

**F. Fauvel-Gouraud, "Description of the Daguerreotype Process," 1840**

(keywords: François Gouraud, François Jean-Baptiste Fauvel-Gouraud, François Gouraud, Francis Fauvel-Gouraud, history of the daguerreotype, history of photography.)

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**THE DAGUERREOTYPE: AN ARCHIVE OF SOURCE TEXTS, GRAPHICS, AND EPHEMERA**

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François Fauvel-Gouraud, *Description of the Daguerreotype Process, or a Summary of M. Gouraud's Public Lectures, according to the Principles of M. Daguerreotype. With a Description of a Provisory Method for Taking Human Portraits* (Boston: Dutton and Wentworth's Print, 1840).

DESCRIPTION  
OF THE  
DAGUERREOTYPE PROCESS  
or  
A SUMMARY  
OF  
M. GOURAUD'S PUBLIC LECTURES,  
ACCORDING TO THE PRINCIPLES OF  
M. DAGUERRE.  
—  
WITH A  
DESCRIPTION OF A PROVISORY METHOD FOR TAKING  
HUMAN PORTRAITS  
—  
BOSTON:  
DUTTON AND WENTWORTH'S PRINT.  
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1840.

## PRELIMINARIES.

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### *Contents.*

Description of the Daguerreotype apparatus—Practical description of the process.  
Five steps of it explained—polishing the plates—preparing the plates with a coating of Iodine—the camera obscura—mercurial process—washing the designs, &c.

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## THE APPARATUS.

A Daguerreotype Apparatus must be composed of the following object :—the camera obscura, with its lens—the Iodine box, with its wooden dish—the substance box—mercury box, with its grooved board—a moveable camera sash, with its plate board—the plate box—the travelling box—two rinsing pans—a washing pan, with a cork at the corner—a phial containing olive oil—some very finely carded cotton—some impalpable pumice powder, tripoli, or other polishing substance, tied up in a bag of muslin, sufficiently thin to allow the powder to pass through when the bag is shaken—a phial of nitric acid, at 40 degrees, diluted with water, in the proportion of one liquor glass to sixteen of the same of distilled water—a small furnace—one spirit lamp—a phial of mercury—four metallic bands or cramps, the same substance as the plate—six wooden wedges—one glass funnel—a phial of Iodine—a bottle of hyposulphate of soda—a tea kettle—a vessel for distilled water—a little box of nails—a pair of iron pincers—a candlestick—chemical matches.

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NOTICE :—*Each part of the apparatus afforded by M. F. Gouraud, bears an indication of its application ; and as PERFECTION AND CLEARNESS in the DESIGN depend only on the MATHEMATICAL EXACTNESS of the apparatus, as in the extreme PURITY of the chemical substances employed in the process, each apparatus PREVIOUSLY EXAMINED and TRIED by M. Gouraud, bears his signature and seal as a guarantee of its perfection.*



## P R E A M B L E .



### I.

The Daguerreotype, designs are executed upon thin plates of silver, plated on copper. The silver must be the purest that can be procured. As to the copper, its thickness ought to be the 24th number of the wire gauge of brass manufacturers, and the proportion of silver, that must cover its surface, the 20th of it in weight. If the plates were not *faithfully* prepared by the manufacturers, according to the principle requisite for the Daguerreotype process, it is impossible to hope for any good success.

### II.

The photogenic process is divided into five operations.

1. The first consists in polishing and cleaning the plate, in order to prepare it for receiving the sensitive coating, upon which the light traces the design.

2. The second is to apply this coating.

3. The third is the placing the prepared plate properly in the camera obscura, to the action of light, for the purpose of receiving the image of nature.

4. The fourth brings out this image, which at first is not visible on the plate being withdrawn from the camera obscura.

5. The fifth and last operation has for its object to remove the sensitive coating on which the design is first impressed, because this coating would continue to be affected by the rays of light, a property which would necessarily and quickly destroy the picture.

## FIRST OPERATION.

*Preparing the Plate.*

The requisites for this operation are :

The phial containing olive oil.

Some of the finely carded cotton.

A small quantity of the polishing powder.

The phial of diluted nitric acid.

