

**John H. Fitzgibbon, "Daguerreotyping Simplified," September 1851**

(keywords: John H. Fitzgibbon, James L. M. Scovill, history of the daguerreotype, history of photography)

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ARTICLE V.

**DAGUERREOTYPEING SIMPLIFIED.**

BY J. H. FITZGIBBON, OF ST. LOUIS, MO.

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It is a well known fact, that until very recently a veil of secrecy, has been thrown over many of the manipulations of this beautiful art, so as to mystify its operations to the new beginner in such a manner that the more he experimented the more he got lost in a labyrinth of uncertainty and doubt, until at last he abandoned its pursuit, fully convinced in his own mind of the inutility of further prosecuting a system of experiments wherein he could not hope to attain any thing like success. One chief reason of this is the complete want of confidence amongst operators.—A total absence of that *esprit du corps* which should invariably accompany the pursuit of any of the liberal arts or sciences; but, this want of confidence among Daguerreotypists can readily be accounted for by the ease with which almost any person can enter the profession and assume to himself the title of artist. Like the *profession* of the Law its gates are thrown wide open to all alike who wish to enter; the consequence of which liberality is, that its temple is desecrated and its altars polluted by any pretender that has not the slightest love for the beautiful in either art or nature. Until very recently, if a Daguerrean should by accident put a few drops more or less of acid in his Bromine, or a little Iodine or any other ingredient which is used in the preparation of Quick or sensitive, he immediately announced to the Daguerrean world that he had made a wonderful discovery, and for a consideration varying from ten to fifty dollars was ready to impart his profound knowledge to those verdant practitioners who are thirsting for wisdom. A dozen instances could be adduced of the grasping and insatiate avariciousness of disposition of some of the fraternity who have made and still make money by the sale of their recipes "for removing spots off pictures", "the prevention of pictures from blueing", "How to make chlorid of gold", "To galvanize plates" "To keep dampness out of Iodine", "To make Black Polish", "To take the chemical focus", "To clean Buffs", "How to color pictures" and many other things which new beginners have to pay well for ere they can be properly inducted into the mysteries of Daguerreotyping. How then can we wonder at the number of inferior pictures, or the hords of indifferent and bad operators that now flood the land in every direction? Where

there is no intercommunication, no free interchange of thought or opinion, there can be no confidence between operators, the consequence of which must necessarily be a system of unsatisfactory experiments without producing the slightest benefit to themselves or the fraternity at large.<sup>1</sup>

I would here state that ever since I commenced the practice of the profession, I have endeavoured to do away with every thing like mystery and confine myself to the most simple method possible. To my pupils and the community of St. Louis—I leave the question to be answered how far I have succeeded.

In proceeding to elucidate my process, I will divide it into six parts, the first three of which will be confined to plate cleaning; the fourth to coating with chemicals; the fifth to mercurizing and chemicals, and the sixth to finishing with general remarks.

First. Take the very best plates<sup>2</sup> you can procure and turn down the edges if they are not already turned down, then slightly burn them with the spirit lamp and leave them to cool on a slap; then take your plate and fasten it down on your plate cleaning block, then take two ounces of pure rain water, to which add twenty drops of nitric acid and shake them well together, and it is fit for use. Then take some of the finest or best of cotton cloth or fine carded cotton, prepared on purpose, which comes in rolls; you then take some of the finest rotten stone (some use tripoli). With these three articles your plates must be cleaned. After dusting the rotten stone on your plate, put on a few drops of the acid water, then take a small quantity of the cotton, form it into a pallet and rub your plate with a circular motion, occasionally putting on more acid-water and rotten stone; while the plate is still damp, take another piece of cotton and rub the plate well until you take that entirely off; you must still continue to rub for some time until you feel that it is clean. If you have any doubt about it, blow your breath slightly on the plate, when, if not thoroughly clean, it will shew for itself. After it is thus far cleaned, take your plate off the block, being careful while doing so not to lay hold of any part but the edges. A small piece of cotton, is now used to wipe the edges with, so as to remove all foreign substances which may have got on while cleaning, which, when done, the plate is put in the box until you are ready to buff it.

Second: Your buffs, whether hand or wheel buffs, should be kept perfectly free from dampness, as moisture is a great enemy to daguerreotyping. Heat should be applied to your buff holders, and the first thing to be done every morning upon entering your laboratory should be to apply heat, through means of the spirit-lamp, to your buff holder and keep it there during the day. Two buffs, one made from prepared buckskin, I am in the habit of using, on which the finest rouge which I can possibly procure is powdered after having burned it very well on a piece of sheet iron. The other I cover with a piece of drab cotton velvet, this should be very well rinsed in scalding hot rain water before using it, on this buff put some calcined Lamp-black, commonly called *coal*; after having been well burned in a sand-crucible, buff with the buckskin buff first and then the velvet one to finish on. After putting the plate on the holder, particular care should be taken to remove every particle of dust which may have settled on the plate, by means of a gum blower. You now proceed to buff lightly, first with one buff, then with the other until all the cotton marks are obliterated. The small plates, medium and quarter, should be buffed about five minutes; a longer time is required for the larger ones. The same care should be observed in handling the plates after buffing, as before. You must also be particular to brush the buffs well, at least once each day, and must not let them get clogged up with too much rouge or coal.

