. He decided upon the Daguerrean art and devoted his time and talents in making miniatures. His thorough chemical knowledge gave him great advantage over others, and the name of Whipple was associated with all that was excellent in daguerreotypes. Good artistic taste, a correct eye and a ready mind to correct difficulties and detect causes for defects, he was enabled to put forth such uniformly perfect work that he was resorted to by the lovers of fine art and the most intelligent people of Boston. Mr. Whipple also commended himself by his urbanity and pleasing manners and made hosts of friends. From this time his success was assured.

Mr. Whipple’s business became so great that he found the manual labor portion of the process become irksome and often vexatious, and he determined to use steam. He procured an engine and adapted machinery to its use. He was well pleased with the result. It was the introduction of this system that gained for him the high reputation he enjoyed, for his plates were better and more uniformly cleaned than by hand, for on a perfectly clean plate the excellency of the picture depended more than on other parts of the process. The beautiful crayon daguerreotypes, which became popular with people of taste, owed their origin to Mr. Whipple.

He was the first, also, to make daguerreotypes (afterwards called ambrotypes), for which pictures he obtained letters patent from the United States Government. If we remember aright, he afterwards gave these inventions to his brethren in the art.

Mr. Whipple, however, did not confine himself to catching the image of the “human face divine.” He applied his favorite art to reveal the wonders of the universe, celestial and terrestrial. By his skill the microscope and telescope were made to give to the daguerreotype plates the secrets of celestial space and the world of animalcule, placing before scientists objects not known to them before. By devoting his talents and skill in this direction he contributed largely to the advancement of science. The achievements of Mr. Whipple in this direction were as wonderful as the objects themselves, and among scientists his name will ever be remembered with grateful praise.

Mr. Whipple’s daguerreotype of the moon was a great achievement. The attempt was made under great difficulties, but his indomitable Yankee “go-aheadness” would not admit of an impossibility in anything he undertook, and so the moon was daguerreotyped.
with remarkable accuracy. This was done in the observatory of the Cambridge (Mass.) University for that institution. It created great excitement, not only among professors in our colleges here, but among the scientists of Europe. From royal institutes in Europe and our own colleges Mr. Whipple received the highest commendation.

We will pause for a moment to say that as great as this achievement was, it was surpassed subsequently by Mr. Whipple on the collodion plate, when he obtained a beautiful and perfect image of the orb on a plate fourteen inches square. One of our professors in astronomy said that it was so clear and accurate in detail that he could classify the rocks of which it is formed.

Of course, the persevering and determined will of such a man brought Mr. Whipple in request among scientists, and he has made many more attacks on celestial bodies and brought their images to earth to enrich science and art.

Shortly before the introduction of the collodion process, patents were taken out both in England and America for a process on glass with an albumen film called cristalotype [crystallotype—ed.]. Mr. Whipple purchased the American patent, and sought to introduce it into this country. He worked the process himself quite successfully, making some very good pictures of large size. He relinquished it, however, when the excellency of the collodion film was manifested.

Daguerreotyping by artificial light became a matter of investigation, and various experiments were made in England, France and this country for a process on glass with an albumen film called cristalotype [crystallotype—ed.]. Mr. Whipple purchased the American patent, and sought to introduce it into this country. He worked the process himself quite successfully, making some very good pictures of large size. He relinquished it, however, when the excellency of the collodion film was manifested.

The enterprise of Mr. Whipple was always on the alert for new things in photography, and he was generally the first in this country to seize the suggestions of European writers and to follow the experiments of foreign photographers, when after due consideration he thought them practicable. In this respect his productions were always superior to those of the discoverer, which fact gave rise to the fact not only here, but in Europe, that American photographers excelled the European in paper photography as well as in the daguerreotype.

The years 1849 and 1850 were most prolific in discoveries and inventions in photography, mostly in France. The superiority of American artists over those of Europe could not be disputed, but it was a matter of surprise and comment, that among so many excellent practical Daguerreotypists that we possessed in this country, none made themselves a name as discoverer of any process or improvement worthy of more than a passing notice in that day, with few exceptions—Mr. Whipple being one of them. Our Daguerreans were content to rely upon European investigators, and there were men who made it their business to appropriate these European processes and formulas, and peddle them about the country to Daguerreans for whatever price they could get. The most done by the American Daguerrean has been the modification of European inventions.