The furnace with charcoal.

A dozen at least of ordinary sheets of paper.

As already stated, these photographic delineations are executed upon silver plated on copper. The size of the plate will depend, of course, on the dimensions of the camera. We must begin by polishing it carefully. To accomplish this, the surface of the silver is powdered all over with the polishing substance, by shaking the bag without touching the plate.

Next, with some cotton dipped in a little olive oil, the operator rubs the plate gently, rounding his strokes, all over its surface. During this operation, the plate must be laid flat upon several folds of paper, care being taken to renew these from time to time, that the tablet be not twisted from any inequality in the support.

The polishing substance must be renewed and the cotton changed several times. It will be readily apprehended of what importance it is to attend to these directions, since upon the high polish of the silver depends in a great measure the beauty of the future design. When the plate is well polished, it must next be cleaned by powdering it all over once more with pumice, and rubbing with dry cotton, always rounding and crossing the strokes, for it is impossible to obtain a good surface by any other motion of the hand. A little pledget of cotton is now rolled up and moistened with the diluted acid already mentioned, by applying the cotton to the mouth of the phial and inverting it, pressing gently, so that the centre only of the cotton may be wetted and but slightly, care being taken not to allow any acid to touch the fingers. the surface of the plate is now rubbed *equally* all over with the acid applied by the pledget of cotton. Change the cotton and keep rubbing, rounding as before, that the acid may be equally spread, yet in so small a quantity as just to skim the surface, so to speak. If, as frequently happens, the acid run into small drops from the high polish, change the cotton repeatedly and break down the globules as quickly as possible,

but always by gently rubbing, for if allowed to rest or to run upon the plate, they will leave stains. It will be seen when the acid has been properly diffused, from the appearance of a thin veil spread regularly over the whole surface of the plate. Once more powder over pumice, and clean it with fresh cotton, rubbing as before, but very slightly.

The plate is now to be subjected to a strong heat. It is placed upon the furnace, the silver upwards, during at least five minutes, the operator holding it with a pair of long and strong pincers, and moving it at the same time, till all is equally heated. The plate is then to be cooled *suddenly*, by placing it on a cold substance, such as a mass of metal or stone, or best of all, a marble table. When perfectly cold, it is to be again polished, an operation speedily performed, since its gummy appearance merely has to be removed, which is done by the dry pumice and cotton repeated several times, changing the cotton frequently. the polishing being thus completed, the operation of the acid is to be repeated three different times, dry pumice being powdered over the plate each time, and polished off very gently with the cotton, which must be very clean, care being taken not to breathe upon the plate or to touch it with the fingers, or even with the cotton upon which the fingers have rested, for the slightest stain upon the surface will be a defect in the drawing.

When the plate is not intended for immediate use, the last operation of the acid is not performed. This allows any number of plates to be kept prepared up to the last slight operation, and they may be purchased in this state if required. It is, however, indispensable that a last operation by acid as described, be performed on every plate, immediately before it be placed in the camera. Lastly, every particle of dust is removed by gently cleaning the whole edges and back also with cotton, or by simply moving the plate in the air.

## SECOND OPERATION.

### *Coating the Plate.*

For this operation we require :

The iodine box.

The small board of the camera sash.

The small metallic bands.

The phial of iodine.