Third: Galvanizing is as necessary to plate cleaning as a good camera is to the successful production of a fine picture.<sup>3</sup> There are many fine pictures produced upon plates that are not galvanized; still I can see no reason why the process of galvanizing is not beneficial. It makes the plates more sensitive for an impression and a shorter time is required for the impression; besides imparting a finer tone than those not galvanized. Operators using them have this advantage, that they can keep on hand a greater number of clean plates which are galvanized for a greater length of time in a perfectly clean state than others not so cleaned; for it is a well known fact that plates which are not galvanized will not keep from day to day clean. The same precaution should be observed before galvanizing as before buffing, namely to keep the plate free from dust. Dip your plate in the solution of silver until it assumes a light sky blue—say about one minute if your battery is in good working order, then take it out and wash it well with pure rain water; then it must be completely dried over the spirit-lamp, you may then put it into the plate box until you are ready to take a picture then you will rebuff it in the same manner as you did at the first. Plates so cleaned will last any length of time and will be as good as if they had been cleaned the day before.

Fourth: Chemicals and coating; there are as many different ways of coating the plates as there are chemicals to bring out the pictures. I shall here, however, confine myself to my own method of coating and to the chemicals I use. Good, tight coating boxes should always be used. I prefer using three of the deepest kind; I cover the bottom of the first box with cotton cloth and spread on it some of the best Iodine so as to entirely cover the bottom. I then cover that with an other piece of the cloth and fasten up the box until I am ready to use it. In the second, I spread over the bottom dry Quick to the depth of about half an inch and immediately fasten up the box. When I use the wet Quick I put one half pint of rain-water and about a table-spoon full of liquid Quick in my coating box.<sup>4</sup> In the third box I use Iodine as in the first. The benefit to be derived from using the third box is, that you then know the exact proportions of Iodine you are using, whereas if you use one Iodine box, you will find it rather difficult to ascertain the due proportions on your plate—especially in cold weather.

I coat my plates in the following manner, taking care to have them free from all dust spots and of a warm temperature, as they come from the buffs. I put the plate first into the box No. 1 and coat it over the Iodine until it is a cherry red: then I put it over the box No. 2 until it becomes of a deep red or just turning to a slight steel or grey color, when I place it over the box No. 3 and coat it one fifth of the first time of Iodine for the dry Quick, and one third for the wet Quick.<sup>5</sup> When using the wet Quick I coat my plates a little lighter than what I do in using the dry in my dark room. The light is admitted freely while coating, except when coating the second time over the Iodine, when I coat entirely in the dark. After coating, great care should be taken to let no dust get on the plate holder, if it does it is apt to get on the plate in moving about and the picture becomes spotted. Although a north light is preferable, yet I believe good pictures can be taken in any light. Sky lights seem to be all the rage at present, but I believe if operators knew as much about them before they had gone to the trouble and expense of constructing them as they do afterwards, they would not have had them made. In posing my sitters I endeavor to place them in as easy and graceful a position as possible, and by carrying on a conversation until I am ready to uncover the camera tube—generally get a more animated expression of countenance than I otherwise would do.

Fifth: After the impression is taken, put your picture over the mercury and leave it over about three minutes, I heat up my Mercury early in the morning at a certain point and keep it there during the day.<sup>6</sup>

Sixth: Gilding and coloring, are parts of the Daguerreotype process which require great care, if not skill, and either adds to, or takes from the beauty of the pictures.

Take of Hyposulphate of Soda one ounce, put it into a pint of filtered rain or distilled water, when dissolved filter it again when it is ready for use. Pour the solution of Hyposulphate of soda over the plate until the chemicals disappear then rinse well the plate with rain water and pour on the gold solution and with a slow heat gild the picture, keeping the solution in motion to prevent it from staining or gilding too fast. In using the chlorid of gold, put fifteen grains of gold to fifty-two of Hyposulphate of soda in one pint and a half of rain water. In mixing always pour the gold on the Hypo. When the salts of gold are used all that is necessary is to mix one bottle of the salts—fifteen grains to one quart of water and then filter it. I now use salts of gold altogether. In coloring the pictures I believe the less coloring matter used the better for their appearance. Such is my own simple process given in as concise a manner as possible, and I would say in conclusion that there are many things connected with the art into which I cannot enter in this communication, but will merely remark that the great secret of success in the process is to have all things in order, use the best materials and though last not least have some taste yourself for something more than the almighty dollar and my word for it money will come all the quicker. I have hastily sketched my own method of proceeding for the benefit of those who really love the art and are desirous of practicing it, and also as a guide to my pupils in their manipulations.

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1. There have lately appeared some valuable works on Daguerreotyping from the pens of a few of our own artists, containing much useful information, among which are “Hill’s treatise on Daguerreotyping”, Snelling’s art of Photography and Humphry’s system of Photography, also two works, one by S. D. Humphry, published semi-monthly in New York, called the Daguerrean Journal, and an other called the Photographic Art Journal by H. Snelling, published monthly.