We once asked some of our most intelligent Daguerreans why this fact existed, and the reply was that experiments were expensive and required much time, time that was needed for their practical work; we are not a scientific set. Yet, the assertion that nothing
new came out of the American mind in those bygone days was not altogether true. Besides Mr. Whipple’s contributions, there were others, of which we shall speak hereafter, that made European inventions—otherwise of no avail—practical. As there has been considerable controversy on the production of microscopic pictures in times past, and for better understanding of these articles, permit me to close this sketch of Mr. Whipple with the following letter, giving the origin and progress of microscopic daguerreotypes in his hand:

“Friend Snelling * * * * * * in 1846, it was suggested to me by the Rev. S. Adams, of this city, that it might be possible to daguerreotype the image of the microscope; he was in possession of a fine ‘Oberhausen,’ which he loaned me for the trial. By removing the lenses from the camera and substituting the microscope in its place and adjusting the object properly for seeing with the naked eye, a clear but very faint image was found projected on the ground glass, the light being so weak that it was hardly possible to focus it. But doing that as well as I could, and submitting a plate to its action, giving it an exposure of one and a half hours, then marvelously long, great was my astonishment and delight when lifting the plate to take a peep, I saw a clear and distinct image there, thus demonstrating the possibility of indelibly fixing the forms of nature now invisible by our unaided vision. The object tried was the mandible of a small spider, so small that it could only be discerned as a mere speck by the naked eye; it was magnified on the plate to cover three-fourths of an inch surface, and every part was reproduced in bold relief, showing its little comb-like appurtenances to perfection, equally as well as represented to the eye in the instrument; the only defect in this first proof was a small light spot exactly in the middle of the plate, which we found was caused by a prism used in the microscope to reflect the image at right angles. On removing that the next proof was without a blemish. My next experience was with test object scales of the tepezum; and truly they were a test for daguerreotyping. I could do every part well enough but the cross-strings, which are only brought out with instruments of the very best manufacture; when so high a power is used as is here necessary a great loss of light is experienced, requiring an exposure of many hours, which every one acquainted with daguerreotyping knows is not favorable to fine results. I succeeded in doing them with the finest instrument as well as a second rate one would show them to the eye. I find a much better way for ordinary purposes, instead of a microscope with eye pieces, is to use simply a double or treble achromatic of a combined focus, of from one-fourth to one inch in length, according to the character of the object, and the extent desirable to magnify; a section of woody fibre, for making an eighth of an inch in diameter, an image of which it would be desirable to impress on a plate five inches in diameter, I should use a lens of about half an inch focus, and all that is to be done to it is to have these little lenses set in the brass plate, which will screw into the camera when the daguerreotype lenses unscrews, then support the slip of wood to be magnified half an inch before the lens on a little slide prepared to hold it, that can be made to move backwards and forwards a quarter of an inch or so, thereby pointing the camera towards the rim, and having the wood just in the focus of the small lens, a beautiful distinct magnified image of it will be seen on the ground glass of the camera, in size just in proportion as the camera box is lengthened or shortened, and the wood supports on the stand moved nearer to or farther from the lens.

“The brilliancy is greatly increased if the sunlight is condensed upon the object by means of a lens, one about two inches in diameter, and three or four inches focus answers
the purpose well, always being careful not to exactly focus the sunlight upon the object; if so it would be singed by the heat.

“An opaque microscopic picture is easily made by condensing the sunlight on the side of the object nearest the little magnifying lenses, instead of letting the light pass through the object, as in the former case.

“By this most simple means it is in the power of every Daguerreotypist to greatly aid the naturalist in his researches, giving him in a few minutes drawings of invisible objects penciled by nature’s own hand, which it would be impossible for him to obtain in any other way, and he also possesses himself with an invaluable collection of objects that would be of great interest to the public.”

JOHN A. WHipple.

Mr. Whipple’s efforts here related were undoubtedly the first successful attempts in micro-photography; at least we know of no other earlier than 1846.

[End of text.]
document creator will not be liable for any damages caused or alleged to be caused directly, indirectly, incidentally, or consequentially by the information provided by this text.

The document creator assumes no responsibility for accuracy of fact; the text is prepared "as found." Factual inaccuracies of the original text are generally not noted by the document creator. If this text is used in academic papers, accuracy should be confirmed by consulting original sources.

The document creator also assumes no responsibility regarding the correctness, suitability, or safety of any chemical or photographic processes that may be described by this text. Many of the chemicals used in early photographic processes are extremely toxic and should not be handled without a thorough knowledge of safe use.

The opinions expressed in this text are solely those of the original author and are not necessarily those of the Archive editor. Some texts may contain derogatory words. Any such word is certainly one that would not be used today. The words remain in the transcription, however, to maintain truthfulness to the original text.