The plate is first to be fixed upon the board by means of the metallic bands with their small catches and tacks. The iodine is now put into the little wooden dish of the iodine box. It is necessary to divide the iodine into pieces, in order to render the exhalation the more extensively and more equally diffused, otherwise it would form circles in the centre of the plate, which would destroy this essential requisite. The board is now fitted into its position, the plate face downwards, the whole being supported by small brackets projecting from the four corners of the box, which is then closed. In this position the apparatus remains .till the vaporization of the iodine which is condensed upon the plate, has covered its surface with a fine coating of a yellow gold colour. If this operation be protracted, the gold colour passes into violet, which must be avoided, because in this state the coating is not so sensitive to the impressions of light. On the contrary, if the coating be too pale, the image of nature in the camera will be too faint to produce a good picture. A decided *gold colour*—nothing more—nothing less—is the only assurance that the ground of the future picture is duly prepared. The time for this cannot be determined, because it depends upon several circumstances. Of these the two principal are the temperature of the apartment, and the state of the apparatus. The operation should be left entirely to spontaneous evaporation of the iodine—or at all events, no other heat should be used than what can be applied through the temperature of the room in which the operation takes place. It is also very important that the temperature of the inside of the box be equal to that of the air outside, for otherwise, a deposition of moisture takes place upon the plate, a circumstance most injurious to the final result. Secondly, as respects the state of the apparatus ; the oftener it has been used, the less time is required, because in this case, the interior of the box being penetrated with the vapours of iodine, these arise from all sides, condensing thus more equally and more rapidly upon the surface of the plate, a very important advantage. Hence it is of consequence to leave always a small quantity of iodine in the cup, and to protect this latter from damp. Hence, likewise, it is obvious that an apparatus of this kind which has been some time in use, is preferable to a new box, for in the former the operation is always more expeditiously performed.

Since from these causes the time cannot be fixed, a priori, and may vary from five minutes to half an hour, rarely more, unless the weather be too cold, means must be adopted for examining the plate from

time to time. In these examinations it is important to not allow the light to fall directly upon the plate. Also, if it appear that the colour id deeper on one side of the plate than the other, to equalize the coating the board must be replaced, not exactly in its former position, but turned one quarter round at each inspection. In order to accomplish these repeated examinations without injuring the sensibility of the ground or coating, the process must be conducted in a darkened apartment into which the light is admitted side-ways, never from the roof—the door left a little ajar answers best. When the operator would inspect the plate, he raises the lid of the box, and lifting the board with both hands, turns up the plate quickly, and very little light suffices to shew him the true colour of the coating. If too pale, the plate must be instantly replaced, till it attains the proper gold tone ; but if this tint be passed, the coating is useless, and the operations must be repeated from the commencement of the first.

From description this operation may perhaps seem difficult, but with a little practice one comes to know pretty nearly the precise interval necessary to produce the true tone of colour, and also to inspect the plate with great rapidity, so as not to allow time for the light to act.

When the coating has reached the proper tone of yellow, the plate with the board to which it is fixed, is slipped into the camera sash, and thus adjusted at once in the camera obscura. In this transference care must be taken to protect the plate from the light ; a taper should be used, and even with this precaution, the operation ought to be performed as quickly as possible, for a taper will leave traces of its action if continued for any length of time.

We pass now to the third operation, that of the camera. If possible the one should *immediately* succeed the other, the longest interval between the second and third ought not to exceed an hour. Beyond this space the action of the iodine and silver no longer possesses the requisite photogenic properties.

*Observanda.*—Before making use of the box, the operator should clean it thoroughly, turning it bottom upwards, in order to empty it of all the particles of iodine which may have escaped from the cap, avoiding at the same time touching the iodine with the fingers. During the operation of coating, the cup ought to be covered with a piece of gauze stretched on a ring. The gauze regulates the evaporation of the iodine, and also prevents the compression of the air on the lid being shut from scattering the particles of iodine, some of which reaching the



plate, would leave large stains on the coating. For the same reason the top should always be let down with the greatest gentleness, not to raise the dust in the inside, the particles of which being charged with the vapour of the iodine, would certainly reach and damage the plate.

### THIRD OPERATION .

#### *The Camera.*

The apparatus required in this operation, is limited to the camera obscura.

This third operation is that in which by means of light, acting through the camera, nature impresses *an image of herself* on the photographic plate, enlightened by the sun, for then the operation is more speedy. It is easy to conceive that this operation, being accomplished only through the agency of light, will be the more rapid in proportion as the objects, whose photographic images are to be delineated, stand exposed to a strong illumination, or in their own nature present bright lines and surfaces.

After having placed the camera in front of the landscape, or facing any other object of which it may be desirable to obtain a representation, the first essential is a perfect adjustment of the focus, that is to say, making your arrangements so as to obtain the outlines of the subject with great neatness. This is accomplished by advancing or withdrawing the frame of the obscured glass which received the images of natural objects. The adjustment being made with satisfactory precision, the moveable part of the camera is fixed by the proper means, and the obscured glass being withdrawn, its place is supplied by the apparatus, with the plate attached as already described, and the whole secured by small brass screws. The light is of course all this time excluded by the inner doors ; these are now opened by means of the two brass semi-circles adapted to them, and the plate is disposed ready to receive its proper impressions. It remains only to open the aperture of the camera, and to consult a watch.