2. In a former paper I stated what I knew from practicable experience to be the best, and I now reiterate it, notwithstanding the opinions to the contrary of others, that there are no plates equal to those manufactured by the Scovill Manufacturing Company.

3. A small battery (Daniels) is generally used, although some operators are not partial to them.

4. The liquid Quick, which I use is nothing more than Bromine water which is allowed by our best writers and artists, to be the finest Quick that can possibly be used,—if you can at all manage the working; of it, which is very simple. The great error operators fall into is, the making the mixture too strong. One ounce of German Bromine will make two quarts of Quick, I use it as mentioned, above. A quantity of it thus prepared will last about two weeks or longer.

5. My dry Quick is composed of Bromine and Lime.

6. I am in the habit of filtering my mercury once a week and of washing my plate holders and slides with a solution of Hyposulphate of Soda about the same time. My

rooms are sprinkled, occasionally, with ammonia and a silver plate hangs in my dark room to catch the floating chemicals. My chemical boxes or bottles are never opened in my laboratory.

[End of text. For clarity, original footnote symbols have been replaced with numbers.]

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#### EDITOR'S NOTES:

In his opening paragraph, Fitzgibbon refers to "recipes" promulgated by various daguerreotypists. An example of "recipe" instructions is an 1851 manuscript, "R. D. Benton's Recipes in the Daguerreotype Science."<sup>1</sup>

This is the second of two articles contributed to this periodical by Fitzgibbon. See also J. H. Fitzgibbon, "Daguerreotyping," 6:3 (June 1851): 200–203.<sup>2</sup>

See also [Fitzgibbon], "Daguerreotyping in the Backwoods," and "The 'Arkansaw Traveler' Daguerreotyped," *Photographic and Fine-Art Journal* (New York) 7:11 (November 1854): 324–326.<sup>3</sup>

A brief profile of Fitzgibbon, with wood engraving portrait illustration, is found in "J. H. Fitzgibbon, of St. Louis," *Frank Leslie's Illustrated Newspaper* (New York) 4:92 (5 September 1857): 213.<sup>4</sup> See also the profile in "Fitzgibbon's Gallery," J. N. Taylor and M. O. Crooks, *Sketch Book of Saint Louis*. (St. Louis: George Knapp & Co., 1858): 311–14.<sup>5</sup>

A three-stanza memorial poem for Fitzgibbon is in Richard Smith Elliott, *Notes Taken in Sixty Years* (St. Louis: R. P. Studley & Co., 1883): 204.<sup>6</sup>

William Quesenbury describes his visit to the Fitzgibbon gallery in "Trip to St. Louis," *South-West Independent* (Fayetteville, AK) 2:46 3 August 1855.

Additional information regarding Fitzgibbon is found in Bonnie Wright, "'This Perpetual Shadow-Taking': The Lively Art of John Fitzgibbon," *Missouri Historical Review* 76:1 (October 1981): 22–30; Delores A. Kilgo, "Fitzgibbon, John (1817–1882)," Lawrence O. Christensen, edit. *Dictionary of Missouri Biography* (Columbia: University of Missouri Press, 1999): 301–2; Peter E. Palmquist and Thomas R. Kailbourn, *Pioneer Photographers from the Mississippi to the Continental Divide: A Biographical Dictionary, 1839–1865* (Stanford: Stanford University Press, 2005): 254–59.

1. [http://www.daguerreotypearchive.org/texts/S8510001\\_HUGHES\\_MS-RECIPES\\_1851-06-20.pdf](http://www.daguerreotypearchive.org/texts/S8510001_HUGHES_MS-RECIPES_1851-06-20.pdf)
2. [http://www.daguerreotypearchive.org/texts/P8510017\\_FITZ\\_DAG-TYPING\\_1851-06.pdf](http://www.daguerreotypearchive.org/texts/P8510017_FITZ_DAG-TYPING_1851-06.pdf)
3. [http://www.daguerreotypearchive.org/texts/P8540007\\_FITZ-BACKWOODS\\_PFAJ\\_1854-11.pdf](http://www.daguerreotypearchive.org/texts/P8540007_FITZ-BACKWOODS_PFAJ_1854-11.pdf)
4. [http://www.daguerreotypearchive.org/texts/P8570002\\_FITZGIBBON\\_BIO\\_LESLIES\\_1857-09-05.pdf](http://www.daguerreotypearchive.org/texts/P8570002_FITZGIBBON_BIO_LESLIES_1857-09-05.pdf)
5. [http://www.daguerreotypearchive.org/texts/B8580003\\_SKETCH-BOOK\\_FITZGIBBON\\_1858.pdf](http://www.daguerreotypearchive.org/texts/B8580003_SKETCH-BOOK_FITZGIBBON_1858.pdf)
6. [http://www.daguerreotypearchive.org/texts/B8830001\\_ELLIOTT\\_SIXTY-YEARS\\_1883.pdf](http://www.daguerreotypearchive.org/texts/B8830001_ELLIOTT_SIXTY-YEARS_1883.pdf)

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