This latter is a task of some nicety, because as nothing is visible, and as it is quite impossible to determine the time necessary for producing a design, this depending entirely on the intensity of the light on the objects, the imagery of which is to be reproduced. At Boston, for example, this varies from three to thirty minutes.

It is likewise to be remarked, that the seasons, as well as the hour of the day, exert considerable influence on the celerity of the operation. The most favorable time is from seven to three o'clock ; and a drawing which, in the months of June and July at Boston, may be taken in three or four minutes, will require five or six in May or August, seven or eight in April and September, and so on in proportion to the progress of the season. These are only general data for very bright or strongly illuminated objects, for it often happens that twenty minutes are necessary in the most favorable months, when the objects are entirely in shadow.

After what has just been said, it will readily occur to the reader that it is impossible to specify with precision the exact length of time necessary to obtain photographic designs ; practice is the only sure guide, and with this advantage, one soon comes to appreciate the required time very correctly. The latitude is of course a fixed element in this calculation. In the south of America, for example, and generally in all those countries in which light has great intensity, as Spain, Italy, &c., we can easily understand that these designs must be obtained with greater promptitude than in more northern regions. It is, however, very important not to exceed the time necessary, in different circumstances, for producing a design, because, in that case, the lights in the drawing will not be clear, but will be blackened by a too-prolonged solorization. If, on the contrary, the time has been too short, the sketch will be very vague, and without the proper details.

Supposing that he has failed in a first trial, by withdrawing the tablet too soon, or by leaving it too long exposed, the operator in either case, should commence with another plate immediately ; the second trial, being corrected by the first, almost insures success. It is even useful, in order to acquire experience, to make some essays of this kind.

In this stage of the process, it is the same as for the coating ; we must hasten to the next operation. When the plate is withdrawn from the camera, it should immediately be subjected to the subsequent process ; there ought, at most, not to be a longer interval than an hour between the third and fourth operations ; but one is always surest of disengaging the images when no space has been allowed to intervene.

## FOURTH OPERATION.

*Mercurial or Disengaging Process.*

Here are required:

The phial of mercury, containing at least 16oz.

The lamp with spirit of wine.

And the mercury box with its grooved flat board.

With a great deal of care the mercury is poured into the cast iron cup at the bottom of the box : the quantity must be sufficient to cover the *bulb* of the thermometer ; afterwards, and throughout the remaining operations, no lights, save a taper, can be used.

The board, with the plate affixed, is now to be withdrawn from the mobile camera sash, and placed rapidly on the grooved board of the mercury box. Immediately, when this is done, the board is then placed within the ledges of the mercury box, at an angle of 45°, the tablet with sketch downwards, so that it can be seen through the semi-circular glass of the upper part ; the top of the box is then gently put down, so as not to rise particles of the mercury, and the front glass previously carefully covered up with a piece of any kind of dark cloth.

When all things are thus disposed, the spirit lamp is lighted, and placed under the cup containing mercury. The operation of the lamp is allowed to continue till the thermometer, the bulb of which is covered by the mercury, indicates a temperature of 65° centigrade (140° F.) The lamp is then immediately withdrawn ; if the thermometer has risen rapidly, it will continue to rise without the aid of the lamp, but this elevation ought not to exceed 75° centigrade (167° F.)

The impress of the image of Nature exists upon the plate, but it is invisible. It is not till after the lapse of several minutes that the faint tracery of objects begins to appear, of which the operator assures himself by looking through the glass, by the light of a taper, using it cautiously that its rays may not fall upon, and injure the nascent images of the sketch. The operation is continued till the thermometer sink to 45° centigrade (113° F.) ; the plate is then withdrawn, and this operation completed.

When the objects have been strongly illuminated, or when the action in the camera has been continued rather too long, it happens that this fourth operation is completed before the thermometer has fallen even to 65° centigrade (113° F.) One may always know this, however, by observing the sketch through the glass of the mercury box.

It is necessary after each operation to clean the inside of the apparatus carefully, to remove the slight coating of mercury adhering to it. When the apparatus has to be packed for the purpose of removal, the mercury is withdrawn by the small brass cock, inclining the vessel to that side.

Once may now examine the sketch by a *feeble light*, in order to be certain that the processes hitherto have succeeded. The plate is now detached from the board, and the little bands of metal which held it there are carefully cleaned with pumice and water after each experiment, a precaution rendered necessary from the coating both of iodine and mercury which they have acquired. The plate is now deposited in the grooved plate box, until it undergoes the fifth and last operation. This may be deferred if not convenient; for the sketch may now be kept for months in its present state without alteration, provided it be not too frequently inspected by the full daylight.

## FIFTH OPERATION.

### *Fixing the Impression.*

The object of this final process is to remove from the tablet the coating of iodine, which continuing to decompose by light would otherwise speedily destroy the design when too long exposed. For this operation the requisites are—

A saturated solution of common salt, or a weak solution of pure hyposulphite of soda—one measure whatever of *crystalized* hyposulphite, upon 14 of the same measure of distilled water.

The tin washing pans.

The vessel of distilled water.

In order to remove the coating of iodine, when the operator could not afford hyposulphite of soda, common salt is put into a bottle with a wide mouth, which is filled one fourth with salt and three-fourths with pure water. To dissolve the salt, shake the bottle, and when the whole forms a saturated solution, filter through paper. This solution is prepared in large quantities before-hand, and kept in corked bottle.

Into one of the square troughs pour the solution, filling it to the height of an inch; into the other, pour in like manner your water. The solution of hyposulphite of soda, must be always preferred, than that of common salt, when possible, because it removes the iodine entirely,

which the saline solution does not always accomplish, especially when the sketches have been laid aside for some time between the fourth and fifth operations. It does not require to be warmed, and a less quantity is required.

First, the plate is placed in common water, poured into a trough, plunging and withdrawing it immediately—the surface merely requiring to be moistened—then plunge it into the saline solution, which latter would act upon the drawing, if not previously hardened by the washing in pure water. To assist the effect of the saline solutions, the plate is moved about in them by means of a little hoop of copper wire, or with the finger. When the yellow color has quite disappeared, the plate is lifted up with both hands, care being taken not to touch the drawing, and plunged again into the first trough of pure water.

Now, when the plate has been a moment into that water, the same washing pan is placed in an *inclined* position, sustained behind by any elevated thing, the *corked* corner being in the lower center point ; the cock is then taken out, and then distilled water, hot, but not boiling, is made to flow in a stream over its whole surface, carrying away every remaining portion of the saline wash.\*

Not less than a quart of distilled water is required when the design is of the now usual dimensions :  $8\frac{1}{2}$  by  $6\frac{1}{2}$  inches. The drops of water remaining on the plate must be removed by forcibly blowing upon it, for otherwise in drying they would leave stains on the drawing. Hence also will appear the necessity of using very pure water, for if in this last washing, the liquid contain any admixture of foreign substances, they will be deposited on the plate, leaving behind numerous and permanent stains. To be assured of the purity of the water, let a drop fall upon a piece of polished metal ; evaporate by heat, and if no stain be left the water is pure. Distilled water is always sufficiently pure without this trial.

After this washing the drawing is finished, it remains only to preserve it from the dust, and from the vapors that might tarnish the silver. The mercury, by the action of which the images are rendered visible, is partially decomposed ; it resists washing, by adhesion to the silver, but cannot endure the slightest rubbing.

To preserve these sketches then, place them in squares of strong pasteboard, with a glass over them, and frame the whole in wood. They are thenceforth unalterable even by the sun's light.

\* If hyposulphite has been used, the distilled water need not be so hot as when common salt has been employed.

In travelling, the collector may preserve his sketches in a box similar to the one belonging to the apparatus, and for greater security may close the joints of the lid \* with a collar of paper. It is necessary to state, that the same plate may be employed for several successive trials, provided the silver be not polished through to the copper. But it is very important after each trial to remove the mercury immediately by using the pumice powder with oil, and changing the cotton frequently during the operation. If this be neglected, the mercury finally adheres to the silver, and fine drawing cannot be obtained if this amalgam be present. They always in this case want firmness, neatness, and vigor of outline and general effect.

\* Mr. Daguerre made attempts to preserve his sketches by means of different varnishes obtained from succinum, copal, Indian rubber, wax, and various resins ; but he has observed, that by the application of any varnish whatsoever, the lights in these sketches were considerably weakened, and at the same time the deeper tones were hidden. To this disadvantage, was added the still greater injury from the decomposition of the mercury by all the varnishes tried ; this effect, which did not become apparent till after the lapse of two or three months, terminated in a total destruction of the forms of the objects represented. Even had this not been the case, the author would have deemed it a sufficient reason for rejecting all varnishes, that they injured the vigor and clearness of the lights. This quality most to be desired in the new art is this intensity of tone in the contrast of the lights and shadows.

MANNER OF TAKING PORTRAITS  
BY THE DAGUERREOTYPE,

Such as published in the Boston Daily Advertiser and Patriot, of March 26th, 1840

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*Short Historical Introduction.*

Within fifteen days after the publication of the process of M. Daguerre, in Paris, people in every quarter were making portraits. At first they were all made with *the eyes shut*. M. Susse, of the *place de la Bourse*, was one of the first amateurs who succeeded in making them in the most satisfactory manner. The achromatic lens, recommended by M. Daguerre was naturally first made use of. But these amateurs soon perceived that in using a glass of this kind, a very long time was required to make the drawing. Every one began to look about for some means of shortening, as much as possible, the period of from fifteen to twenty-five minutes, which M. Susse, who had the whole disposal of his time, had employed in making his pretty portraits—with the eyes shut. Almost at the same time a young man, in the employment of the Minister of Public instruction, Mr. Abel Rendu, directed by the most simple optical principles, adopted an idea which seemed new to him, and produced to the admiration of some of the Paris circles, portraits of men and women, with the *eyes open*, executed in the most satisfactory manner. The mathematical perfection in the representation of the eyes, which M. Daguerre had been seeking for so long a time, was to be sure, not to be found in these portraits ; but this difference was so minute, that it was scarcely perceptible at first sight even by the most practiced eye. On expressing the astonishment with which I was struck, and giving the warmest compliments of encouragement to M. Abel Rendu, that gentleman, without seeking to make the slightest mystery of the means he had employed, told me immediately that he had obtained these first results by means of a *Meniscus!* I immediately made a trial of this method. I used at first the Meniscus recommended by Wollaston, then the common one with one side plain, then one with a parabolic concavity, and obtained also the most satisfactory results, thanks to the information communicated in a manner so obliging by M. Abel Rendu. As these experiments were made just on the eve of my departure, it was impossible for me to repeat them, and not being able to resist the request of the person in whose portrait I had succeeded in making the very best of my attempts, I left this most successful specimen behind with him, intending to supply myself with specimens at New York or elsewhere, when the fine summer sun should return, to offer us his brilliant light, so essential to the rapid execution of this operation. The portraits I had made in Paris, as well as those obtained by Mr. Abel Rendu, were formed in from ONE *minute to TWO minutes twenty-seven seconds*, at the

farthest. Considering the foggy atmosphere of Paris, this was already an immense step, but as M. Rendu did not attach any great importance to a discovery which did not offer the positively mathematical perfection which M. Daguerre required, and which M. Daguerre had undoubtedly himself, already disdained, he did not wish to make the thing an affair of *reputation*, but authorized me to make any use of it in America which I pleased. Before I quitted Paris, I made use of his Meniscus to take the pretty view of the *Pont Louis Philippe*, and the magnificent *facade des Tuilleries*, which are found in my collection. From the slightly nebulous sides of these two pictures, in contrast with the clearness of the centre, may be seen at a glance the adaptation of the *Meniscus*, in preference to the other kinds of glasses, as regards the art of making portraits with the Daguerreotype. It will be perceived that the centre of the design, offers in sharpness, in the lines, and in general clearness a vigor in inverse proportion to the nebulosity of the sides. The reason why the Meniscus should give more clear lines, and act in a shorter space of time on the iodine plate in the camera obscura, will be obvious to all persons acquainted with the most simple principles of optics.

What is important, then, to the amateur in Daguerreotype drawing to know, is the manner of making use of it. The following is the process, (with the exception of some minute details, which it would be impossible to give in the columns of a newspaper,) as I communicated it on my arrival at New ork to all who wished to hear it, and in fact as I have described it, (even to its details) in my crowded public lectures. I render it thus public, by means of the press, in order that those who may not have the opportunity of hearing my verbal information on the subject, may make experiments for themselves, and in fine, that by the means already made use of, they may know that I am able to make the *portrait of any person who wishes it*.

The shortness of the description will be equal to the simplicity of the method, and I am desirous that this new proof of my efforts to please the enlightened community in the midst of which I am placed, and by which I every day continue to be so kindly patronized—I desire, I say, in offering something of actual utility, as well as a source of intellectual amusement, that this new proof of my efforts, small as it may be in value of itself, may nevertheless be acceptable to all. Reserving for my public lectures a description of the general process, in obtaining drawings by the beautiful method of M. Daguerre, I will describe, in a few words, for the benefit of those who have already a notion of that process, how it is possible at the present time, to obtain a miniature portrait by the Daguerreotype.

#### SUMMARY DESCRIPTION OF THE PROCESS.

In the first place you will begin by preparing a room exposed to the sun, the south east if possible. You will give to this room the form of a truncated pyramid lying down, of which the base will be the whole breadth of the window—which window you will make as large as possible, and ex-



tending from the floor to the ceiling. The floor, the ceiling, and the two sides of the room, should be plastered with the whitest kind of lime plaster. Those who cannot dispose a room in this manner, can fix the sides of the room with sheets or other cloth of perfect whiteness. The focus of the room must be covered with a tapestry of white cotton, with knotted or raised figures, which is designed to form the drapery. These are always agreeable to the eye, and should always be shown in interior views. The chair on which the person sits must be of yellow wood. The person, if a man, must be dressed in a clear grey coat, pantaloons of a little deeper hue, a vest of a fancy ground, yellow, orange, if possible, with figures of a colour to make a contrast, the whiteness of the shirt contrasting with a cravat of a grey ground, either a little less dark or more deep than the coat. The toilet of a lady should be of the same shades, and in all cases black must be constantly avoided, as well as green and red. This arrangement, however, is pointed out as the best means of obtaining the best effect; for, as in a portrait, the face is what is most cared for, the costume can be studied more or less at will, but the portrait, with other arrangements, will not be so agreeable to the eye. By means of mirrors properly disposed at the window or in the room, you will concentrate the strongest possible light on the person, and will considerably augment that of the chamber, which has already been made as clear as possible. If the sun should be too brilliant, and the *patient* is not able comfortably to bear the reflection of it, use may be made of the blue glass, recommended by M. Daguerre.

Having covered your plate well with the coating of iodine—you will fix the sitter. His head should be placed on a semi-circle of iron, fitted to the back of the chair. His arms may be arranged at pleasure. He should fix his eyes on some well defined object in any direction which he may prefer—the focus of the camera obscura must be regulated and provided with a good Meniscus. Now, if every thing has been arranged as it should be, your portrait will often be made, even in less than *twenty seconds*, and in the most satisfactory manner.

This is, *at present*, the most approved method of making a miniature by the Daguerreotype. Others may perhaps pretend to improve or invent, after my explanations have been made, because while employing the same means, they will change their places, or call them by other names. But until other methods shall have better success, it is certainly right that those who attach any importance to a futile celebrity should render to Caesar the things which are Caesar's, and it is right that the method of Mr. Abel Rendu, *rendered* public by me in this country, should be attributed entirely to him.

I will now say, at the close, that by adopting a confidential communication which I have received from M. D. G., the French Professor at Cambridge, since I arrived in Boston, I think it is very probable that we shall succeed in obtaining a Daguerreotype portrait in much less time than by the process above described.

F. G.

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**[End of text. Occasional original misspelling of the word "iodine" maintained.]**

### EDITOR'S NOTES:

Although text on page nine of this manual seems to indicate a publication date after September 1840, this editor favors a mid-1840 publication date. (This editor has yet to locate a published review providing specific publication date information.) When Gouraud speaks of exposure times, he speaks anticipatively—just as he does when referring to exposure times in the "south of America." A mid-1840 publication date is further reinforced by the inclusion of the 25 March 1840 text, "Manner of Taking Portraits by the Daguerreotype." If it was indeed published late 1840, it seems inconceivable that Gouraud would omit mention of the various efforts and advances in daguerreotype portraiture occurring mid-1840. Certainly Gouraud would have been aware of Wolcott and Johnson's success with the reflecting camera, as well as Cornelius' success in Philadelphia, and mention of these endeavors in a late-1840 publication would seem appropriate given Gouraud's usual thoroughness.

Some of the content of Gouraud's manual was later incorporated into Gilman & Mower, *The Photographer's Guide; in which the Daguerrean Art is Familiarly Explained* (Lowell: Samuel O. Dearborn, printer, 1843).<sup>1</sup>

The section of the text, "Manner of taking Portraits by the Daguerreotype," (pp. 14–16) is taken from F. G. [F. F. Gouraud], "Manner of Making Portraits by the Daguerreotype," *Boston Daily Advertiser* 45:14964 (26 March 1840): n.p. [second page of issue].<sup>2</sup> A portion of this section is reprinted in a reminiscence, "Portraits by the Daguerreotype," *Photographer's Friend* (Baltimore) 2:2 (April 1872): 58–59.

Further information regarding Gouraud is found in Ron Polito, "The Emergence of Photography in Boston: 1840–1841," *The Journal: New England Journal of Photographic History* No. 164 (Spring 2005): 16–32. Polito's article is also reprinted in *Daguerreian Annual 2006* (Pittsburgh: The Daguerreian Society, 2007): 154–73.

This text is also provided in facsimile in Robert A. Sobieszek, edit., *The Daguerreotype Process: Three Treatises, 1840-1849* (New York: Arno Press, 1973); Robert A. Sobieszek and Odette M. Appel, with research assistance by Charles R. Moore, *The Spirit of Fact: The Daguerreotypes of Southworth & Hawes, 1843–1862* (Boston: David R. Godine, 1976): 139–47; (Dover reprint: *The Daguerreotypes of Southworth & Hawes* [1980]: 105–109.)

Portraits of F. F. Gouraud are found in Francis Fauvel-Gouraud, *Phreno-Mnemotechny; or, The Art of Memory* (New York & London: Wiley and Putnam, 1845);<sup>3</sup> Francis Fauvel-Gouraud, *Phreno-Mnemotechnic Dictionary; being a Philosophical Classification of All the Homophonic Words of the English Language* (New York: Houel and Macoy, 1844).<sup>4</sup>

1. [http://www.daguerreotypearchive.org/texts/B8430001\\_GILMAN-MOWER\\_PHOTOG\\_GUIDE\\_1843.pdf](http://www.daguerreotypearchive.org/texts/B8430001_GILMAN-MOWER_PHOTOG_GUIDE_1843.pdf)

2. [http://www.daguerreotypearchive.org/texts/N8400002\\_GOURAUD\\_BOS-DAILY-ADVERT\\_1840-03-26.pdf](http://www.daguerreotypearchive.org/texts/N8400002_GOURAUD_BOS-DAILY-ADVERT_1840-03-26.pdf)

3. [http://www.daguerreotypearchive.org/graphics/G8440001\\_GOURAUD\\_PORTRAIT\\_1844.pdf](http://www.daguerreotypearchive.org/graphics/G8440001_GOURAUD_PORTRAIT_1844.pdf)

4. [http://www.daguerreotypearchive.org/graphics/G8440002\\_GOURAUD-PORT\\_DICTIONARY\\_1844.pdf](http://www.daguerreotypearchive.org/graphics/G8440002_GOURAUD-PORT_DICTIONARY_1844.pdf)

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